



KENSINGTON COMMUNITY REFERENCE GROUP

MEETING 4

20 JUNE 2019



COMMUNITY UPDATE



DISCUSSION ITEMS

- **Flood compensation – Friends of Newells Paddock**
- The project is continuing to investigate the use of Newells Paddock for compensatory flood storage. No specific plans have been confirmed
- Further information on flood compensation will be available in late 2019.



COMMUNITY ISSUES

Key issues raised during May and June

- Understanding bentonite plant construction impacts
 - Fact sheet to be distributed to the wider community
 - Proactive one-on-one meetings in the lead up to works
 - Updated web content and promotion on social media
 - Pop-ups in the lead up to works
- Site amenity
 - Ongoing response to community enquiries
 - Additional site cleaning works
- Cyclist and pedestrian interface adjacent to South Kensington station
 - Ongoing monitoring and review of mitigation measures
- Disruptive works commencing earlier than notified
 - Response to individual complaints

COMMUNICATION AND ENGAGEMENT

Notifications and communications

- June Kensington Construction Update (30 May)
- May weekend rail shutdown works (17 May)
- Notice of pile break back works (7 June)
- Lloyd Street overnight closure reminder (11 June)
- Kensington Road Closure notification and business brochures (21 June)

Door knocks, meetings, briefings and events

- May weekend rail shutdown door knock (9 May)
- City of Melbourne fortnightly progress meetings (29 April, 13 May, 27 May, 5 June)
- KCCC monthly progress meetings (15 May, 19 June)
- KCCC site visit (27 May)
- Kensington, Hobsons and LSBE business door knocks (6 June, 14 June)
- Lloyd Street Business Estate fortnightly progress meetings (7 June)
- Temporary over-height vehicle detour route door knock (13 June)
- One-on-one meetings with community members and businesses throughout May and June

