



Arden and Parkville Community Reference Group

Meeting 21

Friday 10 December 2021



Agenda



Item	Topic	Presenter
1	Welcome and introductions	Chris Lovell
2	Project wide construction update	CYP
3	Parkville construction update	CYP
4	Parkville chiller plant overview	CYP
5	Arden construction update	CYP
6	Intake Substation works and presentation on landscaping	CYP
7	2021 wrap up – Arden and Parkville	CYP
8	Stakeholder and communications update <ul style="list-style-type: none">• Parkville Development Plan amendment update	CYP
9	General feedback and items for future discussion	CYP
	Meeting close	Chris Lovell

Construction update – Project wide

- The structures and lining team recently completed the first concrete pour for the arch of the eastbound rail platform tunnel
- Shaft construction is progressing at the La Trobe Street site as B3 excavation continues. Above ground, steel fixing is now underway for the buildout of the station entrance
- At Little La Trobe Street site, the B4 slab is being constructed, and adit excavation has recommenced
- Internal wall reinforcement and strut removal are taking place within the shafts at the Franklin Street sites.

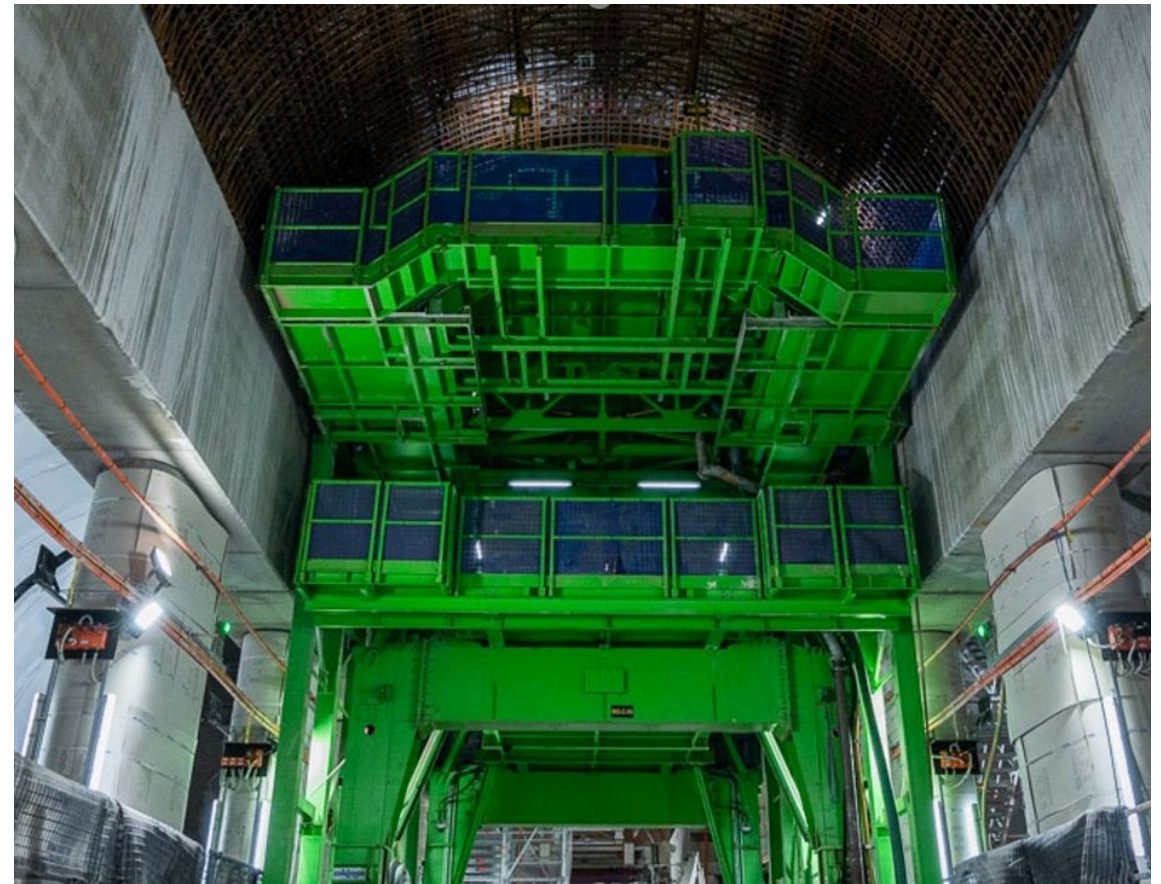


Concrete arch pour

Town Hall Station



- Concrete pours are underway to form the arches within the central cavern
- Works to install tower crane footings are underway on Swanston Street
- Flinders Quarter excavation works reached over 50% total.



Formwork gantry for the station tunnel lining form

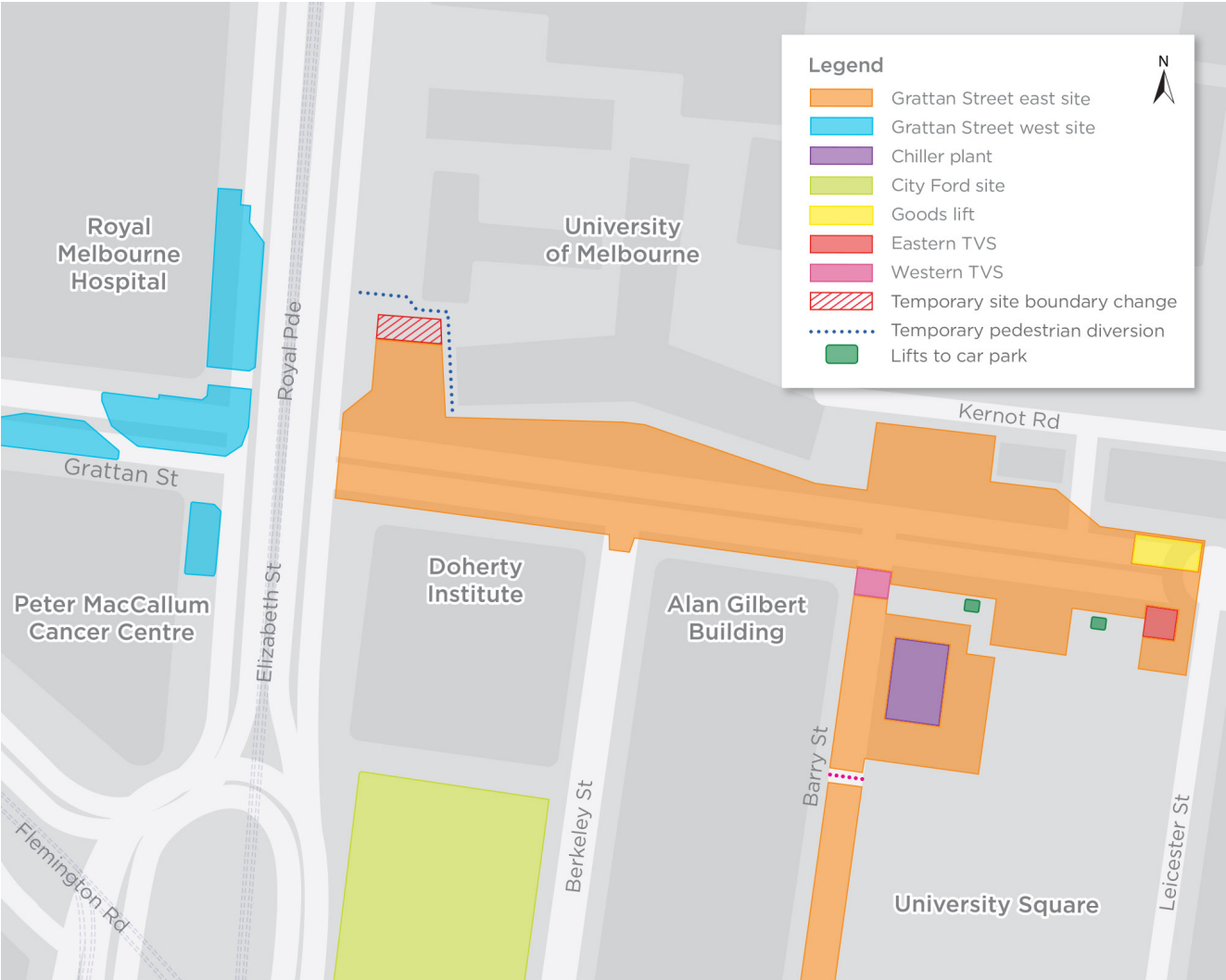
- Work is continuing on steelfixing for the last concrete pour to construct the station box base slab
- D-wall demolition is nearing completion, connecting the concourse level of the station to two of the three station entrances
- Blockwork walls and door frames continue to be installed at concourse level, alongside early mechanical, electrical and plumbing service installation and rough-in
- At the tram interchange station entrance, works continue to backfill the roof slab. Build-out works for this entrance will commence this month, including precast installations and footings construction.



Base slab construction, concourse level and roof slab of station box

Construction update – Parkville

Parkville Precinct

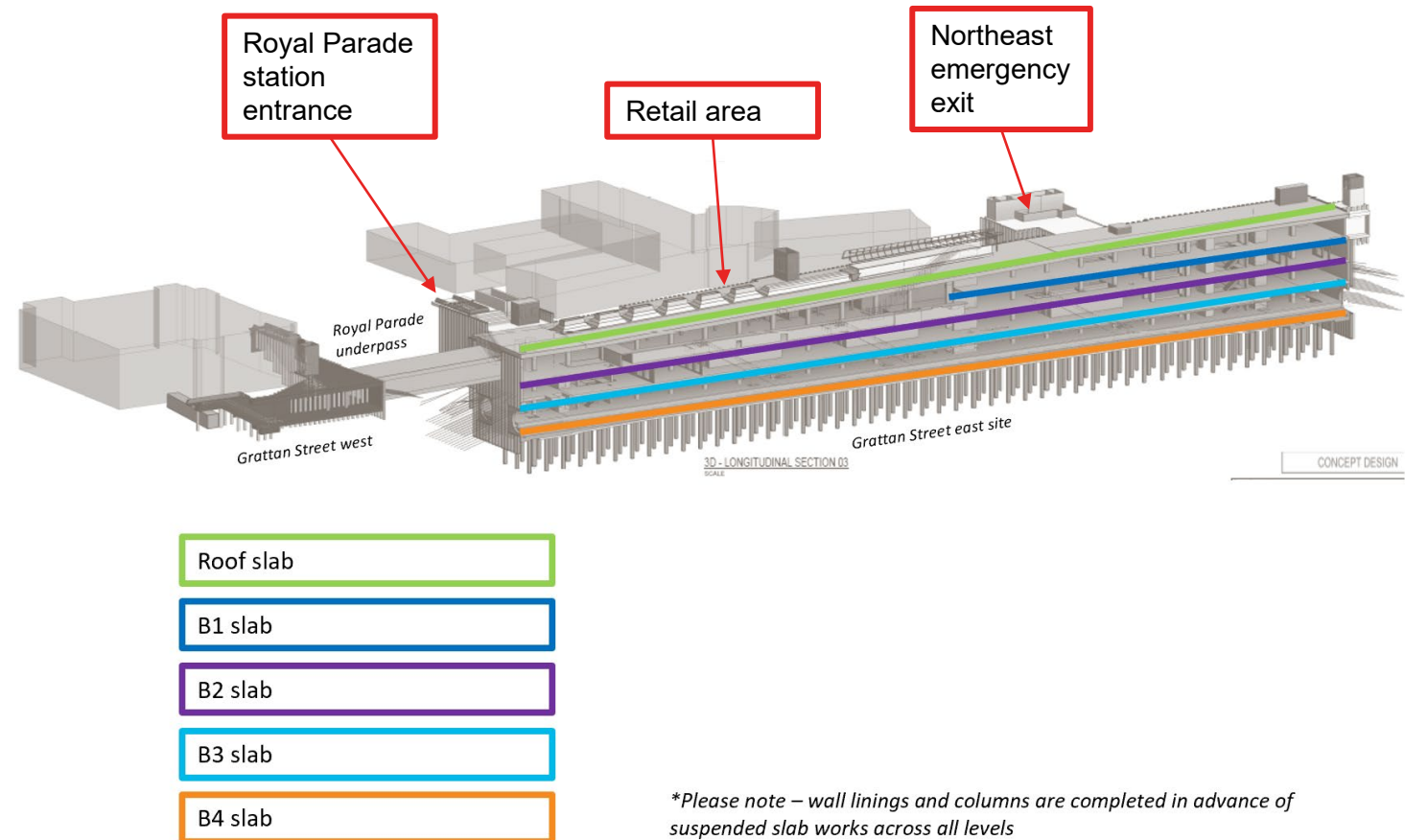


Grattan Street east

Station box permanent structure works



- The roof slab to the main box is expected to be complete by late December
- Royal Parade entrance: Roof slab formwork installation is ongoing
- Retail area: Formwork and reinforcement installation for the final roof pour (finger joint) is ongoing
- Northeast emergency exit: Formwork installation for the lining walls is ongoing.



Station fit out works



- Installation of blockwork is ongoing on B3, B2 and B1
- Mechanical, electrical and plumbing (MEP) / service installation is ongoing on B4, B3, B2 and B1
- Over-track exhaust (OTE) is complete on both the north and south sides
- Platform construction is ongoing on B4.

