

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
The Proposal - general comments			
1	City of Wanneroo	<p>The submitter comments that the City is supportive of the proposal to extend the railway through to Yanchep.</p> <p>The submitter further comments that as part of the ongoing works to complete the train line, there are a number of City documents that should be referred to in its planning, design and construction:</p> <ul style="list-style-type: none"> • Local Planning Policy 3.3: Fauna Management – Areas to be cleared of native vegetation should be contained prior to clearing where macro-fauna (kangaroos and emus) have been shown to be present. Fauna should be kept out of development sites. The City also supports the installation of fauna corridors in the long term to facilitate fauna movement between existing local and regional open space reserves. • Local Planning Policy 4.8: Tree Preservation – The City encourages retaining significant trees where appropriate. • Local Planning Policy 4.13: Caves and Karstic Features – It is understood that there is minimal risk of caves and karstic features in the area, however, future works through areas that potentially contain subterranean fauna should be appropriately identified and managed. • Local Biodiversity Plan 2018/19 – 2023/24 (LBP) – The subject site is located within an 	<p>The PTA has obtained copies of the referenced documents for consideration during preparation of the contractor’s CEMP.</p> <p>Local Planning Policy 3.3: Fauna Management – The development envelope will be fenced prior to the commencement of construction works to minimise unauthorised access (including fauna). Fauna management prior to clearing works will include fauna inspection and relocation where appropriate. The PTA will install one fauna underpass within the Alkimos PRR area to facilitate fauna movement across the reserve.</p> <p>Local Planning Policy 4.8: Tree Preservation – The CEMP will include management measures to minimise the extent of clearing within the development envelope to the minimum area required for the construction footprint and other laydown areas.</p> <p>Local Planning Policy 4.13: Caves and Karstic Feature - A detailed geotechnical investigation has been conducted to supplement and validate the initial findings of the Advisian (2017) investigation and potentially further validate areas to avoid. The CEMP will also include measures to temporarily suspend construction activities if significant caves or voids are encountered during construction. If significant caves or voids cannot be avoided, collection of specimens and genetic material for deposition into the WA Museum collections are proposed to be undertaken by a suitably qualified person.</p> <p>Local Biodiversity Plan 2018/19 – 2023/24 (LBP) – The</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
		<p>area primarily occupied by the Quindalup vegetation complex which is a high priority for further protection under the City’s LBP. As such, clearing should be kept to a minimum, and any revegetation works should aim to reinstate vegetation that occurs locally.</p>	<p>CEMP will include measures addressing revegetation activities including:</p> <ul style="list-style-type: none"> • Areas that can be revegetated, such as some batters, will be stabilised and revegetated using suitable locally endemic species. • Topsoil reuse in areas with consistent dieback and weed control objectives as source. • Topsoil spreading measures and application of stabilisers to revegetation areas to improve vegetation success.
2	<p>ANON-K8RA-XCV2-S ANON-K8RA-XCV3-T ANON-K8RA-XCVW-X ANON-K8RA-XCVQ-R ANON-K8RA-XCVV-W ANON-K8RA-XCVP-Q ANON-K8RA-XCVA-8 ANON-K8RA-XCVK-J ANON-K8RA-XCVR-S ANON-K8RA-XCV8-Y ANON-K8RA-XCV4-U ANON-K8RA-</p>	<p>A number of submitters disagree with the development of the rail extension, expressing that the area should be preserved to protect the flora and fauna of the area and stop any future development. Comments were made in relation to piecemeal development and the need to consider the cumulative impact of development on flora and fauna. The submitters also expressed concern at the loss of areas of remaining bushland in the metropolitan area in general. Submitters also queried if it was possible to find an alternative route and another questioned the continued use of electric trains rather than alternative models of mass transport.</p>	<p>The PTA acknowledges the environmental values within and surrounding the project’s development, including flora and fauna. The PTA has undertaken detailed biological surveys of the Part 1 development envelope to define these flora and fauna values for full consideration in the impact assessment.</p> <p>All future urban development adjacent the Part 1 alignment has received Commonwealth environmental approval. Some of these urban developments have also received subdivision approval from the Western Australian Planning Commission (WAPC), which permits clearing and construction. Therefore, urban development surrounding the Part 1 area would still progress, as planned, with the approval of each subdivision, regardless of whether the rail extension was approved or not.</p> <p>The Part 1 environmental impact assessment submission to the EPA considers the cumulative impact of the construction and operation of the Part 1 project in addition to the construction and operation of:</p> <ul style="list-style-type: none"> • The other ‘part’ of the Project, i.e. Part 2, so the environmental impact of the whole alignment is considered and assessed in its entirety. • Part 2 and the construction of all projected future urban

