



## CBD COMMUNITY REFERENCE GROUP

CROSS YARRA PARTNERSHIP  
6 DECEMBER 2019





## DECEMBER CBD COMMUNITY REFERENCE GROUP

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**Blythe Chidgey**, Town Hall Station Stakeholder Engagement Manager, CYP D&C

**Kate Kearns**, Business Support and Engagement Lead, CYP D&C

**Barry McGuren**, Manager Business Support and Landowner services, RPV

**Mary Parker**, Director Communications and Creative, Project Co

**Melinda Kelly**, State Library Station Stakeholder Engagement Manager, CYP D&C

**Jodie Barrington**, CBD Precinct Lead, CYP D&C

**Friday 6 December 2019**



Construction partner:



# AGENDA

1. State Library Station Update
2. Creative update
3. Town Hall Station Update
4. Flinders Link Update
5. Business support update

# STATE LIBRARY STATION UPDATE

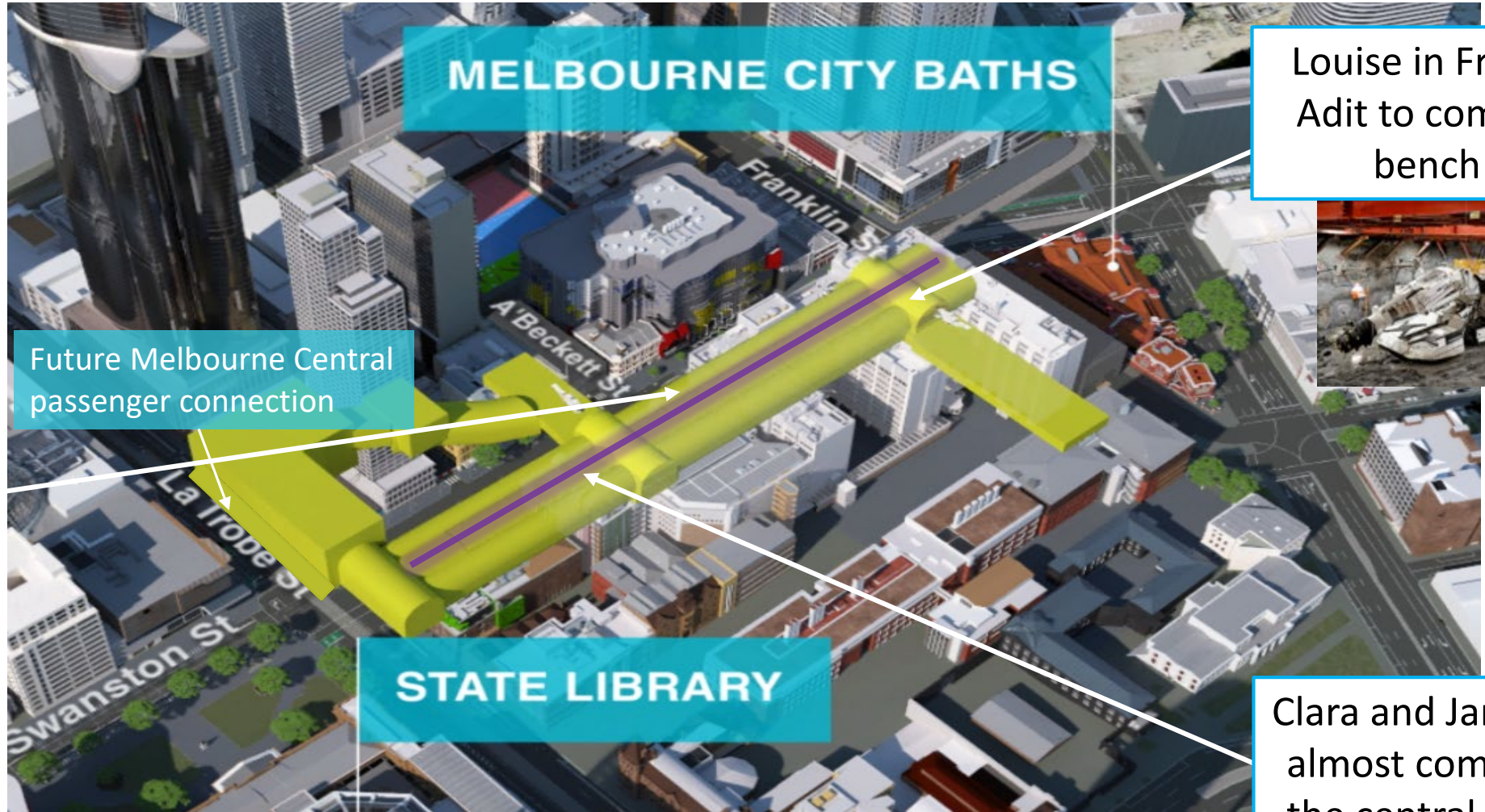




# TUNNELLING UPDATE







MELBOURNE CITY BATHS

Louise in Franklin Adit to complete bench 3

Preparation works for structures and lining

Future Melbourne Central passenger connection

STATE LIBRARY

Clara and Jane have almost completed the central cavern

## **A'Beckett Street site**

Tunnelling

- 24/7

Line marking

- 8pm Sunday 15 December until 5am Monday 16 December

## **Franklin Street east site**

Trucks to demobilise oversized equipment (roadheader and scrubber)

- 1am to 5am for up to four nights in mid-January

From January 2020 the Franklin Street East site will start constructing the underground station platform, this involves delivery of steel and concrete to the site using trucks.





