



Australian Government



mainroads  
WESTERN AUSTRALIA

BUNBURY OUTER RING ROAD | PLANNING AND DEVELOPMENT

**BUILDING OUR FUTURE**

# Bunbury Outer Ring Road Southern Community Reference Group

10 December 2019



# Agenda

5:15	Arrival – light refreshments available	
5:30	Welcome	Linton Pike
	Meeting Purpose and Context	Linton Pike
	Project Update	Dominic Boyle
	Urban and Landscape Design	Marion Dalton
	Environment and Heritage Update	Martine Scheltema
	CRG Review	Tammy Mitchell
	CRG Member Round Table Discussion	CRG Members
	Next Steps	Dominic Boyle
8.30	Close	Linton Pike



A blurred high-speed train, possibly a Shinkansen, is captured in motion, passing under a concrete bridge structure. The train is white with blue and red accents. The bridge has several large concrete pillars. The background is a bright, overcast sky. The overall scene is dynamic and modern.

# Meeting Purpose and Context

Linton Pike



# Project Update

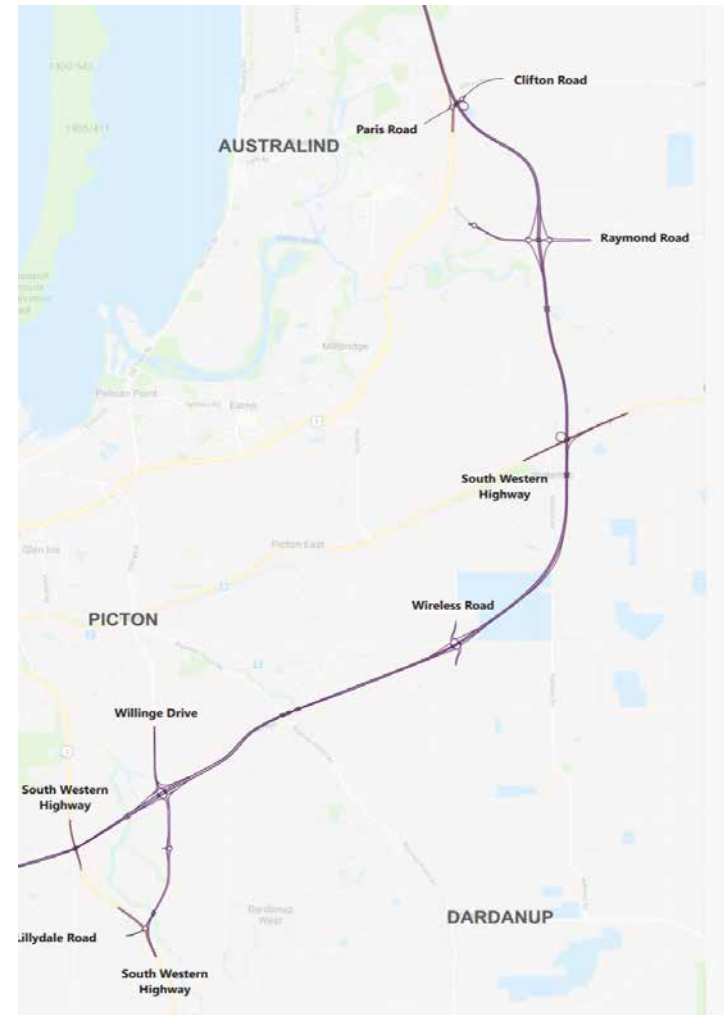
Dominic Boyle



# Northern & Central Sections

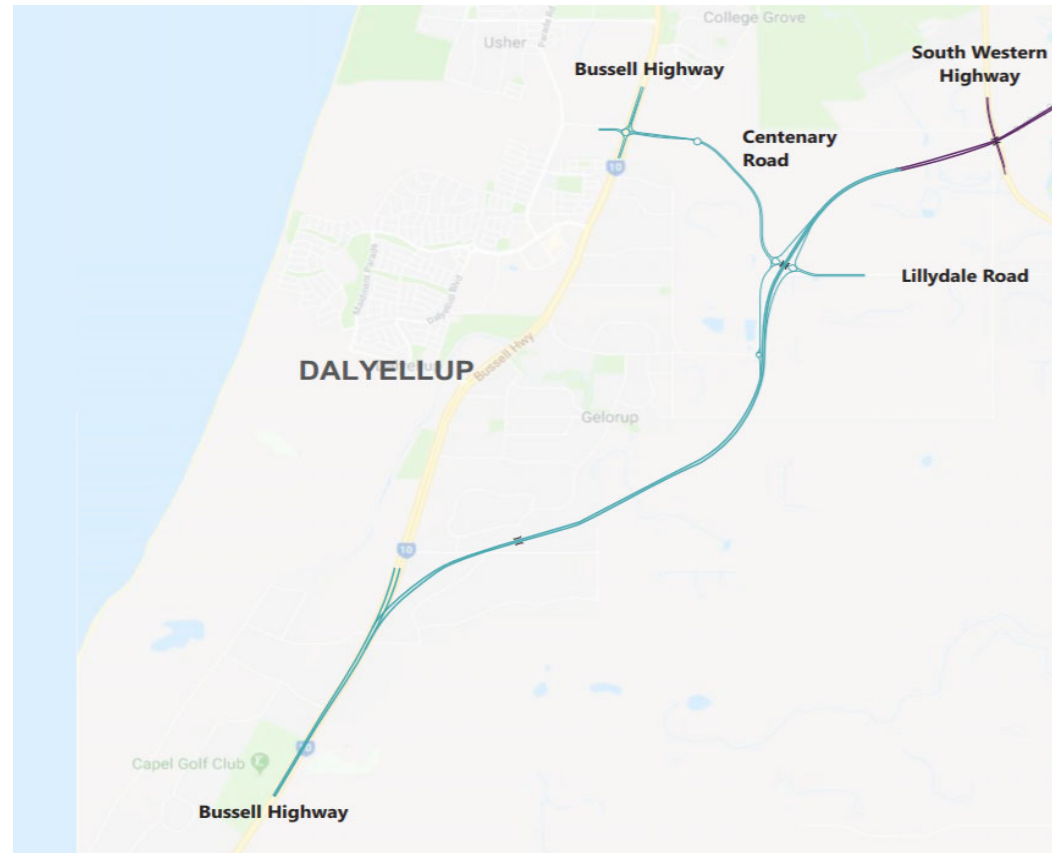


- State and Federal Environmental Referrals submitted June 2019
  - EPA – Assess on Referral Information with Additional Information to be Provided
  - DotEE – Controlled Action: Assess on Preliminary Documentation
  - Workshop to discuss submissions was held with EPA, DoTEE and DBCA early November
  - Submissions January (EPA) and March 2020 (DotEE)
  - Approval anticipated late 2020.
- Land acquisition progressing.
- Further heritage surveys at bridge locations – reports awaited then lodge S18 application