CHILDERS STREET ARTWORK



KCCC SITE VISIT





WORKS UPDATE

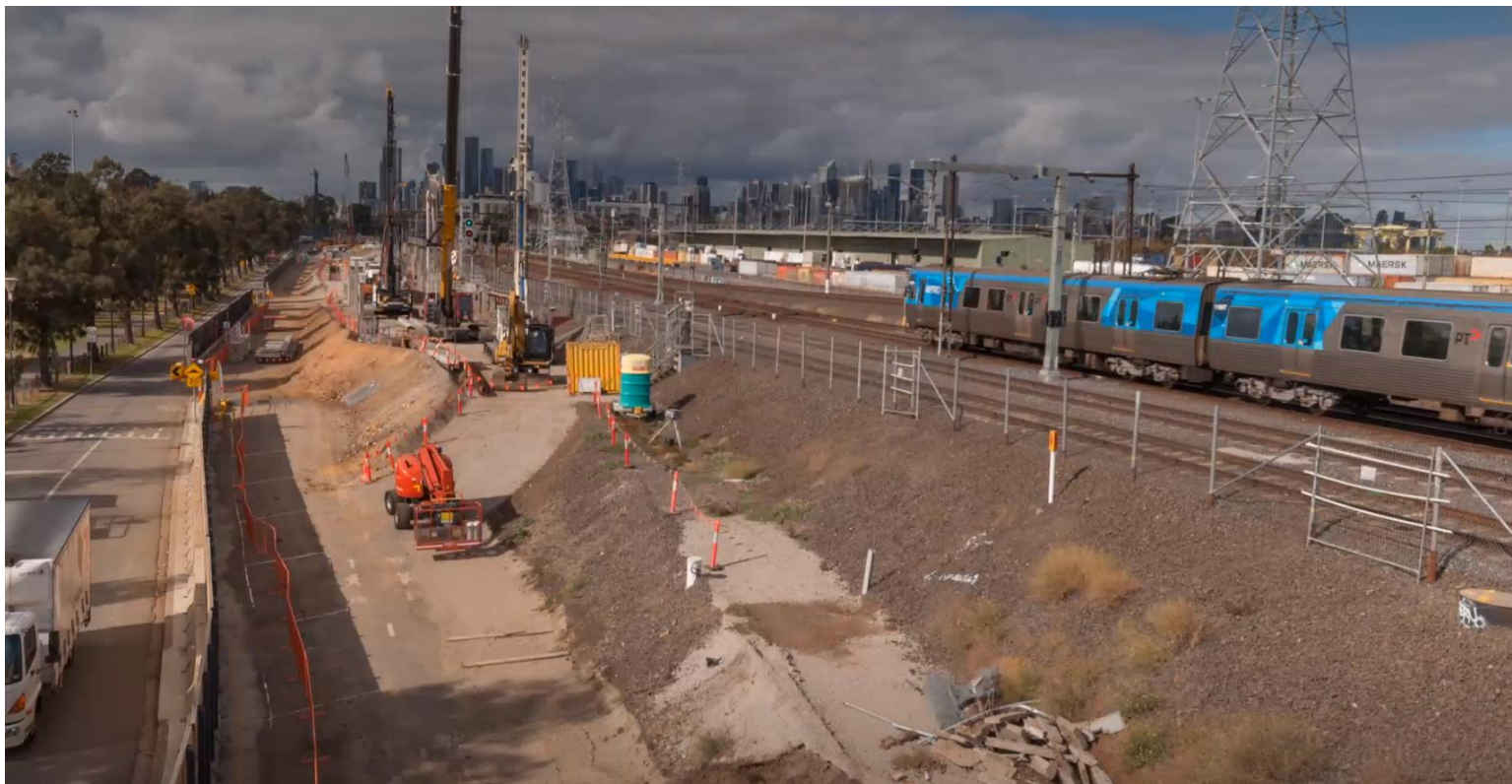
WHAT'S BEEN COMPLETED

- Installation of 75+ driven piles
- Embankment stabilising – steel and concrete installation
- Installation of right hand turn arrow signal on Kensington Road into Hobsons Road
- Water connection for Bentonite plant
- Installation of guide walls ahead of diaphragm wall construction
- Installation of road-side bored piles
- Jet grout trials at cross passage 2 (McLennan Drive)

NOISE – PAST WORKS



TIMELAPSE VIDEO



CONSTRUCTION PROGRAM

Activity	Jun	Jul	Aug	Sep	Oct
Embankment stabilising and widening					
Temporary bentonite plant construction					
Diaphragm wall works					
Rail occupation					
Road-side piling (break back and capping beam)					
TBM retrieval shaft excavation & strutting					
Cross passage ground improvement (CP2, CP3)					
Tunnelling (North Melbourne to Kensington)					