## FRANKLIN STREET WEST UPDATE



# FRANKLIN STREET WEST UPDATE

Activity	Location	Dec	Jan	Feb	Mar	April	May	
Acoustic shed construction	Site	●————●						
Shaft excavation	Site	●—————●						
Overhead gantry	Franklin St	●——●						
Westbound lane reinstated	Franklin St	●——●						

# FRANKLIN STREET WEST UPDATE

## **Acoustic shed installation**

- Monday to Fridays, 7am to 10pm (excavation 6pm to 10pm)
- Saturdays, 7am to 5pm

## **Westbound lane reinstatement works**

- Line marking and sign removal 8pm Sunday 8 December to 5am Monday 9 December
- Westbound lane reinstatement – 6am Monday 9 December

## **Traffic impacts**

- Eastbound lane closure, Franklin Street (Stewart to Swanston), Monday to Fridays, 7am to 8pm, Saturdays 7am to 5pm (until westbound reinstatement, as above)
- Intermittent southern footpath closures during scaffold removal and cladding installations





**LITTLE LA TROBE STREET UPDATE**



# LITTLE LA TROBE STREET SITE UPDATE

Activity	Dec	Jan	Feb	Mar	April	May
Piling	●—————●					
Plunge column installations				●—————●		

## Stages of piling

1

### SETTING UP THE RIG

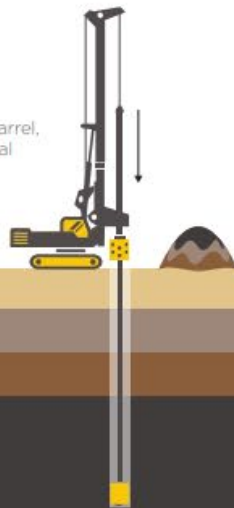
Deliver the rig to site and move it into position



2

### DRILLING

Drilling holes into the ground using a core barrel, and excavating material



3

### STEEL REINFORCEMENT

Removing the material and inserting a prefabricated steel reinforcement cage into the hole



4

### CONCRETE POURING WITH TREMIE PIPE

Pouring concrete into the hole to form the pile. Once the concrete sets, the pile is complete



5

### CAPPING THE PILES

Once the piles are constructed, the top layer of concrete is removed and topped by a capping beam to prevent lateral displacement.



Start of the pile top removal process



# LITTLE LA TROBE UPDATE

## **Piling works**

- Monday to Saturdays, 7am to 6pm
- Monday to Fridays, 6pm to 10pm - *concrete pours and minor works (as required)*