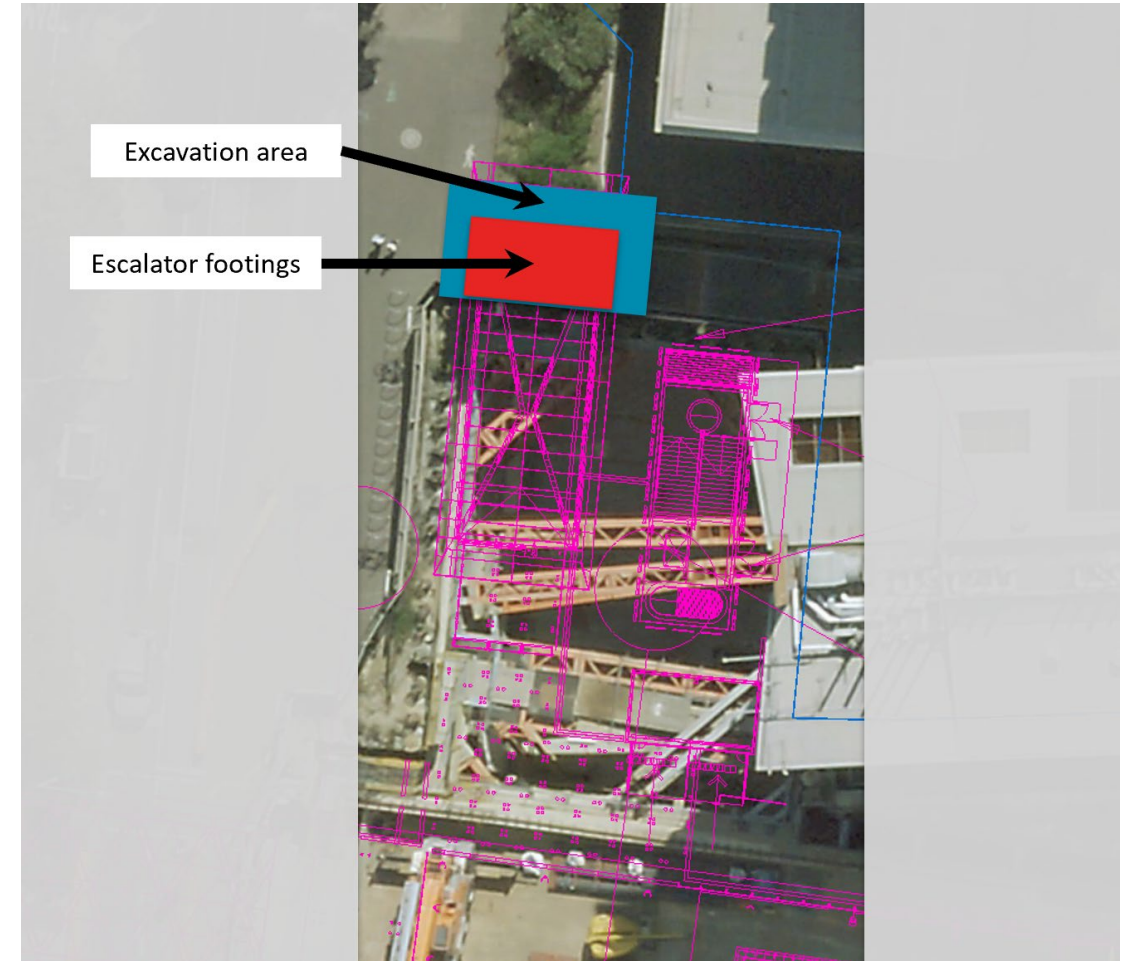


Royal Parade entrance

Escalator works



- Site boundary change required to facilitate works for the escalator at the Royal Parade entrance
- Pedestrian arrangements are subject to ongoing consultation with the University of Melbourne
- Following escalator footing construction, works in this area include steel installation, escalator installation, legacy utilities and landscaping
- Works are expected to commence from early 2022.



Northeast emergency exit



- Pile removal has been completed to connect this area to the main station box
- Base slab construction is complete
- Permanent structure works, including lining wall construction, is ongoing
- Lining wall reinforcement works are complete.





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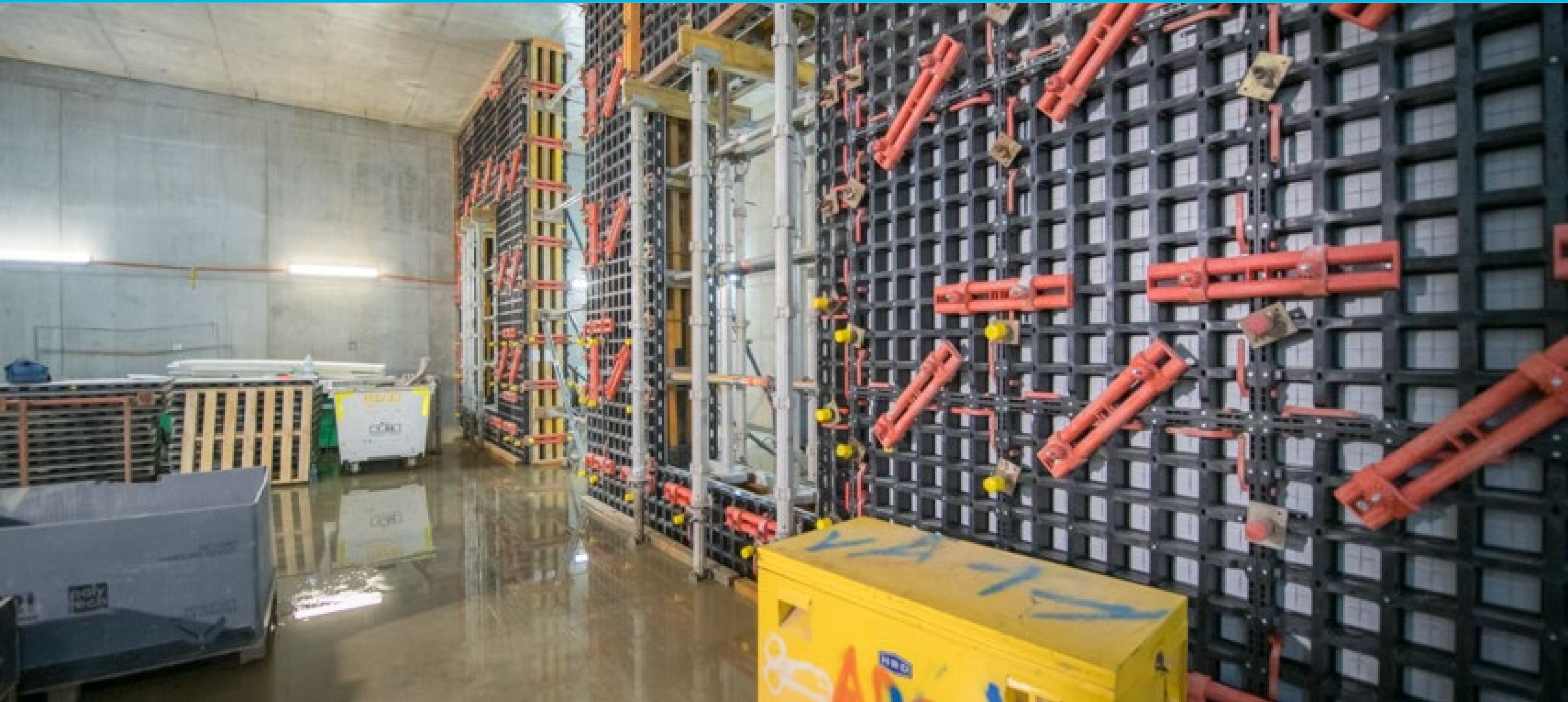
 Doherty
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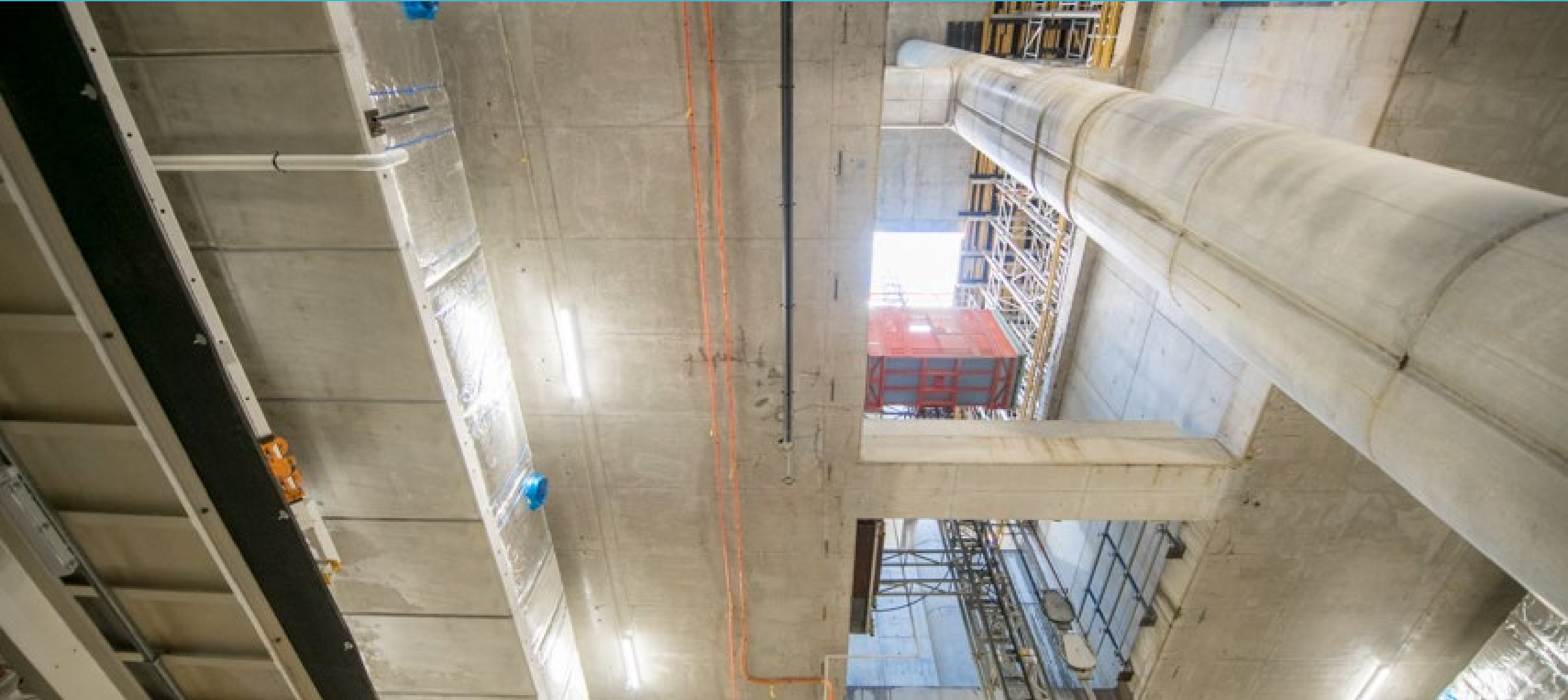
Permanent structure works