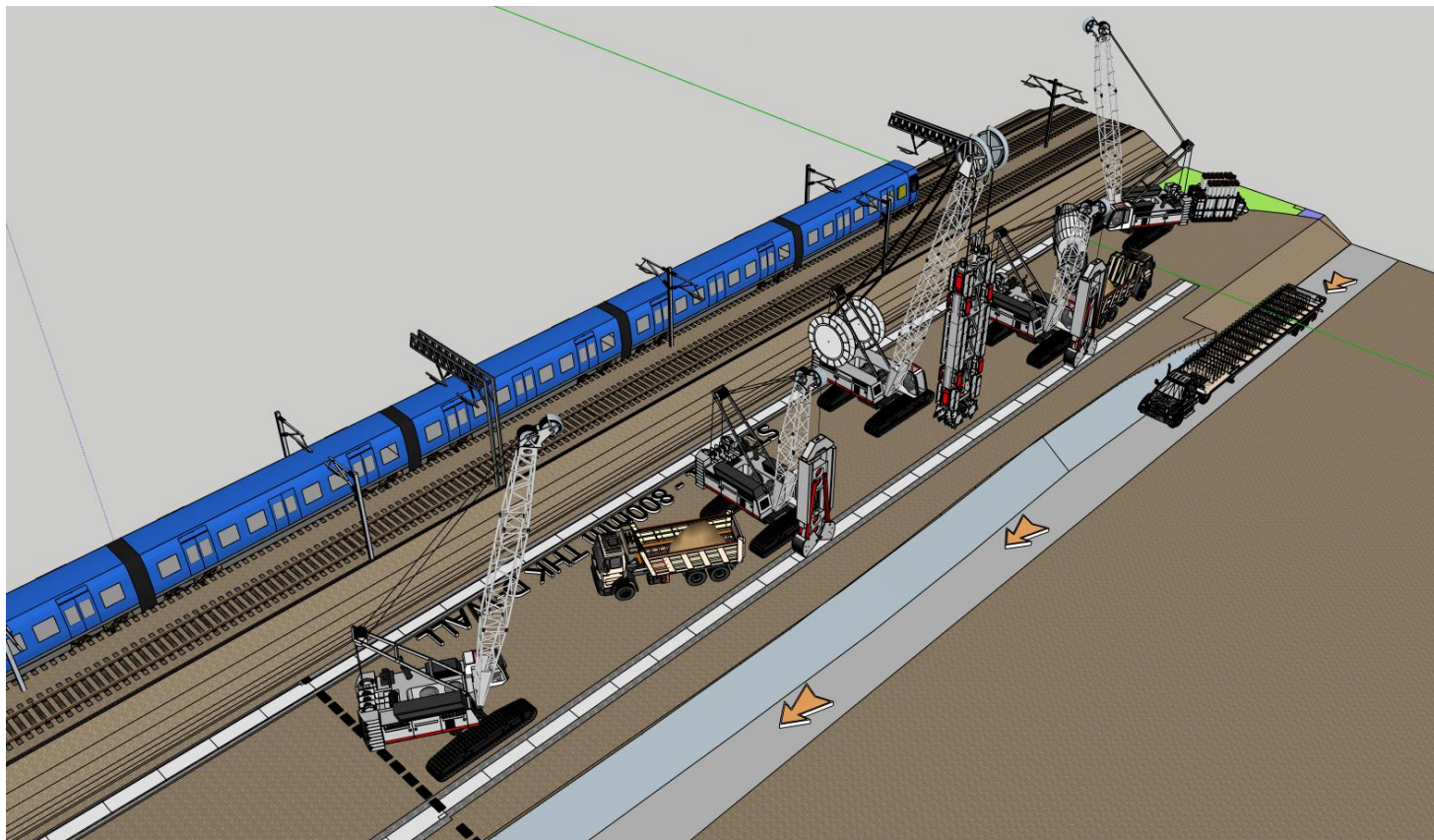
Program is indicative and subject to change

DIAPHRAGM WALL CONSTRUCTION

- 280m in length
- 10-20m deep x 2-4m long
- Construction from August to mid-2020
- Trench excavation equipment
 - Two service cranes, two excavation cranes and one hydro-fraise (cutter) for bedrock
- Out of hours mobilisation in mid-July (Childers Street)



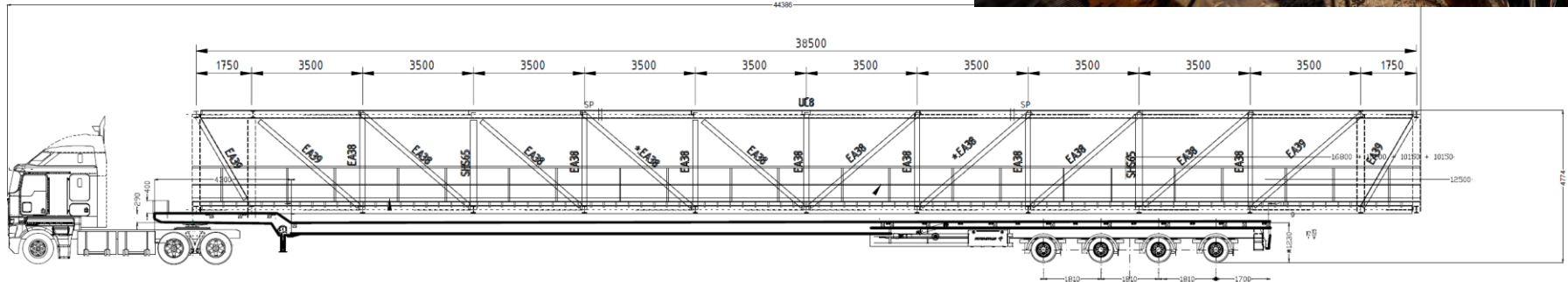
DIAPHRAGM WALL WORKS



TEMPORARY BENTONITE PLANT

- Installation of Bentonite plant to assist with diaphragm wall construction
- Late June to late July (Hobsons Road worksite)
- Out of hours delivery of gantry
- Kensington Road Closure (7pm Friday 5 to 5:30am Saturday 6 July)

