

## ARDEN AND PARKVILLE COMMUNITY REFERENCE GROUP

**MEETING 6** 

**13 SEPTEMBER 2019** 







## **AGENDA**

- 1. Introductions and welcome
- 2. Construction update Parkville
- 3. Construction update North Melbourne
- 4. Cross passage ground improvement works (CP5)
- 5. Tunnelling update
- 6. Engagement and communications update
- 7. Questions
- 8. Meeting close







# **CONSTRUCTION UPDATE - PARKVILLE**







## WHAT'S HAPPENING AT GRATTAN STREET EAST

- Phase 2 excavation underway
- Phase 3 excavation
  - Q4 2019
- Station box bulk excavation scheduled for completion
  - Q4 2019
- Strut and ground anchor installation ongoing
- Works underway on the northern side of the box to relocate services, install struts, commence excavation









# **PARKVILLE 2019/2020 TIMELINE**

| Activity   | Aug<br>2019 | Sep<br>2019 | Oct<br>2019 | Nov<br>2019 | Dec<br>2019 | Jan<br>2020 | Feb<br>2020 | Mar<br>2020 | Apr<br>2020 | May<br>2020 | Jun<br>2020 | Jul<br>2020 | Aug<br>2020 | Sep<br>2020 | Oct<br>2020 | Nov<br>2020 | Dec<br>2020 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Grattan St east/ Closed excavation - trucks removing material under deck (Stage 2)                           |             |             |             | ***         |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Grattan St east/ Retail and entrances excavation   |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Grattan St west/ Service relocations   |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Gantry cranes remove excavated material/<br>load into trucks waiting inside acoustic<br>enclosures (Stage 3) |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Grattan St east/ Base slab construction  |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Grattan Street west/ Station entrance construction   |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |