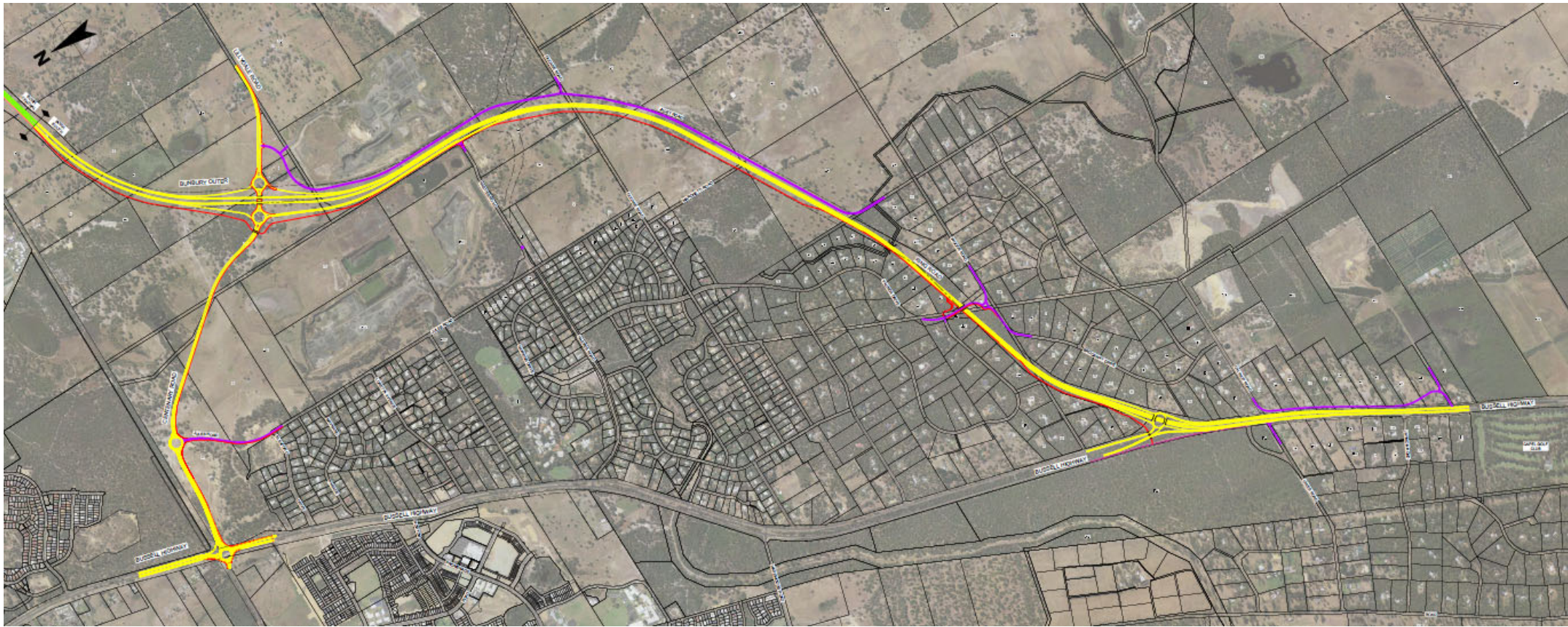
# Southern Section

- Referred to EPA and DotEE for Level of Environmental Assessment September 2019
- EPA – Assess on Referral Information with additional information to be provided and 8 week public comment period.
- DotEE – Consultation on Level of Assessment Awaited
- Conditional approval anticipated late early 2021
- Land acquisition progressing – NOITTs imminent
- Heritage - Ethnographic and archaeological surveys completed November 2019.
- Await reports then submit Section 18 application





# Access Strategy – Jules Road





## Jules Road Connection

- Ultimate Planning recommendation for Jules Road to be connected to Centenary Road
- Safer for vehicles turning right out of Gelorup onto Bussell Highway
- Access for Gelorup to head east across BORR
- Provides alternative access in emergency event
- School access
- Designed for local traffic only, heavy vehicles to the quarry will use Allenville Road/ Hasties Road
- Provides good network resilience





## Community Views

- Some residents concerned at potential increase in traffic on Jules Road
- Sleaford Drive – recognised potential reduction in traffic volume
- Community pleased at removal of heavy vehicles (Holcim Quarry) from Jules Road

# Traffic Modelling

- Bunbury Traffic Model – Strategic Model (establish demand / volumes on major routes)
- Mesoscopic Model – finer zoning
- Confirms removal of through traffic from Gelorup
- Increase on Jules Road – expected order of magnitude is few hundred vehicles per day (current volume on Jules Road around 500 vpd)
- Decrease on Sleaford Drive (with right turn ban Bussell into Sleaford to prevent rat run)







# Urban and Landscape Design

Marion Dalton



# What is Urban and Landscape Design (ULD)?

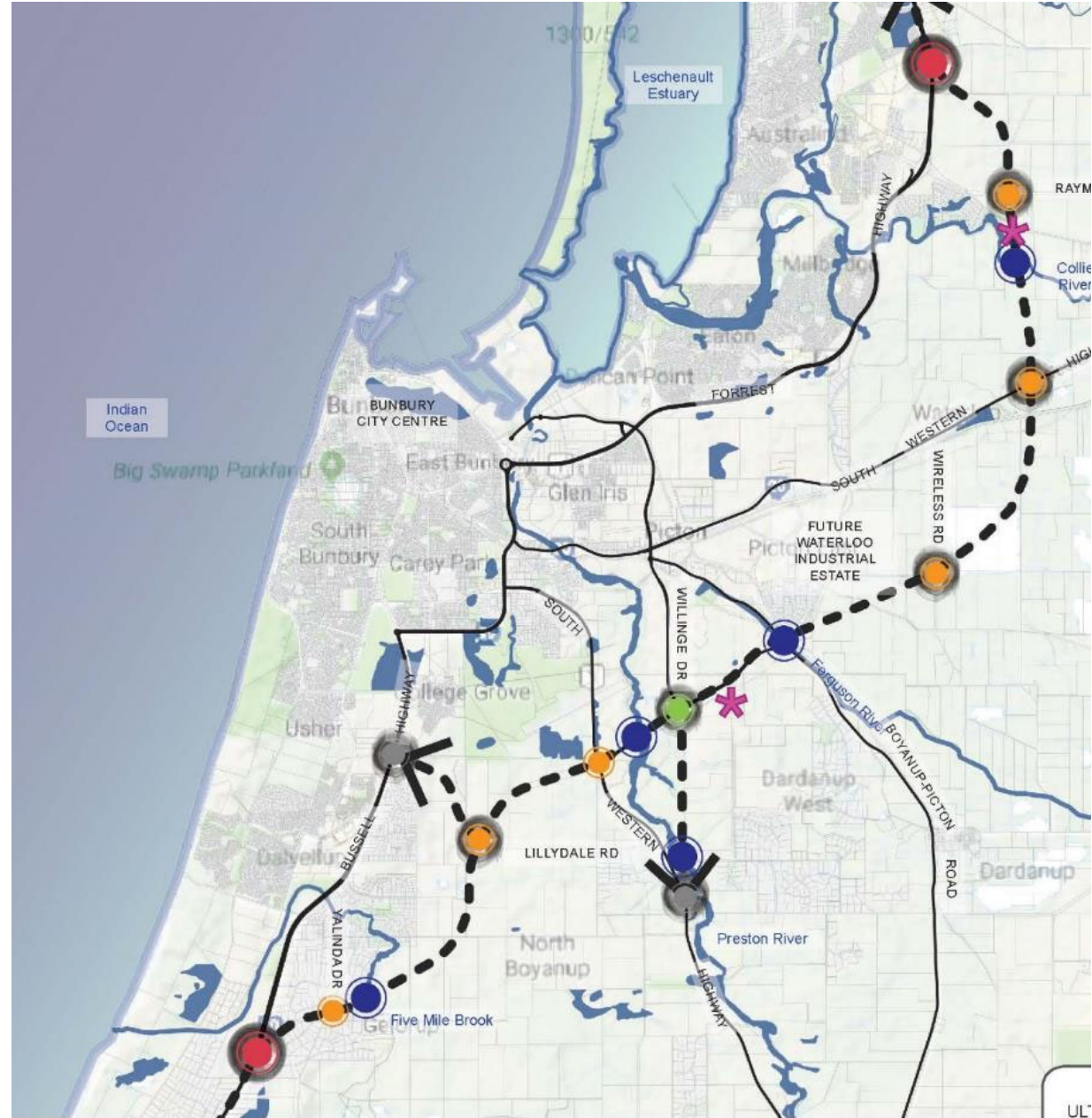
Urban and Landscape Design is about creating places for people by connecting communities, built form and the natural environment. This includes:

- Planting
- Hard Landscape
- Retention of vegetation and habitat
- Integrated public art/ local art
- Integrated aesthetic treatments such as colour and relief pattern on walls
- Enhancing pedestrian and cycling experiences
- Visual amenity for surrounding communities and road users

# ULD Vision

## Reflecting Place

- Utilising integrated aesthetic treatments of large structures, public art/ local art to reflect local themes, features and stories to provide drivers a sense of place
- Creating a hierarchy of interchanges & structures (nodes) to provide visual cues, assisting drivers to naturally find their way





# ULD Vision

## Reflecting Place

### Node Hierarchy

- Primary – BORR/Bussell & BORR/ Forrest
- Secondary – Willinge Drive
- Tertiary
- River



# ULD Vision

## Integrating Networks

- A shared walking and cycling path along BORR connecting into key local roads and amenities
- Trees are proposed over the path to provide shade, habitat, visual screening and amenity for adjacent land owners

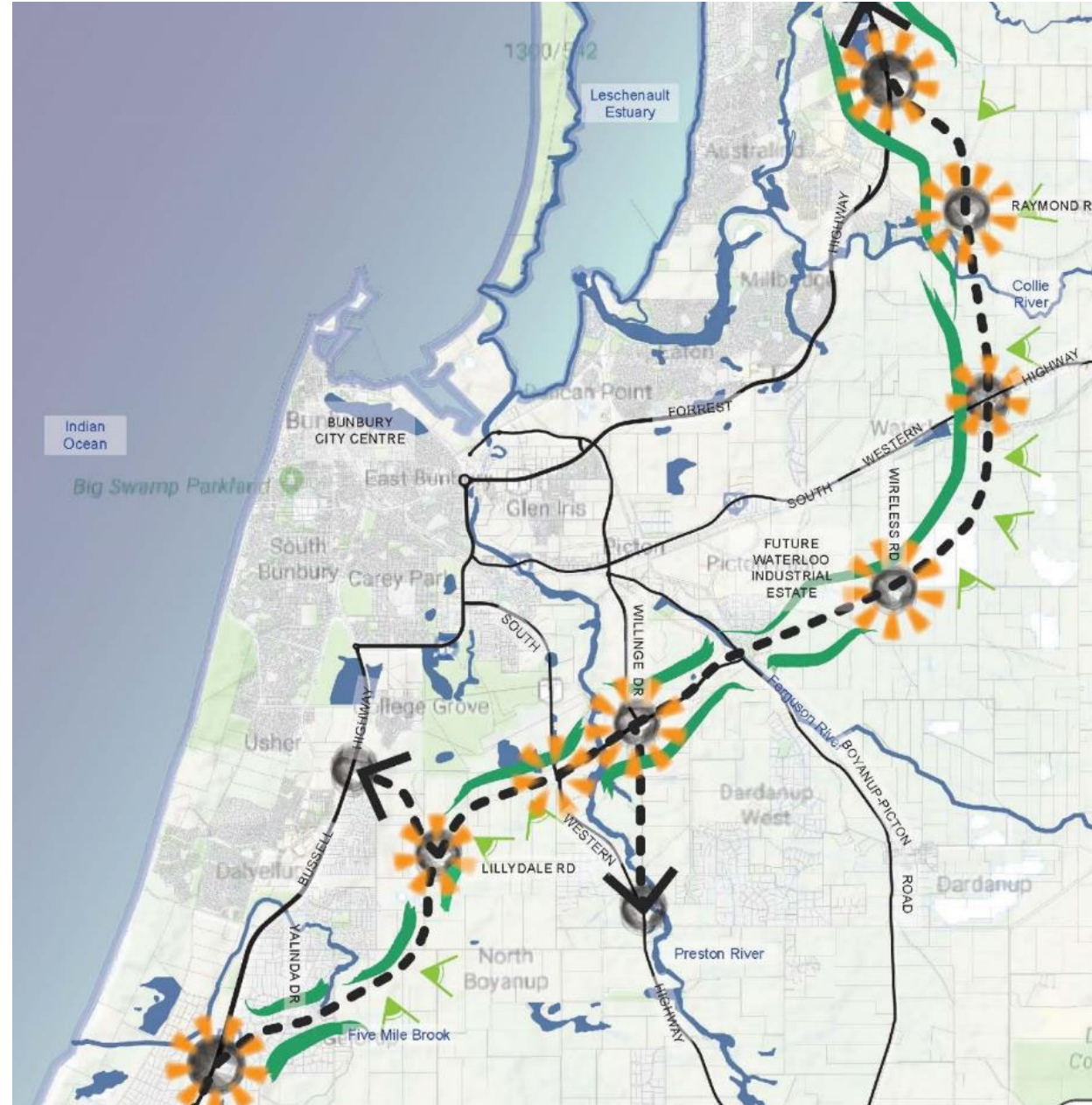




# ULD Vision

## Experiencing Journey

- Create varied experience for drivers to combat driver fatigue
- Utilise elevated sections of road for long views to the escarpment and across the rural landscape to create a sense of place
- Incorporates vegetated screening to create amenity for adjacent residents and also to screen out undesirable views such as the quarries and industry
- Provide habitat connections along the alignment











# Planting

- Maximise vegetation retention
- Maximise planting opportunities
- Revegetation planting of species in the endemic vegetation complexes; Karrakatta, Bassendean and Southern River.
- Utilise vegetation to provide visual screening and amenity
- Utilise vegetation to create feature treatments in key areas such as at interchanges
- Legacy opportunities to improve existing vegetation beyond the construction footprint



# Planting

## Legend

-  Feature Planting
-  Screening Planting
-  Revegetation
-  Parkland
-  Dense Parkland
-  Median Planting
-  Riparian
-  Fire Break





## Planting

Seed collection of provenance species is being undertaken for use on the project.