Internal wall construction



Permanent structure works



Platform and OTE – B4 level



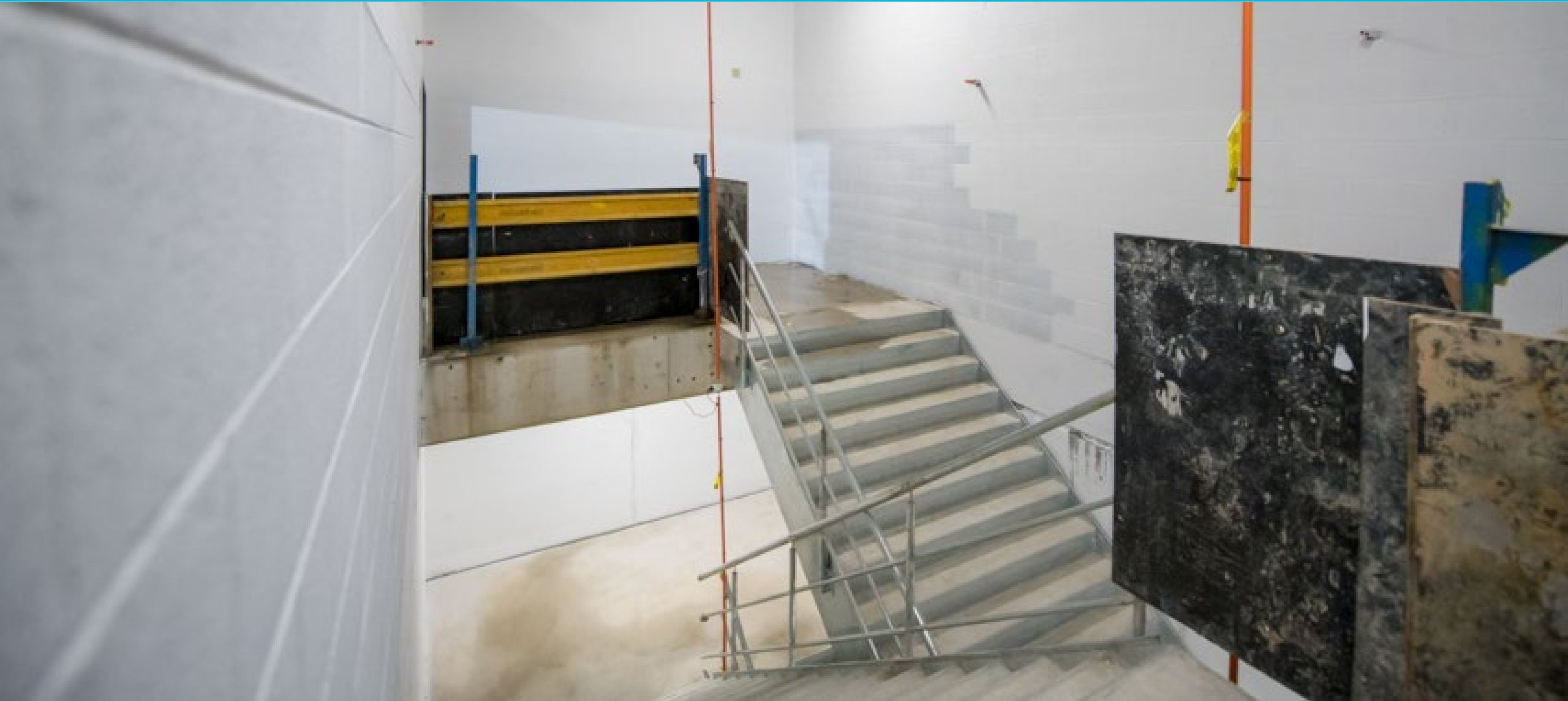
Tunnel and OTE – B4 level



Platform construction – B4 level



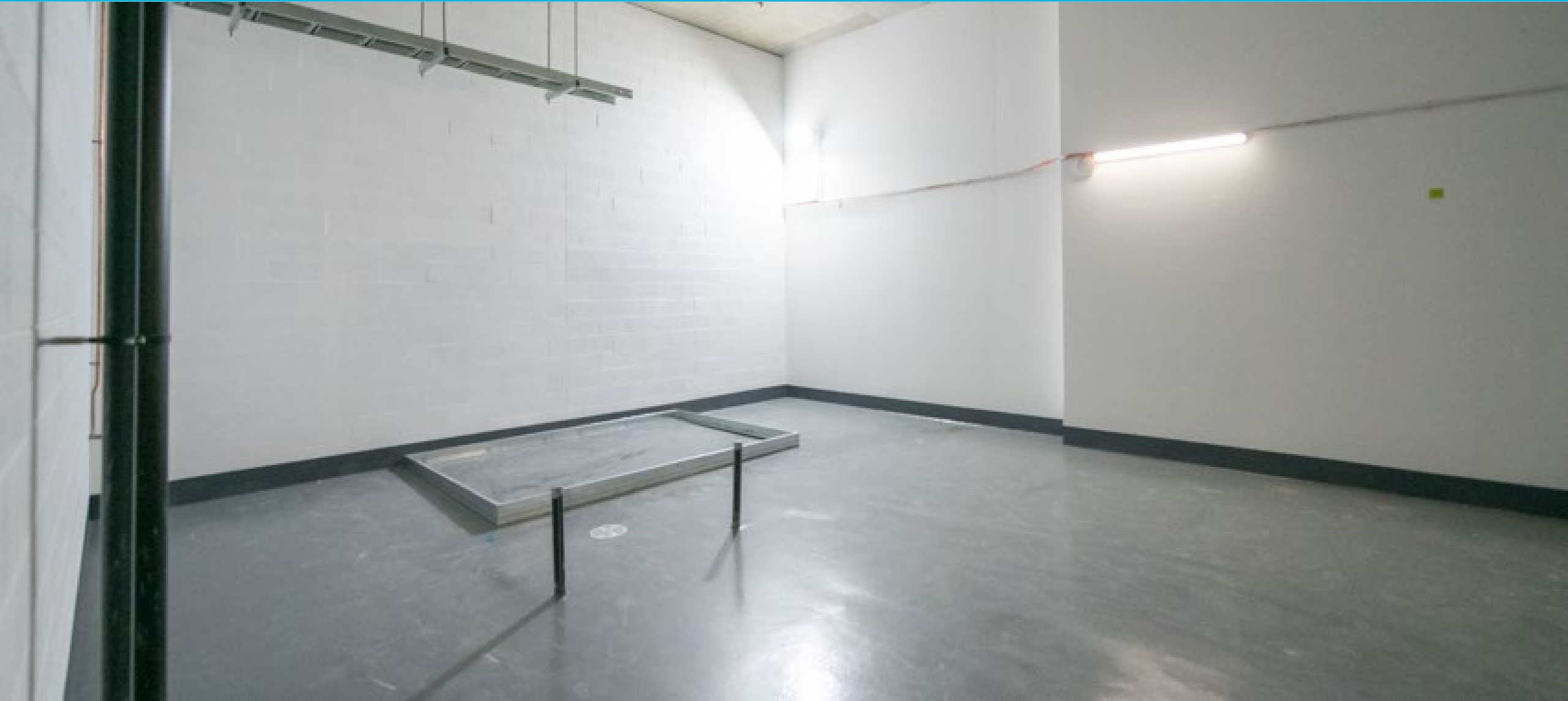
Station fitout



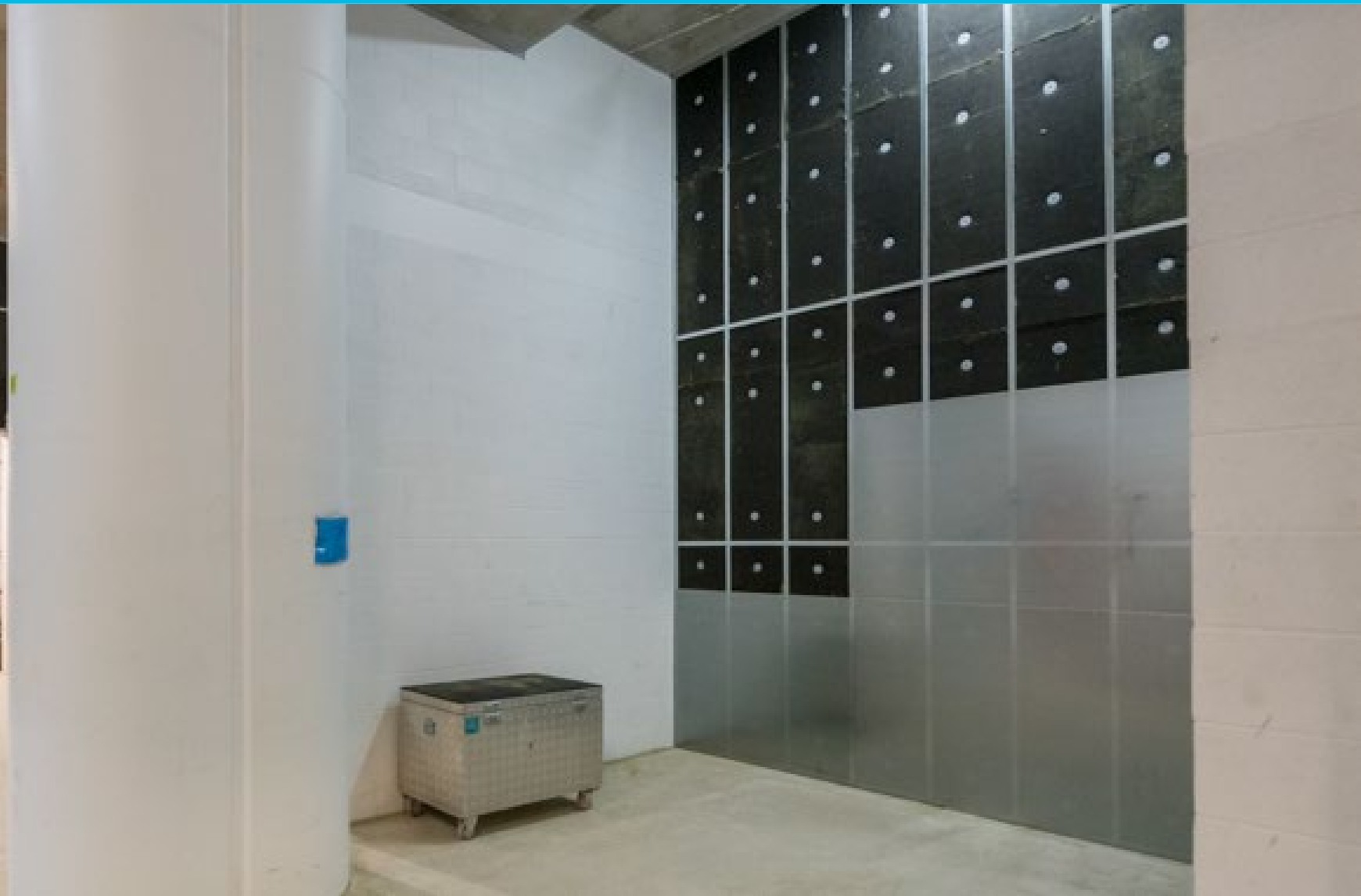
Station fitout



Station fitout



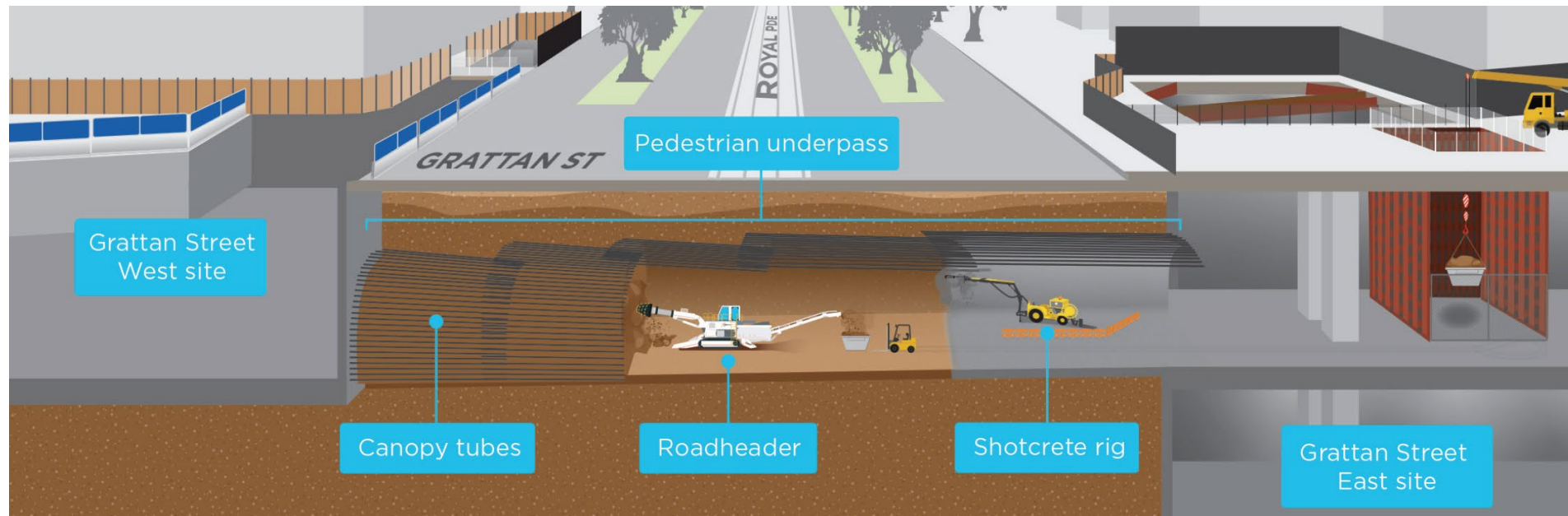
Station fitout



Royal Parade underpass



- Three arrays of canopy tubes have been installed
- Excavation using a roadheader is ongoing.



Artist's impression. Not to scale.

Royal Parade underpass

Roadheader mobilisation



Royal Parade underpass

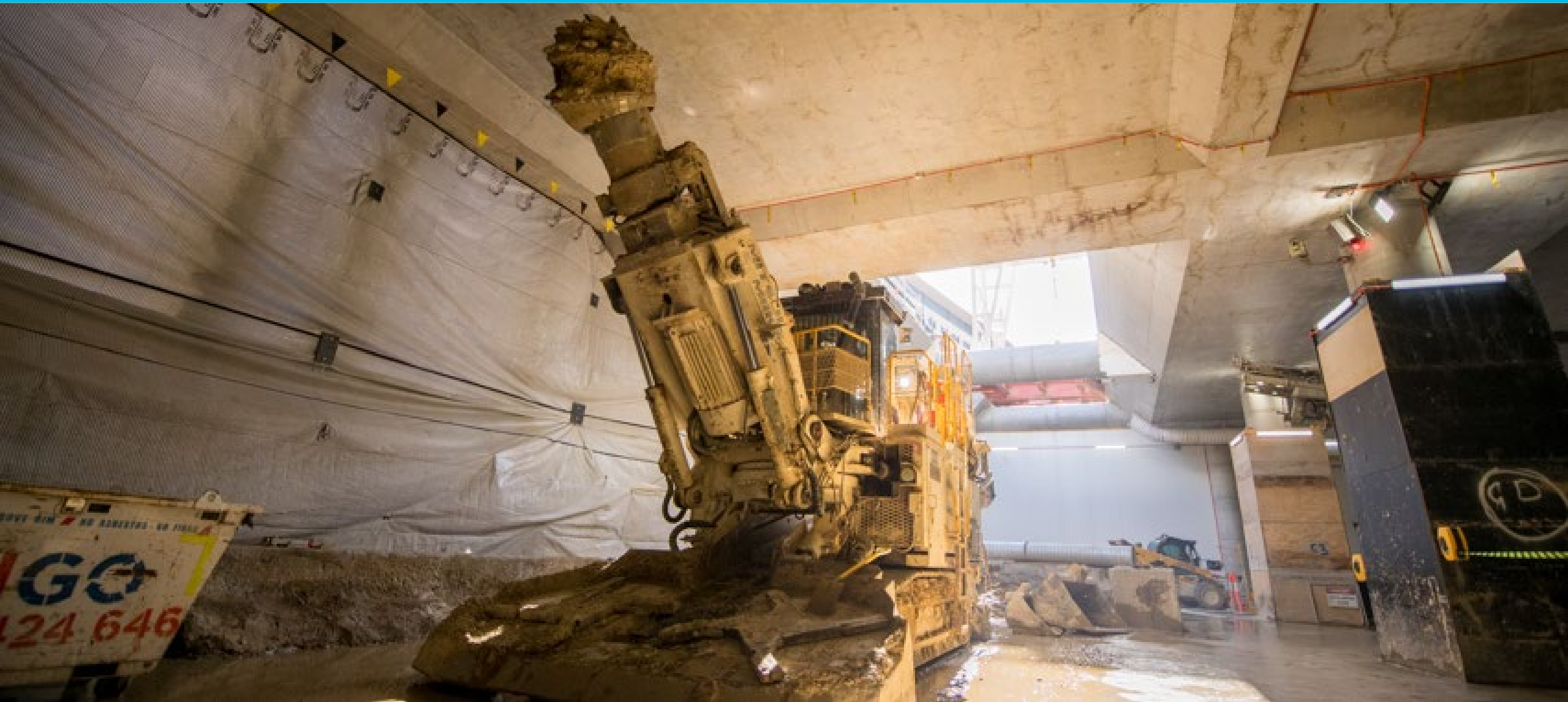
Canopy tube installation



Royal Parade underpass



Roadheader



University Square Car Park works:

- Construction of the blade column is complete
- Works to modify part of the University Square Car Park structure on levels B1, B5, and the plaza have commenced and are ongoing.

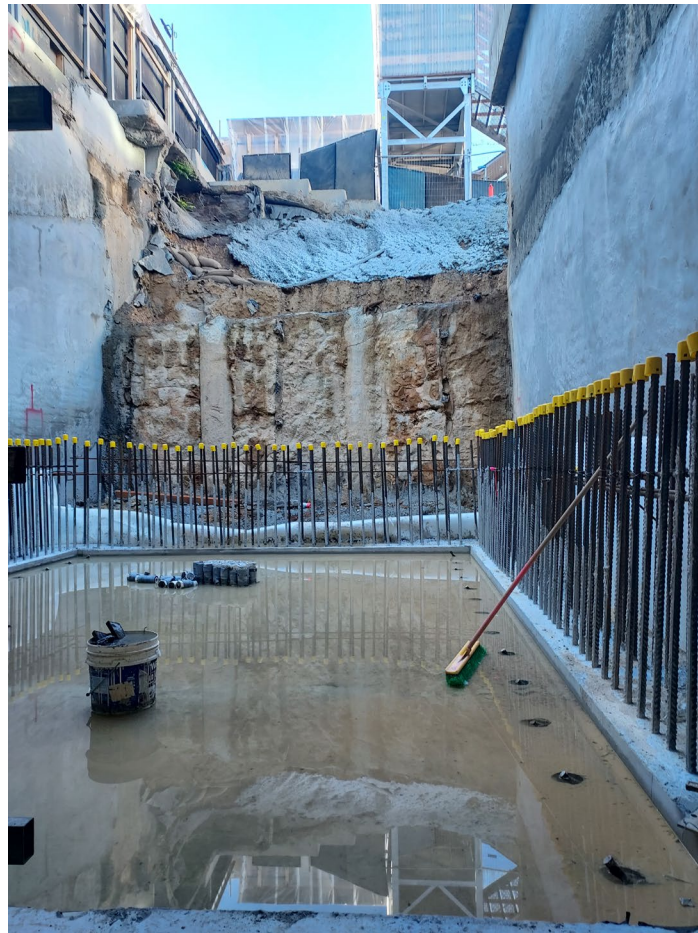


West tunnel ventilation shaft and chiller plant



West TVS

- Base slab concrete pour has been completed
- Lining wall works are ongoing.



