



## KENSINGTON AND ARDEN COMMUNITY REFERENCE GROUP

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26 OCTOBER 2017





## FREEING UP MELBOURNE'S BIGGEST BOTTLENECK

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**James Tonkin**, Director, Communications and Stakeholder Relations  
Melbourne Metro Rail Authority

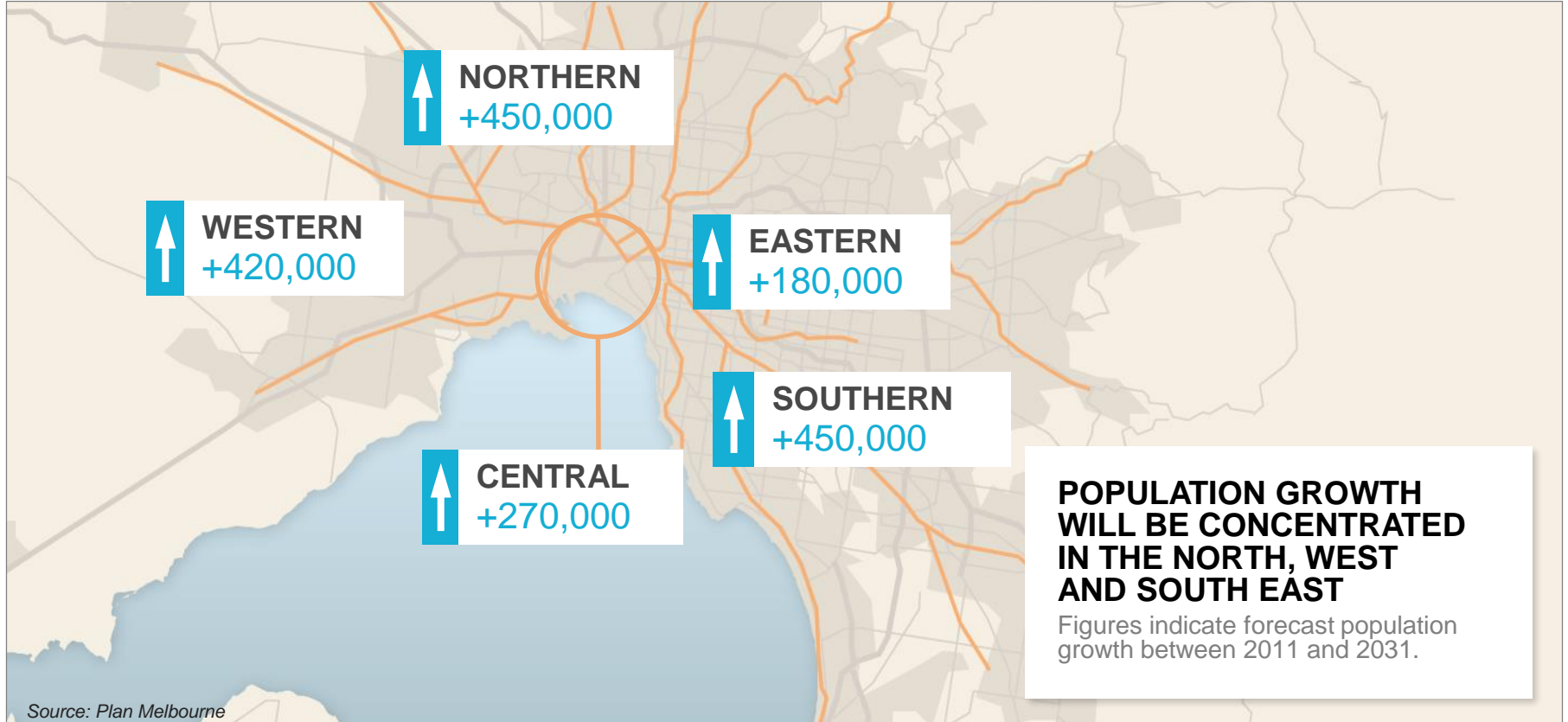




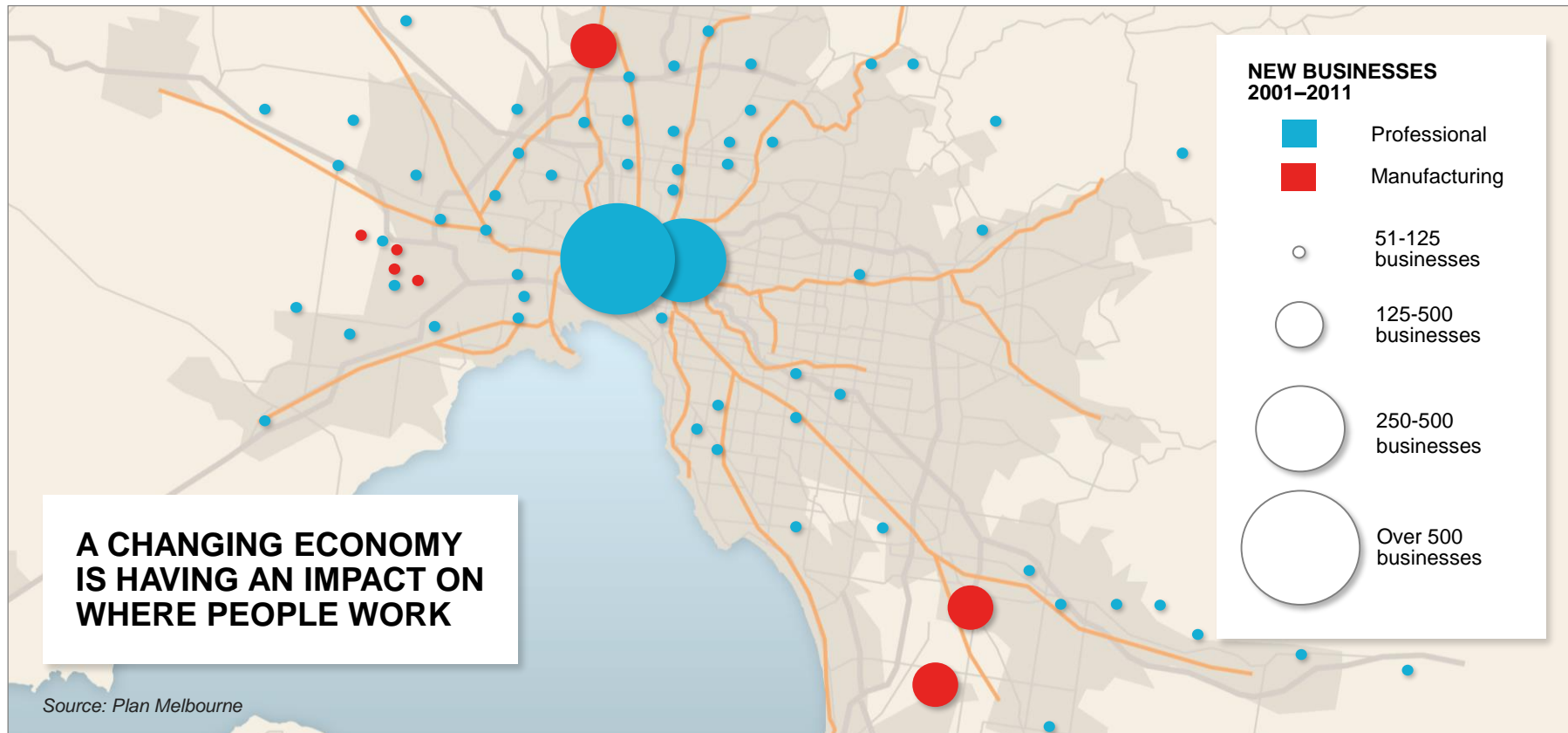
# MELBOURNE'S CHALLENGES



# POPULATION GROWTH



# NEW BUSINESS GROWTH

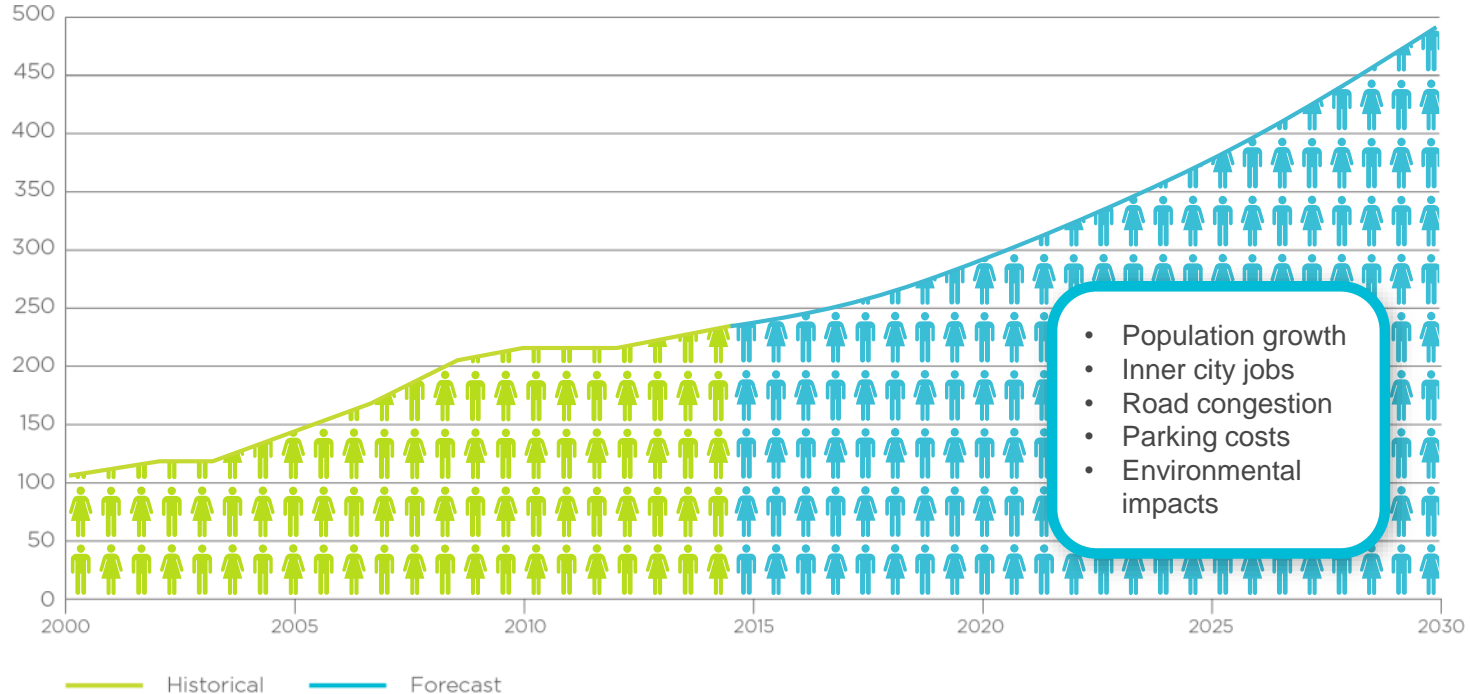