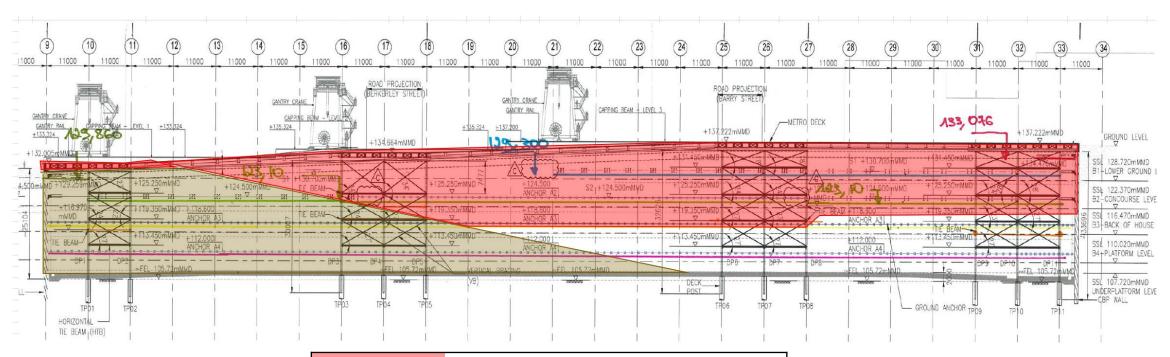
Dates subject to change





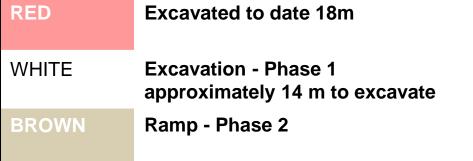


## **EXCAVATION PROGRESS**



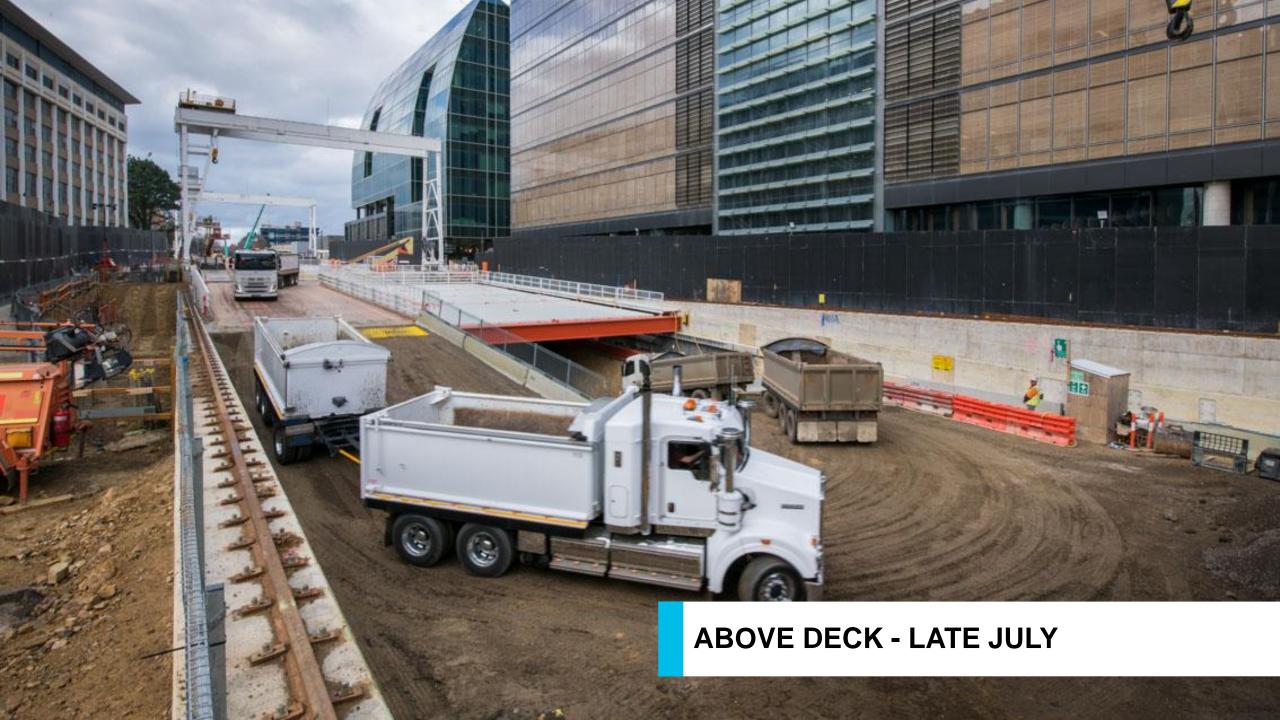


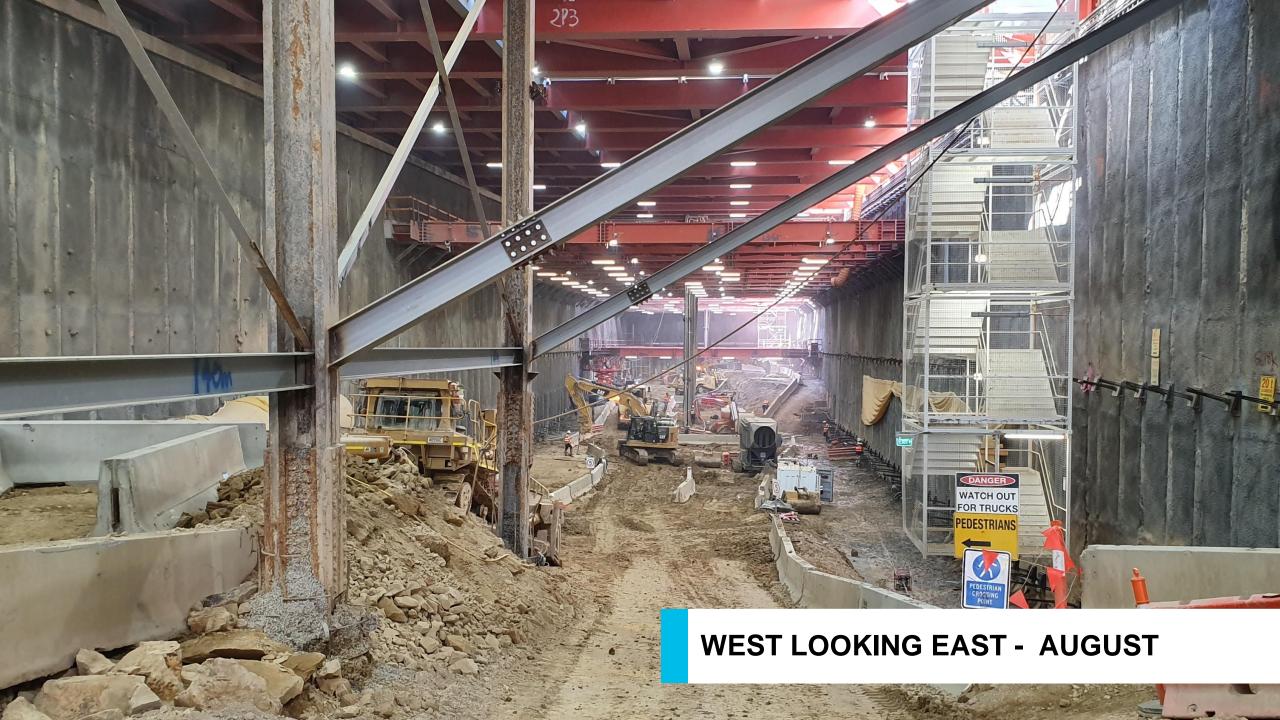
















## WHAT'S HAPPENING AT GRATTAN ST WEST

### **Early October to late 2019**

Telecommunications/utility service relocations

### Mid-October to mid-November 2019

Sewer bore in VCCC footpath

### Early to mid-October 2019

Enabling works – temporary traffic cut-overs (Royal Parade northbound service lane)

### Early November to early December, 2019

- Royal Parade northbound service lane Occupation #1
  - 3-4 week continuous closure of northbound service lane (24/7)
  - Intersection of Royal Parade and Grattan Street to remain open
  - Closure area to extend to include intersection of Royal Parade and Grattan Street during weekends only

### Late January to late February, 2020

- Grattan Street West Occupation #2
  - 3-4 week continuous closure between Flemington Road and Royal Parade (24/7)
  - Extending to the intersection during weekends only

### March to April 2020

Commence West box piling

