

13.4 In principle support of the Orrong Road, Leach Highway to Great Eastern Highway, Expressway Concept developed by Main Roads Western Australia

Location	Carlisle Lathlain Welshpool
Reporting officer	Frank Squadrito
Responsible officer	John Wong
Voting requirement	Simple majority
Attachments	<ol style="list-style-type: none"> 1. PC A-142- Combined-plans [13.4.1 - 2 pages] 2. D 20 22958 Approval Granted - Planning Control Area - 142 Orrong Road [13.4.2 - 4 pages] 3. Main Roads Western Australia - Community feedback dated March 2020 - Orrong Road Planning Study Up [13.4.3 - 3 pages] 4. Main Roads Western Australia - Orrong Road Planning Design Concept - Revision B [13.4.4 - 1 page] 5. D 20 48721 Orrong Road Planning Study response letter from Main Roads WA dated 16 June 2020 [13.4.5 - 9 pages] 6. Orrong Road schematic diagram [13.4.6 - 1 page]

Recommendation

That Council provides “in principle” support for the Main Roads Western Australia Orrong Road Planning Design Concept, Revision B subject to:

- a) Comprehensive detailed traffic impact assessment, considering the local road impacts being submitted to the Town prior to detailed design works being initiated.
- b) Input and involvement by Council’s representatives on detailed design outcomes.
- c) Detailed design drawings impacting Council assets shall be submitted and approved by the relevant departments and to the satisfaction of the Town of Victoria Park.

Purpose

For Council to consider and provide “In Principle” support for the current 2020 Concept design prepared by Main Roads Western Australia for the Orrong Road Planning Study (between Great Eastern Highway and Leach Highway).

Background

1. In late May 2019, the Town received formal advice that Main Roads was undertaking a planning study to identify the best solution for upgrading Orrong Road between Great Eastern Highway and Leach Highway.
2. The study recognized that in its current state Orrong Road represented a deficient link in the state’s road network. It already operates at capacity in its function of distributing traffic to adjoining freeways and highways and with expected increases to traffic volumes would become inadequate for future operations.
3. Historical planning for this road allowed for the construction of a six-lane highway at ground level. However, it was recognized that in addition to not improving expected travel times, land and funding commitments did not allow for a realistic progression of this concept.

4. A preferred concept to improve the road function was developed and presented to the various municipalities affected by the extent of the road coverage (Town of Victoria Park, City of Belmont, and City of Canning), and community consultation was undertaken between May 2019 and July 2019. This plan allows for a central below ground expressway for the majority of road pavement section of Orrong Road between Great Eastern Highway and Pilbara St, with existing outer road pavement sections to be maintained for the purposes of local road traffic movement.
5. On the 24 July 2019, Council staff from the Place Planning and Street Improvement Business Unit provided Main Roads Western Australia with a letter highlighting the Town's concerns and a request to address the various matters brought to their attention. Further details are contained in the analysis section of this report.
6. Main Roads is now seeking Council endorsement for its concept plan. Please note that there is currently no statutory requirement for Council to endorse the concept plan.

Strategic alignment

Civic Leadership	
Strategic outcome	Intended public value outcome or impact
CL03 - Well thought out and managed projects that are delivered successfully.	To consider the planned changes to Orrong Road corridor and impacts on the local transport network.

Environment	
Strategic outcome	Intended public value outcome or impact
EN02 - A safe, interconnected and well maintained transport network that makes it easy for everyone to get around.	Improved travel times and safety for all road users accessing both the regional and local network

Engagement

Internal engagement	
Street Improvement	Numerous comments and a letter dated 24 July 2019 was forwarded to Main Roads WA pertaining to high-level technical considerations. Most of the Town's concerns are detailed in the table under the analysis section.
Place Planning	The concept needs to be cognizant of the objectives contained in the State Governments Strategy for the Perth and Peel @ 3.5 million. Additional detailed comments were also included in the Town's letter to Main Roads WA dated 24 July 2019
Urban Planning	New development applications along Orrong Road will need to consider Planning Control Area 142 showing impacts to landholdings.
Elected Members	Presentations by Main Roads WA representatives were undertaken with Council on the 20 November 2018 and 25 February 2020.