# MELBOURNE'S RAIL NETWORK

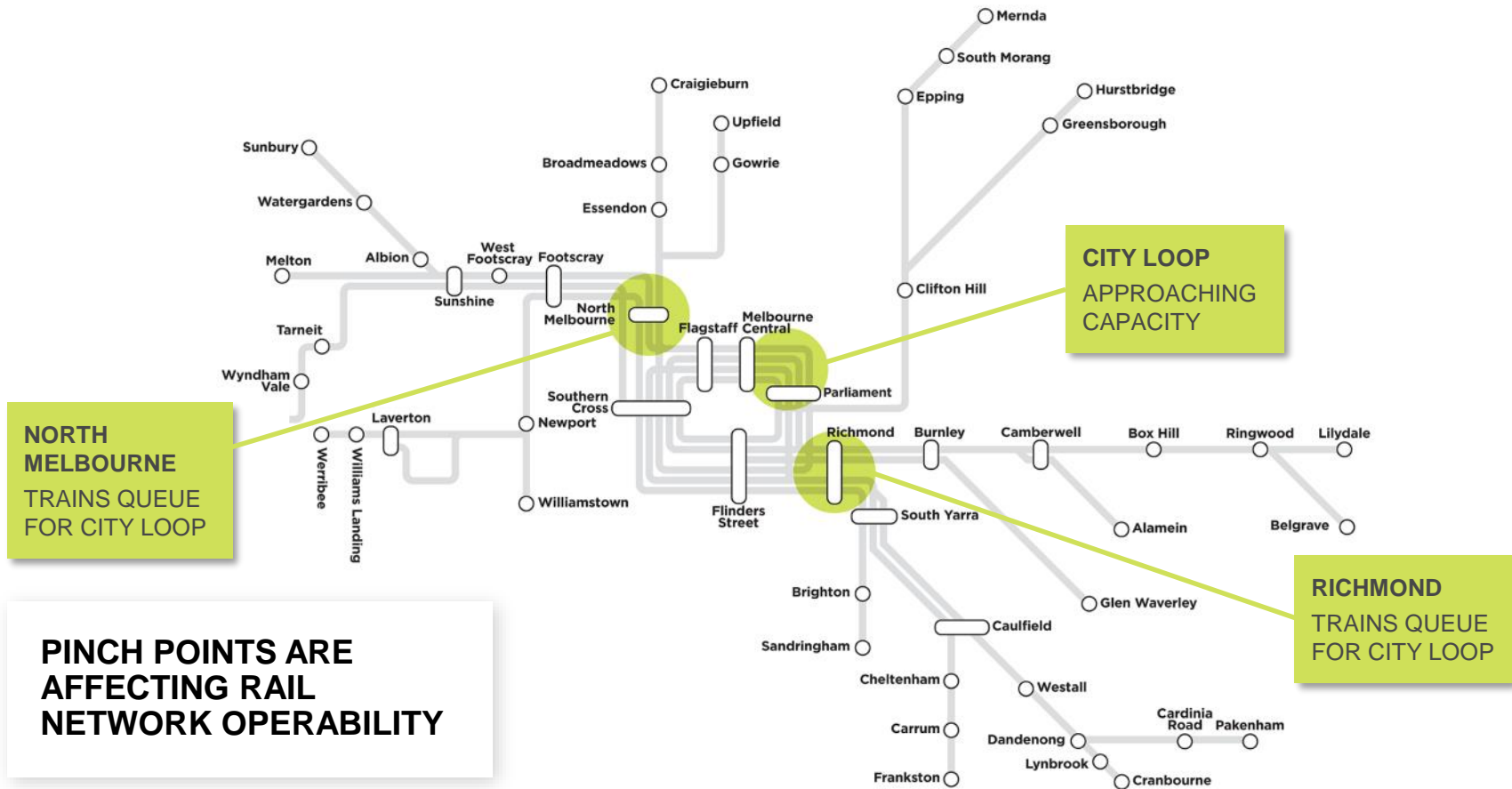
# FUTURE RAIL PATRONAGE

Annual patronage millions





# RAIL NETWORK PINCH POINTS



# TRAM PINCH POINTS



**PINCH POINTS ARE AFFECTING CBD TRANSPORT OPERABILITY**



# METRO TUNNEL PROJECT



Western Portal

South Kensington

Arden

Parkville

North Melbourne

CBD North

Melbourne Central

Flagstaff

Parliament

CBD South

Southern Cross

Flinders Street

Richmond

Domain

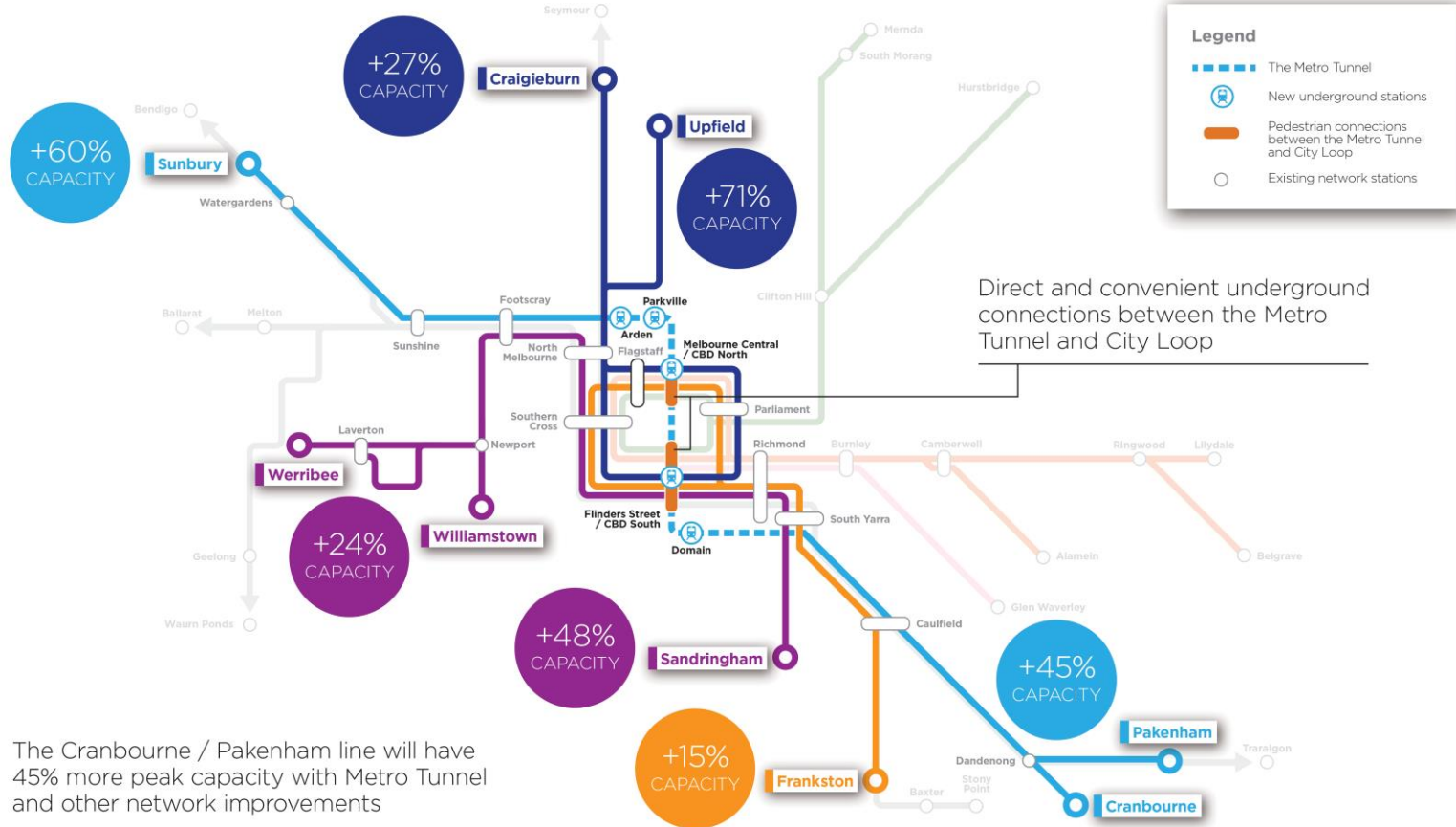