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
	<p>XCVN-N ANON-K8RA- XCVG-E ANON-K8RA- XCVT-U ANON-K8RA- XCV9-Z ANON-K8RA- XCV6-W ANON-K8RA- XCVC-A</p>		<p>and industrial development adjacent the entire alignment (Part 1 and 2), beyond 10 years (considered the worst-case scenario from a cumulative impact perspective).</p> <p>The Part 1 alignment was defined based on the following existing constraints (present during the environmental planning phase):</p> <ul style="list-style-type: none"> • The rail corridor generally follows the area reserved as “Railways” under the current MRS. • The existing WAPC approved Structure Plan areas adjacent the PTA development envelope, which had obtained Commonwealth environmental approvals, including assessment and approval of the land contained in the proposed rail alignment. • The existing WAPC approved subdivisions adjacent the alignment, permitting urban developers to clear and construct their developments. • Clearing and urban development construction works that had commenced or been completed within the area adjacent to the development envelope. <p>Due to the constraints listed above, opportunity and flexibility to find an alternative route to the alignment is very limited.</p> <p>METRONET is the Government’s vision to integrate transport and land use planning in Western Australia and provide a framework to support sustainable growth of greater metropolitan Perth over the next 50 to 100 years. Perth’s population is expected to grow from 2.02 million in 2017 to 3.5 million by 2050 (Perth and Peel @3.5 million) with the North-West Metropolitan Sub-Region expected to accommodate a significant portion of this growth with its population expected to reach 740,000 by 2050.</p> <p>A key part of the PTA’s Route Utilisation Strategy (RUS) is to</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<p>move people where they want to go, as effectively as possible. Using the RUS, METRONET’s rail planning will look at how each project fits with Perth’s broader public transport needs and find ways to optimise the existing rail system’s capacity. As part of this, the PTA’s Station Access Strategy will inform how METRONET projects can integrate with the community and what is needed to encourage people to connect to future stations by walking, cycling, bus, drop off and finally, driving and parking.</p> <p>METRONET addresses worsening urban congestion and lack of efficient transport alternative and an urban form that promotes car dependency, by considering how rail integrates with other sustainable transportation options.</p> <p>Table 11-3 (included in Appendix M) shows the average emissions intensity of several modes of transport. Emissions from mass transit options – including urban passenger rail – vary substantially due to energy sources and the number of people using them. However, rail is projected to be the most sustainable form of public transport.</p>
3	ANON-K8RA-XCVF-D	The submitter supports the proposal but would prefer higher density zoning and more protected native bushland.	<p>METRONET will drive land use change in more than 5,000 ha of land within walking distance of the new stations.</p> <p>METRONET station precincts will be planned to create connected community centres that are universally accessible and provide a range of housing, jobs and services to Perth’s growing population. METRONET station precincts are broadly defined as the area within one kilometre (a 10 to 15-minute walk) from the station. Station precincts are great locations for future developments of housing, jobs and community services as they make the best use of the State Government’s investment in transport infrastructure.</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<p>Over time these areas will become higher-density active urban places, offering a range of living, employment, entertainment and recreation opportunities while the surrounding suburbs will remain largely ‘low-density residential’ in character.</p> <p>Native bushland designated for protection is assigned different protection status by different government bodies based on vegetation types and condition and for different conservation purposes. This includes the WAPC’s classification of bushland as Bush Forever and zoning land for parks and reserves and the DBCA’s management of national parks (e.g. Neerabup National Park and Yanchep National Park) and nature reserves. The PTA will offset their significant environmental impacts, which will include a component of land acquisition, creating opportunities for additional areas of native bushland to be managed, protected and potentially transferred to conservation estate.</p>
4	ANON-K8RA-XCV6-W	The submitter suggests that an underground solution, regardless of the cost, is preferable in order to retain the natural environment.	<p>Surface impacts and vegetation clearing are also required during the construction of a rail tunnel and associated infrastructure, such as underground stations. This is due to the deployment and operation of tunnel boring machines, tunnel construction techniques, safety requirements and installation of the equipment and infrastructure associated with an operational rail tunnel. Cut, fill and/or vegetation clearing, resulting in surface impacts would be required for:</p> <ul style="list-style-type: none"> • The installation of emergency access/egress shafts. • The installation of emergency/maintenance access roads and a principal shared path (PSP). • Creation of an ingress/egress point for mobilisation of the tunnel boring machine. • Cleared laydown areas for storage of spoil.