External engagement

Main Roads WA led engagement	In May 2019 Main Roads WA released a website bulletin seeking community input into a planning study to identify the best solution for upgrading Orrong Road, between Leach Hwy in Kewdale and Great Eastern Hwy in Rivervale.
Period of engagement	May 2019 to 22 July 2019
Level of engagement	Consult
Methods of engagement	Online survey on the www.mysaytransport.wa.gov.au webpage and a drop-in information session held on Wednesday 12 June 2019 at the Riversdale Community Centre.
Advertising	Newspaper, social media posts, and letter drop to impacted residents
Submission summary	Main Roads WA received 355 responses from a wide area. 87% supported the Orrong Road Concept and 13% did not support the proposal
Key findings	<p>Main themes from the community feedback included (Main Roads WA led engagement and outcomes)</p> <ol style="list-style-type: none"> 1. High levels of support for the concept, 2. Orrong Road is a critical transport connection for a wide range of residents throughout the southeastern suburbs, 3. Support for maximising tree retention and /or replacement, 4. Significant frustration with current traffic congestion, support for extending the concept to Roe Highway 5. Improved safety and decreased travel times a supported feature. <p>Other features of the concept that are supported</p> <ul style="list-style-type: none"> • 283 responses – Travel time savings for free-flowing traffic on Orrong Road • 212 responses – Enhanced community connectivity across surface level roads • 191 responses – Facilitating public transport between communities across Orrong Road • 201 responses – Minimising land impacts and preserving residential property • 227 responses – improved community amenity, safe crossing opportunities for cyclists and pedestrians at surface roads • 227 responses – Environmental benefits reducing emissions by minimising stop/start conditions, reducing noise by building the majority of the expressway below current ground level • 263 responses – Improved safety – separating local and regional traffic and reducing congestion <p>Other key statistics included</p> <ul style="list-style-type: none"> • 41% that were surveyed live on the section of Orrong Road that is impacted and 13% lived on a street directly off Orrong Road within the affected area.

Other engagement

City of Belmont	Similar engagement opportunities and presentations were provided to staff and elected members.
Western Australian Planning Commission	Main Roads WA presented outcomes of the community consultation to the WA Planning Commission on the Orrong Road Planning Study in November 2019. A letter dated 19 March 2020 providing an update on the project indicated that WAPC supported the revised planning concept and the Minister for Planning approved a (PCA) Planning Control area to safeguard the road corridor.

Legal compliance

[Planning and Development Act, section 112 – Declarations of planning control areas](#)

[Planning and Development Act, section 115 - Development in planning control area, applying for approval](#)

Risk management consideration

Risk impact category	Risk event description	Consequence rating	Likelihood rating	Overall risk level score	Council's risk appetite	Risk treatment option and rationale for actions
Financial	<i>Main Roads WA have advised no funding has been allocated to the project yet and the Town has not been approached to contribute.</i>	<i>Minor</i>	<i>Possible</i>	<i>Medium</i>	<i>Low</i>	<i>Accept – There is no commitment by Council to provide a financial contribution at this stage.</i>
Environmental	Numerous trees, predominantly in the median of Orrong Road are earmarked for removal. This a contentious issue for the community	Moderate	Almost certain	High	Medium	Transfer - Delegation to remove trees within the Orrong Road Corridor falls outside the Towns jurisdiction
Health and safety	Many intersections along Orrong Road have a high crash rate and need to be treated in the shorter term rather than taking a long term view	Moderate	Almost Certain	High	Low	Treat – Supporting the concept plan will ultimately deliver significant safety improvements at key intersecting roads
Infrastructure/ ICT systems/ utilities	Once constructed some assets will likely be handed	Minor	Likely	Medium	Medium	Accept – Asset handover will be dependent on