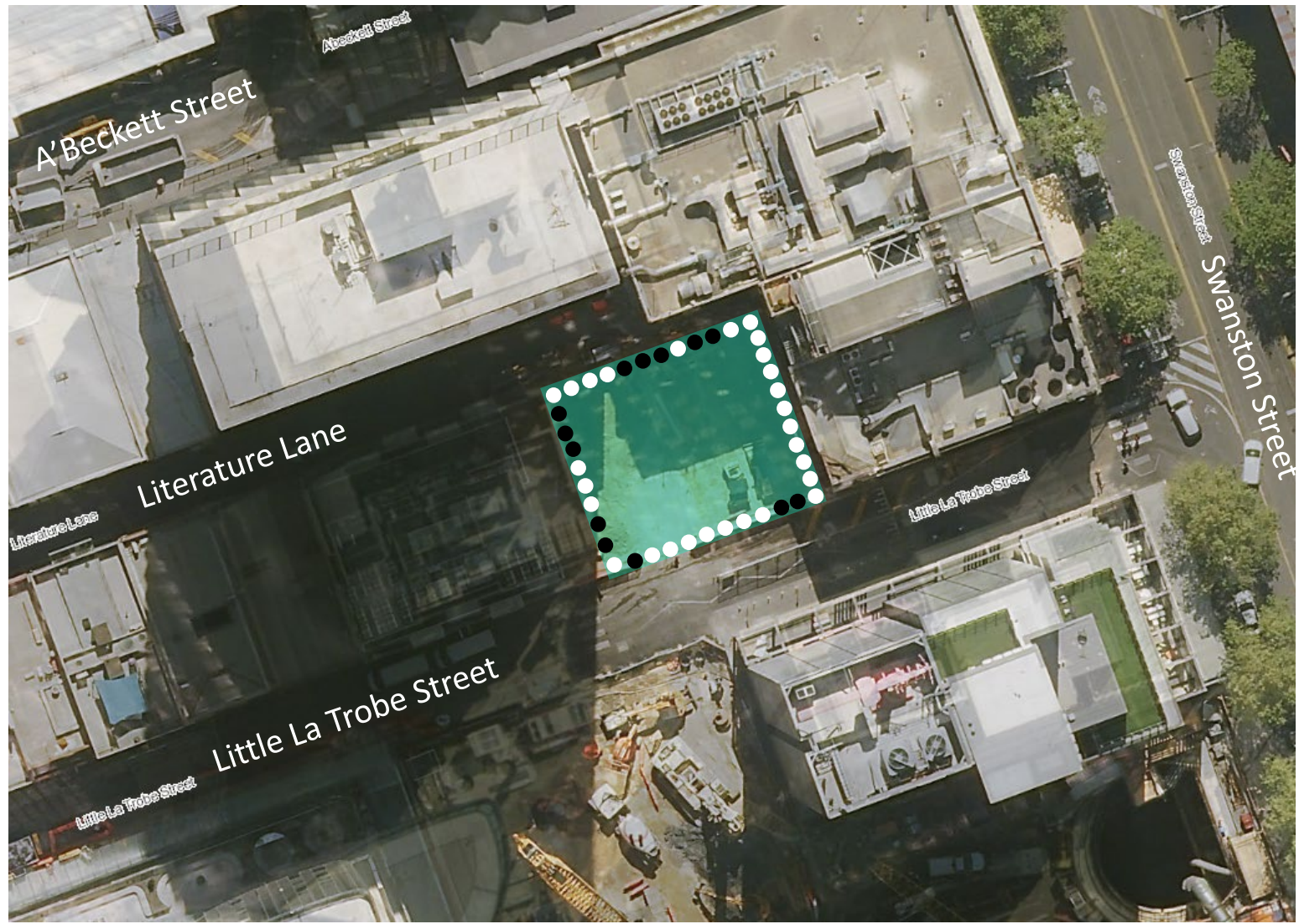
## **Line marking**

- 8pm to midnight, Tuesday 10 December
- Traffic access maintained

# LITTLE LA TROBE STREET SITE PILING

## Perimeter piling

- 17 of 67 complete







## LA TROBE STREET UPDATE

# LA TROBE STREET SITE UPDATE

Activity	Location	Dec	Jan	Feb	Mar	April	May
Perimeter piling and plunge column installation	Site	[Timeline bar from Dec to May]					
Temporary shaft removal	Site	[Timeline bar in Dec]					
Tower crane installation	Site			[Timeline bar in Feb]			