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<ul style="list-style-type: none"> • Other associated laydown areas such as storage of tunnel segments. <p>As an example, the total footprint of an existing egress site constructed as part of the PTA’s Forrestfield Airport Link project is approximately 90 m x 45 m (0.4 ha), which includes:</p> <ul style="list-style-type: none"> • Imported fill to raise the site which has increased the overall size. • The actual egress shaft itself with a 1.5 m buffer around for fencing and scaffolding. • Crib sheds and toilet facilities. • Stockpiling area for the temporary storage of material coming out of the shaft. • Crane pad. • Laydown area. <p>Construction of a tunnel will also result in the following direct and indirect impacts:</p> <ul style="list-style-type: none"> • Increased direct impacts to subterranean fauna and subterranean fauna habitat due to removal of potential karst and subsurface material. • Increased direct impacts to landforms due to removal of potential karst and subsurface material. • Increased noise and vibration impacts associated with tunnelling and construction of supporting infrastructure. • Generation of spoil which will require removal, storage, transport and offsite reuse, which may present an additional cost to the overall large construction cost and will potentially generate dust emissions, which will require management. <p>Therefore, construction of an underground tunnel would not</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			completely remove impacts to native vegetation, and in some cases may introduce other environmental impacts (e.g. disturbance of the landform and karstic features).
Flora and vegetation			
1	NON-K8RA-XCVX-Y	<p>The submitter expresses concern at the loss of north metropolitan coastal scrub which they describe as a unique and biodiverse remnant of an historically larger area lost to development.</p> <p>The submitter asks if to mitigate the loss of native vegetation, a single 70 hectare area could be protected as National Park from currently unallocated Crown land in similar coastal scrub in the north metropolitan area.</p>	<p>The PTA has prepared an Offsets Strategy (ELA, 2019) that provides a summary of significant residual impacts and proposed offsets. Environmental offsets will only be applied where the residual impacts of a project are determined to be significant, after avoidance, minimisation and rehabilitation have been pursued (Government of Western Australia, 2014).</p> <p>Offsets will be provided for the following significant residual impacts as a result of the Part 1 proposal:</p> <ul style="list-style-type: none"> • A total of 1.12 ha of <i>Melaleuca huegellii</i> – <i>M. systena</i> shrublands on limestone ridges (Gibson et al. 1994 FCT type 26a) TEC; and • A total of 52.42 ha of Carnaby’s Black Cockatoo habitat (including 21 potential breeding trees). <p>The preferred direct offset for TEC 26a is the acquisition and/or securing of land that has no existing conservation tenure and transfer to the conservation estate.</p> <p>The offset requirement for the majority of the impacts to Carnaby’s Black Cockatoo foraging habitat has already been accounted for through the acquisition of land as an offset for previous Commonwealth environmental approvals. These approvals are for six urban developers under the EPBC Act.</p> <p>There is 1.16 ha of potential foraging habitat for Carnaby’s Black Cockatoo and 21 potential breeding trees that have not previously been accounted for and require offsetting. The</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<p>preferred direct offset for Carnaby’s Black Cockatoo is the acquisition and/or securing of land that has no existing conservation tenure and transfer to the conservation estate.</p>
2	<p>Quinns Rocks Environmental Group ANON-K8RA-XCVC-A</p>	<p>The submitters contend that there is a lack of consideration of Banksia Woodland of the Swan Coastal Plain TEC and expressed concern regarding the significant loss of this ecological community and the amount remaining. Please refer to Attachment 3 and provide a direct response to the issues raised.</p>	<p>Refer to Attachment 3.</p>
3	<p>Urban Bushland Council WA Inc.</p>	<p>The submitter contends that the continued land clearing of an inherently biodiverse landscape is environmentally and socially unacceptable. The submitter argues that clearing of 70.22 ha for the proposal is only part of the proposal in planning terms and environmental impact. The submitter believes that the rail extension will be used to justify clearing of surrounding lands and that this clearing must be considered in this proposal. The submitter notes that the description of the 70.22 ha proposed for clearing does not indicate which areas are Threatened Ecological Communities (TECs) under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) separately from State listed plant communities and habitats of endangered species. The submitter believes that clearing of TECs, both state and EPBC Act listed, is unacceptable and cannot be offset. The submitter states that the principle of avoidance should apply to all TECs. The submitter further contends that clearing of any of the Endangered <i>Melaleuca huegelii-M. systema</i> shrublands on limestone ridges is unacceptable.</p>	<p>The PTA acknowledges the Urban Bushland Council’s comments. All future urban development adjacent the Part 1 alignment has received Commonwealth environmental approval. Some of these urban developments have also received subdivision approval under the WAPC, which permits clearing and construction. Therefore, urban development within the Part 1 area would still progress, as planned, with the approval of each subdivision, regardless of whether the rail extension was approved or not. The Part 1 environmental impact assessment submission to the EPA considers the cumulative impact of the construction and operation of the Part 1 project in addition to the construction and operation of:</p> <ul style="list-style-type: none"> • The other ‘part’ of the Project, i.e. Part 2, so the environmental impact of the whole alignment is considered and assessed in its entirety. • Part 2 and the construction of all projected future urban and industrial development adjacent the entire alignment (Part 1 and 2), beyond 10 years (considered the worst-