### Late 2021/Early 2022

Commence Royal Parade pedestrian underpass construction (mined tunnel)

Access for ambulances, emergency services and public transport will be maintained at all times across these works







## HERITAGE APPLICATION

## Heritage Victoria permit approved, with conditions, in August 2019 to:

- Construction of the Parkville Station entrances outside of The Royal Melbourne Hospital and Peter MacCallum Cancer Centre
- Construction of a tram 'super-stop' within the central roadway, north of Grattan Street intersection
- Reinstatement of the area in line with the approved Legacy Design

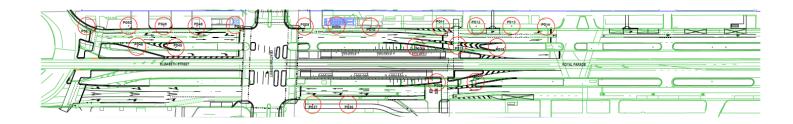


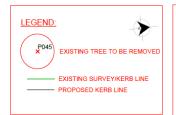




## HERITAGE APPLICATION

- Heritage application covers both temporary and permanent works:
  - partial removal of the existing bluestone kerb and channel to the outer service lanes of Royal Parade
  - partial removal of the existing central medians with tiered concrete kerbing
  - removal of existing road surfaces and associated road and tramway infrastructure and signage
  - removal of some trees within Elizabeth Street and Royal Parade