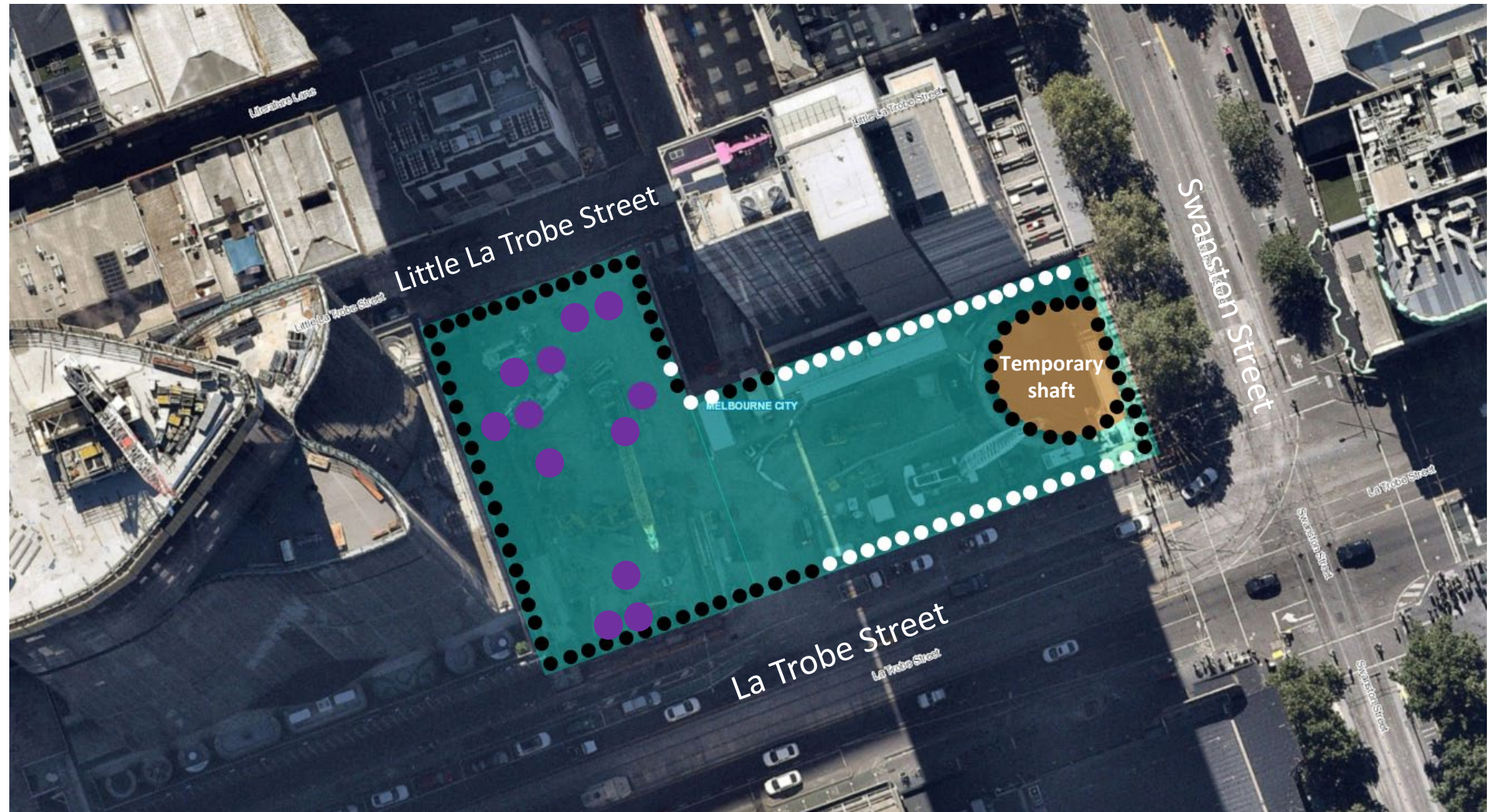
# LA TROBE STREET SITE PILING

## Perimeter piling

- 99 of 172 complete

## Plunge columns

- 12 of 56 complete



## **Piling and plunge column works**

- Monday to Fridays, 7am to 6pm
- Saturdays, 7am to 6pm
- *Concrete pours and minor works (as required)*, Monday to Fridays, 6pm to 10pm

## **Removal of temporary shaft**

- 24 hours, Monday to Saturdays

## **Tunnelling**

- Monday to Sundays, 24/7 ongoing

## **Tower crane installation**

- Additional overnight work will be required to deliver and install a tower crane early 2020

## **Oversized deliveries**

- 1am to 5am, as required



# TUNNELLING VIDEO



# QUESTIONS?





# CREATIVE UPDATE





# TOWN HALL STATION UPDATE





## FLINDERS QUARTER



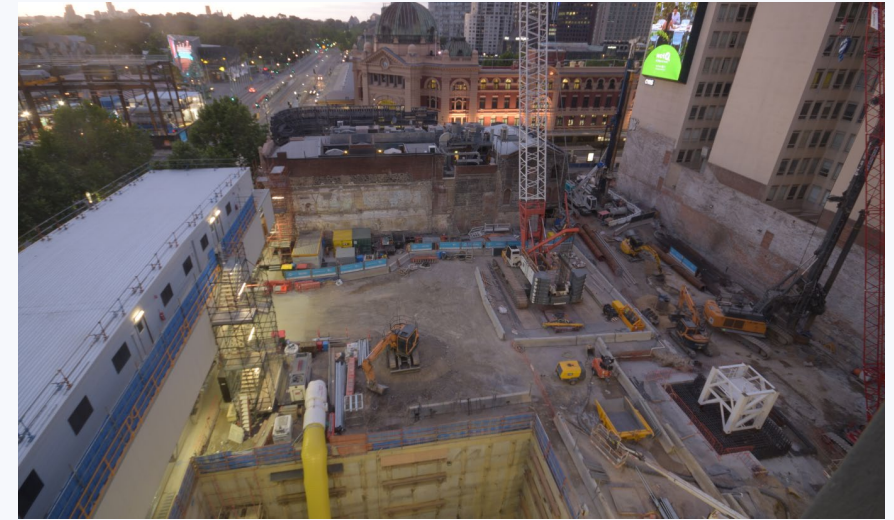
# FLINDERS QUARTER PROGRESS



SEPTEMBER 2018



MARCH 2019



DECEMBER 2019

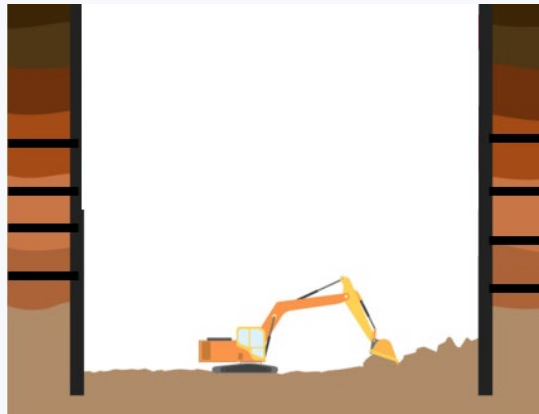
# FLINDERS QUARTER – SHAFT A



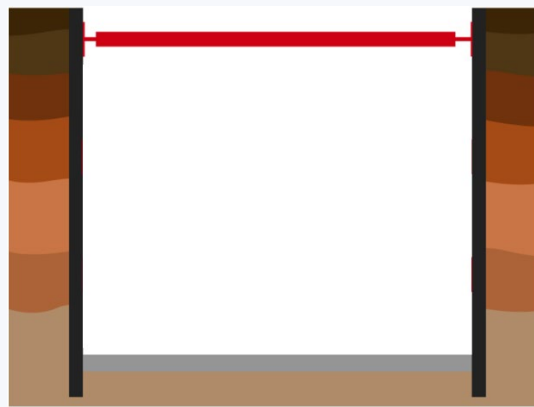
Activity	Dec	Jan	Feb	Mar	Apr	May
Excavation	●————●					
Deck construction	————●					
Acoustic enclosure installation		●————●				
Roadheader mobilisation				●————●		
Roadheader tunnelling					●————●	