	over to the Town for maintenance and control.					community benefits at a local level and maintenance funding will need to be shared amongst adjoining local governments (i.e. ToVP & City of Belmont)
Legislative compliance	Planning Control Area has been applied to properties along Orrong Road. Not applying appropriate conditions may result in lost opportunities to preserve land for road widening purposes	Minor	Possible	Medium	Low	Treat – Planning and Engineering staff will need to refer development applications for properties along Orrong Road to the Western Australian Planning Commission
Reputation	Given the high community support level for the project (87% from the 355 responses), not providing Council support for the project may undermine states objectives	Moderate	Possible	Medium	Low	Treat – Council Staff advocating to support Main Roads WA concept planning for Orrong Road.
Service delivery	Current projects as part of Black Spot funding could be impacted by Main Roads WA future plans e.g. Archer Street/Orrong Road	Minor	Likely	Medium	Medium	Treat – As construction timelines for the project are unknown staff are of the opinion that planned short term works will need to be progressed to avoid carry forward funding.

Financial implications

Current budget

NIL.

impact	
Future budget impact	<i>Not applicable at this stage as the Town has not been approached to provide funding</i>

Analysis

- The concept details a number of geometric changes to the current carriageway system of which most are supported by Technical Staff. The predominant changes include trenching at various depths along the main regional road corridor within the median (below existing ground level) from Kew Street to approximately 200m north of Francisco Street and retaining the local road network at grade on either side of the main road.
- The Western Australian Planning Commission (WAPC), resolved at its meeting of 22 January 2020 to declare land shown on plans 1.7924 and 17925, a planning control area (PCA 142) under the provisions of section 112 of the Planning and Development Act 2005.
- Road changes impacting the Town of Victoria Park include

Road	Existing Configuration	Proposed Configuration
Goddard Street	Left in- left out	Cul-de-sac
Francisco Place	Full movement, signalised (No connectivity to Streatley Road	Left-out with connectivity to Streatley Road
Rayment Street/Orrong Road	Cul-de-sac	Left-in-left-out
Roberts Road/Orrong Road	Full movement, priority controlled	Full movement, signalised
Archer Street/Orrong Road	Full movement, signalised	Full movement, signalised
Galaxy Way	Left-in	Cul-de-sac
Mercury Street	Full movement, priority control	Cul-de-sac
Astral	Cul-de-sac	Cul-de-sac
Oats Street	Full movement, signalised	Grade seperated flyover, no access to Orrong Road
Cohn Street/Orrong Road	Left in/left out	Cul-de-sac
Briggs Street Orrong Road	Full movement, priority control	Left in/left out
President Street/Orrong Road	Left in/left out on Town of Victoria Park side	Full movement, four-way signalised
Kew Street	Full movement, three-way, priority control on Town of Victoria Park side)	Left in/out

10. In a letter to Main Roads WA in July 2019, Technical Staff raised many concerns and a response was provided back to staff in June 2020. Summary of main issues tabled below

Issued raised/concern	Response by Main Roads WA
<p>1. Planning Context – Under the Perth and Peel @ 3.5 million and the Town’s Draft Local Planning Strategy there was a concern that increased efficiency of the road network could undermine employment self-sufficiency of the Towns local economy</p>	<p>Main Roads supports the Town's self-sufficiency targets, and have captured these aspirations in the transport modelling used to inform this study (ROM land use data captures over 90% growth in total dwellings and total employment opportunities between 2016 and 2031). With a robust and thorough strategy to attain the target levels of self-sufficiency, improvements to the safety and efficiency of the road network on the periphery of your constituents should not undermine these targets.</p>
<p>2. Industrial precinct access issues – The ability to turn right to travel southbound on Orrong Road will be limited to President Street/Orrong Road. As a result, some commercial vehicles may be redirected to Welshpool Road access points.</p>	<p>Traffic surveys undertaken in march 2017 for Kew Street and Briggs Street indicate that only 2–5 heavy vehicles are making the right turn movement from the industrial precinct to Orrong Road each peak hour. Redistribution of these vehicles (acknowledging there will be some growth in line with general traffic growth) will not pose a significant impost on alternative routes.</p>
<p>3. Francisco Place in front of properties 1 –3 should accommodate two-way traffic flow, together with Orrong Road crossing to access the ramp for northbound motorists.</p>	<p>The section of Francisco Place in front of properties 1-3 can accommodate two-way traffic flow to the front of the commercial properties, however, this will not be extended across the Francisco Street/Orrong Road crossing. Traffic wishing to head city-bound will be able to access the Francisco Street ramp, however, traffic wishing to travel southeast will use the local street network to access alternative intersections, such as Roberts Road.</p>
<p>4. Dupre lane – Currently the access road links around to both Cornwall Street and Maple Street. The proposed on-ramp from Francisco Street for northbound motorists will sever the most southern portion of Dupre lane, effectively disconnecting it from Cornwall Street. Approximately 3 properties will be restricted to having driveways onto Cornwall Street as their primary access. It’s our understanding that the access concerns can be resolved for residents, however, the issue for waste pick-ups is still a concern. The option of retaining a 3m access leg at the rear of properties 52 – 56 is strongly</p>	<p>Issue noted by Main Roads WA.</p>