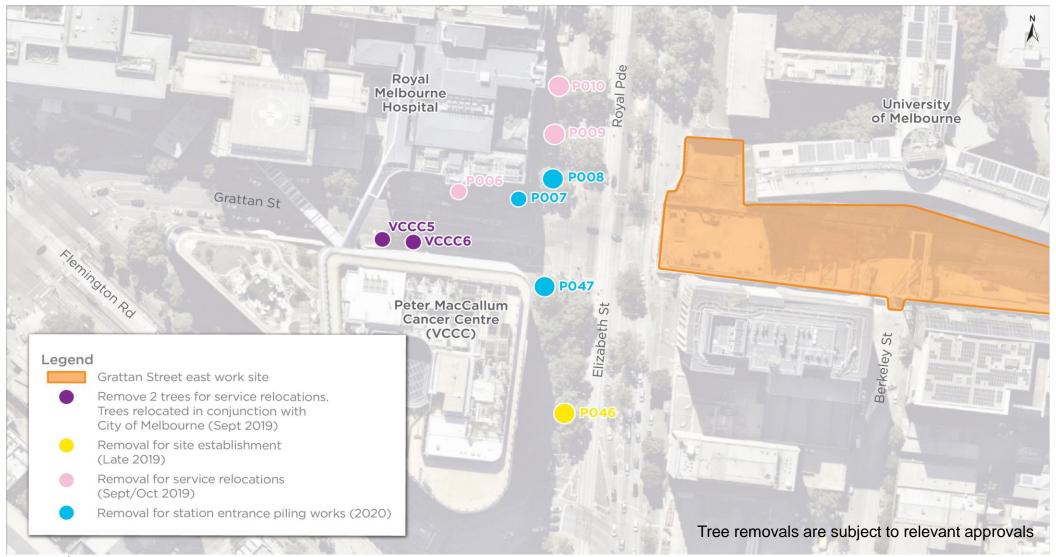








# **UPCOMING TREE REMOVALS**









# **CONSTRUCTION UPDATE – NORTH MELBOURNE**







# **CONSTRUCTION PROGRAM**

| Activity  | Sept | Oct | Nov | Dec | Jan | Feb |
|---|------|-----|-----|-----|-----|-----|
| Gantry shed construction                            |      |     |     |     |     |     |
| East box base slab construction                     |      |     |     |     |     |     |
| East box wall construction                          |      |     |     |     |     |     |
| TBM assembly  |      |     |     |     |     |     |
| Tunnelling towards Kensington                       |      |     |     |     |     |     |
| Cross passage ground improvement - Lothian St (CP5) |      |     |     |     |     |     |

Program is indicative and subject to change







## WHAT'S HAPPENING IN NORTH MELBOURNE

### Out of hours works

- 6pm –10pm (evening works), Monday to Friday
  - Over-size equipment deliveries to and from site and use of a crawler crane to unload deliveries
  - Base slab and inner wall construction, and strut removal (east box)
  - TBM assembly, tunnelling, slurry treatment plant, grout pump and segment facility operation
- 10pm 7am (night works), Monday to Friday
  - Over-size equipment deliveries to and from site and use of a crawler crane to unload deliveries
  - Base slab and inner wall construction, and strut removal (east box)
  - Concrete deliveries for base slab construction
  - TBM assembly, tunnelling, slurry treatment plant, grout pump and segment facility operation
  - Road cleaning on Arden Street as required

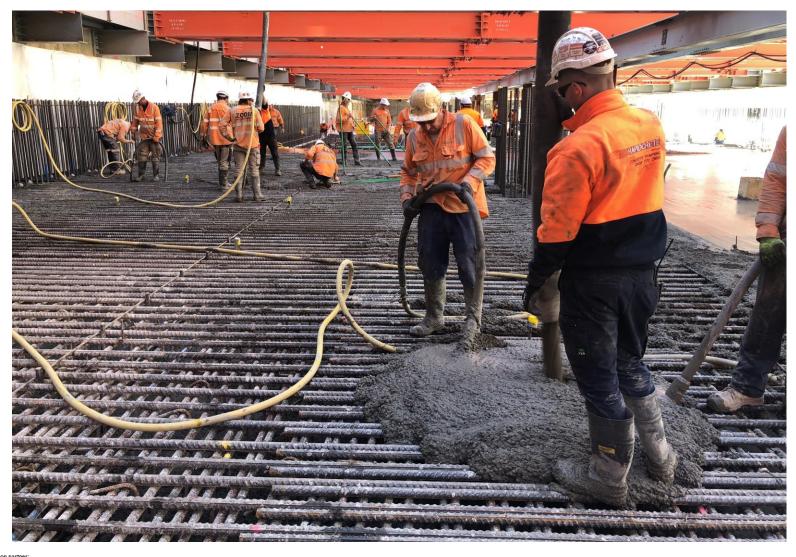
After 6pm, construction vehicles will enter and exit via Arden Street wherever possible.