# SHAFT A BOTTOM -UP CONSTRUCTION

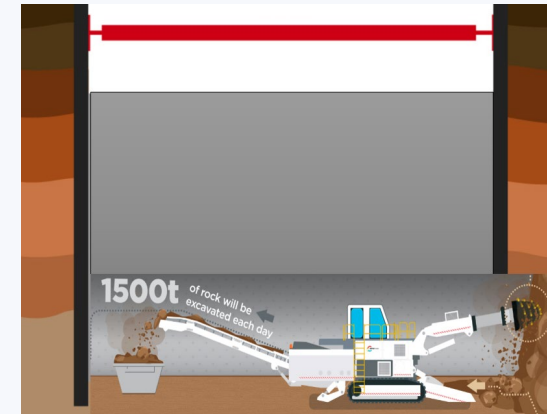
The 'bottom up' method involves excavating the box down to its maximum depth before the construction and fit out.



- In Shaft A rock anchors are used to provide structure to the shaft
- Steel struts were used within the City Square and Federation Square shafts



- A deck is constructed over the shaft, followed by the construction of an acoustic enclosure



- A roadheader will be lowered into the shaft to commence excavation in 2020



# FLINDERS QUARTER- SHAFT B

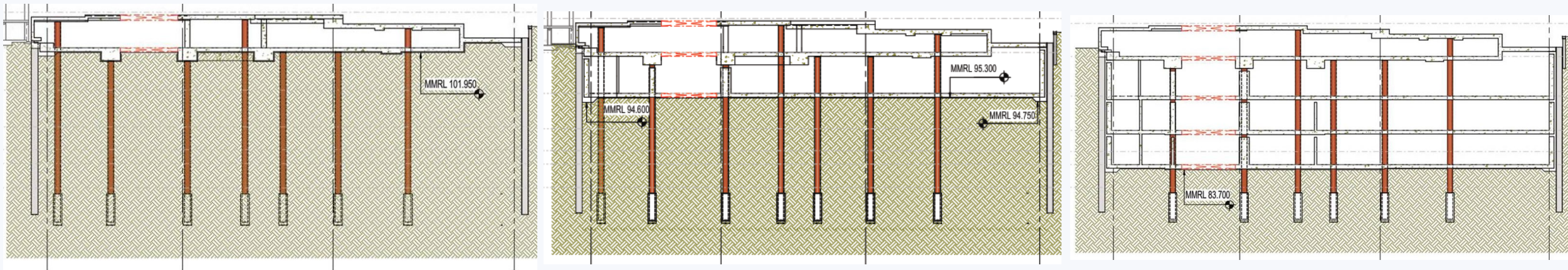


Activity	Dec	Jan	Feb	Mar	Apr	May
Piling	—————●					
Plunge columns	—————●					
Tower Crane	●—●					
Electrical Gantry		●—●				
Ground floor slab construction			●—————			
Excavation			●—————			