recommended.	
<p>5. Access issues for properties 164 to 182 along Orrong Road - A right of carriageway option was put forward to Council Officers on the 11/7/2019. The diagram provided shows a 6m wide reserve at the front boundary from Lot 206 to Keyes Street accessing the minor road through Lot 1. The Town's preference is that the service road connection is provided onto Orrong Road, closer to the southern end of the right of carriageway or alternatively a battle-axe type turnaround facility be provided at the terminating end so that service vehicle can egress without performing multiple maneuverers.</p>	<p>Main Roads has been working with officers at the Town to achieve a suitable reciprocal right of carriageway for the properties between 164 – 182 Orrong Road. Connection of this access way to Orrong Road cannot be accommodated due to differences in grades between properties and Orrong Road at this location. The plan will be updated to include a suitable connection of the reciprocal right of carriageway to Keyes Street and Custance Street suitable for property access and to ensure service vehicle access and egress.</p>
<p>6. Proposed signalisation at Roberts Road, Archer Street, and President Street is anticipated to deliver safety benefits for the wider community, however, a full closure at Mercury Street and Cohn Street will raise significant concerns for residents as they will be required to travel through residential streets such as Star Street to access Archer Street. Parallel roads such as Star Street may reach volumes in excess of their desirable characteristics. We acknowledge that level differences require these identified roads to be cul-de-saced, however, traffic distribution needs to be addressed to avoid local roads becoming short-cuts.</p>	<p>The redistribution of traffic due to the closure of the intersections at Goddard Street, Mercury Street, and Cohn Street with Orrong Road, as well as changes to the Oats Street configuration has been captured as part of the traffic modelling stage of this project. The traffic modelling illustrates that even with the redistribution of traffic the congestion experienced on the local roads at key intersections with Orrong Road is significantly reduced.</p> <p>Note provided by Town officer: No figures were provided by Main Roads staff to quantify numbers.</p>
<p>7. Pedestrian desire lines at midblock locations will require further investigation, mainly in the section between Oats Street and President Street. Wig/Wag pedestrian crossing facilities exist south of Corser Street</p>	<p>The reduced traffic volumes at surface level intersections, which will include signalised pedestrian phases, will provide improved opportunities for pedestrians to cross at these locations</p>
<p>8. No timelines have been provided to understand the implication for future construction activity and how the project would be staged.</p>	<p>As this is a long term planning study, there are no timeframes for construction. There is currently no funding for this project.</p>