# WHAT'S HAPPENING IN NORTH MELBOURNE









# WHAT'S HAPPENING IN NORTH MELBOURNE (ARDEN)









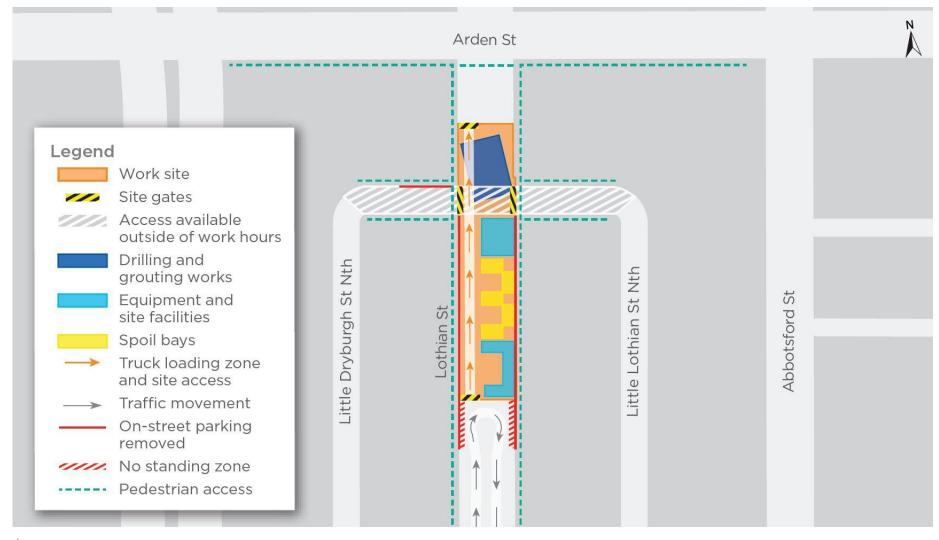
# CROSS PASSAGE GROUND IMPROVEMENT WORKS (CP5)







# SITE LAYOUT - LOTHIAN STREET

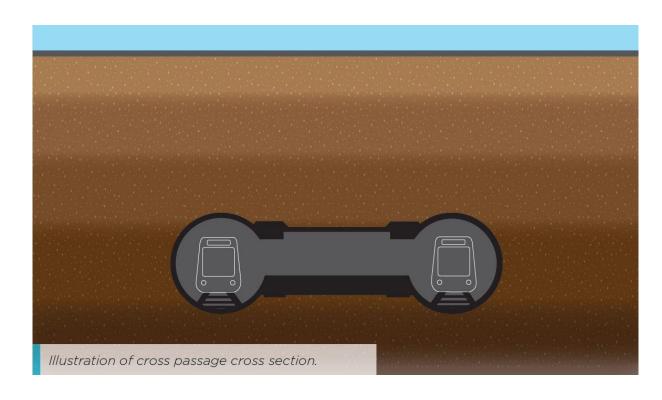


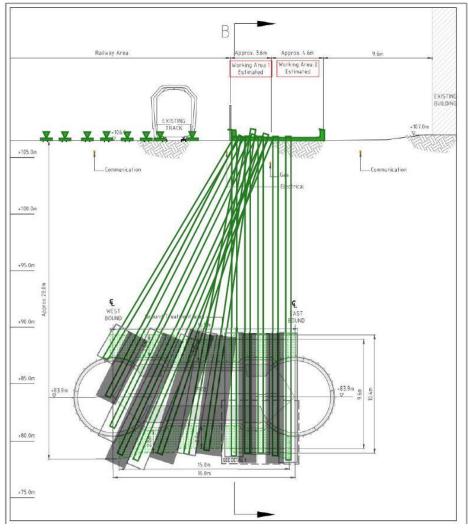






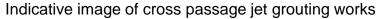
## **CROSS PASSAGE GROUND IMPROVEMENT WORKS**













## **CROSS PASSAGE GROUND IMPROVEMENT WORKS**

- NDD service proving complete and underground services confirmed
- Site establishment: from 10 September (3 weeks)
- Jet grout trials: from end September (3 weeks)
- Production jet grouting: from end October (up to 7 months)
- Completed communication and engagement:
  - Door knocks/meetings with directly impacted residents (Lothian Street, between Arden and Queensberry, Little Dryburgh Street N and Little Lothian Street N) – 26 and 27 August and 4 September
  - Door knocks/meetings with directly impacted businesses (Lothian Street, between Arden and Queensberry, Little Dryburgh Street N and Little Lothian Street N) – 22 August and 5 September
  - Provision of works notifications.