- 2018/19 – 53kg collected
- 2019/20 - targeting 200kg



## Hard Landscape

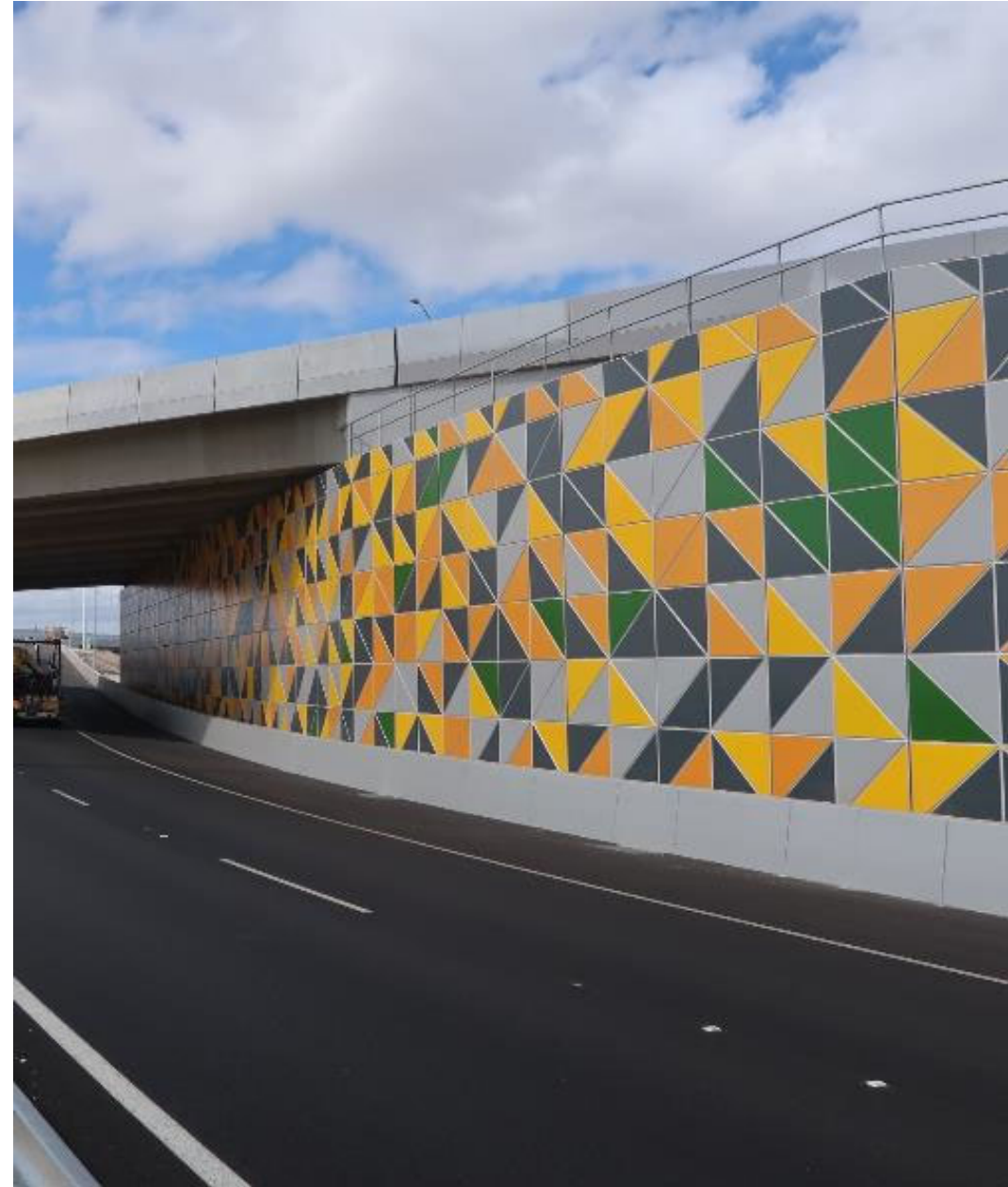
Proposed locations:

- Feature areas for visual impact i.e. around interchange and local road medians
- Areas that are too narrow or steep to planting
- Areas that are unsafe to maintain
- Areas that provide maintenance access



## Integrated Aesthetics

- Integrated colour and relief patterns on retaining walls at interchanges (nodes) and noise walls along the alignment





## Integrated Aesthetics

- Integrated colour and relief patterns on retaining walls at interchanges (nodes) and noise walls along the alignment
- Local art opportunities at underpasses



## Integrated Aesthetics

- Integrated colour and relief patterns on retaining walls at interchanges (nodes) and noise walls along the alignment
- Local art opportunities at underpasses
- Feature light poles







## Integrated Aesthetics

- Integrated colour and relief patterns on retaining walls at interchanges (nodes) and noise walls along the alignment
- Local art opportunities at underpasses
- Feature light poles
- Interpretive signage to tell local stories and highlight key features
- Opportunity to reflect local themes and character