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
		<p>The submitter is concerned that approval of part 1 would be used to justify part 2 and the associated clearing of other areas for housing.</p>	<p>case scenario from a cumulative impact perspective).</p> <p>Reference to EPBC Act listed TEC(s) have not been included in the assessment of potential impacts as DotEE advised (December 2018, provided in Appendix I) that the potential impacts of YRE Part 1 to MNES were captured within the six existing EPBC Act approvals issued for adjacent urban development sites. As such, no further assessment of the potential impacts to MNES under the EPBC Act is being sought for YRE Part 1. Further, assessment of potential impacts to Commonwealth listed TEC(s) are beyond the scope of the EPA assessment under Part IV of the EP Act.</p> <p>The Biological Assessment (GHD 2018a) of the entire YRE project identified one EPBC Act listed TEC – Banksia Woodlands of the Swan Coastal Plain. As referenced above, the YRE Part 1 proposal is not being assessed under the EPBC Act, and therefore potential impacts to this TEC haven’t been included in documentation submitted to the EPA.</p> <p>The principal of avoidance for all potential impacts, including to State listed TECs, has been considered with the application of the EPA’s mitigation hierarchy, which requires significant residual impacts to be offset. Complete avoidance of impacts to <i>Melaleuca huegelii-M. systema</i> shrublands on limestone ridges TEC has been unable to be achieved. This TEC occurs more broadly in the areas surrounding the YRE Part 1 development envelope, and therefore moving the rail alignment to avoid the TEC is not possible.</p> <p>Despite both assessments considering the cumulative impacts of both parts of the project, Parts 1 and 2 of the proposal are being assessed by the EPA and/or DotEE in isolation, with a contingency available for the operation of</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			Part 1 should Part 2 not proceed.
4	Urban Bushland Council WA Inc.	<p>The submitter states that the Approved Conservation Advice for the EPBC Act listed Banksia Woodlands of the Swan Coastal Plain TEC is applicable and that the TEC should be protected to prevent further loss of extent and condition, and clearing should not be approved by State agencies. The submitter claims it is unacceptable that the assessment information does not include a map of the extent of the TEC and believes that the proposal will contribute to the ‘death by a thousand cuts’ of the TEC.</p>	<p>Reference to EPBC listed TEC(s) have not been included in the assessment of potential impacts as DotEE advised (December 2018, provided in Appendix I) that the potential impacts of YRE Part 1 to MNES were captured within the six existing EPBC approvals issued for adjacent urban development sites. As such, no further assessment of the potential impacts to MNES under the EPBC Act is being sought for YRE Part 1. Further, assessment of potential impacts to Commonwealth listed TEC(s) are beyond the scope of the EPA assessment under Part IV of the EP Act.</p> <p>The Biological Assessment (GHD 2018a) of the entire YRE project identified and mapped the EPBC Act listed TEC – Banksia Woodlands of the Swan Coastal Plain. As referenced above, the YRE Part 1 proposal is not being assessed under the EPBC Act, and therefore potential impacts to this TEC haven’t been included in documentation submitted to the EPA.</p> <p>Banksia Woodlands of the SCP TEC is a subset of the Banksia dominated woodlands of the SCP IBRA Region PEC, therefore, by default; the extent of this TEC is captured within the PEC mapping attached to the Environmental Review Document (despite not being separately labelled).</p>
5	Urban Bushland Council WA Inc.	<p>The submitter contends that the status of the south-west of Western Australia as a biodiversity hotspot has been ignored and argues that the area is already over-cleared and therefore (sic) any further clearing should be avoided.</p> <p>The submitter further states that the Perth region is recognised as a sub-hotspot in the larger south-west region and that this should result in any clearing being</p>	<p>The PTA acknowledges Urban Bushland Council’s comments and recognises the south-west of Western Australia’s importance as a biodiversity hotspot.</p> <p>The State Government is committed to the National Objectives and Targets for Biodiversity Conservation (Commonwealth of Australia 2001), which includes a target to avoid clearance of ecological communities with an extent</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
		declared as environmentally unacceptable regardless of the extent to be cleared.	<p>below 30% of that present prior to European settlement. The implementation of the proposal will not reduce any of the vegetation associations mapped within the development envelope below 30% of their pre-European extents. The extent remaining after of the YRE Part 1 proposal implementation varies from 36% to 69% at all scales.</p> <p>Through the design and development of the proposal, the PTA has implemented the EPA’s mitigation hierarchy to avoid and minimise impacts to biodiversity. Construction and access areas have been selected to coincide with proposed future urban development cells or roads either reserved by the Metropolitan Region Scheme, or as detailed within approved and draft local structure plans, to intentionally avoid direct impacts to native vegetation which may have otherwise been able to be retained within future public open space reservations.</p>
6	Quinns Rocks Environmental Group	Please refer to Attachment 3 and provide a direct response to the issues raised.	Refer to Attachment 3.