Bentonite plant at Arden site



CHILDERS STREET SITE CONSTRAINTS

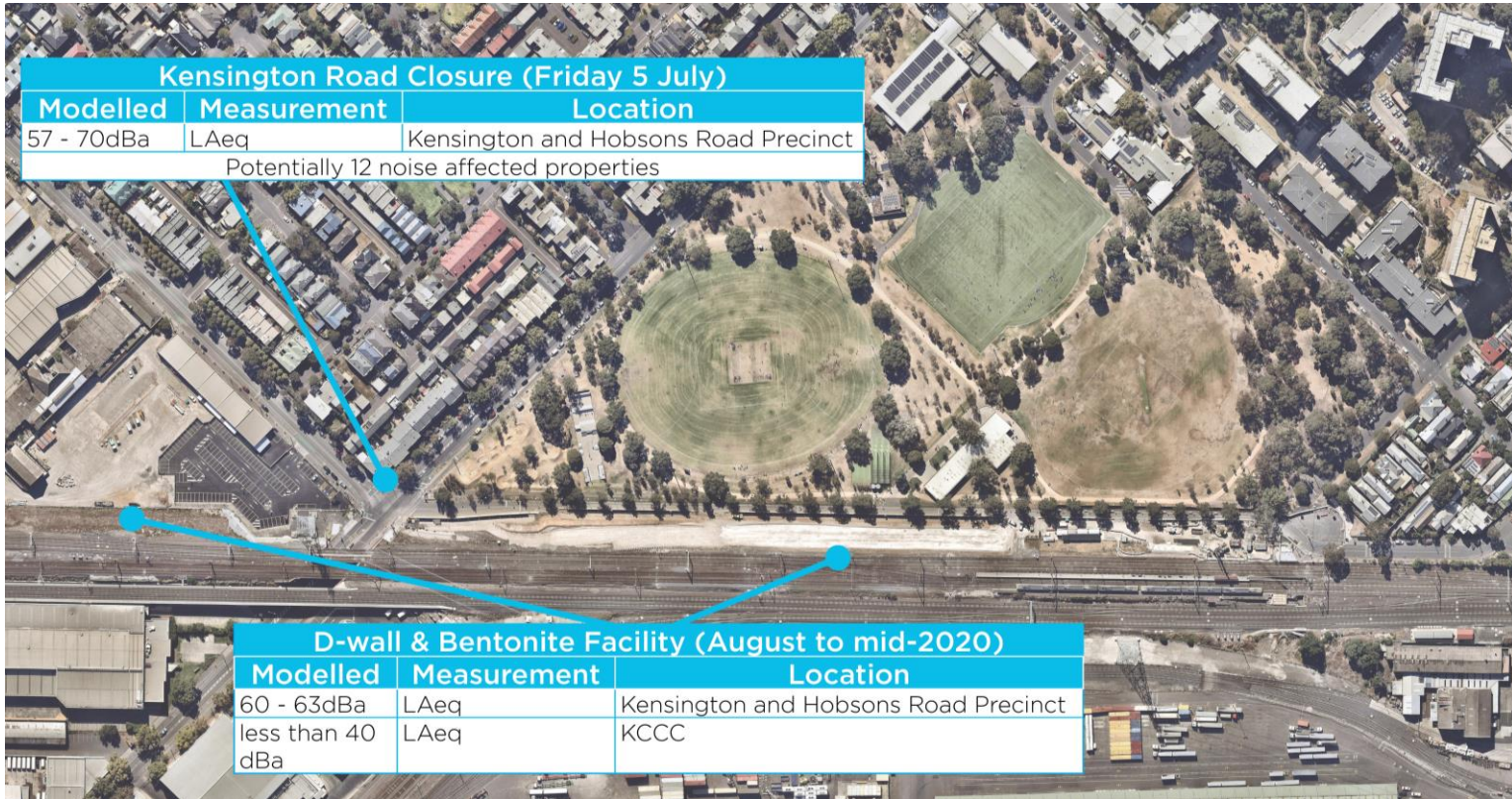
Expected to be an increased number of construction vehicle and machinery movements from late July 2019.