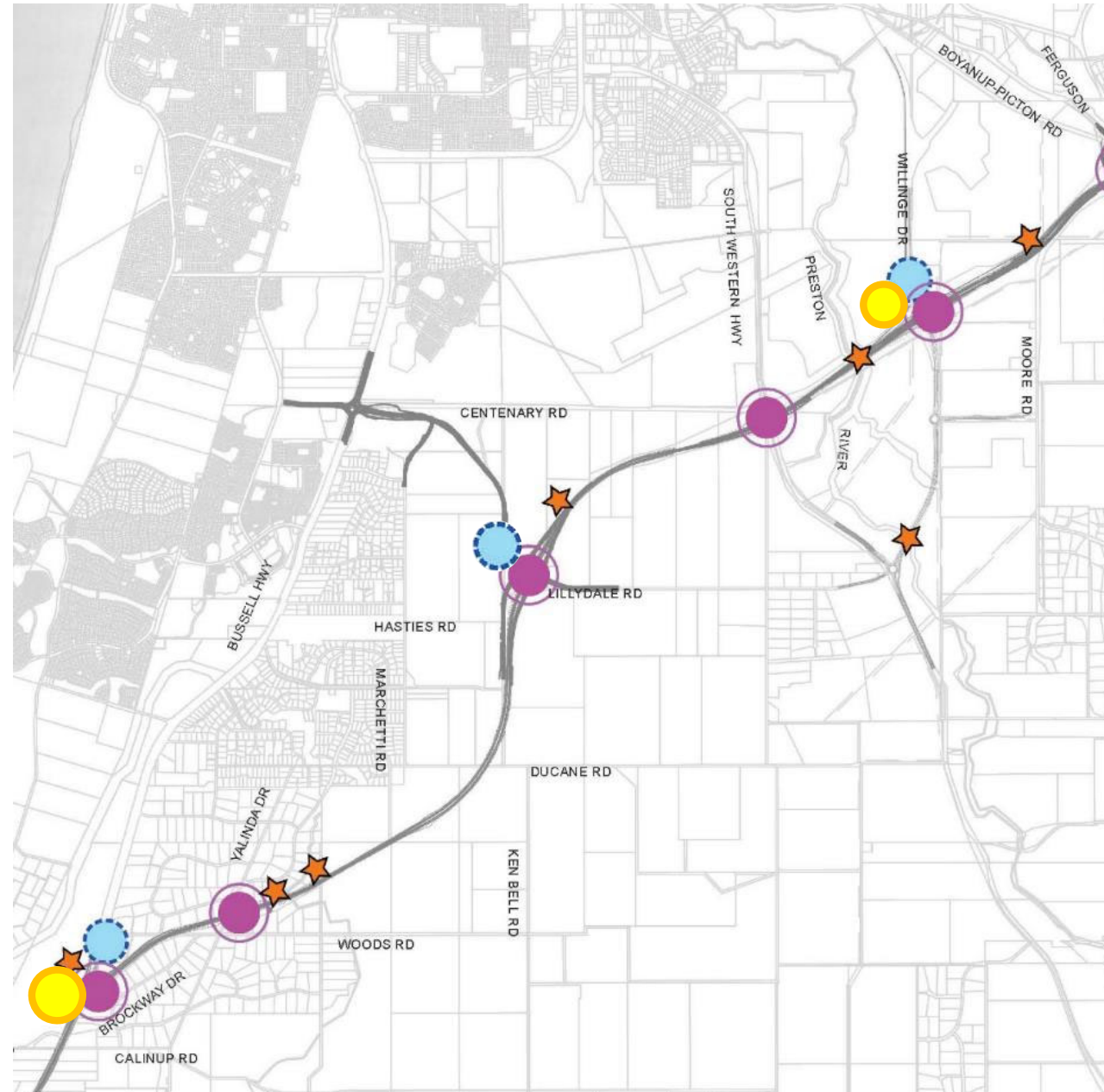




# Integrated Aesthetics

-  Interchange/bridge retaining walls
-  Points of interest (interpretation sign)
-  Underpass
-  Feature light poles

Noise walls will also have an aesthetic treatment. Locations are to be determined



# Integrated Aesthetics & Local Art Themes

- Colours and patterns will be developed from local themes
- Suggestions from the community through drop-ins and CRG sessions
- Subject to further stakeholder consultation and design development
- Are there additional themes which are unique to Gelorup or the Greater Bunbury Region?

WESTERN  
RING-  
TAILED  
POSSUM

RED-CAPPED  
PARROT



AGRICULTURAL  
LIFESTYLE



EUCALYPTUS  
WANDOO



WILDFLOWERS



FERGUSON  
VALLEY



PORT



A blurred high-speed train, possibly a Shinkansen, is captured in motion, passing under a concrete bridge structure. The train is white with blue and red accents. The bridge has several large concrete pillars. The background is a bright, overcast sky. The overall scene is dynamic and modern.

# Environment & Heritage Update

Fionnuala Hannon and  
Martine Scheltema



# EPA Request for Additional Information

## Flora & Vegetation

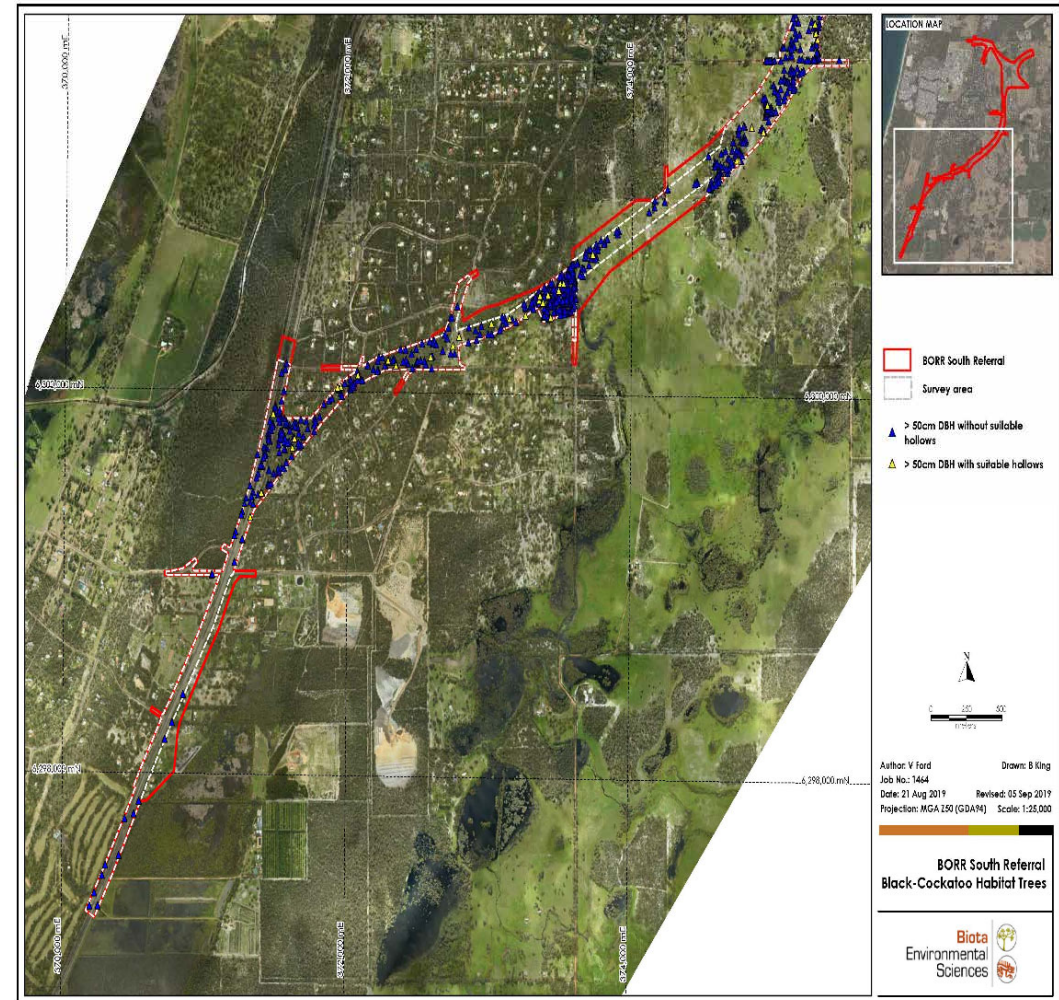
EPA request	Studies undertaken	Results
Confirm impacts to Flora and Vegetation within unsurveyed areas	<ul style="list-style-type: none"> <li>Level 2 Flora and Vegetation Spring Survey (including targeted Tuart TEC and Claypan TEC surveys) – August - October 2019</li> <li>Phytophthora Dieback Occurrence Survey – September 2019</li> </ul>	<ul style="list-style-type: none"> <li>No Claypan TEC</li> </ul>
Additional surveys to confirm occurrence and impacts to TECs/PECs or threatened/priority flora within unsurveyed area	<ul style="list-style-type: none"> <li>Targeted Claypan TEC Winter Survey – August 2019</li> <li>Targeted Orchid Spring Survey – November 2019</li> <li>TEC/PEC monitoring program (ongoing) – September and November 2019</li> </ul>	<ul style="list-style-type: none"> <li>No Claypan TEC</li> <li>Survey is complete. Report is in preparation</li> <li>Surveys complete. Report is in preparation</li> </ul>
Additional surveys to confirm occurrence and impacts to Tuart TEC (Critically Endangered – EPBC Act)	<ul style="list-style-type: none"> <li>Targeted Tuart TEC Survey (part of the Level 2 Flora and Vegetation Spring Survey) – August - October 2019</li> </ul>	<ul style="list-style-type: none"> <li>Report in preparation.</li> </ul>