South Yarra

Eastern Portal

Sunbury Line

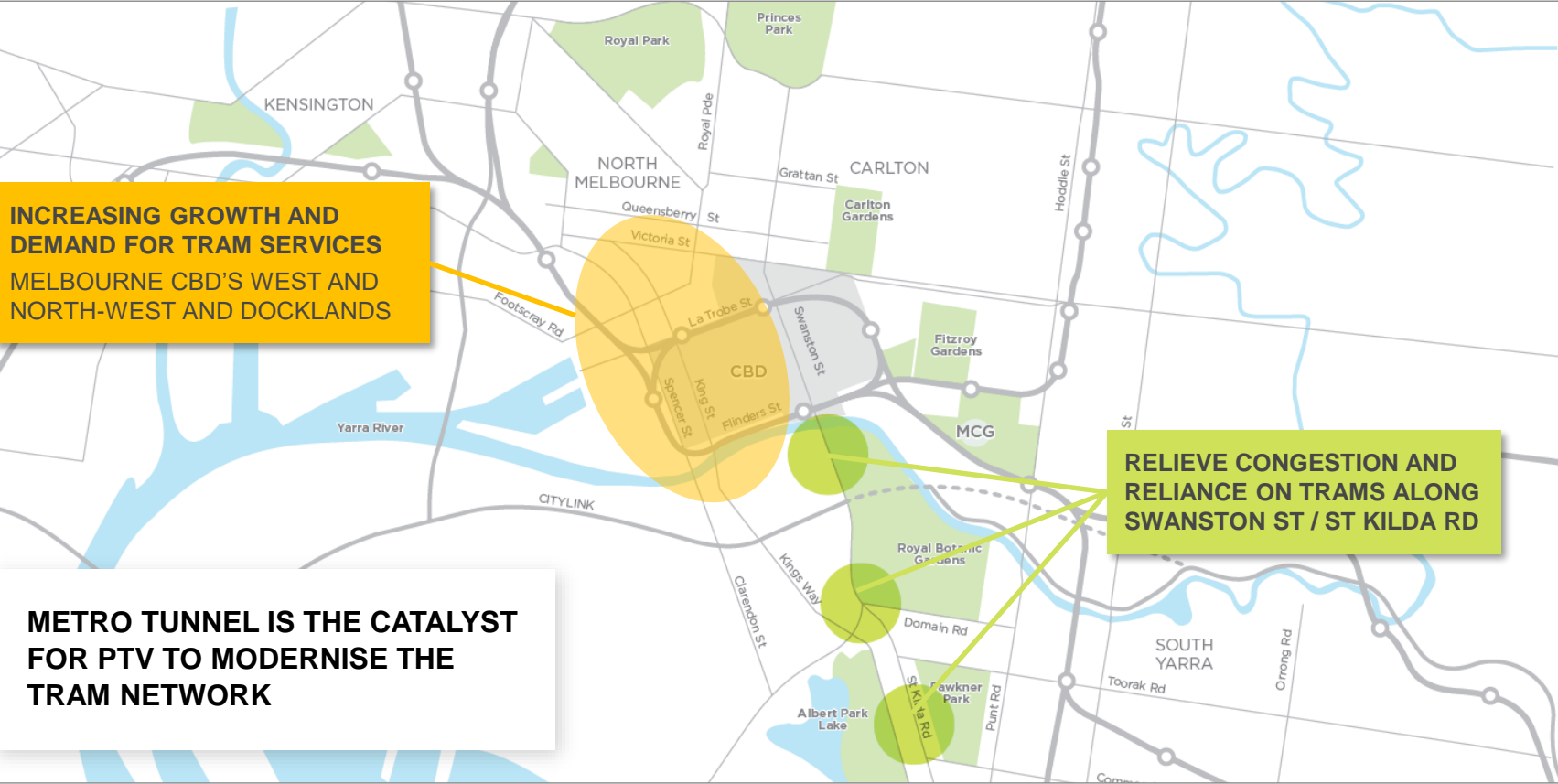
Cranbourne / Pakenham Line

# CAPACITY BENEFITS



The Cranbourne / Pakenham line will have 45% more peak capacity with Metro Tunnel and other network improvements

# TRAMS WHERE THEY ARE NEEDED



**INCREASING GROWTH AND DEMAND FOR TRAM SERVICES  
MELBOURNE CBD'S WEST AND NORTH-WEST AND DOCKLANDS**

**RELIEVE CONGESTION AND RELIANCE ON TRAMS ALONG SWANSTON ST / ST KILDA RD**

**METRO TUNNEL IS THE CATALYST FOR PTV TO MODERNISE THE TRAM NETWORK**

# WORK PACKAGES



## EARLY WORKS

- Utility services relocation, demolition, CBD access shafts and other preparatory works (Managing Contractor)
- Tram diversion works (Franchisee Works)
- Construction power (Utility Service Provider)

## TUNNEL AND STATIONS (AVAILABILITY PPP)

- 9km twin tunnels and five underground stations including fit-out
- Mechanical and electrical systems
- Tunnel and stations maintenance
- Rail systems installation within the tunnel

