METRONET

BUILDING FOR TOMORROW.

Yanchep Rail Extension

The 14.5 kilometre Joondalup Line extension is essential in managing the future growth of Perth's northern suburbs, addressing road congestion, and creating the focus for progressive, mixed-use development that will provide local amenity, services and employment.

From a transport perspective, the project will address the three key problems impacting public transport in the area to ensure forecast population-driven increases in travel demand are met, urban congestion is alleviated, and efficient travel times are provided for those accessing jobs, services and amenities.

Other transport benefits include:

- increasing the reach and frequency of bus services in the area
- contributing to the long-term expansion of the greater Perth passenger rail and bus network, and
- providing alternative, sustainable transport options, as shared paths connect the stations to surrounding residential and employment areas.

LEGEND

- Passenger rail alignment
- Principal shared path
- Yanchep Rail Extension - local roads
- Future local roads
- Future Mitchell Freeway
- Station location
- Road over rail bridge
- Green bridge
- Fauna underpass

The Project

The Yanchep Rail Extension project will include:

- 14.5km of new dual-track to extend the Joondalup Line.
- Alkimos Station including parking, bus interchanges, passenger amenities and cycling facilities to cater for approximately 3,616 daily boardings (2031) and offering an approximate 41-minute journey to Perth.
- Eglinton Station including parking, bus interchanges, passenger amenities and cycling facilities to cater for an estimated 4,792 daily boardings (2031) and offering an approximate 46-minute journey to Perth.
- Yanchep Station including parking, bus interchanges, passenger amenities and cycling facilities to cater for an estimated 11,032 daily boardings (2031) and offering an approximate 49-minute journey to Perth.
- Modifying Butler Station into a ‘through’ station.
- 13.8km principal shared path for cyclists and pedestrians adjacent to the rail line.
- Two stow roads north of Yanchep Station for four six-car trains.
- Nine road-over-rail bridges.
- One fauna underpass.
- Three fauna bridges.
- New bus stowage depot at Alkimos.
- Noise and vibration mitigation measures including noise walls and ballast matting under the rail.

Walk, cycle, bus and share

While ample parking will be provided at each station, the Yanchep Rail Extension will be designed to encourage passengers to access the stations by walking, cycling, catching a bus or being dropped off.

A 13.8km principal shared path (PSP) along the western side of the rail extension will provide users a continuous and safe travel option. The PSP will be built at ground level and will connect to existing local pathways in residential estates, as well as to each station.

Bus interchange facilities at each station will support the new rail line and improve access options for passengers. Final bus timetables will be confirmed closer to start of train services. Each new station will also include dedicated passenger drop-off areas, secure bicycle parking shelters, bike u-rails, and the capacity to add more bike parking in the future.

Station and precinct design

In consultation with the City of Wanneroo and METRONET Noongar Reference Group, each station and immediate surrounding area's design will recognise the local area's unique characteristics.

Following the METRONET Gnarla Biddi Strategy place making stream, each station's design and architecture will reflect the native flora and landscape features, which have been recognised as significant by the METRONET Noongar Reference Group and consulted Noongar custodians.

The Alkimos Station design will take inspiration from melaleuca bark, and the surrounding limestone pinnacles, Eglinton Station will draw on the grevillia flowers, and the heavily vegetated eucalyptus woodlands, and Yanchep Station will feature Banskia flowers, and the local Yanchep Caves.

Each station's landscaping design will seek to integrate the new infrastructure with the surrounding natural and urban areas. Additional landscaping will also be provided at the Alkimos Parks and Recreation Reserve, where a fauna underpass will be built. Three landscaped fauna bridges will be built within the Ningana Bush Forever site to maintain east-west connectivity over the rail line for local wildlife.

The METRONET Office will continue to work closely with the City of Wanneroo, and other key stakeholders including local developers, to ensure that planning for these new urban centres makes the most of the public transport infrastructure and encourages appropriate development around the stations.

Environment

The rail alignment will travel through the Alkimos Park and Recreation Reserve and the Ningana Bushland south of Yanchep.

While every effort was made to avoid these areas, including careful consideration of alternative alignments, the undulating landscape, tight rail curve (not conforming to strict railway design standards), and impact on existing and future residents meant this was not viable.

The majority of the rail extension will be constructed in a cutting to support community connections and integration, reduce noise and improve overall amenity. To further improve overall quality, noise walls and ballast matting (vibration-absorbing material laid under the rail formation) will be installed around existing and proposed residential developments.

Heritage

Detailed studies have been carried out across the alignment to understand the potential impacts of the project on heritage items in the area.

Where feasible, the project design has been amended to avoid impact to heritage items and properties, including redesigning the rail alignment to avoid the Romeo Road Pinnacles, which have significance to Noongar people.

An archaeological survey, heritage surveys, and Aboriginal consultation has been undertaken to identify the heritage value of the rail corridor and surrounding areas. As a result, specialist Aboriginal monitoring personnel have been engaged to ensure there are no heritage sites or artefacts located within the vegetation and station clearing areas.

Staging

A staged construction approach will ensure works progress as efficiently as possible, and reduce potential construction impacts.

Enabling works	Vegetation clearing, fence installation, utility location, and ground conditions analysis. During this phase the site is being 'primed' for major construction works to start.
Main construction works	The longest of phases, this includes establishing construction compounds, utility relocation, bulk earthworks, drainage works, road and bridge construction, noise wall installation, station and car park construction and track laying.
Testing and commissioning	The final stage will include rail connections to the existing Butler Station, testing of all new infrastructure, and commissioning the rail extension before passenger services begin.

MORE INFORMATION

info@metronet.wa.gov.au
9326 3666
metronet.wa.gov.au

twitter.com/metronetperth
facebook.com/perthmetronet
facebook.com/groups/yancheprailextension

Funding Partner: Australian Government BUILDING OUR FUTURE

Delivery Agency: Public Transport Authority

September 2020