There are a number of considerations in regards to traffic management along Childers Street:

- Construction program, staging and safety
- Queuing along Childers Street and at the Kensington Road intersection
- Wider community impacts
- Impacts to Lloyd Street Business Estate (LSBE)



NOISE – UPCOMING WORKS

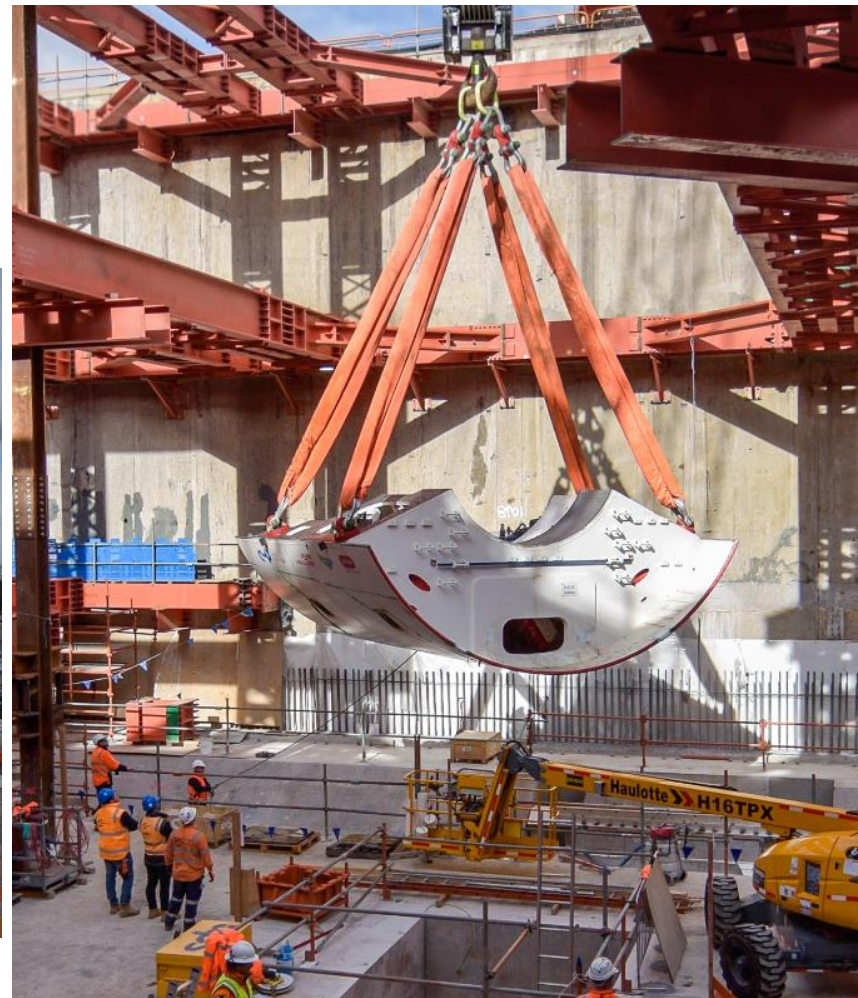


ROAD-SIDE PILE BREAK BACK

- Remove concrete pile guide wall using excavator
- Two stages of break back:
 1. Using excavators to break back soft piles (no steel reinforcement) – four days
 2. Using jackhammers to break back remaining piles – up to seven days
- Install steel reinforcement and form work for capping beam
- Pour capping beam (two pours)



TBM ASSEMBLY



TUNNELLING - TIMELINE

Indicative timing	Activity
Q1 2019 – Q3 2019	TBM 1 & 2 arrive at Arden and assembled
Q3 2019 – Q4 2019	TBM 1 & 2 tunnelling Arden to Western Portal
Q1 2020 – Q1 2020	TBM 1 & 2 retrieved and transported back to Arden
Q1 2020 – Q4 2020	TBM 1 & 2 tunnelling Arden to Parkville

Program is indicative and subject to change



TUNNELLING – CONSTRUCTION NOISE AND VIBRATION

TBM Ground-borne Noise and Vibration Model process

1. Model project-wide impacts
2. Validate in stages (Arden to Kensington; Arden to Parkville) - attended monitoring
3. Update model with attended monitoring data

Consultation will be undertaken with potentially affected residents.