Chiller plant

- Excavation activities have been completed
- Strengthening works at surface level are expected to commence in mid-December.



Gantry crane removal



- The first of the three gantry cranes will be removed from early 2022
- For each crane this involves:
 - Disconnecting motors and electrics
 - Attaching temporary braces to the gantry crane legs
 - Using a large mobile crane to lower pieces of the crane to ground level
 - Removing gantry crane legs and temporary braces (mobile crane)
 - Additional dismantling at ground level
 - Removal from site (some oversized loads required at night).



Six month program

Grattan Street east



Activity	Dec	Jan	Feb	Mar	Apr	May
Station box permanent structure works						
Station box fit out						
Royal Parade entrance						
Retail area						
Northeast emergency exit						
Staged pile removal						
East TVS						
West TVS						
Chiller plant						
Goods lift						
Royal Parade underpass						
Gantry crane removal						
Staged capping beam removal						

Grattan Street west

Station entrance construction

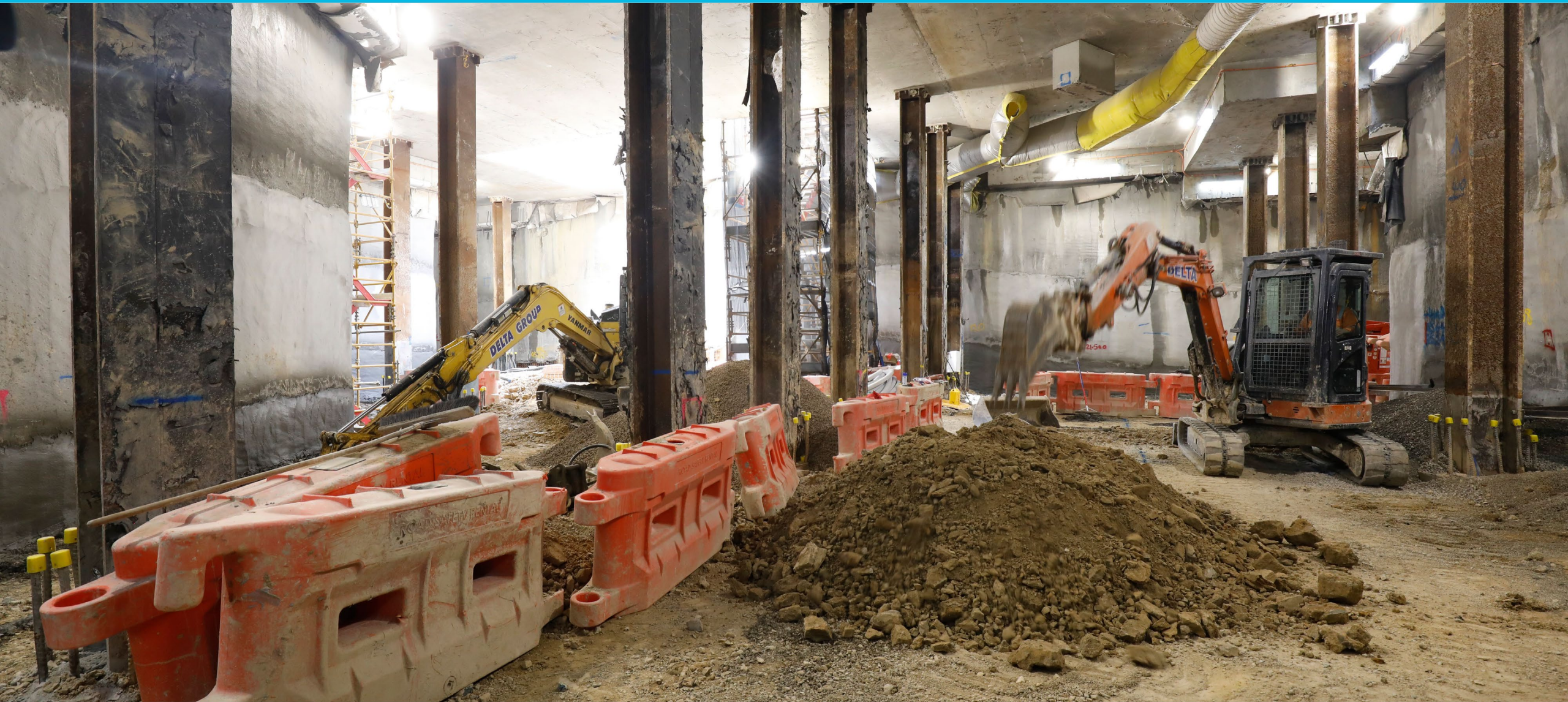


- Stage 2 bulk excavation is complete
- Blinding works are complete
- Permanent structure works are ongoing until early 2022, including base slab and lining wall construction. These works involve waterproofing, steel fixing, installation of formwork, concrete pours and associated works
- The base slab pour is expected to be complete by late December
- Following permanent structure works, services installation, including mechanical, electrical and plumbing and fit out works will commence
- Future works at surface level will include pile top removal, preparation for structures (minor excavation), structure works and backfilling activities.



Grattan Street west

Excavation – October 2021



Grattan Street west

Excavation – October 2021



Program

Grattan Street west



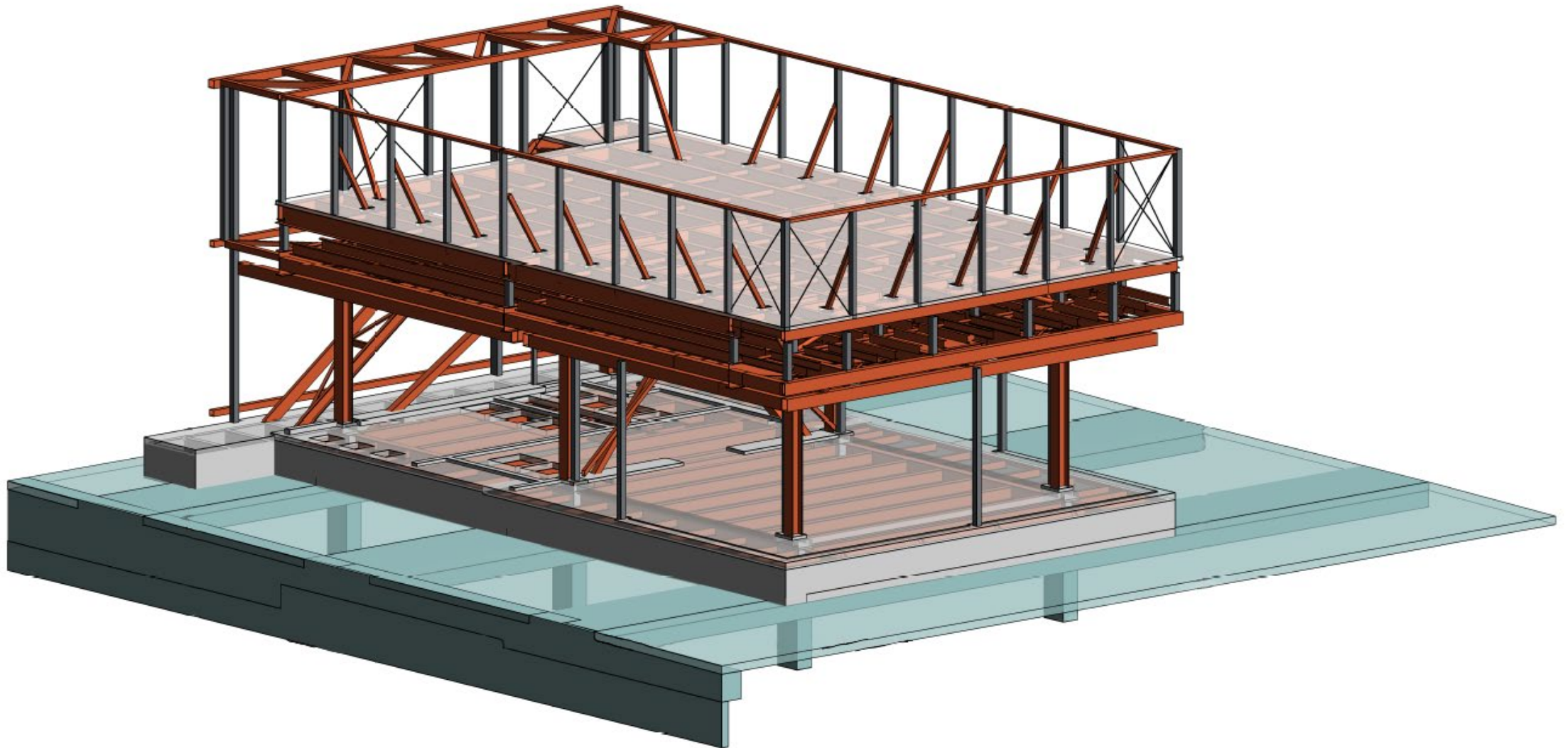
Six month program

Activity	Dec	Jan	Feb	Mar	Apr	May
Structure works						
Service installation and fit out works						
Pile top removal						
Backfill						

Parkville chiller plant overview

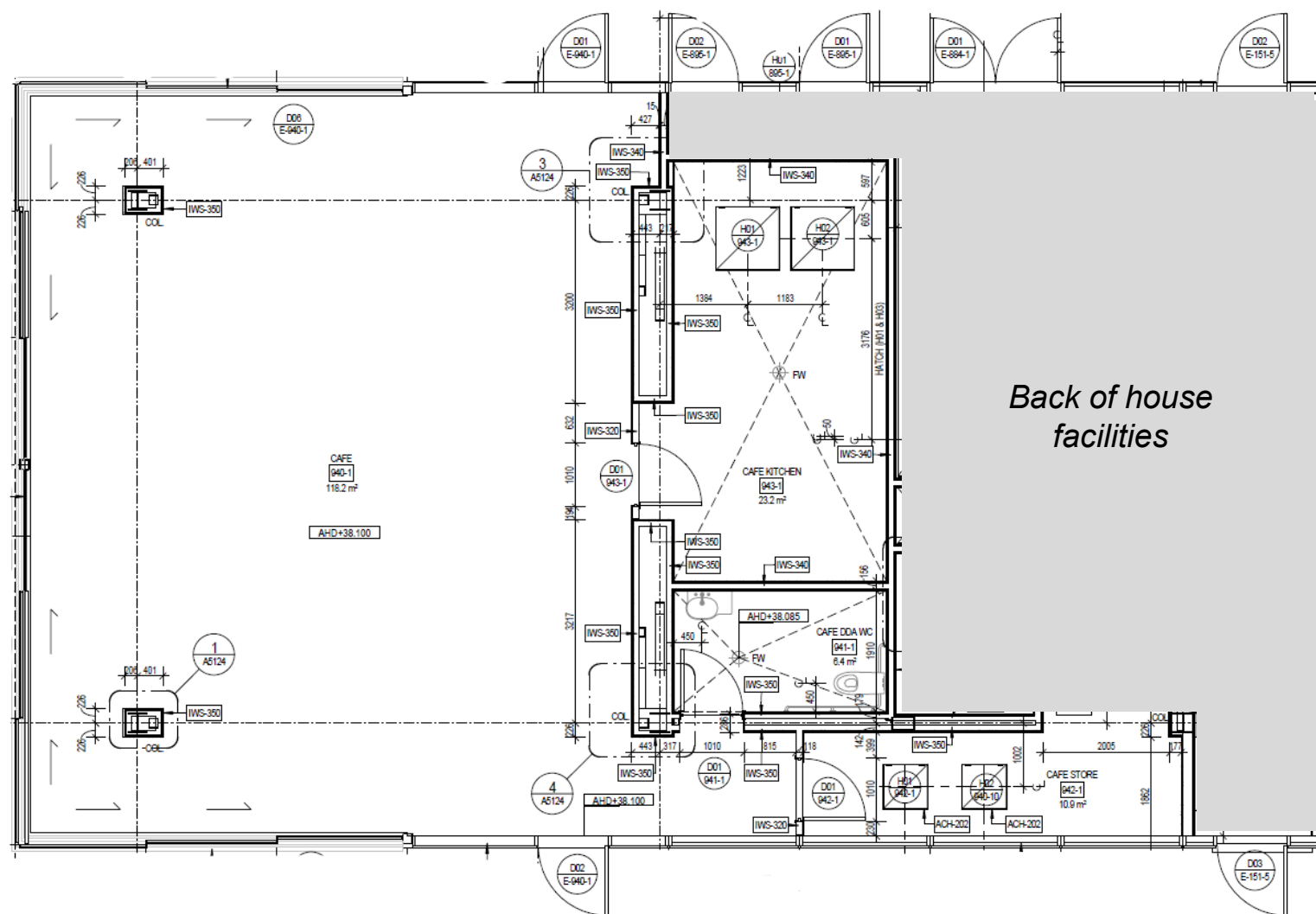
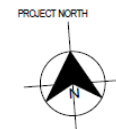
Chiller plant

Structural steel view



Presenter: Paul Dal Pra

Indicative floor plan



Construction update – North Melbourne

Station construction



- Blockwork wall construction is ongoing, and painting continuing in services building
- The blockwork walls at mezzanine and concourse level are complete
- Mechanical, Electrical and Plumbing rough in and fit out underway
- Internal wall linings for comms equipment room (CER) being installed.



Blockwork installation under gantry shed complete

Station entrance construction



- Station entrance arches are now completed
- Arch segments have been installed and grouted into place
- Work is now underway to remove the falsework support structures from beneath.



Support structure for arches being removed

Station entrance construction

Arch installation



Next steps – Arden Station entrance (2022)



- Falsework removal to finish early new year
- Structural steel will continue
- Façade panels with brick and porcelain will be installed to enclose the arches
- Terrace construction and ground floor entrance slab will commence.



