

ATLASSIAN BUILDING CENTRAL

DEVONSHIRE STREET TUNNEL DEMOLITION MANAGEMENT PLAN

REVISION 3

MAY 2022

EXECUTIVE SUMMARY

The Purpose of the Devonshire Street Tunnel Demolition Management Plan is to outline the BOJV construction methodology for the completion of the required works in this specific area of the project. The Devonshire Street Tunnel (DST) located adjacent to the Atlassian site forms an important part of the precinct public domain works. A portion of the DST will be demolished as part of the Atlassian works and a new structure built in its place. There is also scope very close to the entrance of the tunnel inclusive of the upgrading of services and construction of new retailers and entrances into the future development. The methodology described below in detail considers the importance of this area as a pedestrian thoroughfare and considers pedestrian modelling, fire life safety and structural design to minimise the impact that the works have on stakeholders and the public. This Management Plan will demonstrate how BOJV will carry out the Demolition works and will address the following:

- Key stakeholder interfaces
- Key design considerations
- Enabling works
- Demolition zone 1
- Demolition zone 2
- Demolition zone 3
- Demolition zone 4
- Installation of gantry systems
- Rebuild and completion

This Management Plan will address the demolition of the Devonshire Street Tunnel and associated works. The other works that will occur within the tunnel have been listed for clarity but will be addressed at a later date once further detailed design has been completed.



DOCUMENT REVIEW AND AUTHORISATION

This Devonshire Street Tunnel Demolition Management Plan has been reviewed and authorised for issue by the Construction Manager.

Future documentation and changes to previously issued documents shall also be approved by the Project Manager.

Revision Details		Approval		
Revision:	Rev 03	Position: Construction Manager	Position: Project Manager	
		Name: Jahaan Rowdah	Name: Whitney Force	
Date Issued:	25 May 2022	Signature:	Signature:	

Controlled Copy Details			
Revision 1	For Review		
Revision 2 Updated to address TfNSW/GHD comments			
Revision 3 Updates based on current programme			

Revision - Key Changes Summary				
Revision 1	First Submission			
Revision 2	Updated to address TfNSW/GHD comments			
Revision 3	Updates based on TfNSW comments and revised start on site programme			



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1 Project Description

1.1 Overview

The project, referred to as 'Atlassian Building Central', is a development being undertaken at 8-10 Lee Street Haymarket.

On 7th August 2018, the NSW Government announced that it is seeking to create a world-class technology hub along the corridor in and around Central Station. Following the announcement, the NSW Government entered into an agreement with Atlassian to progress discussions on Atlassian's proposal to develop the YHA Site at Central Station and to anchor the technology hub that will form the first phase of the new tech precinct. The design of the building is bespoke in all aspects with State Work integration across the link zone, heritage retention within the Parcels Shed, new YHA facility in podium floors & the high-rise office tower for Atlassian. The tower itself is comprised of eight major divisions, each of which contains its own distinct habitat, rendered in mass timber, and wrapped in glass with a steel and cross-laminated timber sub-structure.

In December 2020, the SSDA was submitted for approval to the Department of Planning Industry & Environment

Since the last revision of the CMP Dexus became a development partner with Vertical First. For the purposes of this plan the development partners will be referred to as "Atlassian."

The proposed development is comprised of:

- Two basement levels (B1 & B2), which includes service spaces, loading docks, and EOT facilities which will be accessed from Lee St following the completion of works to convert the existing Upper Carriage Lane into a shared ramp from Lee Street which will service both the Adina hotel and Atlassian development:
- Delivery of Transport for NSW assets (State Works) comprising Lower Ground and Upper Ground Floor through site link which is key pedestrian infrastructure for Central Station to connect the future metro Central Walk West. Refer to the figure below highlighting the delineation between Developer and State Works:
- Retention of the existing Heritage Parcel Shed and adaptive reuse to form part of a new public realm strategy incorporating it into the new building's lobby
- Construction of a new high-rise tower of approx. 68,500m2 including:
 - New YHA accommodation (lower levels)
- Commercial office levels (upper levels)



1.2 The Construction Site

The Former Inward Parcels Shed is located at 8a/10 Lee Street, Haymarket NSW 2000, within the Railway Square of the Central Railway Precinct, surrounded by the following:

- Eastern boundary Platform 1 of Central Station (TfNSW)
- Western boundary The Adina Hotel on Lee Street (TOGA)
- Southern boundary Henry Deane Plaza, Devonshire pedestrian tunnel, and Office building (DEXUS)
- Northern boundary Ambulance Avenue, TFNSW Central station maintenance offices, Railway Colonnade Dr, and Western Forecourt (TfNSW)