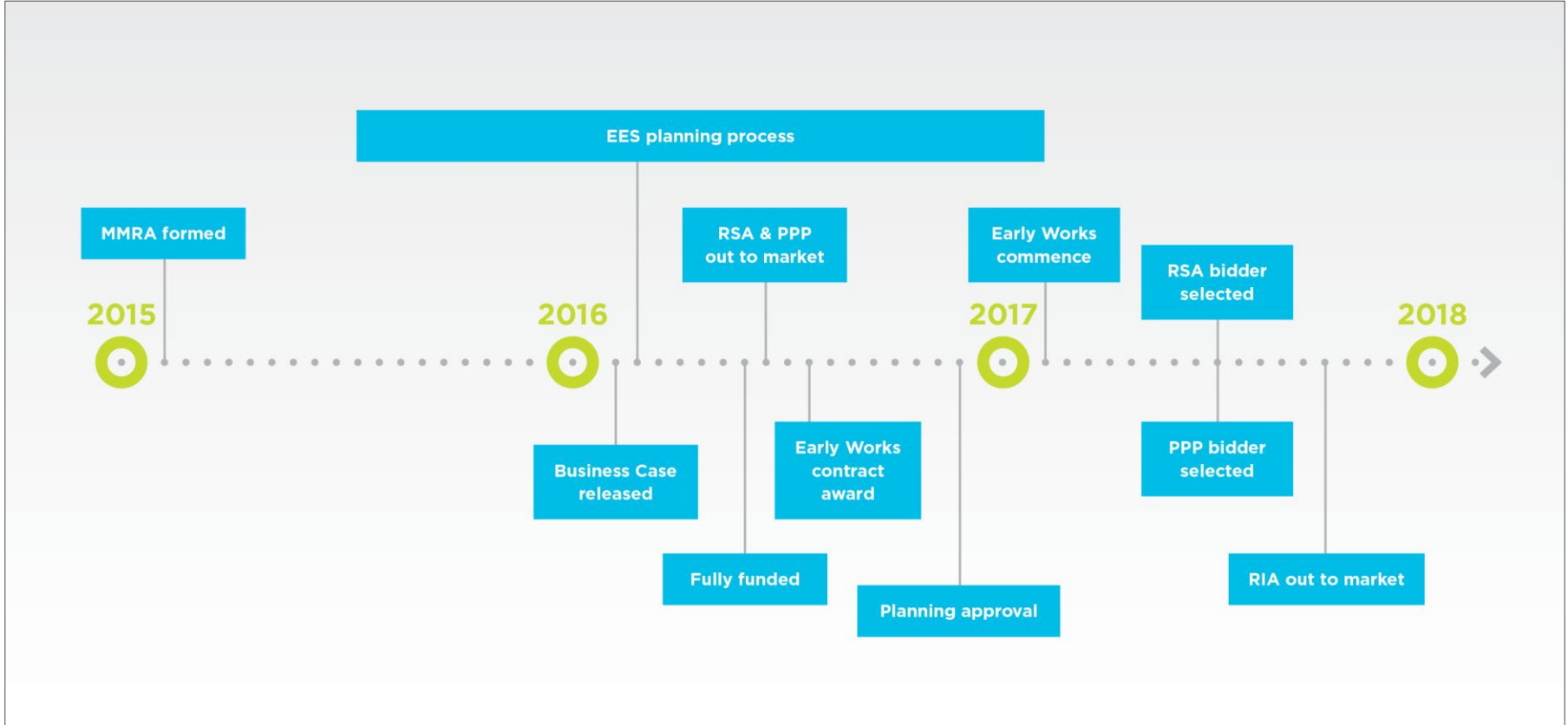
## RAIL INFRASTRUCTURE (ALLIANCE)

- Eastern and Western Portals
- Integration of portal with existing rail networks (civil track, overhead line equipment, signalling)
- Eastern and Western Turnback
- Wider network enhancements

## RAIL SYSTEMS (ALLIANCE)

- High capacity signalling
- Conventional signalling upgrades and modifications
- Communication systems
- Platform screen doors
- Train control and operational control systems
- Systems integration and end-to-end commissioning

# MILESTONES





# NEXT STEPS



**2017**

- Construction underway (e.g. site preparation, shafts)
- Property acquisition
- PPP & RSA contract award
- Road network changes



**2018**

- Development of detailed design
- Major construction on tunnels and stations
- RIA contract award