## Terrestrial Fauna

EPA request	Studies undertaken	Results
Confirm impacts to Terrestrial Fauna within unsurveyed areas	<ul style="list-style-type: none"> <li>Level 1 Fauna Survey (unsurveyed areas) – August and October 2019</li> </ul>	<ul style="list-style-type: none"> <li>Report in preparation</li> </ul>
Additional surveys to confirm impacts (direct and indirect) to Black-stripe Minnow and/or suitable habitat for Black-stripe Minnow, Black Cockatoos and Western Ringtail Possum	<ul style="list-style-type: none"> <li>Targeted Conservation Significant Aquatic Fauna Survey – August 2019</li> <li>Drone survey of Black Cockatoo hollows – November 2019</li> <li>Western Ringtail Possum population within the BORR Study area – August, October and December 2019</li> <li>Ongoing Western Ringtail Possum monitoring – commenced November 2019</li> </ul>	<ul style="list-style-type: none"> <li>Report is complete</li> <li>Report in preparation</li> <li>Report in preparation</li> <li>Report in preparation</li> </ul>

# Fauna Survey Effort Black Cockatoo

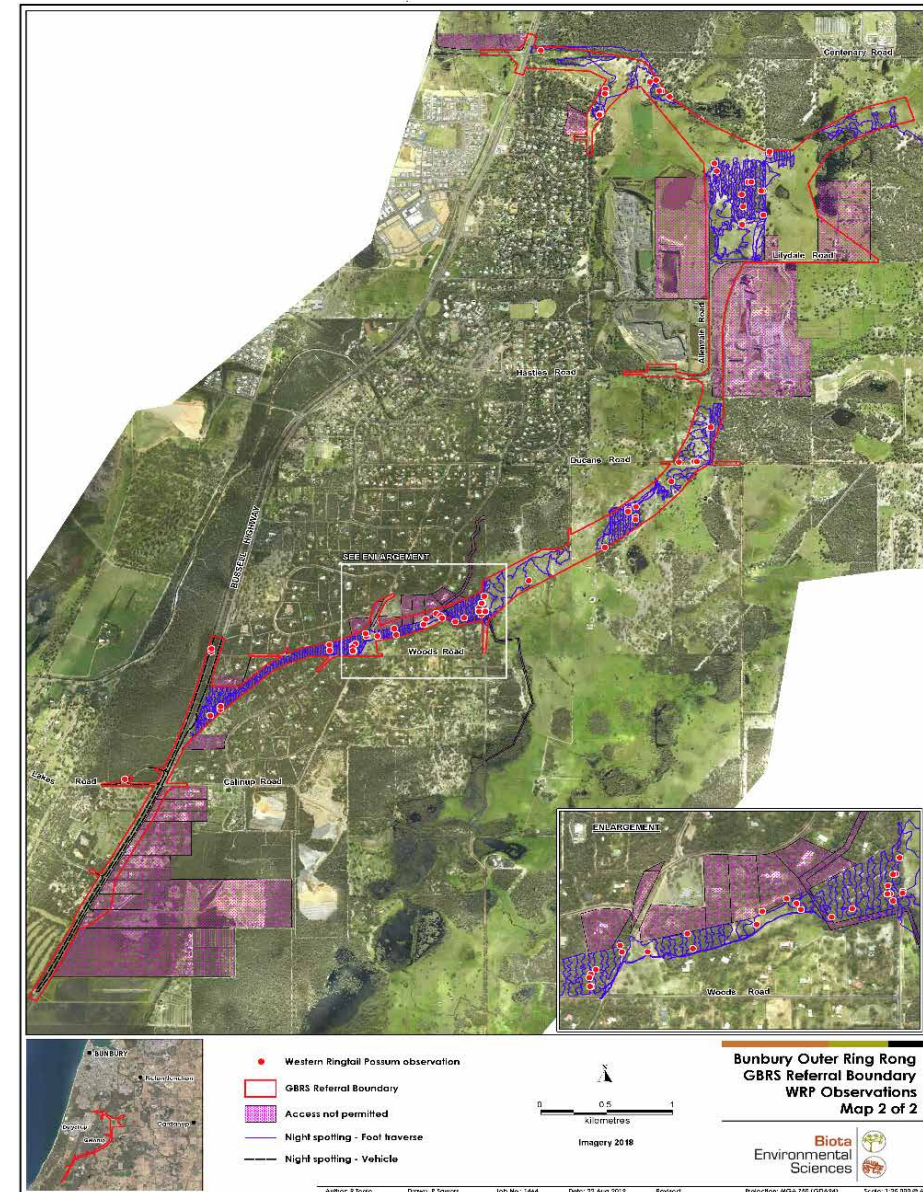
- Re-assess breeding hollows, drones (completed, results pending)
- Forage habitat remains the same as report in September 2019





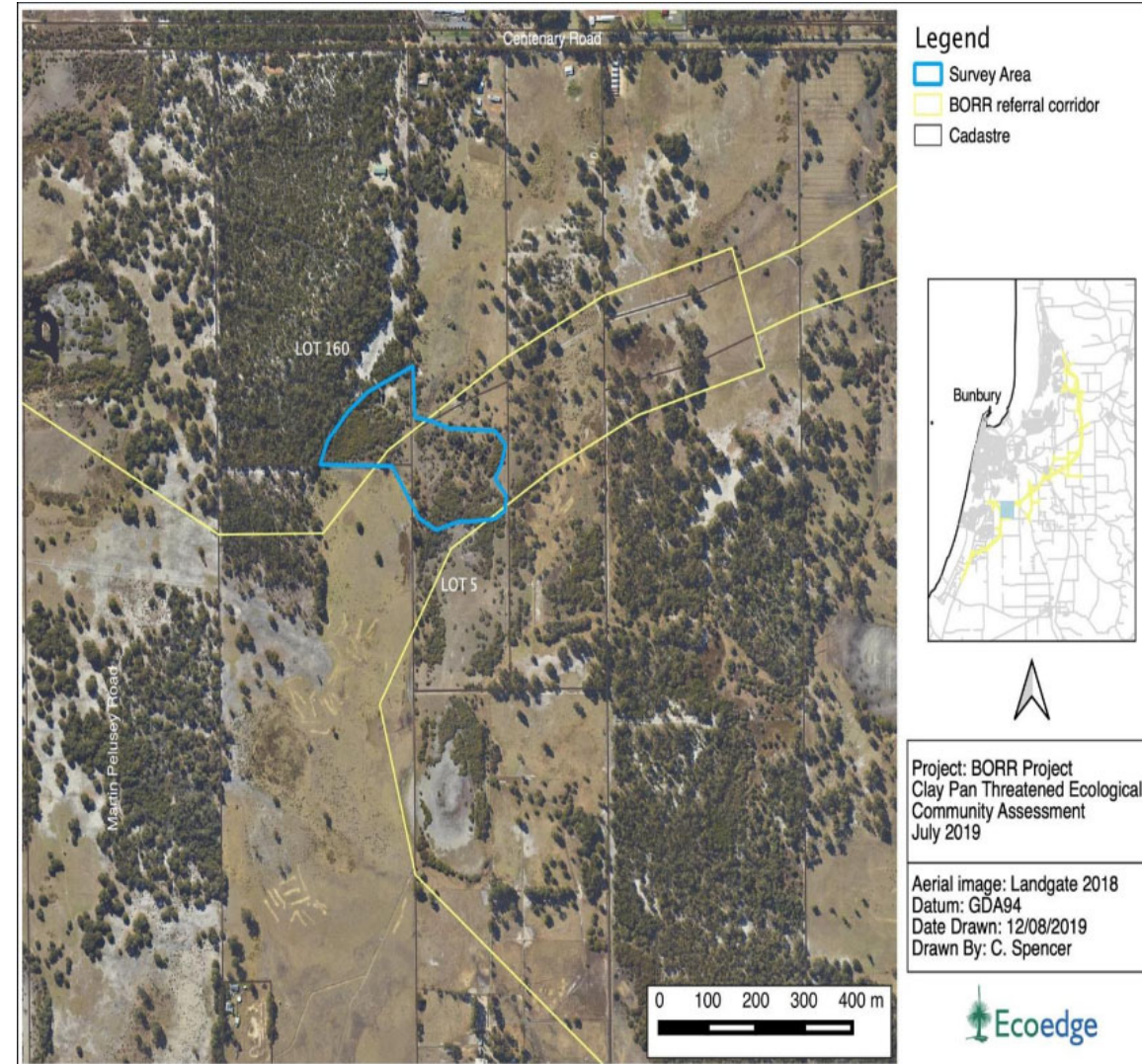
## Fauna Survey Effort for the BORR Study Area Western Ringtail Possum