The Former Inwards Parcels Shed site is subject to several statutory heritage listings from various government agencies. The listings are outlined below:

- The site is included in the heritage listing for the whole Sydney Terminal and Central Railway Station Group as listed on the State Heritage Register (SHR No. 01255) under the auspices of the NSW Heritage Act 1977
- The site is included in the heritage listing for the Central Railway Station and Sydney Terminal Group on TfNSW S.170 Register under the auspices of the NSW Heritage Act 1977
- The site is listed as part of the Central Railway Station listing



Figure 1-1: Site location plan illustrating proposed development & surrounding properties



1.3 Devonshire Street Tunnel Existing Conditions

The existing Devonshire Street Tunnel exit towards Henry Dene Plaza is made up of two structures, one from the original tunnel construction and the second from the addition when Henry Dene Plaza was developed. The first structural condition is the inground concrete structure that sits underneath the central station railway yard, the second is the suspended structure located at the west end of the tunnel. The demolition methodology applied to these structural conditions are referred to as zone 1 and zone 2 (suspended structure) and zone 3 and zone 4 (in-ground structure). The location that the works associated with each of these zones is shown in figure 1-2. Site investigations are being undertaken to confirm the existing structural conditions of the tunnel, the potential of any hazardous materials, and the location of any existing services. These site investigations will further inform and support the demolition methodology currently anticipated in this plan.

One of the key existing conditions that has been considered when developing the demolition methodology is the in-ground portion of the structure that provides support to Platform 1. Of note is the existing heritage significant fabric and the interface between the retained and demolished structures. There are also key services located below the Devonshire Street Tunnel, services locations will be confirmed to ensure they are not impacted by the demolition works.

The demolition of this portion of the Tunnel requires the endorsement of various ownership entities including TAHE, TOGA, CPS, and the future Atlassian Site. Accordingly, all required construction licences are being obtained and consultation with each of the landowners is underway. The key interfaces are explained in detail within section 2 of this management plan. Some key items include the support condition of the southern side of the tunnel being on columns that form part of the CPS development and the requirement for the Northern and Southern retailers (TOGA and CPS) to be vacated to allow for demolition works to be completed and for the pedestrian diversion to be established through the Southern retailers. Ongoing coordination with CPS is currently underway to confirm the location of the pedestrian diversion on the southern side of the Tunnel.

1.4 Devonshire Street Tunnel Works

The works associated with the demolition of the Devonshire Street Tunnel are inclusive of the following:

- 1. Validation of existing conditions through Site investigations
- 2. Establishment of the site (hoardings, temporary directional signage & the like)
- 3. Isolation and strip out of existing retail tenancies (South)
- 4. Localised demolition of existing structures within the Atlassian Site
- 5. Establishment of pedestrian diversion routes
- 6. Zone 1 & 2 demolition (suspended structure)
- 7. Zone 3 & 4 demolition (inground structure)
- 8. Column upgrades
- 9. Installation of gantry system (B-class hoarding)
- 10. Form Reo Pour of the new overhead tunnel structure
- 11. Removal of temporary support systems
- 12. Services, floor replacement & finishes work
- 13. Handover and demobilisation of the construction site (OC)

Items 1 to 5 form part of the enabling works, items 6 to 8 form part of the demolition works, and item 9 is in reference to the temporary tunnel structure that will remain in place until the permanent new structure is built over the top. Items 10 through to 13 will occur later in the construction program and have been addressed briefly but further detail will be provided in line with design development. This information will be appended to this current management plan once it becomes available.









2 Key Interfaces

The below interfaces have been identified as the key areas that will be impacted by the Devonshire Street Tunnel works. The methodology as demonstrated in this plan has been produced based on the current documentation whilst targeting to minimise the effects that the works will have on the current tunnel arrangement.

2.1 Existing Services

Prior to the demolition works commencing there will be services within the portion of the tunnel being demolished that will need to be isolated & made safe. These range from lights, exhausts, and cameras to Transport passenger information displays & signage. Figure 1-3 below shows an example of some TfNSW assets that will need to be isolated and relocated prior to the tunnel demolition. Temporary services will be installed within the pedestrian diversion including statutory signage and wayfinding as required to preserve the utility of the tunnel during zone 1 and 2 of the demolition works. The relocation of the TfNSW passenger information displays will be completed by Sydney Trains.



Figure 1-3: Devonshire Street Tunnel Existing Services

2.2 Hazardous Materials

Investigations have been completed to determine the extent and location of any hazardous materials including but not limited to, lead paint, lead dust and asbestos. This investigation revealed the presence of lead dust & lead paint within the DST, and synthetic mineral fibres (SMF) in the retail spaces adjacent. A specialist subcontractor will be engaged to undertake the safe removal of hazardous materials as required prior to the demolition works. Safety procedures will be in place during these works to align with all relevant standards and requirements for hazardous materials removal. Lead dust within the DST will be remediated at night and out of hours to reduce the impacts of hazmat exclusion zones on pedestrian flow.