**2026**

- Target completion



**QUESTIONS?**



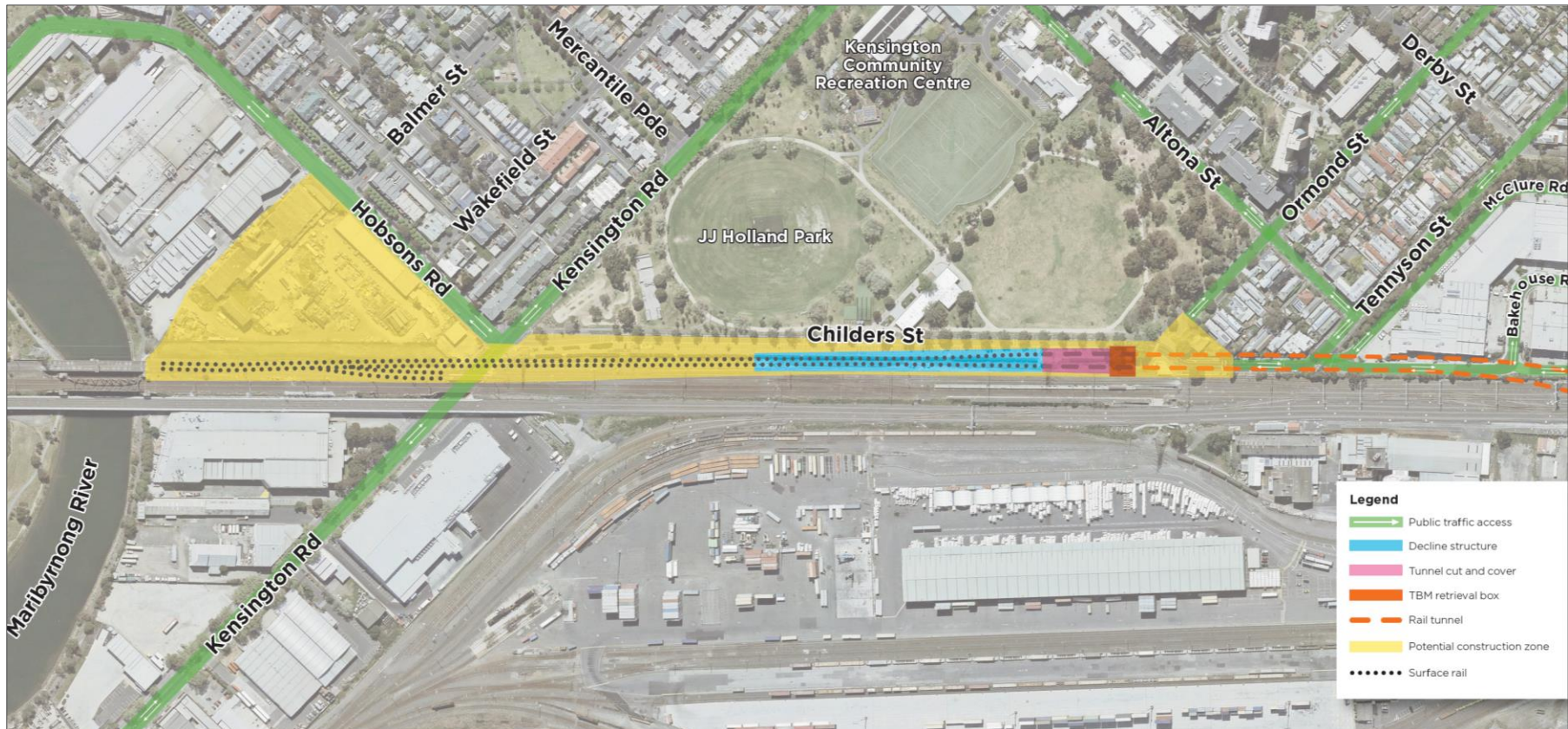
## RAIL INFRASTRUCTURE ALLIANCE

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Eli Firestone, Western Portal Precinct Manager  
Melbourne Metro Rail Authority



# WESTERN TUNNEL ENTRANCE



Rail Infrastructure Alliance anticipated timeframes:

- 2017 – Expression of Interest received in mid-September
- 2018 – contract awarded in third quarter
- 2018 – major work begins in Kensington in fourth quarter
- 2021 – major work finishes in Kensington, with intermittent works until 2026



**QUESTIONS?**



## JOHN HOLLAND MANAGING CONTRACTOR - EARLY WORKS

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David Thek, Precinct Manager – Western Portal and Arden  
John Holland