- Bi-monthly spotlight survey
- August, October & December.
- The bi-monthly survey effort will continue in 2020
- Assessment of fauna movement and connectivity



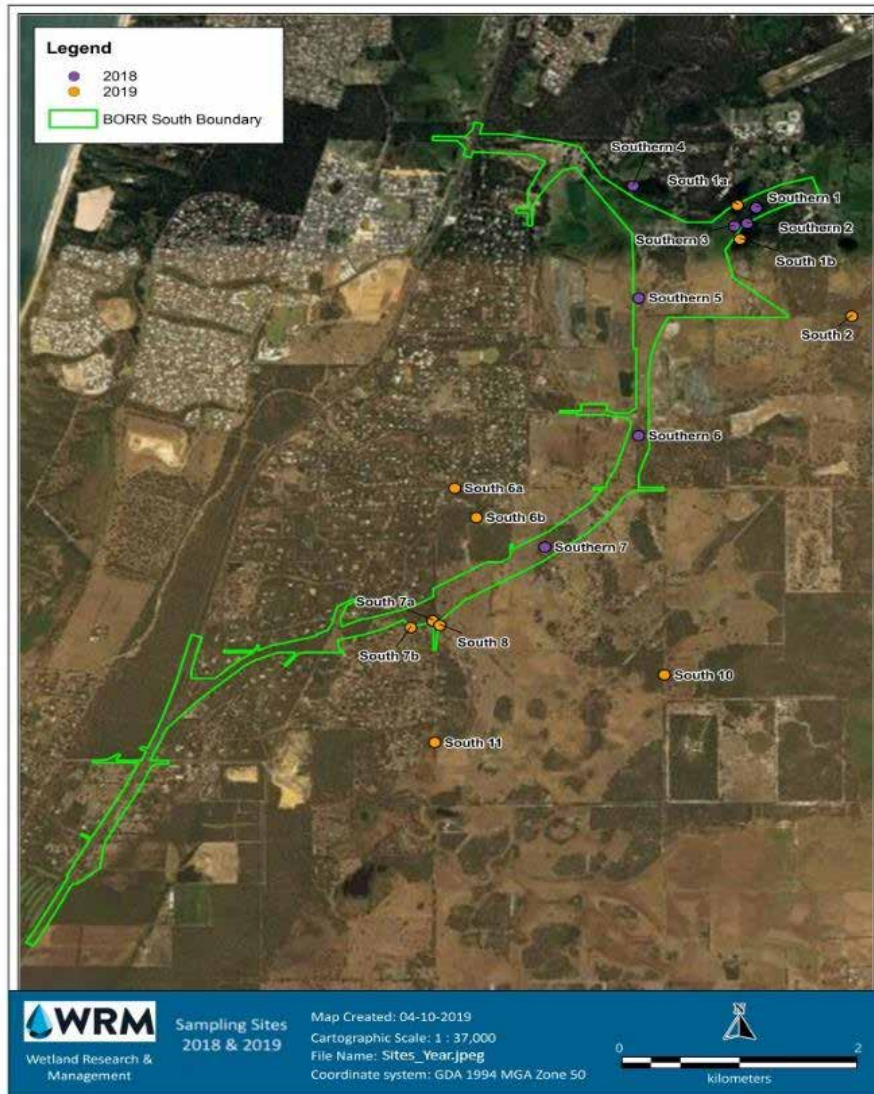
# Flora & Veg Survey Effort

- Assess potential Claypan Threatened Ecological Communities
- Completed spring survey
- Targeted orchid survey
- Identify and assess monitoring/reference sites





# 34 Aquatic fauna – Black Striped Minnow





## Social Surroundings

EPA request	Studies undertaken	Results
<p><i>Noise</i></p> <ul style="list-style-type: none"> <li>• Provide noise modelling predictions and analysis of impacts</li> <li>• Proposed noise mitigation, e.g. noise walls, bunds etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Transportation Noise Assessment (Lloyd George Acoustics) – Draft August 2019</li> </ul>	<ul style="list-style-type: none"> <li>• Draft 2019 results are consistent with results from the 2012 study where exceedances were anticipated</li> <li>• Noise control options include quieter road surface, noise walls, architectural upgrades to dwellings are currently being assessed</li> <li>• Report in process of being finalised</li> </ul>
<p><i>Amenity</i></p> <ul style="list-style-type: none"> <li>• Provide a landscape and visual impact assessment study</li> <li>• Provide a detailed assessment of impacts to amenity values – potential loss of connectivity between Gelorup north and south</li> </ul>	<ul style="list-style-type: none"> <li>• Landscape and Visual Impact Assessment Study – underway</li> </ul>	<ul style="list-style-type: none"> <li>• Report in preparation</li> </ul>
<p><i>Aboriginal heritage and culture</i></p> <ul style="list-style-type: none"> <li>• Aboriginal cultural heritage and ethnographic surveys identifying proposed impacts, avoidance, minimisation and mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>• Aboriginal Heritage Assessment (Archaeological and Ethnographic Survey) – October and November 2019</li> </ul>	<ul style="list-style-type: none"> <li>• Report's in preparation</li> </ul>

## Aboriginal Heritage

- Archaeological study field study undertaken week commencing 28 October
- Ethnographic consultation was undertaken on 8 November. Informants attending the consultation were nominated by the Gnaala Karla Booja Working Party.
- The Report's are in preparation.