TUNNELLING – CONSTRUCTION NOISE AND VIBRATION

Human comfort

Location	VDV (m/s ^{1.75})			
	Day 7:00am to 10:00pm		Night 10:00pm to 7:00am	
	Preferred Value	Maximum Value	Preferred Value	Maximum Value
Residences	0.20	0.40	0.10	0.20
Offices, schools, educational institutions, places of worship	0.40	0.80	0.40	0.80
Workshops	0.80	1.60	0.80	1.60

- (VDV) Vibration Dose Value = vibration over time
- Guideline targets are the goals that CYP are setting out to achieve

Ground-borne noise

Time Period	Internal L _{Aeq,15min} , dB
Evening, 6pm to 10pm	40
Night, 10pm to 7am	35

- Internal levels
- Levels are only applicable when ground-borne noise levels are higher than airborne noise levels
- The noise levels are assessed at the centre of the most affected habitable room



TUNNEL OPERATIONAL NOISE & VIBRATION

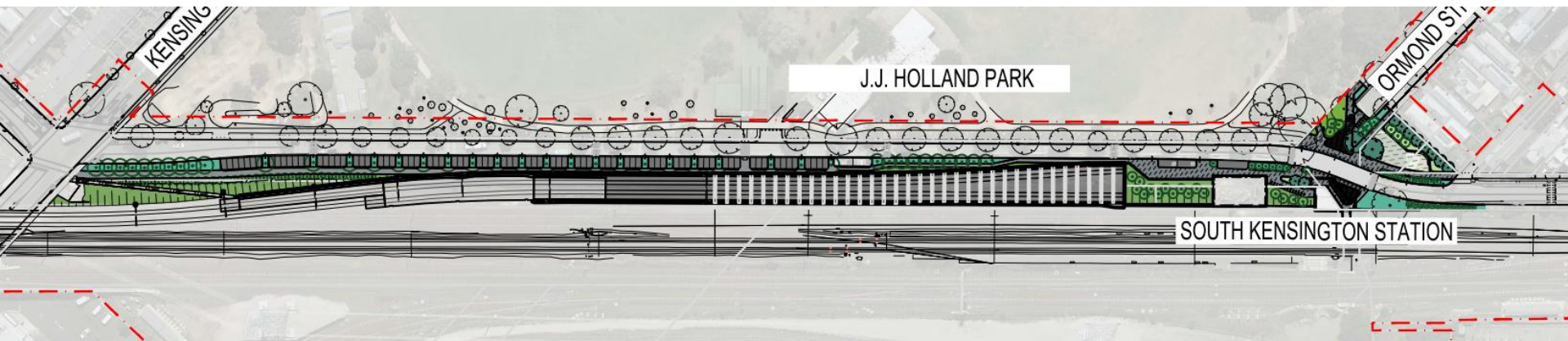
- Interim design was complete in June
- Additional inputs associated with the High Capacity Metro Trains added to model
- Certified design issued late July



PLANNING AND DESIGN

PLANNING AND DESIGN UPDATE

- The RIA Western Portal Development Plan has been approved
- Proposed Amendment to Development Plan to improve the 'balance' of trees and car parking along Childers Street
- Design Development update





OTHER ITEMS?



Western Portal

South Kensington

North Melbourne

Parkville

West Melbourne

The existing 'North Melbourne' station will be renamed West Melbourne.

Melbourne Central

Flagstaff

Southern Cross

Flinders Street

State Library

Parliament

Town Hall

Anzac

Richmond

South Yarra

Eastern Portal

Cranbourne / Pakenham Line

Sunbury Line