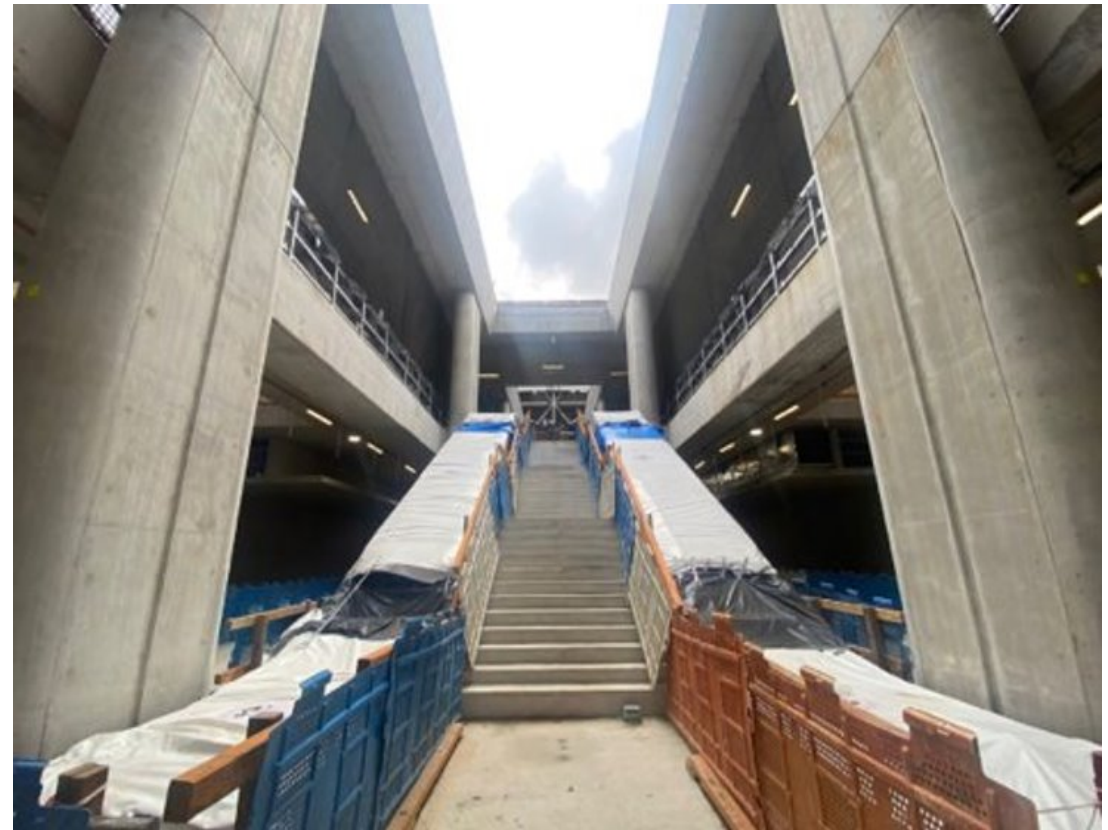
Works at the Arden Station entrance

- Over track exhaust (OTE) precast installation is complete
- Platform construction is almost complete with the last topping slabs now being formed and poured
- Blockwork on the western end of the platform continues.



Platform topping slab construction

- The first staircase from platform level to concourse has been constructed
- The first two escalators have been installed
- There will be seven escalators in total at Arden Station



Stairs and escalators installed

- Sprinkler and hydrant bracket and pipework installation
- Gaseous suppression system pipework installation
- Mechanical pipework and ductwork installation
- Electrical cable tray and cable installation
- Hydraulic pipework installation
- Installation of large Tunnel Ventilation Fans, dampers and associated steelwork
- Ongoing installation of fire detection systems.



Mechanical, electrical and plumbing rough-in – service building

- Bracket installation is ongoing. The fixing points are formed in the precast panels
- Early stages of installation of emergency walkways is ongoing.



Six month program

North Melbourne



Activity	Dec	Jan	Feb	Mar	Apr	May
Utility investigation works						
Over track exhaust (OTE) and platform construction						
Services building construction						
Station entrance construction						
Mechanical, electrical and plumbing installation						
North Melbourne electrical substation construction						

North Melbourne electrical substation



- Substation cladding and fit out/testing ongoing
- The two undercreek bores are now complete, with a third for Citipower underway
- Installation and testing of electrical systems and switch rooms
- Fire water service connection works ongoing
- Completion and commissioning expected by end of March 2022



Substation construction progressing

Intake Substation:

**Revegetation and
landscaping**

Tree species

Aca.p	<i>Acacia pycnantha</i>	Golden Wattle
All.v	<i>Allocasuarina verticillata</i>	Drooping Sheoak
Euc.c	<i>Eucalyptus camaldulensis</i>	River Red Gum
Mel.e	<i>Melaleuca ericifolia</i>	Barlan / Swamp Paperbark
Mel.q	<i>Melaleuca quinquenervia</i>	Broad-leaved paperbark



Euc.c



Mel.e



All.v

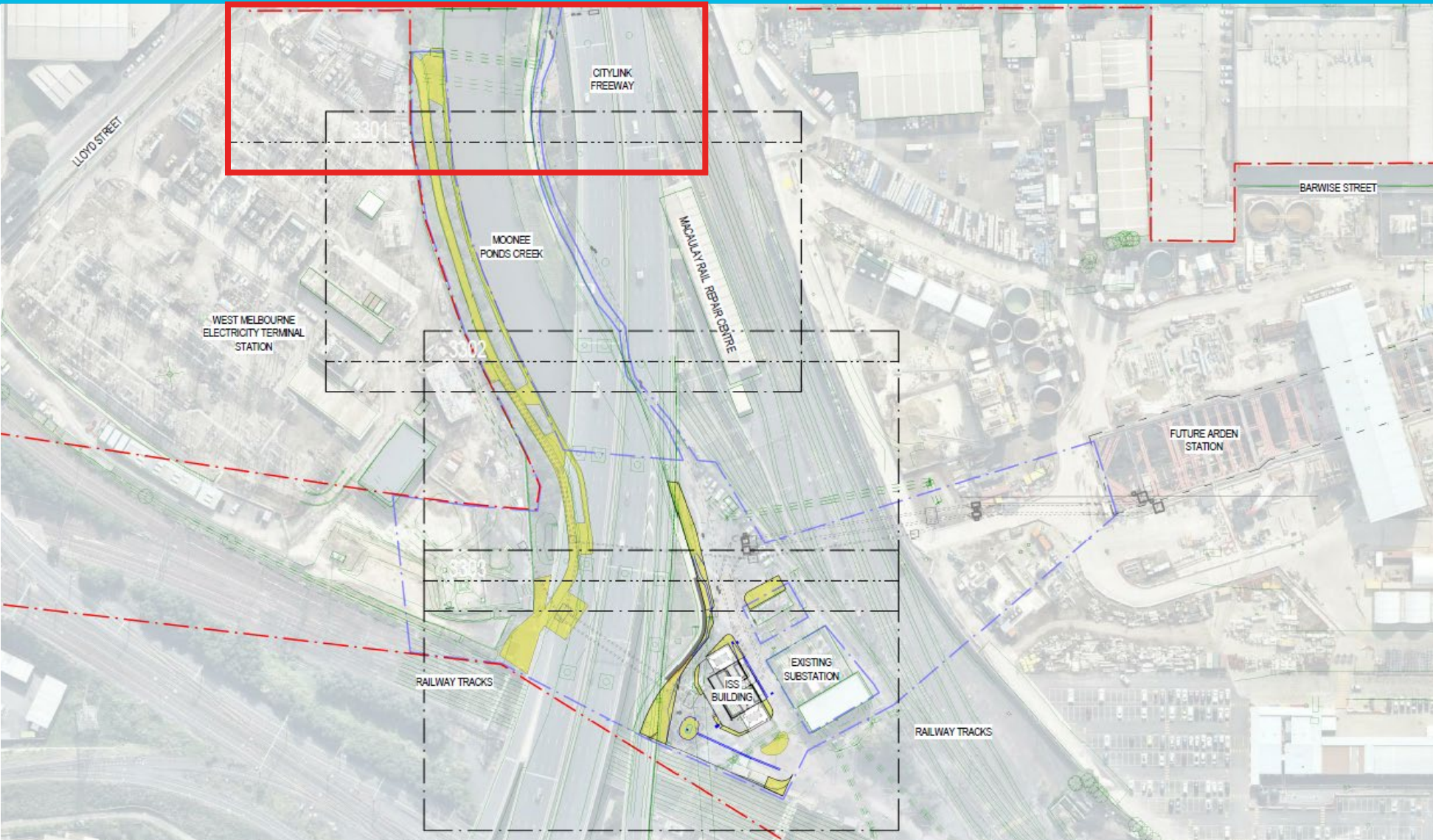


Aca.p



Mel.q

Revegetation and landscaping AREA 1



Area 1

Planting Schedule



Revegetation - Marsh Infill Mix

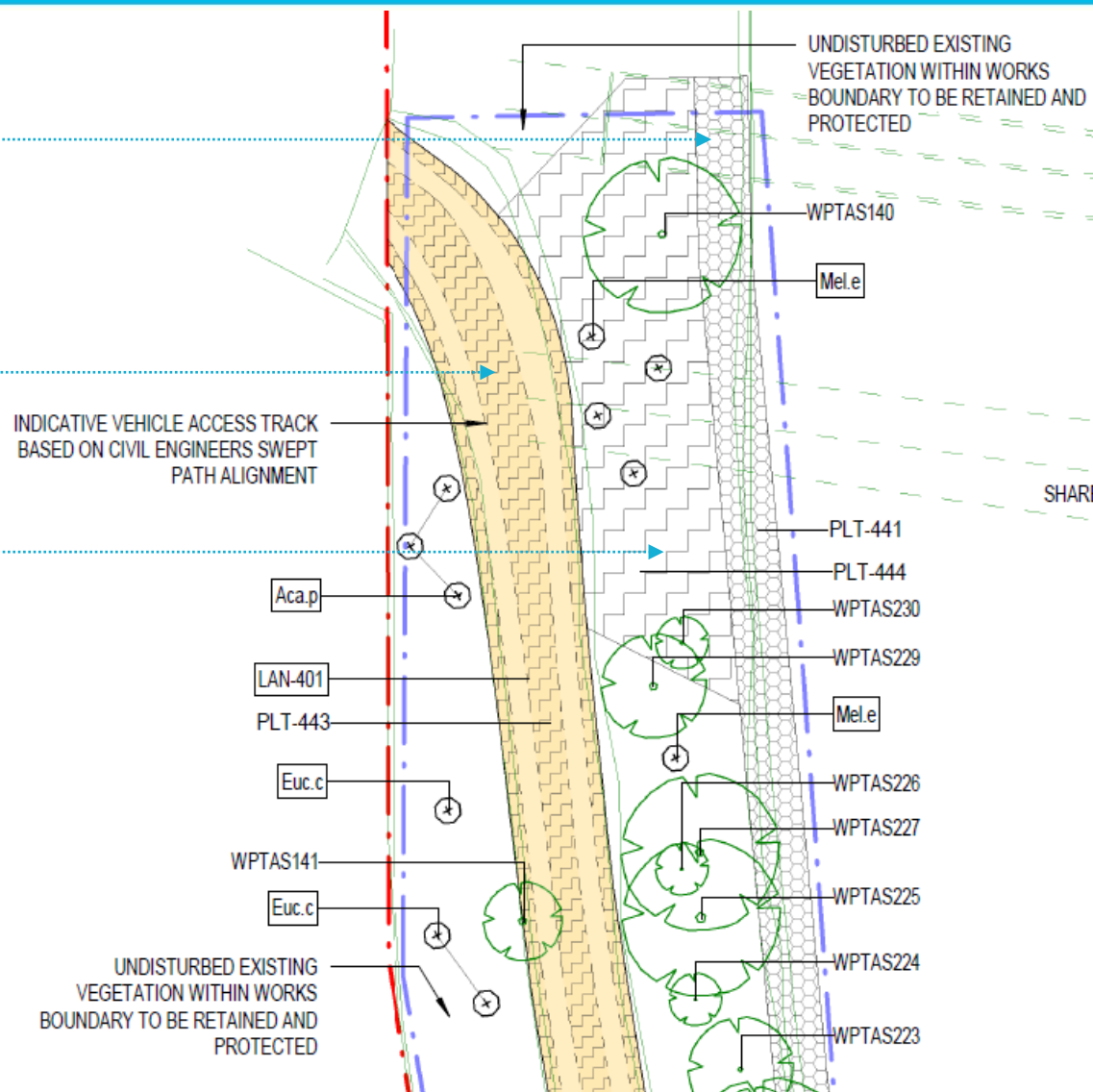
Botanic Name	Common Name
<i>Bolboschoenus caldwellii</i>	Sea Club-rush
<i>Phragmites australis</i>	Common Reed