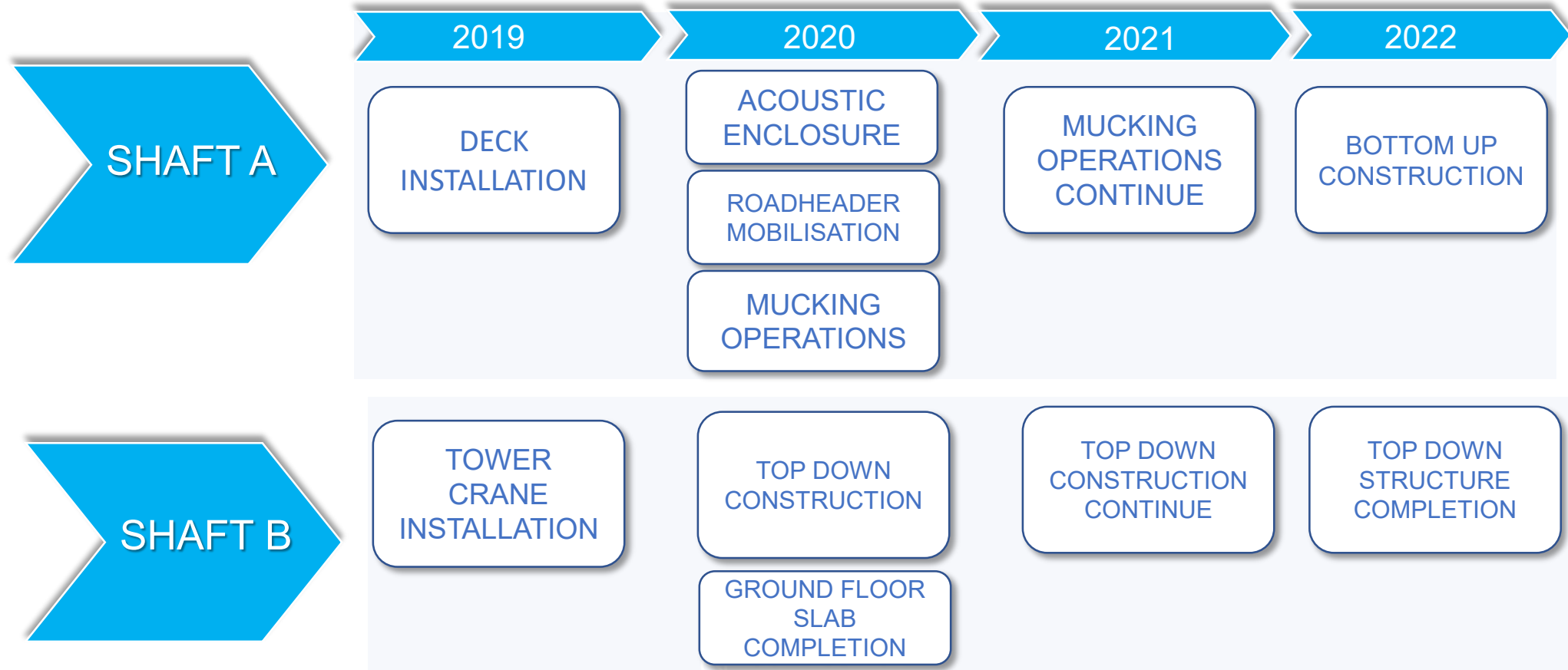


# SHAFT B TOP-DOWN CONSTRUCTION

The 'top-down' method involves building each level during excavation.



# FLINDERS QUARTER LOOK AHEAD



# FLINDERS QUARTER – OUT OF HOURS WORKS

## Plunge piling

- Monday to Fridays, 7am to 10pm  
*(low noise clean up activities until 11pm as required)*
- Saturdays, 7am to 5pm

## Shaft A Deck construction

- Monday to Sundays, 24 hours –  
*until 11 December*
- One morning, between 11 and 19 December, 4:45am to 7am  
*(concrete pour)*

## Shaft A Excavation

- Monday to Fridays, 7am to 10pm –  
*To recommence following deck completion*
- Saturdays, 7am to 5pm

## Deliveries (ongoing)

- Monday to Saturdays, 5am to 7am

## Tower crane mobilisation

- Between Thursday 5 and Tuesday 10 December

## Shaft preparation works

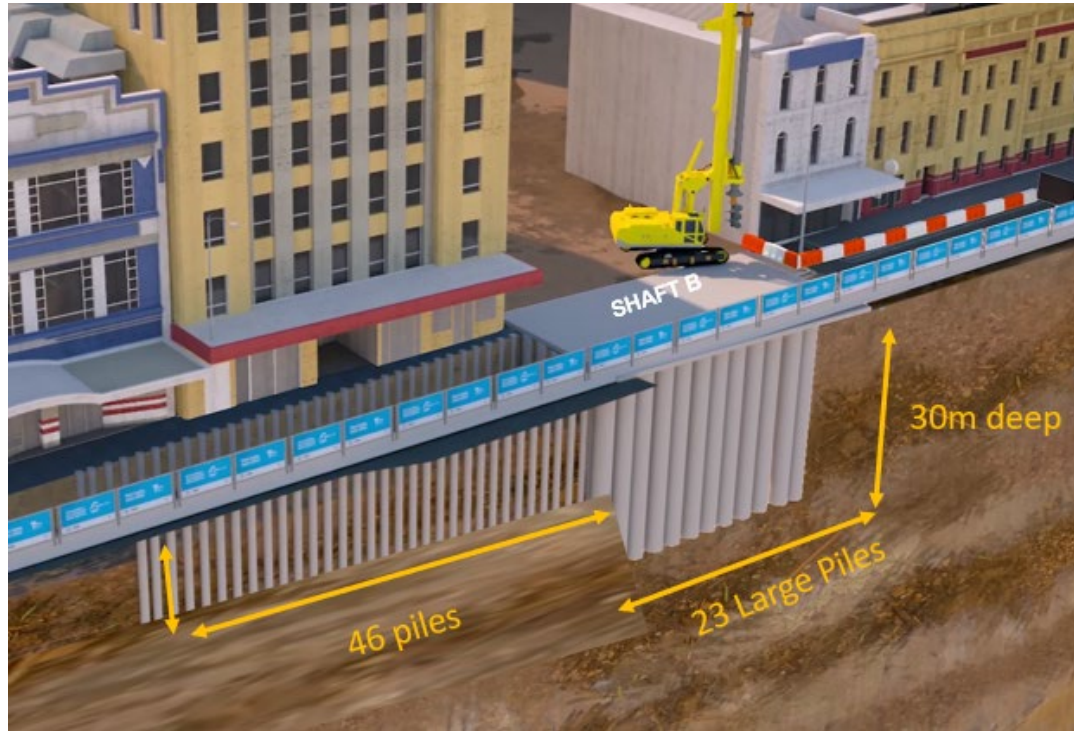
- Monday to Friday, 7am to 5am  
Saturdays, 7am to 5pm