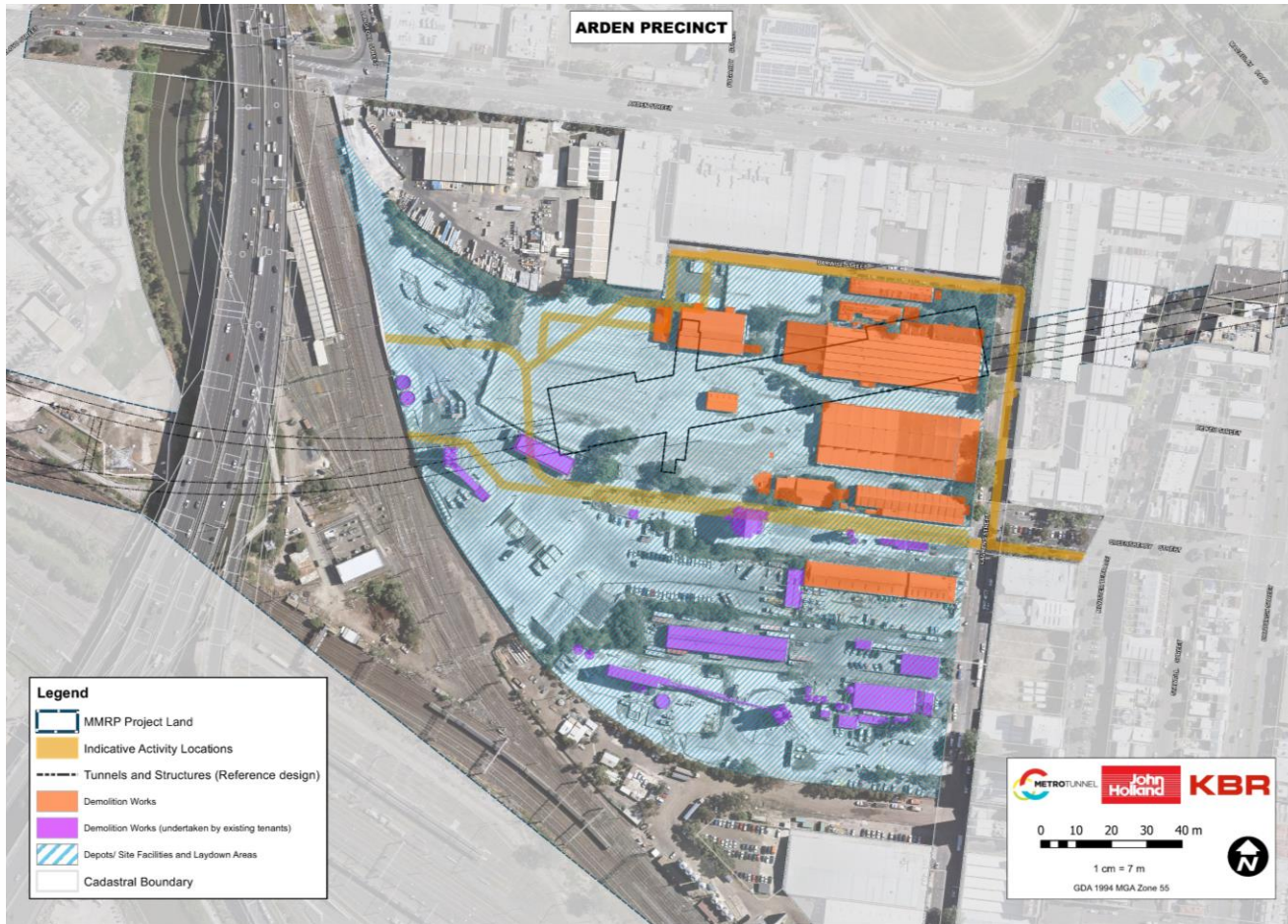




**ARDEN**



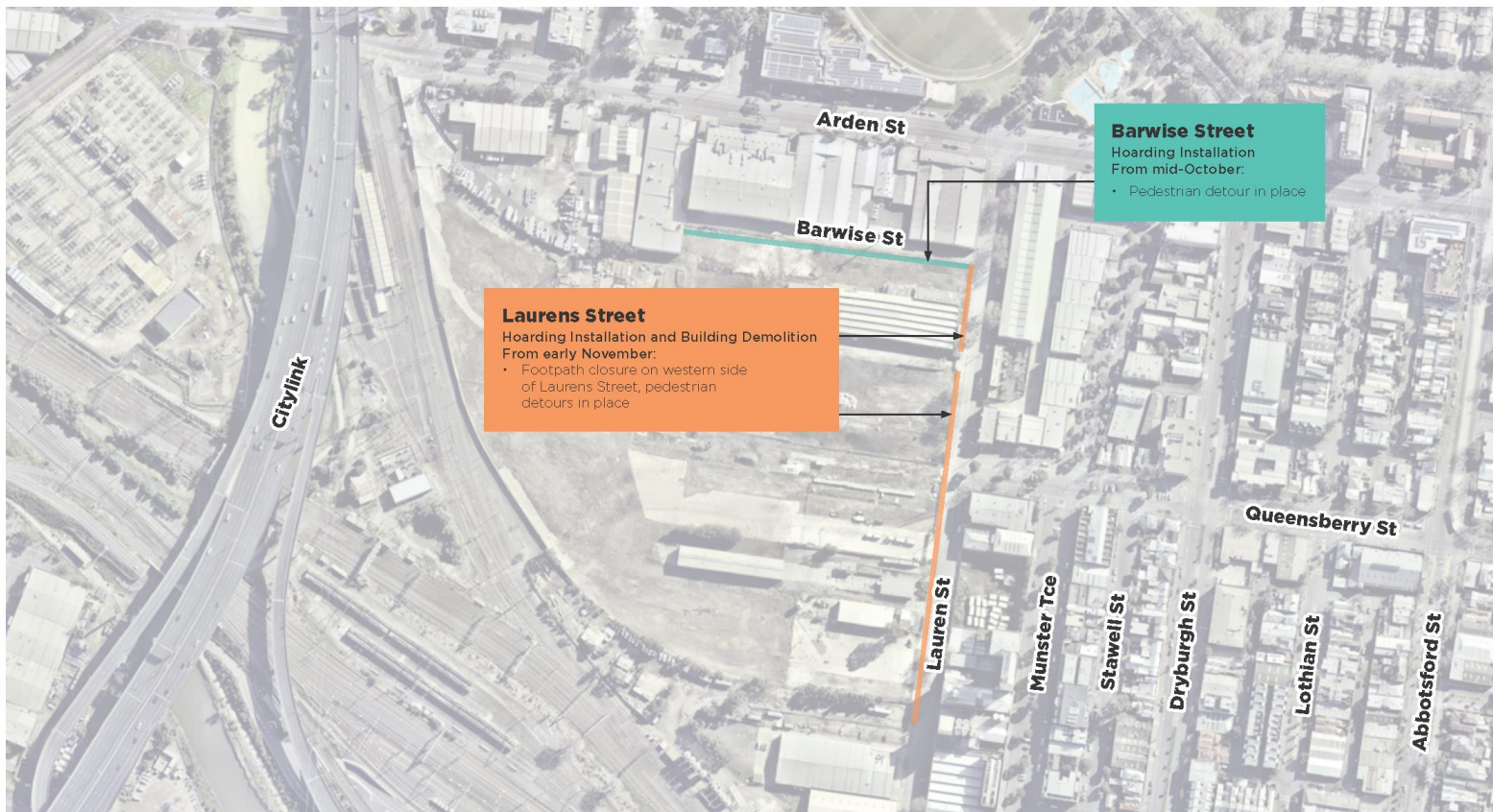
# Arden: demolition and service relocation