Terrestrial fauna			
1	Wildlife Care WA	<p>The submitter asks if an onsite assessment has been done to identify all wildlife that will be affected, including those with a low conservation status and if so, what has been done to minimise the impact on them, particularly the larger terrestrial wildlife such as Western Grey Kangaroos.</p> <p>The submitter also asks if any plans will be made to relocate some of the reptiles to prevent them from being killed during the clearing and whether the Public Transport Authority (PTA) have</p>	<p>A total of three terrestrial fauna surveys have been undertaken within the development envelope between 2011 and 2018, as well as five desktop assessments.</p> <p>The most recent 2018 survey recorded 68 vertebrate fauna species within the development envelope, including 51 birds, eight reptiles and nine mammals (GHD 2018). This survey predominantly focused on the likelihood of fauna of high conservation significance occurring within the proposal’s development envelope. Three conservation listed species</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
		<p>contact details of registered carers who would be willing to help if the need arose.</p>	<p>were recorded in the development envelope, a further five conservation listed vertebrate species were considered likely to occur in the development envelope and two conservation listed invertebrates were considered to have the potential to occur.</p> <p>The likelihood of low conservation status fauna occurring in the area has been based on results of the Yanchep Rail Extension Part 2 Fauna Desktop Study (Bamford, 2019b), which is also applicable to Part 1, and publically available fauna survey datasets.</p> <p>The Desktop Study (Bamford, 2019b) provides an overview of all the vertebrate fauna expected to occur within the development envelope and includes consideration of more common species such as the Western Grey Kangaroo and Bush Rat.</p> <p>The PTA will install a fauna underpass estimated to be 75 m long, within the Alkimos ‘Parks and Recreation reservation’ (Alkimos PRR) to maintain east-west local ecological linkage for fauna in this area. The fauna underpass will be designed in accordance with the advice provided in the Fauna Underpass Assessment for YRE Part 2 (Bamford Consulting Ecologists 2019a) and in direct consultation with Bamford Consulting Ecologists during the detailed design. This includes vegetating the underpass at both entry points, and installing furniture. Bamford Consulting Ecologists (2019a) states that some native fauna, including Brush Wallaby, Quenda, Common Brushtail Possum, Echidna, Western Grey Kangaroos, large lizards and snakes and moaning frogs will readily use box culvert design fauna underpasses.</p> <p>Potential impacts to fauna will be managed in accordance with the CEMP which will includes measures such as:</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<ul style="list-style-type: none"> • Fauna habitat clearing has been reduced to the minimum area required for construction and operations. • A fauna underpass will be located underneath the railway line within the within the Alkimos PRR to maintain the local east-west local ecological linkage and provide for the long-term movement of native fauna in this area. • Undertake progressive clearing to allow fauna to move on. • Within seven days prior to clearing of native vegetation, a qualified fauna expert will undertake a trapping and relocation program for conservation significant vertebrate fauna in accordance with a licence to take fauna issued by the DBCA. • Conduct fauna trapping and relocation in accordance with DBCA's Standard Operating Procedures (SOPs) or permit conditions. • Contact DBCA prior to the trapping and relocation program to assist with the identifying suitable relocation sites. • Implement the trapping and relocation for five consecutive nights prior to clearing activities in areas containing native vegetation. • Following clearing activities, install fences between cleared areas and adjacent native vegetation to limit opportunities for macrofauna to return to the cleared area. • Ensure fauna spotters are present during clearing of native vegetation to supervise dispersal/relocation of any remnant fauna, and identification of any potential injured fauna. • Undertake vegetation clearing commencing from a disturbed edge, where practicable, to encourage remaining mobile fauna to naturally relocate to areas of

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<p>adjacent vegetation.</p> <ul style="list-style-type: none"> • Visually inspect fencing and trenches within the development envelope during clearing activities for isolated or trapped macrofauna (Western Brush Wallaby, Emus etc.) in temporary construction infrastructure. Facilitate the relocation of trapped macrofauna. • Ensure all personnel complete a site induction that will cover fauna values within and adjacent to the development envelope. <p>The PTA welcomes the provision of contact details of registered carers who would be willing to help if the need arose and will contact Wildlife Care WA for further information.</p>