Revegetation - Track Planting Mix

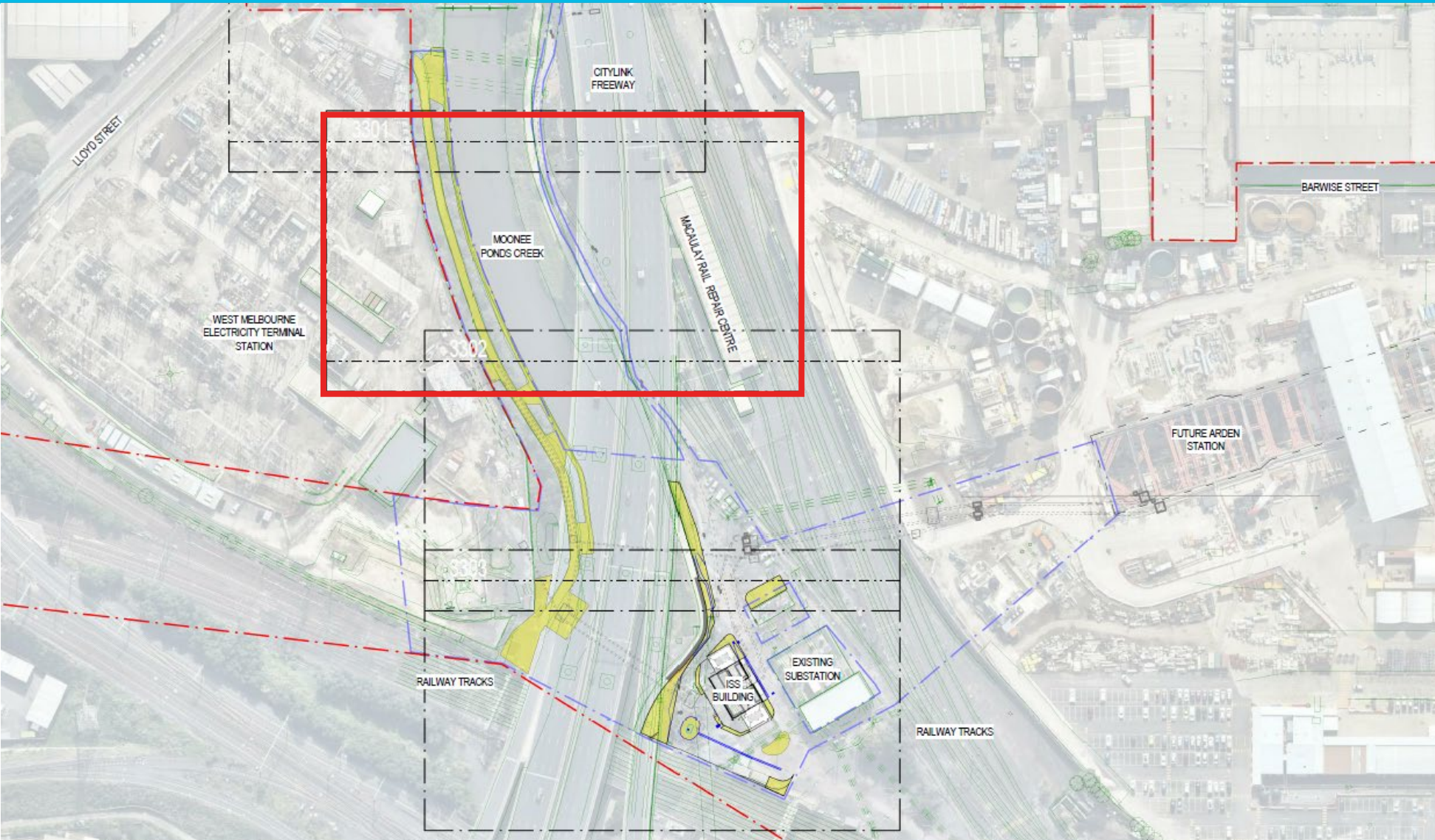
Botanic Name	Common Name
<i>Austrostipa stipoides</i>	Spear Grass
<i>Chloris truncata</i>	Windmill grass
<i>Dichanthum annalatum</i>	Sheda grass
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass

Revegetation - Herb Infill Mix

Botanic Name	Common Name
Ground Cover	
<i>Chloris truncata</i>	Windmill grass
<i>Einadia nutans subsp. nutans</i>	Climbing Salt Bush
<i>Enchylaena tomentosa var. tomentosa</i>	Ruby Salt bush
<i>Dichanthum annalatum</i>	Sheda grass
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass
Understory	
<i>Atriplex cinerea</i>	Grey Salt Bush
<i>Atriplex prostrata</i>	Mat Salt Bush
<i>Duma florulenta</i>	Tangles lignum