# **TUNNELLING**







# TBM ASSEMBLY AND BLESSING







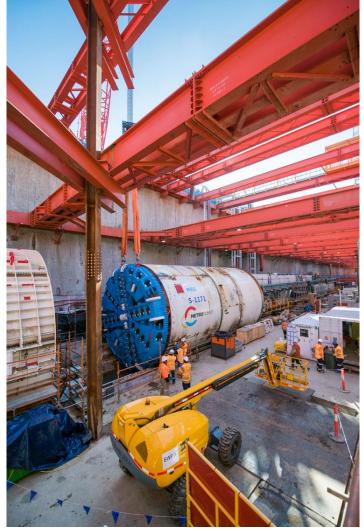






# **TBM ASSEMBLY**











# **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           | 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







## **ENVIRONMENT – CONSTRUCTION NOISE & VIBRATION**

- TBM Ground borne Noise and Vibration Model Process
  - Model project wide impacts
  - Validate in stages (North Melbourne to Kensington; North Melbourne to Parkville) - attended monitoring
  - Update model with attended monitoring data
- Consultation will be progressively undertaken with potentially affected residents prior to TBM arrival







# STAKEHOLDER AND COMMUNICATIONS UPDATE







## **ENGAGEMENT & COMMUNICATIONS UPDATE**

### NORTH MELBOURNE AND PARKVILLE

#### **Notifications and communications**

- Pile break back OOHW update
- North Melbourne August September Construction Update (13 August)
- North Melbourne OOH gantry crane construction DL (16 August)
- North Melbourne commencement of tunnelling DL (10 September)
- North Melbourne commencement of ground improvement works, Lothian Street (4 and 5 September)

### Door knocks, meetings, briefings and events

- City of Melbourne fortnightly progress meetings
- Ongoing fortnightly meetings with Peter Mac, Melbourne Health, UoM, Graduate House, CoM
- Monthly business health check
- North Melbourne Community Day (4 August)
- Lecture to engineering students on project by Peter Hunt at the University of Melbourne (16 August) and site tour (19 August)
- University of Melbourne Open Day (18 August)
- MAURI ANZ monthly works interface meeting (22 August)
- Peter Doherty Institute staff site tour (23 August)
- Small business project precinct site tour (23 August)
- Lothian Street businesses commencement of ground improvement works (22 August and 5 September)
- Residents of Lothian Street commencement of ground improvement works (26, 27 August and 4 September)
- University of Melbourne site tour with Project Interface Team (28 August)
- Support and coordination for PDI Family Day (Sept 8)
- Lecture to UoM students on project and energy efficiency tech by CYP Mark Wells at the University of Melbourne (5 Sept)
- Lecture to UoM students on procurement by RPV James Sutherland (9 Sept)







## **ENGAGEMENT & COMMUNICATIONS UPDATE**

### NORTH MELBOURNE AND PARKVILLE

### **Community issues/enquiries**

- Noise and vibration
- Tunnel alignment enquiries and property condition survey requests

### **Upcoming engagement**

- Ongoing discussion with hospitals in relation to engagement and collateral for service relocation works, regarding Grattan Street west
- Cross passage ground improvement notification and meetings with residents and businesses
- Site tours University of Melbourne, Graduate House and Peter Mac (20 August)
- Site tour Community Reference Group (13 September)
- CP5 ground improvement works resident/business health check door knock/drop in (24 September)
- North Melbourne tunnelling commencement resident health check door knock (8 October)
- Site tour for Institute of Civil Engineers (14 October)







# **QUESTIONS?**







# **NEXT MEETING**

Friday 1 November 2019