2	<p>ANON-K8RA-XCVH-F ANON-K8RA-XCVG-E ANON-K8RA-XCVM-M ANON-K8RA-XCV9-Z ANON-K8RA-XCVN-N ANON-K8RA-XCVC-A</p>	<p>Submitters are concerned at the loss of Carnaby’s black cockatoo habitat and the potential impact to the species resulting from the loss of habitat. They contend that any loss of habitat is unacceptable given the development and habitat loss in surrounding areas and across the Swan Coastal Plain generally.</p> <p>Submitters raised concerns regarding the loss of 67 potential breeding trees and the time it takes for suitable breeding hollows to develop and ask what is being done to protect the identified potential breeding trees.</p> <p>Submitters contend that the proposal area is a Carnaby’s black cockatoo roosting site and must be conserved.</p> <p>Submitters also raised concerns that the loss of black cockatoo habitat may increase demands on the Department of Biodiversity, Conservation and Attractions (DBCA) and suggested that the PTA work with the DBCA to find a solution.</p>	<p>The number of potential breeding trees for Carnaby’s Black Cockatoo that will be impacted by the project is 21. The clearing of these 21 potential breeding trees will be offset through the acquisition of land containing potential breeding trees for transfer into the conservation estate. This proposal is outlined in the YRE Part 1 Preliminary Offsets Strategy (ELA, 2019).</p> <p>No roosting sites were recorded as being used by Black Cockatoos within the YRE Part 1 development envelope during the biological surveys, and the development envelope contains limited suitable vegetation for roosting habitat (i.e. large mature trees). There are known roosting sites in close proximity to the proposal, including within Yanchep National Park.</p> <p>Impacts to Carnaby’s Cockatoos prior to and during construction will be managed in accordance with the CEMP which will include measures such as:</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<ul style="list-style-type: none"> • An appropriately qualified ecologist will inspect all potential Black Cockatoo breeding trees no more than seven days prior to vegetation clearing during the Carnaby’s Black Cockatoo breeding season (July to December). If breeding activity is identified, trees with active nests (eggs, chicks or fledglings) will be demarcated, with a 10 m buffer applied around the tree using temporary fencing. • Clearing within 10 m of active nests will be postponed until an appropriately qualified ecologist advises it is suitable to continue (e.g. after the fledglings have vacated the nest). <p>It is assumed the commenter is referring to the ‘demands placed on the DBCA in relation to increased impacts to Black Cockatoo Habitat’, being the ongoing management of acquired offset sites. The PTA has engaged in early consultation with relevant DBCA personnel to discuss and establish proposed offset strategies. The final Offset Strategy will be reviewed and approved by the EPA, DBCA and DWER and funding and ongoing management arrangements will be agreed to and bound by a Memorandum of Understanding.</p>
3	ANON-K8RA-XCV5-V ANON-K8RA-XCVY-Z ANON-K8RA-XCVG-E ANON-K8RA-XCVN-N ANON-K8RA-XCVT-U	<p>Submitters raised general concerns regarding the permanent loss of fauna habitat, particularly habitat important for foraging, breeding and roosting. Submitters believe that removal of threatened fauna habitat would threaten species survival. Submitters were of the view that the clearing and removal of native habitat for development should not occur. Concerns were raised regarding the relocation of fauna, particularly territorial species.</p>	<p>The PTA acknowledges the submitters comments and concerns and takes these comments on board.</p> <p>The proposal’s potential impacts, proposed avoidance and management measures, residual impacts and proposed offsets are detailed within the Referral Information with Additional Information document (ELA, 2018).</p> <p>Fauna relocation will be managed by suitably qualified personnel in accordance with the CEMP (ELA, 2018).</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
	ANON-K8RA-XCVC-A Urban Bushland Council WA Inc.	Suggestions were made in relation to potential offsets, particularly the provision of a nature reserve between the railway and freeway to retain fauna habitat and the expansion and repair of other habitats. Others contend that offsets do not work or more generally that the losses cannot be offset.	<p>The PTA has prepared an Offsets Strategy (ELA 2019) that provides a summary of significant residual impacts and proposed offsets.</p> <p>Offsets will be provided for the following significant residual impacts to fauna as a result of Part 1:</p> <ul style="list-style-type: none"> • A total of 52.42 ha of Carnaby’s Black Cockatoo habitat, including potential foraging habitat and 21 potential breeding trees. <p>The preferred direct offset for Carnaby’s Black Cockatoo habitat is the acquisition and/or securing of land that has no existing conservation tenure and transfer to the conservation estate. Suitable sites for land acquisition have been identified by the DBCA and include high quality foraging and breeding habitat at priority locations.</p> <p>The land proposed for acquisition is located north of the proposal. Transfer of the land between the railway and the freeway to conservation reserve is unlikely, as this land is zoned urban and Structure Plans have been approved by the State and the Commonwealth, with developments already being constructed in some instances.</p>
4	ANON-K8RA-XCVT-U	The submitter suggests that in order to allow and maintain the east-west movement of fauna, the railway will need to be raised in many sections.	A fauna underpass will be located underneath the railway line within the within the Alkimos PRR to maintain the local east-west local ecological linkage and provide for the long-term movement of native fauna in this area.