## Arden: demolition and service relocation



# Arden: hoarding installation





# WESTERN TUNNEL ENTRANCE

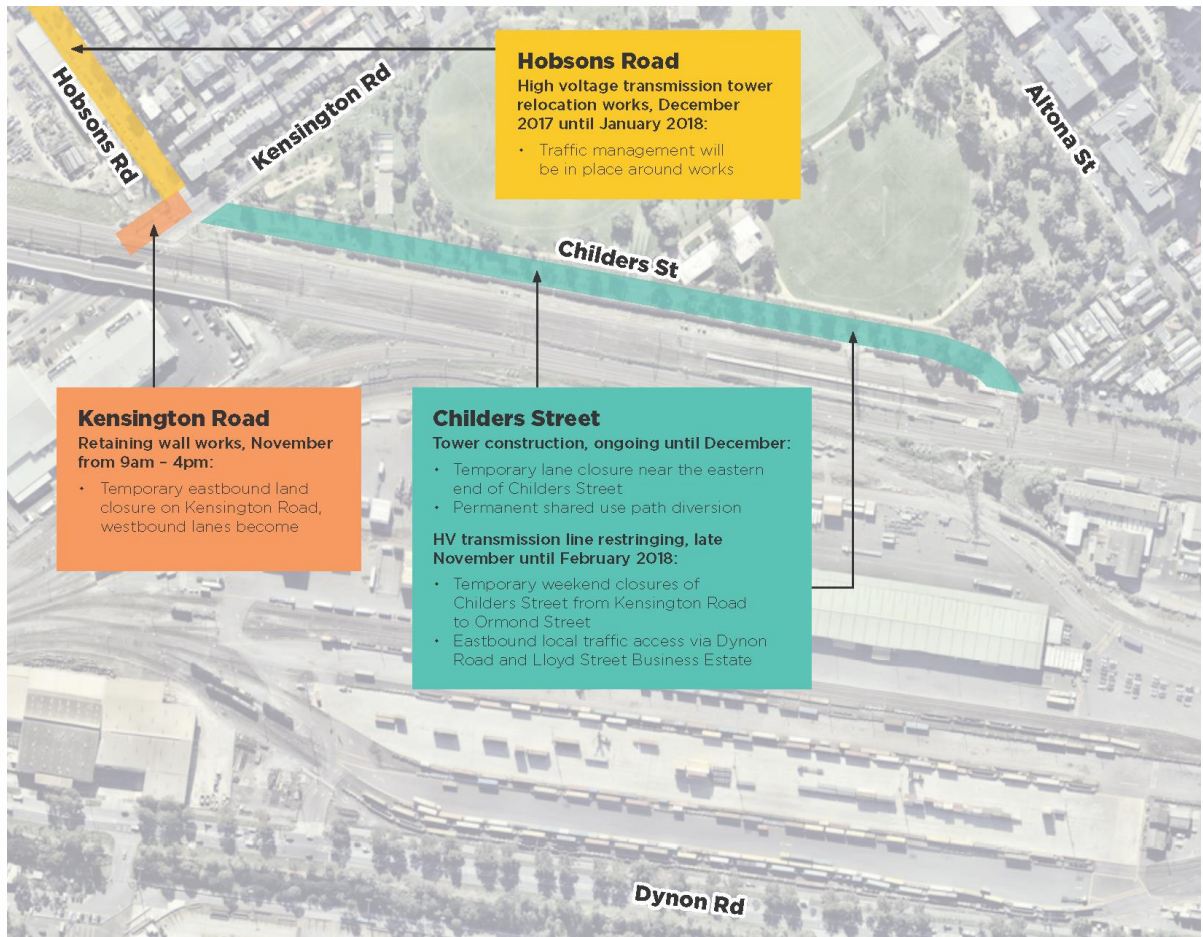
# Western Tunnel Entrance



## Western Tunnel Entrance: HV Tower relocation



# Western Tunnel Entrance: traffic impacts





**QUESTIONS?**





## BEON ENERGY SOLUTIONS CONSTRUCTION POWER

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**Megan Crockford**, Project Manager  
Beon Energy Solutions



# Overall Scope

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- 🔥 Design and construction of a temporary electrical substation at Arden to power the Tunnel Boring Machines (TBM)
- 🔥 Construction will last approx. 6 months with the substation handed over to MMRA
- 🔥 Substation is planned to be removed in approximately 5 years by MMRA/CYP on completion of the TBM work
- 🔥 Work commenced on Tuesday 10 October to mobilise to the site

# Arden Precinct

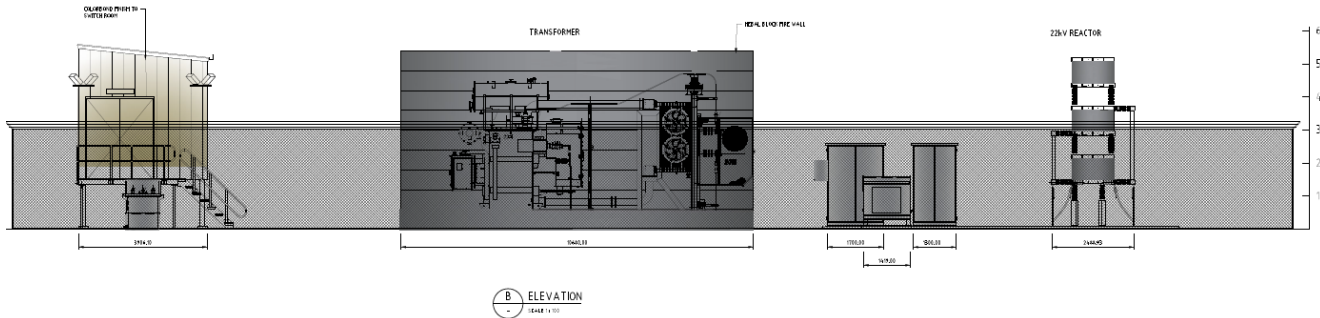
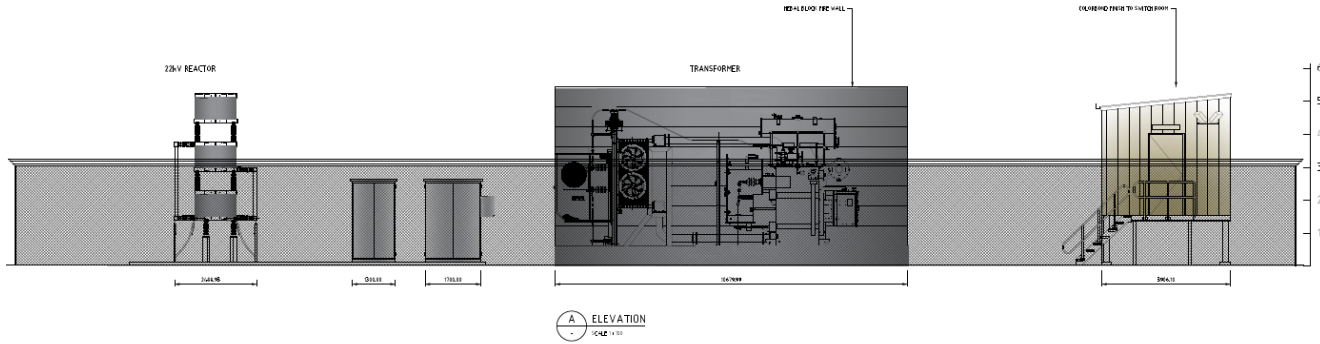
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- 🔥 Site Parking will be within the compound
- 🔥 Minimal impact to traffic – when there is, a traffic management plan will be followed
- 🔥 Temporary Road Closures will only occur when bringing in large items – expecting this to be approx. 5 deliveries
  - These closures will last approx. 6 hours in duration
- 🔥 All relevant stakeholders will be contacted around the larger deliveries
  - This will be between now and Christmas
- 🔥 Trucks/Traffic will enter the site from Barwise Street
- 🔥 Cables are being brought in through the existing Project land to supply power to the substation

# Arden Precinct – Barwise St



# Arden Precinct - Design



## Key features:

- Pale grey/brown Colorbond control room
- Concrete Firewall between the transformers
- Secure mesh fence surrounding the substation



**QUESTIONS?**