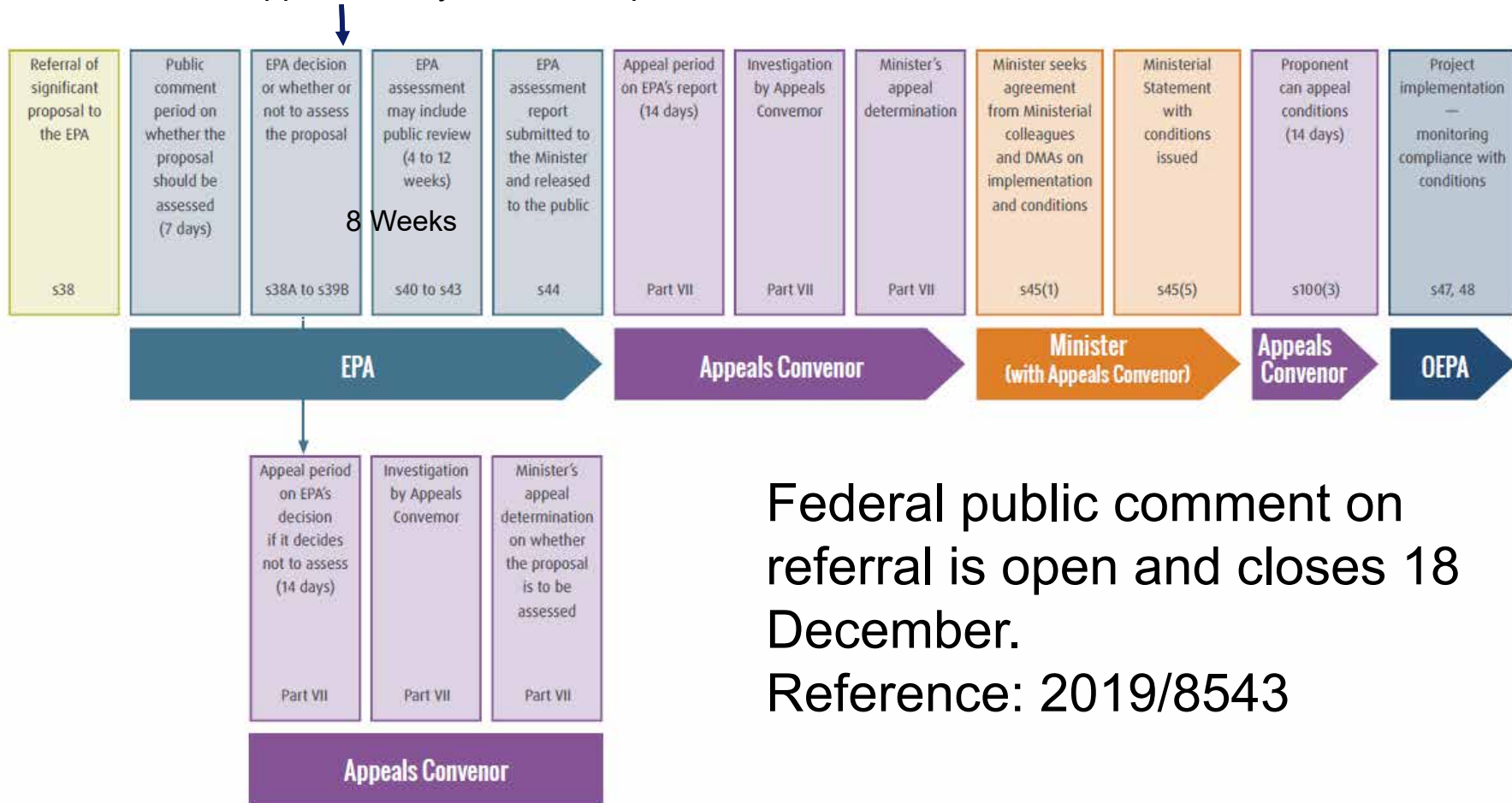
# Current and Ongoing Studies

- Aboriginal Heritage
- Targeted Orchid Survey
- Dieback assessment
- Ongoing TEC/PEC monitoring
- Ongoing WRP monitoring, including radio tracking
- Noise Assessment
- Landscape and Visual Impact Assessment Study
- Background Groundwater and Surface Water Monitoring
- Contaminated Sites Constraints Assessment
- Acid Sulfate Soils Factual Report and Management Plan
- Wetland Study
- Environmental Impact Assessment



# Status of Environmental approvals

We are approximately here in the process



Federal public comment on referral is open and closes 18 December.

Reference: 2019/8543



# CRG Review

Tammy Mitchell

# Community Representative Group Process



BUNBURY OUTER RING ROAD | PLANNING AND DEVELOPMENT

Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

**Prepare Ultimate Planning Design and environmental referral documents**

**Obtain approvals, develop Project Case Design and Business Case**

**CRG #1 JULY 2018**  
Project overview, planning options criteria, key project issues and opportunities

**CRG #4 MARCH 2019**  
Project criteria and objectives, key project issues

**CRG #2 SEPTEMBER 2018**  
Alignment, planning options and analysis, key project issues

**CRG #5 MAY 2019**  
Project options and staging, key project issues

**CRG #3 DECEMBER 2018**  
Ultimate planning design concept, landscaping, urban design, environmental referral, key project issues

**CRG #6 AUGUST 2019**  
Key project issues, final summary and next steps



## CRG Influence

Issue	Action
Primacy of Bunbury and economic impacts of 'bypass'.	Formation of Economic Advisory Group
Concerns about social and economic impacts on community, business and severance for farmers.	KPMG was commissioned by MR to undertake a Socio-Economic Assessment.
Local access issues for northern Gelorup-Jules Road & Sleaford Drive	A Local Access Strategy Workshop was held in July 2019.
BORR connection to Gelorup via Hasties Road. Increased traffic through community and past community infrastructure & interactions with school traffic.	Interchange moved to Centenary Road / Lillydale Road. Quarry trucks removed from Jules Road and will use Hasties Road and Allenville Road with new cul-de-sac on Hasties Road.

## CRG Influence

Issue	Action
Road severance impacts to residents east of BORR and emergency services access.	A service road from Ducane Road to Lillydale Road is proposed.
Concern about lack of movements at Bussell Highway / BORR with Y-Interchange.	New grade separated round about improves network resilience by allowing all movements.
Stratham community concerns regarding closure of Lakes road requiring extension of Minninup Road to Maidment Parade.	Review of local access and southern interchange has allowed for left in, left out movements to be maintained at Tamra Close with Bussell Highway.
Calinup and other Bussell Highway interchange safety concerns raised	Interchange forms will be amended slightly to improve safety.
Light pollution from street lights and vehicle headlights.	LED lighting, backshades and reducing light pole height where possible to minimise impacts

A blurred high-speed train, possibly a Shinkansen, is captured in motion, passing under a concrete bridge structure. The train is white with blue and red accents. The bridge has several large concrete pillars. The background is a bright blue sky. A dark blue rectangular box is overlaid on the right side of the image, containing white text.

# CRG Member Round table



A blurred high-speed train, possibly a Shinkansen, is captured in motion, passing under a concrete bridge structure. The train is white with blue and red accents, and its wheels are blurred due to its speed. The bridge structure is made of concrete and has a dark, industrial appearance. The overall scene is dimly lit, with a blue tint. A dark blue rectangular box is overlaid on the right side of the image, containing the text "Next Steps" in white.

# Next Steps

# Transition from Project Development to Delivery

- Project Development Phase complete by end of February 2020
- Some activities will continue (environmental assessment / heritage approvals)
- Environmental Approvals – Public Comment Periods
- Main Roads will continue to provide Project Updates & Information on Project Website
- Delivery Alliance will take on engagement from early 2021
- Usual approach is to establish Construction Reference Groups
- Main Roads will deal with queries in the meantime

## Contact from March 2020

- Main Roads Contact Details:
  - 138 138 – available 24/7
  - [enquiries@mainroads.wa.gov.au](mailto:enquiries@mainroads.wa.gov.au)