5	Urban Bushland Council WA Inc.	<p>The submitter makes the following comments in relation to Carnaby’s black cockatoo:</p> <ul style="list-style-type: none"> • the population is in steady decline • the objective of the approved Recovery Plan is to maintain and restore the population • all vegetation proposed to be cleared or 	<p>The PTA acknowledges and will consider the Urban Bushland Council’s comments.</p> <p>Not all vegetation within the development envelope proposed to be cleared or impacted is Carnaby’s cockatoo habitat. The extent of Carnaby’s cockatoo habitat mapped within the</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
		<p>impacted is described as Carnaby’s black cockatoo habitat</p> <ul style="list-style-type: none"> • any clearing of Carnaby’s black cockatoo habitat should not be permitted and the proposal should be determined environmentally unacceptable. <p>The submitter also refers to the further loss of habitat associated with urban development and part 2 of the Yanchep rail extension, and considers that this clearing should be considered during the assessment of part 1 and therefore the whole of the Yanchep rail extension should be determined to be environmentally unacceptable.</p>	<p>development envelope has been included in Appendix N.</p> <p>The PTA is working in collaboration with the DBCA to identify priority sites for land acquisition that contain high quality habitat for Carnaby’s Black Cockatoo. Through this process the DBCA will be identifying offset sites that align with the actions described in the species’ Recovery Plan.</p> <p>All future urban development adjacent the Part 1 alignment has received Commonwealth environmental approval. These urban development areas also contain Carnaby’s Black Cockatoo habitat. Some of these urban developments have also received subdivision approval under the WAPC, which permits clearing and construction. Therefore, urban development within the Part 1 area would still progress, as planned, with the approval of each subdivision, regardless of whether the rail extension was approved or not.</p> <p>The Part 1 environmental impact assessment considers the cumulative impact of the construction and operation of the Part 1 project in addition to the construction and operation of:</p> <ul style="list-style-type: none"> • The other ‘part’ of the Project, i.e. Part 2, so the environmental impact of the whole alignment is considered and assessed in its entirety. • Part 2 and the construction of all projected future urban and industrial development adjacent the entire alignment (Part 1 and 2), beyond 10 years (considered the worst-case scenario from a cumulative impact perspective).
6	Quinns Rocks Environmental Group	Please refer to Attachment 3 and provide a direct response to the issues raised.	Refer to Attachment 3.
Landforms			

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
1	Quinns Rocks Environmental Group	Please refer to Attachment 3 and provide a direct response to the issues raised.	Refer to Attachment 3.
Consultation			
1	Urban Bushland Council WA Inc.	The submitter states that the additional information provided is in a very large number of documents and appendices and comments that they find this overwhelming and beyond their capacity to study it all. They further comment that the assessment information is far too long and is partly confusing. The submitter also states that they felt that having the public comment period over the Christmas holiday break was unfair for people who are on holidays and spending time off with their families.	The PTA acknowledges the Urban Bushland Council’s comments.