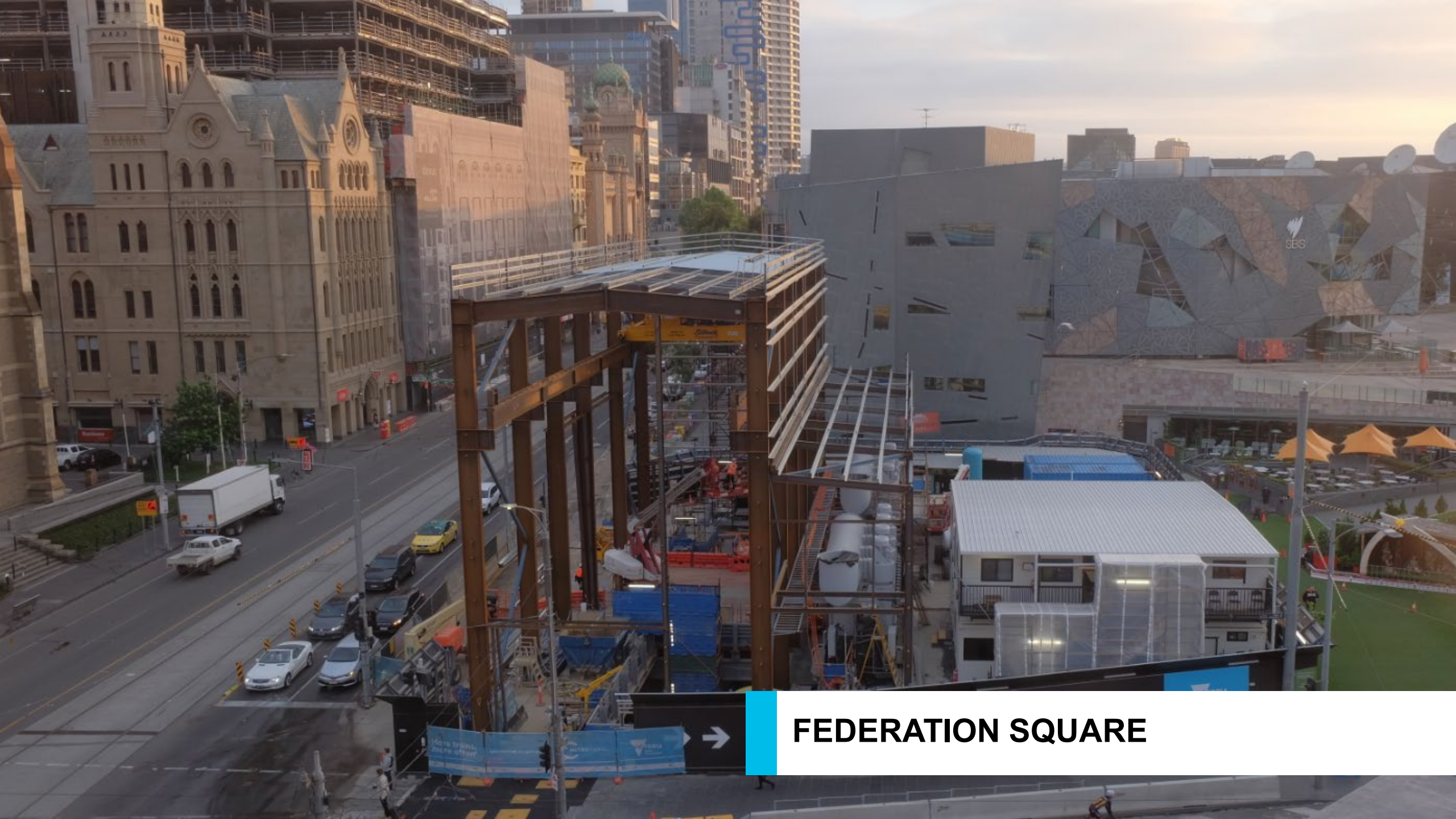
## FLINDERS LINK

# FLINDERS LINK WORKS UPDATE



Activity	Dec	Jan	Feb	Mar	Apr	May
Piling	—		●			
Service relocation works	—		●			
Excavation			●	—		





**FEDERATION SQUARE**



# FEDERATION SQUARE PROGRESS

## DECEMBER 2018



- 65 piles completed totalling 1000 metres
- Currently 12 metres deep within the main shaft
- 2400m<sup>3</sup> of rock removed from the shaft

- Two layers of steel struts installed
- Steel deck installed weighing 325 tonnes

## DECEMBER 2019



# FEDERATION SQUARE WORKS UPDATE

Activity	Location	Dec	Jan	Feb	Mar	Apr	May	
Acoustic shed construction	Internal	—		•				
Excavation	Internal	—						
Roadheader tunnelling	Internal	•	—					