<p>9. Any network alterations required at a local level as a result of the ultimate Orrong Road Planning Study would need to be funded by Main Roads WA – E.g. Creation of new service roads, change of priorities, and other intersection treatments to improve safety.</p>	<p>No comments provided.</p>
<p>10. Restricted Access Vehicle (RAV's) turning movements at intersections to be assessed once new routes are established.</p>	<p>No comments provided.</p>
<p>11. Many ratepayers have expressed their discontent to the Town regarding the loss of mature trees and impacts on streetscape amenity, including wildlife in the area. What measures will be put in place as a result.</p>	<p>Opportunities to detail landscaping, re-vegetation, and the transplanting of existing vegetation will be captured at a detailed project development stage, cognizant to the Towns Urban Forest Strategy.</p>
<p>12. Existing high voltage power poles and aerial infrastructure to be placed underground at a cost to the project.</p>	<p>The opportunity to sink the 132 kV bulk transmission lines below ground level has been identified and the details for this will be captured at a project development stage.</p>
<p>13. Many local business centres along Orrong Road rely heavily on passing trade. These are likely to suffer significantly once access is restricted and regional traffic bypasses these locations. What mechanisms or strategies are in place to compensate owners and provide assistance in times of hardship? This is likely to be an issue during the construction phase also.</p>	<p>It is acknowledged that whilst there are some business's that do rely on passing trade, many of the local business centres along Orrong Road are destinations that directly attract customers. While all efforts are made to minimize impacts Main Roads must consider a concept that will benefit the whole community, while still ensuring an equitable balance for road users, local residents, and landowners.</p>
<p>14. How does the Orrong Road Planning proposal address noise impacts and compliance with WAPC State Planning Policy 5.4. Orrong Road is a major road corridor linking to the Graham Farmer Freeway to the north and an industrial Centre to the south. Traffic growth is likely to continue into the future and given that the vertical profile begins to surface, closer to natural surface in some isolated areas, noise is likely to be a problem.</p>	<p>A noise assessment has been undertaken for the proposed concept which models the anticipated noise for the forecast future traffic. Results indicate that for the below ground level sections, even with the increase in traffic, forecast noise levels are consistently below the noise levels that have been recorded currently.</p> <p>Sections where the road is at ground or elevated (i.e. Leach Hwy), there are increases in noise levels. Minimum levels of noise screening and/or are identified at this preliminary planning stage to ensure no areas will experience an increase in noise to what is currently recorded.</p>

Relevant documents

Not applicable.

Further consideration

Following the agenda briefing forum held on the 6 October 2020 the following additional information is provided:

11. Place Plans for Lathlain, Carlisle and Welshpool all suggest partnering with State Authorities on a potential upgrade to Orrong Road and assess the impact any future design may have on the adjacent community.
12. The Mint and Archer Street Place Concept forms part of a local bike route in the Town's current joint Town of Victoria Park/City of South Perth Bike plan. Access to a local road network at surface level will be maintained at the intersection of Orrong Road/Archer Street, thus providing safer opportunities for all road users. This does not alter the Towns place plans for the Archer Street concept.
13. There have been concerns regarding rat-running through local streets and potential for increased traffic along Roberts Road. Technical staff are of the opinion that volumes will likely increase given that Roberts/Orrong Road will be signalised and safer opportunities will be provided to allow full movements at the intersection. A comprehensive traffic impact assessment is being requested as part of this report to quantify traffic volumes and redistribution patterns on local roads.
14. Providing an arborist report detailing tree canopy, species, health of existing vegetation and other important information has now been highlighted to the relevant authority. Main Roads WA is aware of the Town's of Victoria Park Urban Forest Strategy. This has been captured in the planning study documentation to ensure any replanting is complementary to this strategy.
15. The current Orrong Road Concept Plan does not allow for an on and off ramp at Oats Street due to space constraints relating to ramps at President Street and Wright Street.
16. The structural integrity of the retaining walls to support other vehicular crossings or flyovers is a design parameter that requires further investigation by Main Roads WA. Advice sought to date indicates the proposed planning as it stands is the ultimate, therefore no other crossings are envisaged.
17. In relation to the trenched sections of the design, adding covered slabs has many design implications such as fire, emergency egress and ventilation issues and therefore has not been included. Costs for these improvements are likely to be significant. These factors mean that any future tunnel option would have greater land impacts, greater land requirements, greater costs and fundamentally could not provide the same network improvements the trench option provides due to limiting opportunities for connectivity
18. In relation to whether Main Roads WA have requested Council support for their concept in a specific timeframe, officers have not been given such a timeframe, only a request that formal Council support be provided.