Other			
1	ANON-K8RA-XCVC-A	The submitter suggested that multiple independent assessors need to be consulted before such projects are considered, not just a couple.	<p>METRONET is set up to promote an integrated approach to project oversight, planning and design. As such, the integrated METRONET team draws on specialists from across government including:</p> <ul style="list-style-type: none"> • WAPC • PTA • Metropolitan Redevelopment Authority (MRA) • Department of Transport • Landcorp • Department of Communities • Department of Planning, Lands and Heritage (DPLH). <p>The team is responsible for planning and designing projects up to the investment decision. Once in construction and</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<p>delivery, the team will monitor the project’s implementation.</p> <p>Further, METRONET has an open and transparent community and stakeholder engagement process. In addition to the METRONET website and community consultation sessions, the YRE Environment team has consulted with:</p> <ul style="list-style-type: none"> • Whadjuk Working Group • South West Land and Sea Council (SWALSC) • DBCA • EPA • DWER • DotEE • Water Corporation • WAPC • DPLH • City of Wanneroo • Property developers • Urban Bushland Council • Quinns Rock Environmental Group • Murdoch University. <p>In addition, the EPA is an independent statutory body that protects the environment by providing sound, robust and transparent advice to the Minister for Environment. The EPA Board comprises five members appointed by the Governor on the recommendation of the Minister for Environment. The EPA is independent, in that it is not subject to direction by the Minister, and its advice to Government is public.</p>
2	Urban Bushland Council WA Inc.	The submitter is of the view that a formal Public Environmental Review should have been undertaken together with Part 2 given the complexity of the natural	The Part 1 environmental impact assessment submission to the EPA considers the cumulative impact of the construction and operation of the Part 1 project in addition to the

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
		<p>landscape and the range of significant environmental factors and social context pertaining to this section. The submitter believes that parts 1 and 2 of the Yanchep rail extension should have been assessed together and notes that some of the data presented was relevant to both parts 1 and 2 of the rail extension.</p> <p>The submitter adds that the social and environmental context of the complete Yanchep extension should be considered, especially with regard to the sustainability of the associated low density, linear urban development.</p> <p>The submitter highlights the long linear extent of the Perth Metropolitan Region and the impacts associated with high car use and travel times resulting from continued urban expansion and suggests that total greenhouse gas emissions should be considered, not only for transport but also for urban development.</p>	<p>construction and operation of:</p> <ul style="list-style-type: none"> • The other ‘part’ of the Project, i.e. Part 2, so the environmental impact of the whole alignment is considered and assessed in its entirety. • Part 2 and the construction of all projected future urban and industrial development adjacent the entire alignment (Part 1 and 2), beyond 10 years (considered the worst-case scenario from a cumulative impact perspective). <p>Part 2 of the YRE project is currently being assessed by the EPA with a Public Environmental Review level of assessment (including a six-week public review period). The EPA’s assessment of Part 1 will also take into consideration the cumulative impacts of Part 1 and Part 2 combined, with the significance of environmental impacts assessed through this process.</p> <p>Consideration of greenhouse gas emissions from the operation of cars associated with the projected urban development within the Perth Metropolitan Region is beyond the scope of the environmental impact assessment of the project.</p> <p>Emissions from mass transit options – including urban passenger rail (estimated to be an average of 3-21(g CO₂/km) (emissions per km per person) – vary substantially due to energy sources and the number of people using them. However, they are considerably less emissions intensive than cars (estimated to be on average 182 g CO₂/km), particularly in peak periods when passenger numbers on mass transit are higher and many private cars are carrying a single occupant (Adapted from Climate Council (2016). Car emissions data from National Transport Commission (2019). Other data from IPCC (2014)).</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<p>As part of assessing the business case for the YRE Project, the Department of Transport’s Strategic Transport Evaluation Model (STEM) was used to assess how the YRE Project will impact the transport network and its use. Key future land use assumptions are incorporated into STEM to ensure forecast development is taken into account. The YRE Project was subsequently assessed against a ‘base case’ network to calculate changes in demand, which was then used as an input to an economic model that evaluates a range of benefits.</p> <p>Rapid growth is forecast for the northwest corridor of Perth, which will be served by the YRE Project. From the modelling, annual fuel savings are predicted resulting from reduced amounts of road vehicle travel. Increased use of public transport has the effect of removing vehicles from the road network. This results in a ‘saving’ in vehicle fuel usage and a corresponding reduction in greenhouse gas emissions from road user activity.</p> <p>From these estimated fuel savings, energy content and emission factors from the National Greenhouse Account Factors (DotEE, 2018) were applied to estimate the associated carbon dioxide (CO₂) emission savings. Based on STEM modelling, the YRE Project is estimated to provide an annual reduction of 14,140 t CO₂-equivalent (CO₂-e) in the year 2022 due to this removal of vehicles from the road network. With forecast urban growth, this will increase to an annual saving of 35,386 t CO₂-e in the year 2031. Cumulatively, a total saving of 287,966 t CO₂-e is estimated from opening in 2022 to the year 2050 associated with vehicles removed from the road network.</p> <p>Emissions savings are presented in Table 11-4 (Appendix</p>

Attachment 2 – The Public Transport Authority’s responses to key issues raised in public submissions in response to the publication of the Yanchep Rail Extension Part 1 – Butler to Eglinton Referral Information with Additional Information.

No.	Submitter	Submission and/or issue	PTA’s response to comment
			<p>M.)</p> <p>This fuel saving from reduced road vehicle travel will also have resultant benefits for other greenhouse gases (i.e. methane (CH₄) and nitrous oxide (N₂O) and particulates generated from road vehicle emissions.</p>
3	Quinns Rocks Environmental Group	Please refer to Attachment 3 and provide a direct response to the issues raised.	Refer to Attachment 3.