Revegetation and landscaping AREA 2



Area 2

Planting Schedule



Revegetation - Marsh Infill Mix

Botanic Name

Bolboschoenus caldwellii

Phragmites australis

Common Name

Sea Club-rush

Common Reed

Revegetation - Track Planting Mix

Botanic Name

Austrostipa stipoides

Chloris truncata

Dichanthum annulatum

Rytidosperma caespitosum

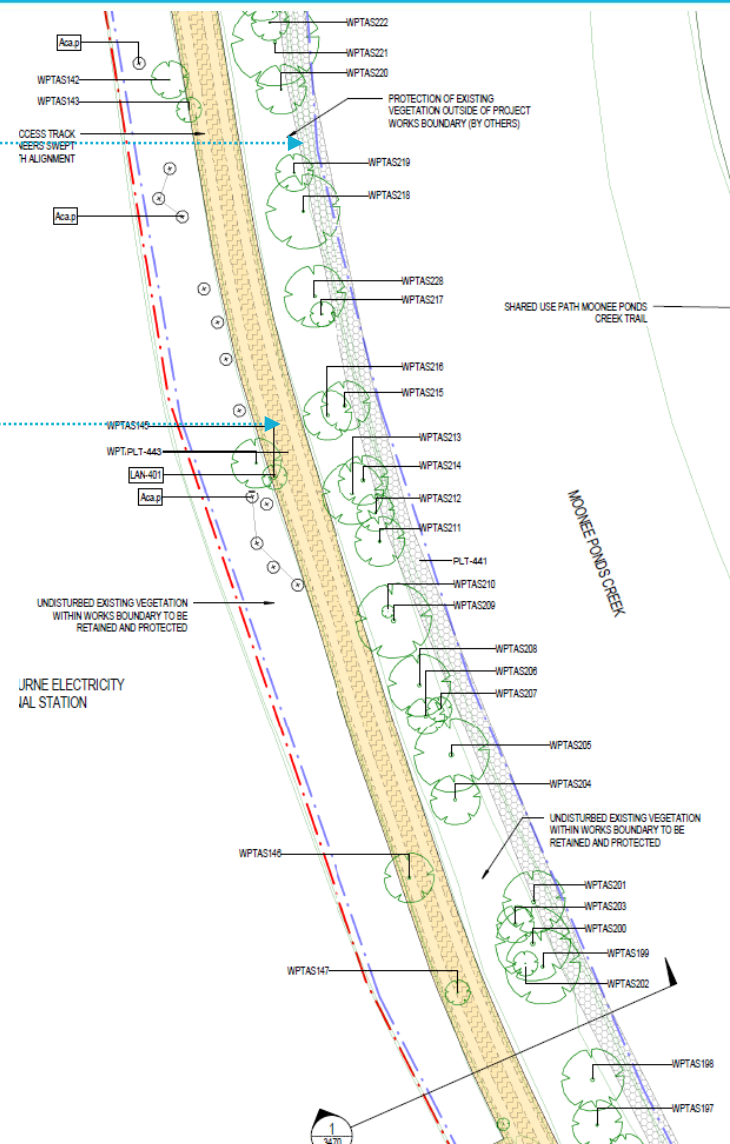
Common Name

Spear Grass

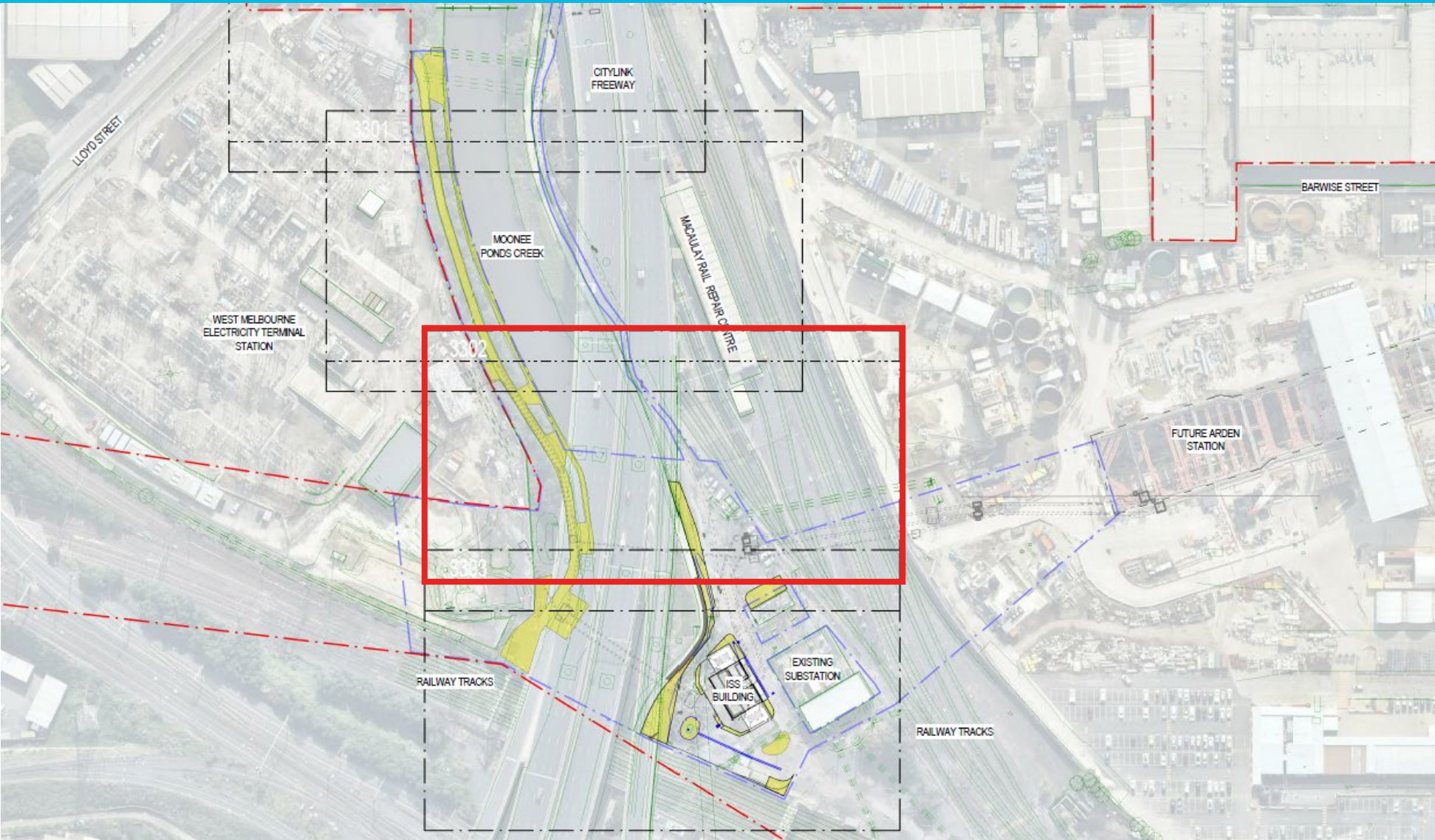
Windmill grass

Sheda grass

Common Wallaby-grass



Revegetation and landscaping AREA 3



Area 3

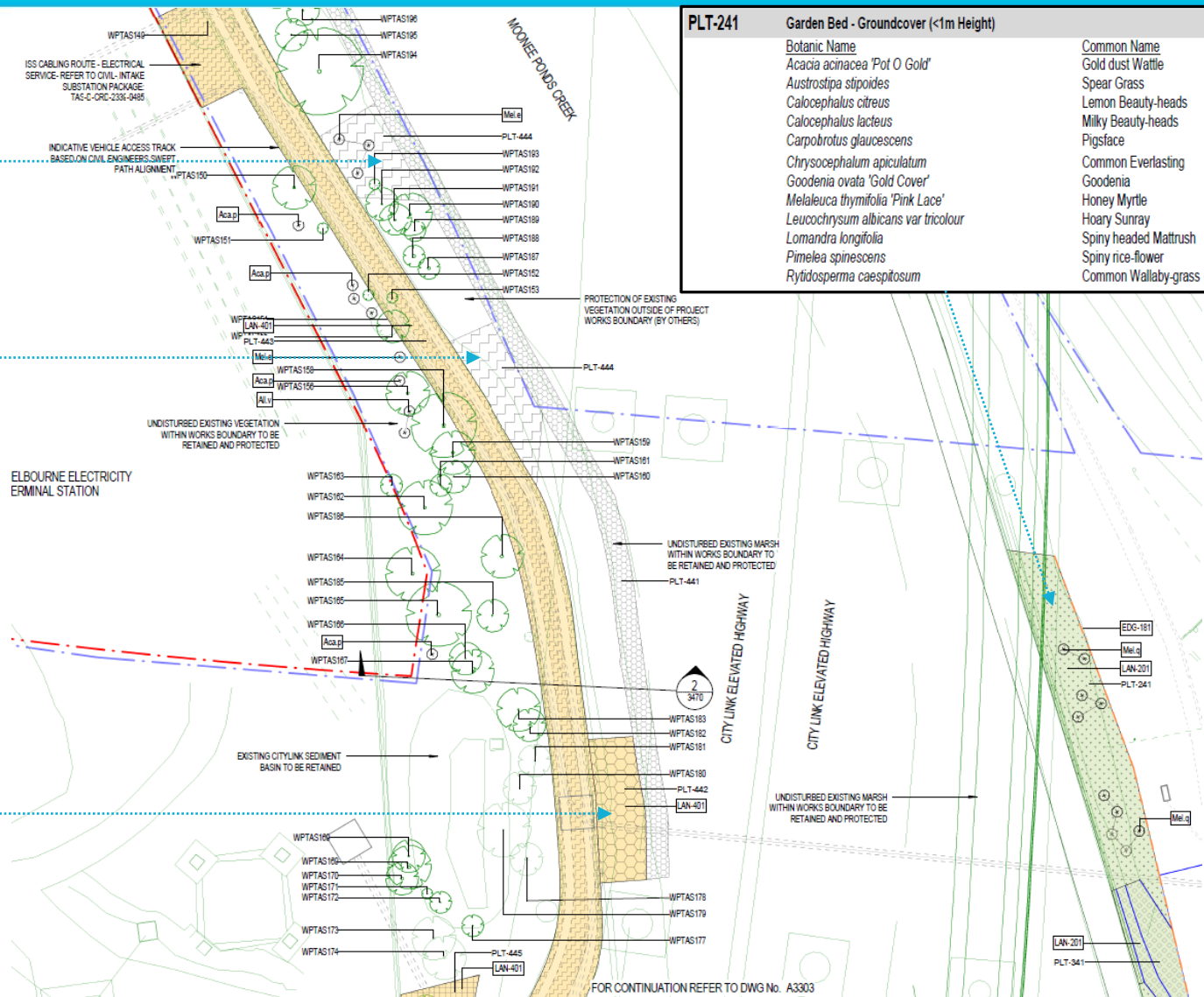
Planting Schedule



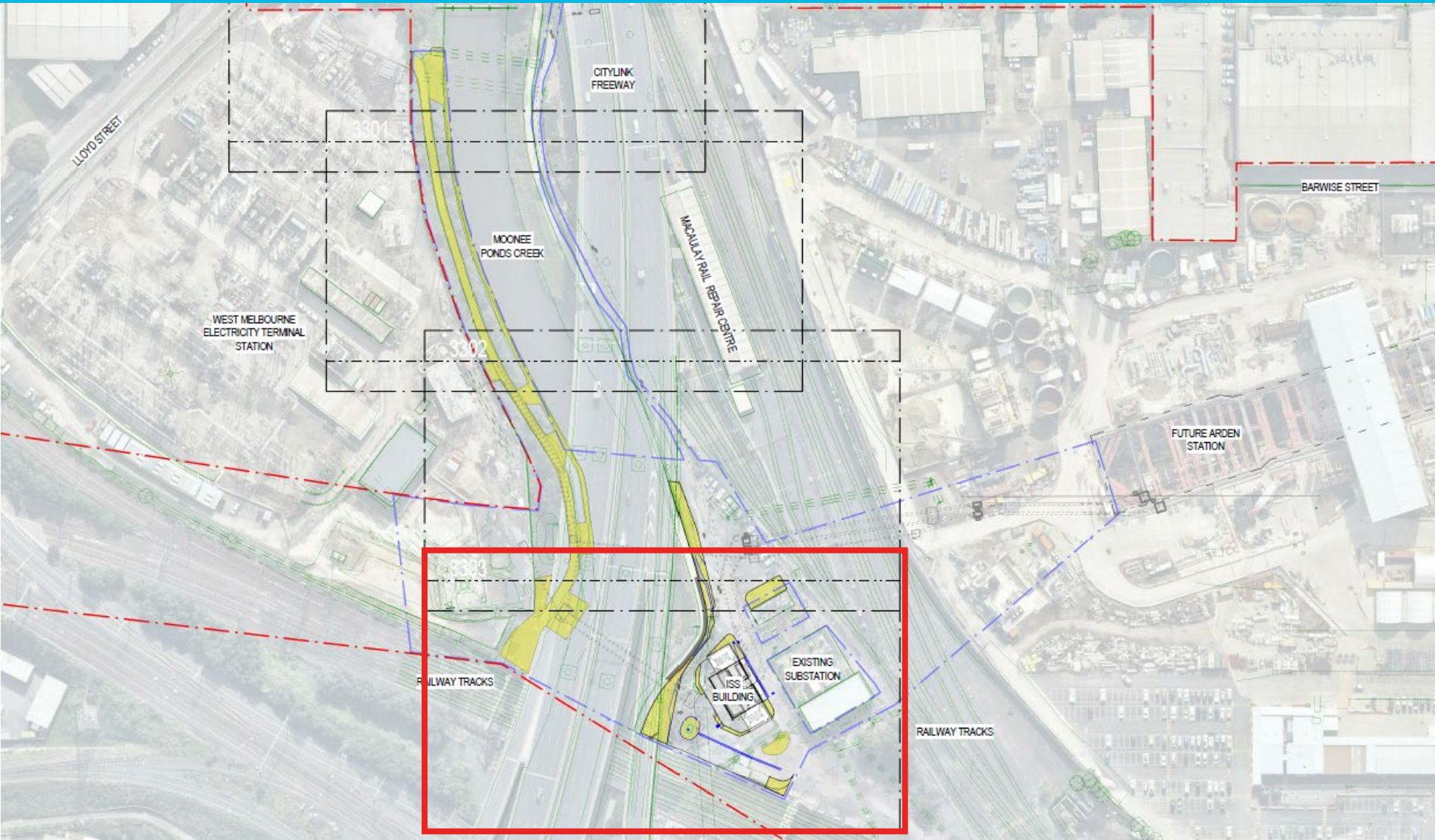
PLT-444		
Revegetation - Herb Infill Mix		
Botanic Name	Common Name	
Ground Cover		
<i>Chloris truncata</i>	Windmill grass	
<i>Einadia nutans subsp. nutans</i>	Climbing Salt Bush	
<i>Enchylaena tomentosa var. tomentosa</i>	Ruby Salt bush	
<i>Dichanthum annulatum</i>	Sheda grass	
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass	
Understory		
<i>Atriplex cinerea</i>	Grey Salt Bush	
<i>Atriplex prostrata</i>	Mat Salt Bush	
<i>Duma florulenta</i>	Tangles lignum	

PLT-442		
Revegetation - Infill Planting Mix		
<u>Botanic Name</u>		<u>Common Name</u>
Ground Cover		
<i>Austrostipa stipoides</i>		Spear Grass
<i>Calocephalus citreus</i>		Lemon Beauty-heads
<i>Calocephalus lacteus</i>		Milky Beauty-heads
<i>Chloris truncata</i>		Windmill grass
<i>Chrysocephalum apiculatum</i>		Common Everlasting
<i>Pimelea spinescens</i>		Spiny rice-flower
<i>Rytidosperma caespitosum</i>		Common Wallaby-grass
Understory		
<i>Acacia acinacea</i>		Gold dust Wattle
<i>Acacia paradoxa</i>		Hedge Wattle
<i>Dianella revoluta</i>		Blue flax-lily
<i>Leptospermum lanigerum</i>		Wooly Teatree
<i>Lomandra longifolia</i>		Spiny headed Matrush
<i>Rhagodia parabolica</i>		Fragrant Salt Bush

PLT-241		
Garden Bed - Groundcover (<1m Height)		
Botanic Name	Common Name	
<i>Acacia acinacea 'Pot O Gold'</i>	Gold dust Wattle	
<i>Austrostipa stipoides</i>	Spear Grass	
<i>Calocephalus citreus</i>	Lemon Beauty-heads	
<i>Calocephalus lacteus</i>	Milky Beauty-heads	
<i>Carpobrotus glaucescens</i>	Pigsface	
<i>Chrysocephalum apiculatum</i>	Common Everlasting	
<i>Goodenia ovata 'Gold Cover'</i>	Goodenia	
<i>Melaleuca thymifolia 'Pink Lace'</i>	Honey Myrtle	
<i>Leucochrysum albicans var tricolour</i>	Hoary Sunray	
<i>Lomandra longifolia</i>	Spiny headed Mattrush	
<i>Pimelea spinescens</i>	Spiny rice-flower	
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass	



Revegetation and landscaping AREA 4



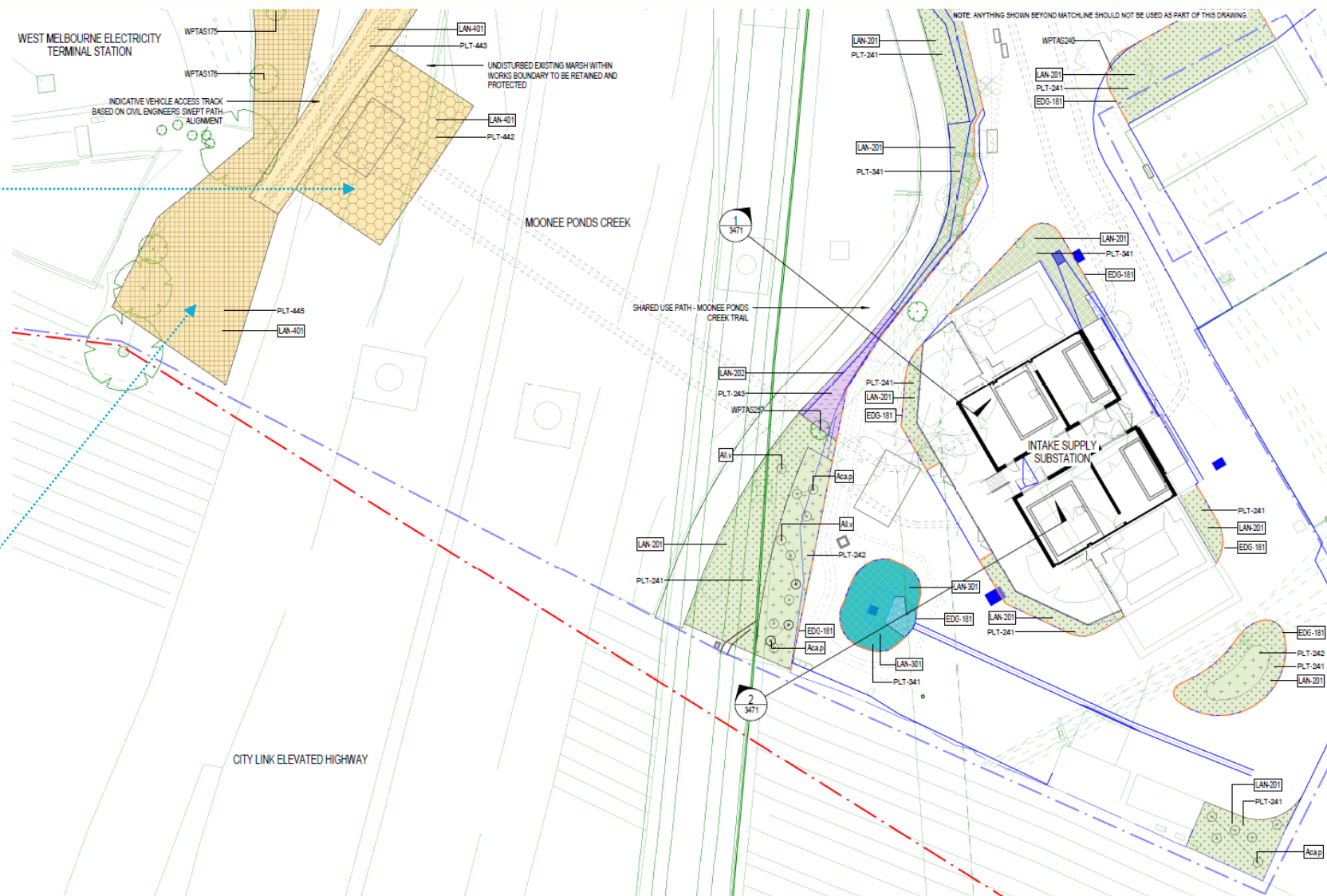
Area 4

Planting Schedule (West Bank)



PLT-442 Revegetation - Infill Planting Mix		
	<u>Botanic Name</u>	<u>Common Name</u>
	Ground Cover	
	<i>Austrostipa stipoides</i>	Spear Grass
	<i>Calocephalus citreus</i>	Lemon Beauty-heads
	<i>Calocephalus lacteus</i>	Milky Beauty-heads
	<i>Chloris truncata</i>	Windmill grass
	<i>Chrysocephalum apiculatum</i>	Common Everlasting
	<i>Pimelea spinescens</i>	Spiny rice-flower
	<i>Rytidosperma caespitosum</i>	Common Wallaby-grass
	Understory	
	<i>Acacia acinacea</i>	Gold dust Wattle
	<i>Acacia paradoxa</i>	Hedge Wattle
	<i>Dianella revoluta</i>	Blue flax-lily
	<i>Leptospermum lanigerum</i>	Wooly Teatree
	<i>Lomandra longifolia</i>	Spiny headed Mattrush
	<i>Rhagodia parabolica</i>	Fragrant Salt Bush

PLT-445 Revegetation - Woodland mix		
<u>Botanic Name</u>		<u>Common Name</u>
Ground Cover		
<i>Austrostipa stipoides</i>		Spear Grass
<i>Chloris truncata</i>		Windmill grass
<i>Dichanthum annulatum</i>		Sheda grass
<i>Rytidosperma caespitosum</i>		Common Wallaby-grass
Understory		
<i>Acacia acinacea</i>		Gold dust Wattle
<i>Acacia paradoxa</i>		Hedge Wattle
<i>Dodonaea viscosa</i>		Hop Bush
<i>Duma florulenta</i>		Tangles lignum
<i>Leptospermum lanigerum</i>		Wooly Teatree
<i>Rhagodia parabolica</i>		Fragrant Salt Bush



Area 4

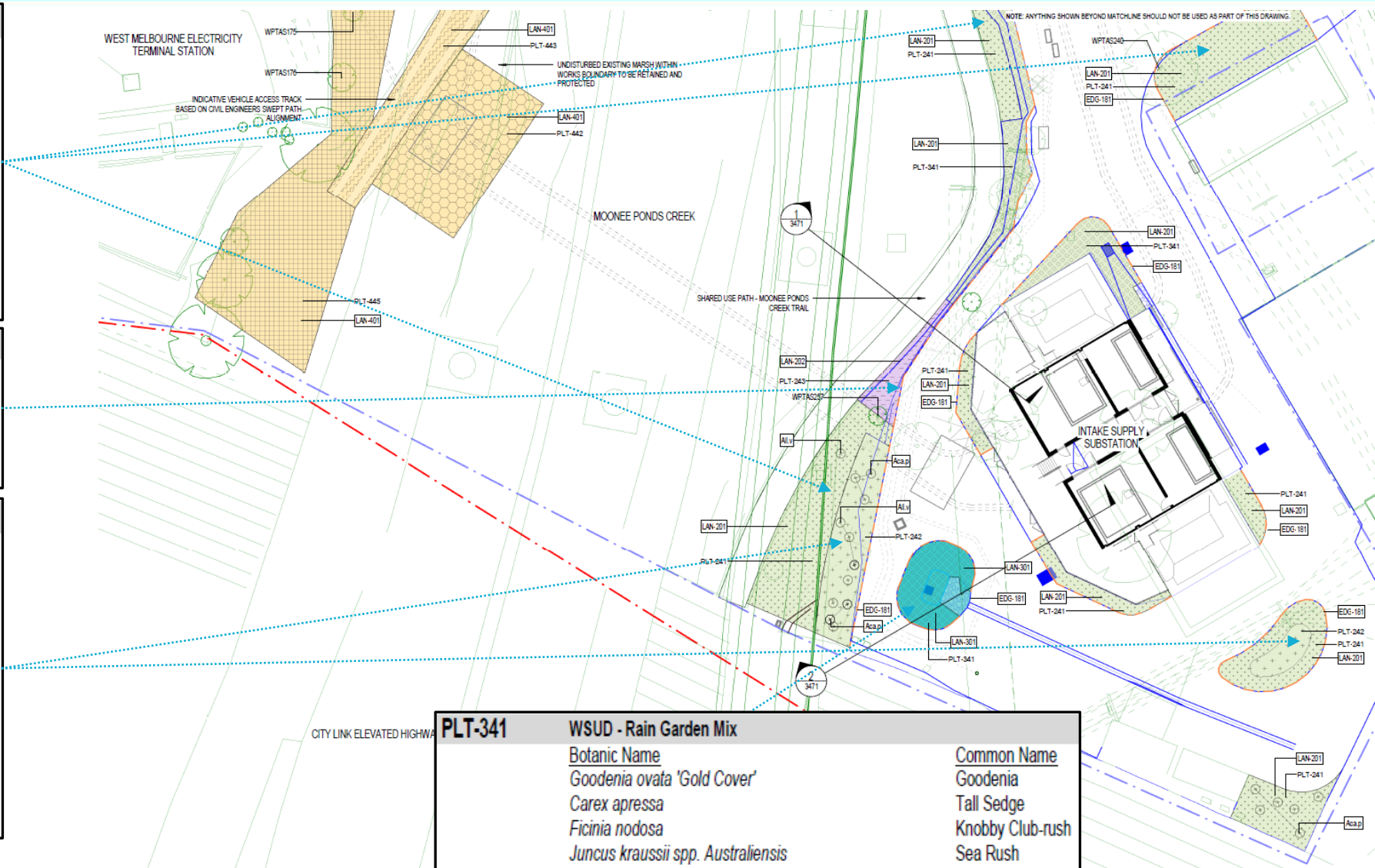
Planting Schedule (East Bank)