# FEDERATION SQUARE – OUT OF HOURS WORK

## **Tunnelling and excavation**

- 24 hours, Monday to Sunday

## **Acoustic shed construction**

- 24 hours, Monday to Sunday until late-January

## **Roadheader delivery**

- 12am to 6am, Saturday 7 December



**CITY SQUARE**



# CITY SQUARE PROGRESS





# ACOUSTIC SHED COMPLETION





# CITY SQUARE WORKS UPDATE

Activity	Location	Dec	Jan	Feb	Mar	Apr	May
Shaft excavation	Internal	[Activity duration bar from Dec to May]					
Strutting	Internal	[Activity duration bar from Dec to mid-April]					
Roadheader Tunnelling	Internal	[Activity duration bar from mid-Dec to May]					

# CITY SQUARE – OUT OF HOURS WORKS

## **Tunnelling and excavation**

- 24 hours, Monday to Sunday

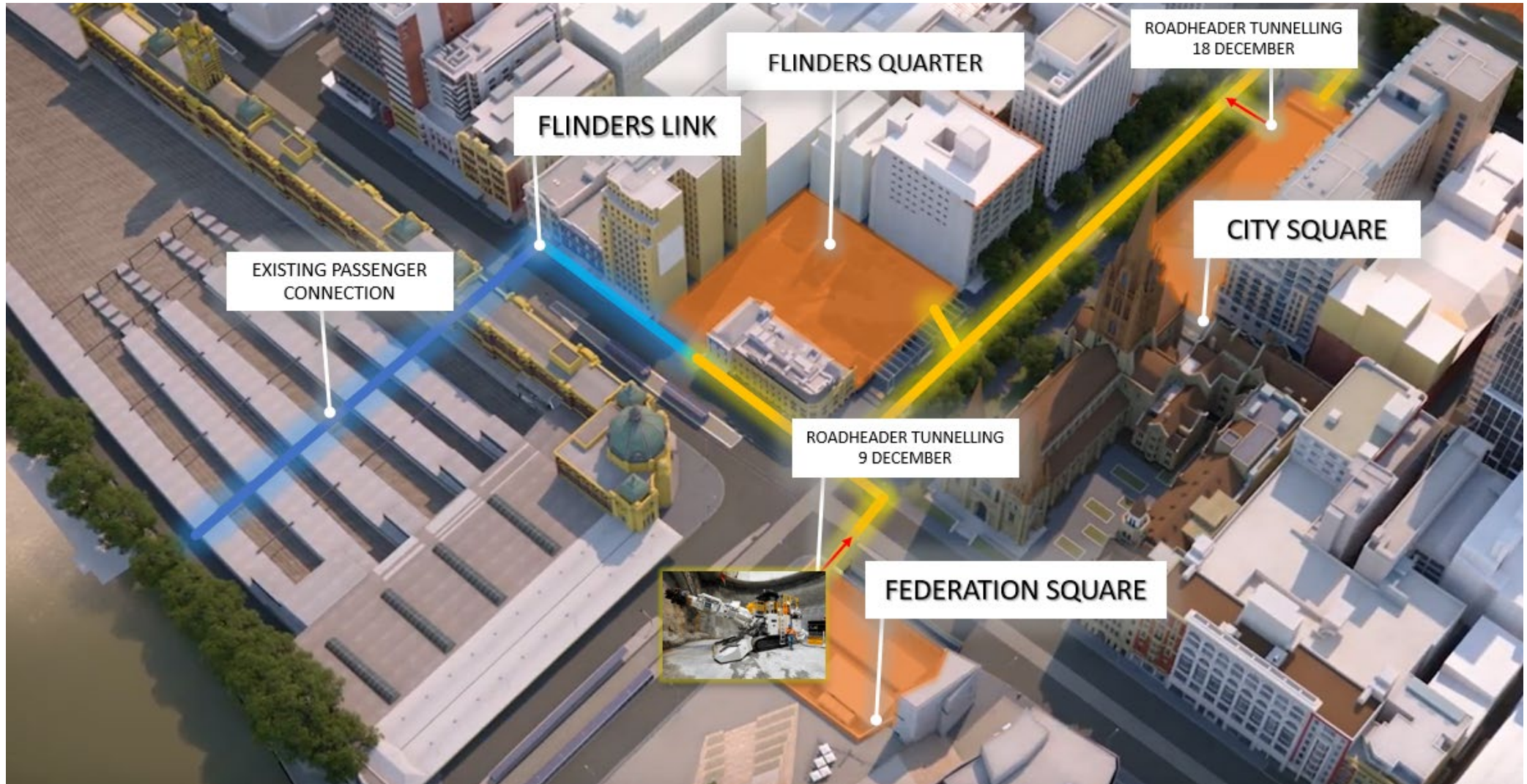
## **Strutting**

- 24 hours, Monday to Sunday





# WELCOME THE ROADHEADERS TO CBD SOUTH



# QUESTIONS?





# BUSINESS SUPPORT UPDATE



## CHRISTMAS

- The Metro Tunnel Project office will take a break from 5pm Friday 20 December returning Monday 6 January 2020

*During the closure, the sites will be secured with regular security patrols.*