PLT-241 Garden Bed - Groundcover (<1m Height)		
Botanic Name	Common Name	
<i>Acacia acinacea</i> 'Pot O Gold'	Gold dust Wattle	
<i>Austrostipa stipoides</i>	Spear Grass	
<i>Calocephalus citreus</i>	Lemon Beauty-heads	
<i>Calocephalus lacteus</i>	Milky Beauty-heads	
<i>Carpobrotus glaucescens</i>	Pigsface	
<i>Chrysocephalum apiculatum</i>	Common Everlasting	
<i>Goodenia ovata</i> 'Gold Cover'	Goodenia	
<i>Melaleuca thymifolia</i> 'Pink Lace'	Honey Myrtle	
<i>Leucochrysum albicans</i> var tricolour	Hoary Sunray	
<i>Lomandra longifolia</i>	Spiny headed Matrush	
<i>Pimelea spinescens</i>	Spiny rice-flower	
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass	

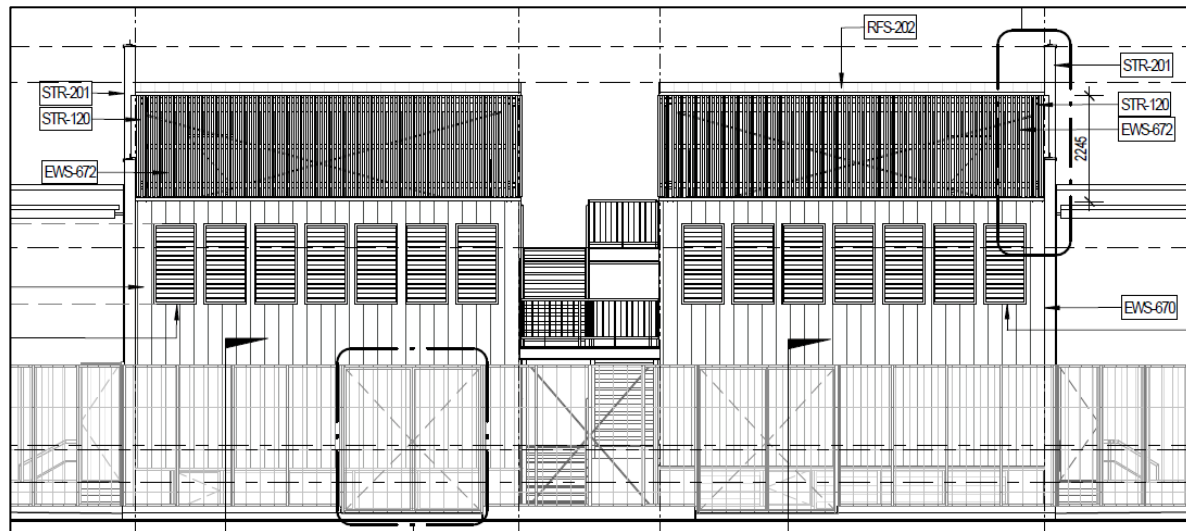
PLT-243 Garden Bed - Embankment Mix		
Botanic Name	Common Name	
<i>Atriplex semibaccata</i>	Creeping Saltbush	
<i>Chrysocephalum apiculatum</i>	Common Everlasting	
<i>Ficinia nodosa</i>	Knobby Club-rush	
<i>Lomandra longifolia</i>	Spiny-headed Matrush	
<i>Poa labillardierei</i>	Common Tussock Grass	

PLT-242 Garden Bed - Screening Mix (>1m Height)		
Botanic Name	Common Name	
Ground Cover		
<i>Acacia acinacea</i>	Gold dust Wattle	
<i>Atriplex cinerea</i>	Grey Salt Bush	
<i>Austrostipa stipoides</i>	Spear Grass	
Understory		
<i>Dianella revoluta</i>	Blue flax-lily	
<i>Leptospermum lanigerum</i>	Wooly Teatree	
<i>Lomandra longifolia</i>	Spiny headed Matrush	
<i>Rhagodia parabolica</i>	Fragrant Salt Bush	
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass	



PLT-341 WSUD - Rain Garden Mix		
Botanic Name	Common Name	
<i>Goodenia ovata</i> 'Gold Cover'	Goodenia	
<i>Carex apressa</i>	Tall Sedge	
<i>Ficinia nodosa</i>	Knobby Club-rush	
<i>Juncus kraussii</i> spp. <i>Australiensis</i>	Sea Rush	

Design update



Intake Substation Design



Construction Progress – Cladding Installed (*Monday 6 December*)

Construction update



Activity	Date
Final under-creek bore completion (CitiPower Scope)	15 December 2021
Building Completion	17 December 2021
Planting and landscaping	28 January – Early March 2022
Power Commissioning	31 March 2022



Construction Progress (Monday 6 December)

Communications and stakeholder engagement update

Communications and engagement update

North Melbourne and Parkville



Notification and communications

- North Melbourne: December/January construction update (3 December)
- Parkville: December 2021/January 2022 construction update (1 December)
- Parkville: weekly update to key stakeholders (ongoing).

Door knocks, meetings, briefings and events

- North Melbourne: fortnightly meetings with City of Melbourne
- Parkville: fortnightly meetings with Peter MacCallum Cancer Centre, Melbourne Health, University of Melbourne, City of Melbourne and monthly meeting with Graduate House.

Communications and engagement update

North Melbourne and Parkville



Community issues/enquiries and key stakeholder engagement

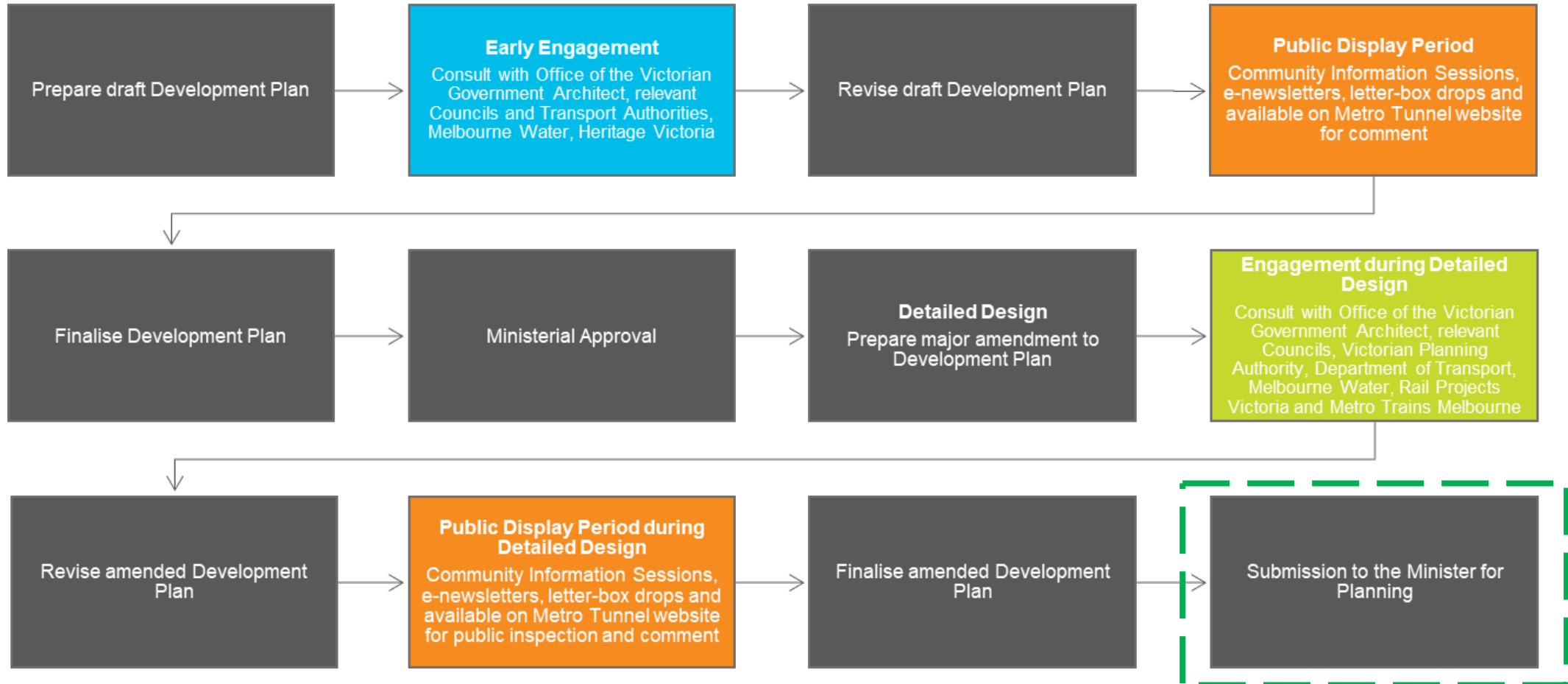
- Parkville: Royal Parade entrance boundary adjustment for escalator works

Upcoming engagement

- Parkville: 2022 activities
- North Melbourne: 2022 activities

Parkville Precinct Development Plan update

Amending the Development Plan



Parkville Precinct Development Plan update

Consultation



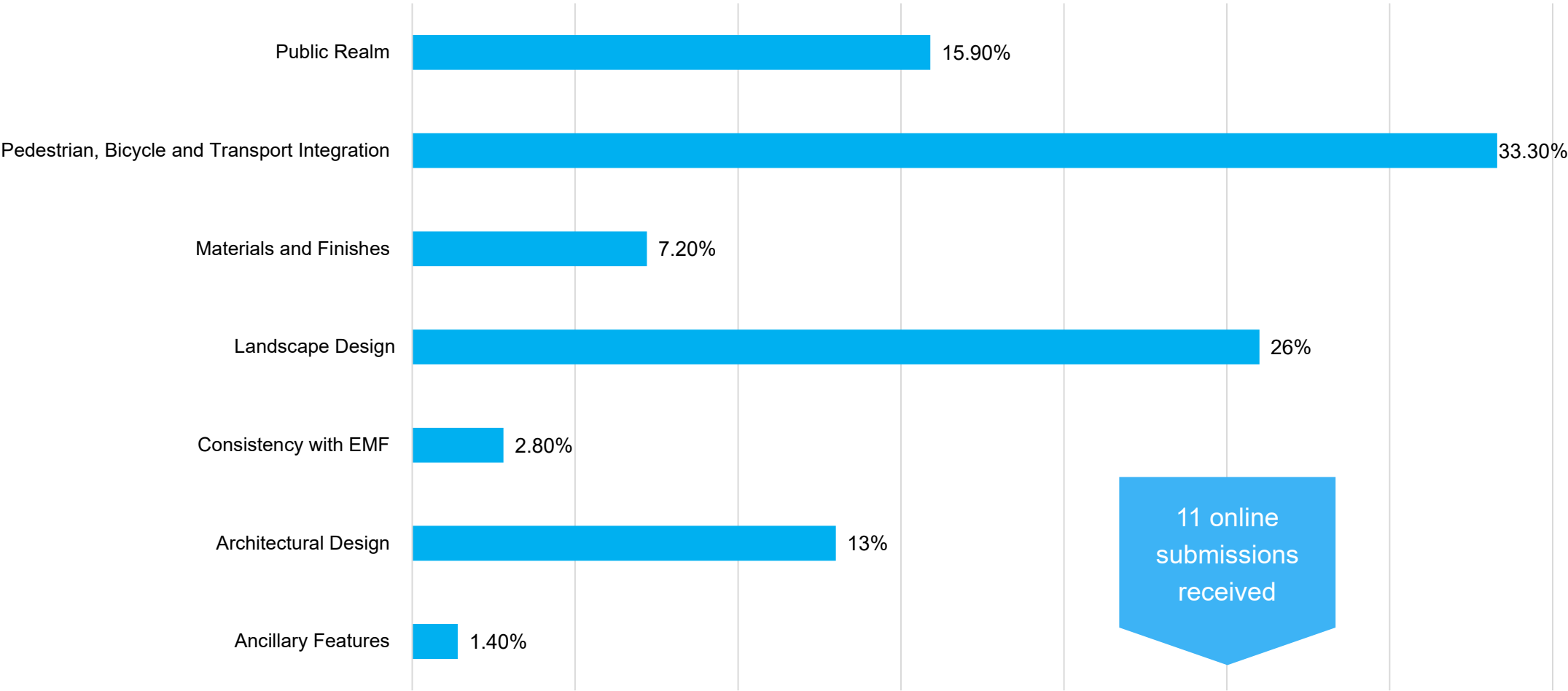
- 22 attendees at Parkville Precinct online information session
- 2644 visits to the Engage Vic website
- Parkville Precinct Development Plan submissions:
 - Amended Development Plan (2021): 11 submissions provided via online submission portal
 - Previously approved Development Plan (2018): 200 submissions

Parkville Precinct Development Plan update

What we heard



Key themes of feedback on Parkville Precinct Development Plan



Parkville Precinct Development Plan update

Development Plan changes



- Updated Section 1.3.2 to reflect process undertaken, including most recent public display period and consultation
- Updated Section 4.3.4.3 bicycle access, to provide further detail regarding the extent of bike lane separation along Grattan Street, and location of bicycle parking throughout the precinct
- Updated Section 4.3.4.4 transport integration, to further explain the changes to the tram stop on Royal Parade and bus stops on Grattan Street east.

Parkville Precinct Development Plan update

Next steps



- Submitted for Ministerial approval – December 2021
- Response to stakeholders
 - Minister's listed stakeholders (Incorporated Document)
 - Key stakeholders
 - Community and organisations who provided a response
 - Community Reference Groups

2021 wrap up

Parkville Precinct – 2021 activities



Presenter: Danielle Smits

Arden Precinct – 2021 activities



Presenter: Jordan Turner

Other business

- Next meeting: Friday 11 February 2022 (online)