2.3 Existing Pedestrian Pathway

The existing pedestrian pathway currently allows pedestrians to walk under the station train lines from Lee St on the West to Elizabeth St on the East. The tunnel at its narrowest point is 5.5m in width at the exit of the tunnel towards Henry Dene Plaza. The walkway then transitions from the tunnel to an area where there is a group of retailers on the North & South of the main walkway. To minimise the impact of the necessary works, a pedestrian diversion will be established to maintain access. The details of the diversion are under development and will be designed in accordance with pedestrian analysis and fire life safety requirements, the works will be timed for periods of low traffic to ensure the least impact on day-to-day operations. To complete the works safely there is a period where the tunnel will need to be closed temporarily to pedestrian traffic. The specific details of the proposed pedestrian diversion and shutdown periods is provided in a later section of the report.





Figure 1-5: Existing Devonshire Street Tunnel (East)



Figure 1-6: Existing Devonshire Street Tunnel (West)

Existing Retailers 2.4

The existing retailers to the north (lot 13b) and south (lot 12) of the Devonshire Street Tunnel adjacent to the Atlassian site will be impacted by the works. Specifically, the retailers will need to be vacated, services isolated





and stripped out to allow for the construction of the new tower development. The southern retailers will be impacted by the structural modification works required to the CPS columns to accommodate the new tunnel structure. These works will be carried out in consultation with the relevant stakeholders (TOGA & CPS).

2.5 Staged Demolition & Materials Handling

The demolition works will be coordinated through consultation and communication with TOGA, TAHE, TfNSW, CPS and all other relevant stakeholders. Demolition staging is explored in detail within the following sections to deal with the different types of structure and to mitigate the impact of the works. Materials handling during the demolition work will be carried out using overhead lifting equipment & other large plant to lift demolished materials into vehicles where they will be loaded out through the Atlassian site via the regular site egress route on Lee Street.

2.6 Platform 1 Support Conditions

As outlined above there are existing structural considerations that have been accounted for when developing the methodology. There are four main support conditions that are required to complete the demolition works, including the retention wall system within the Atlassian site, the existing column supports within the Henry Dene Plaza building, the fill zone on top of the in-ground portion of the tunnel (lot 118) and the tunnel structure currently supporting platform 1 of central station, this support condition can be seen in figures 1-7 and 1-8.

Through the risk assessment process that was undertaken, the cut line for the demolition of the Devonshire Street Tunnel has been moved to the west away from Platform 1 such that a larger portion of the current tunnel is retained, and Platform 1 is not affected by the works.

The soil above and around the in-ground structure will need to be excavated to allow for the demolition of the structure.



Figure 1-7: Indicative Devonshire Street Tunnel & Platform 1 Overlay





Figure 1-8: Indicative Devonshire Street Tunnel & Platform 1 Section



2.7 Construction Licenses

All required construction licenses to complete these works and address the above interfaces are being obtained prior to these specific works commencing. To complete the Devonshire Street Tunnel demolition and associated works Construction Licenses are being obtained to access land belonging to TAHE, TOGA, and CPS. The lots affected by the works and the lot owners are listed below. These stakeholders have been consulted in the development of the design and methodology and extent of the construction licences required.

- Lot 118: TAHE
- Lot 13a: currently TOGA, Atlassian post PDA execution
- Lot 13b: TOGA
- Lot 12: CPS

2.8 **Programme Considerations**

The proposed dates for the works to be undertaken are listed below. Dates provided have been developed in consultation with TfNSW and Construction Programme Rev X. As such these dates are indicative and may be subject to change.

- Enabling Works (DST Soft Strip & Diversions) July August 2022
- Zone 1 & 2 Demolition October 2022
- Zone 3 & 4 Demolition
 - o 8:00pm Monday 02.01.2023 5:00am Monday 09.01.2023
 - o 8:00pm Friday 13.01.2023 5:00am Monday 16.01.2023
 - o 8:00pm Friday 20.01.2023 5:00am Monday 23.01.2023 (if required)
- Following the demolition of Zones 3 & 4, the installation of the overhead gantry structure will commence. Similar to the tunnel demolition works, the first two stages of the gantry installation will require the tunnel to be closed
- Future works including removal of gantry, completion of services and finishes commencing May 2024 to project completion in May 2026
- Major events will be considered in further planning
- Adjoining developments current forecast commencement
 - o Dexus / Frazers Property / Central Place Sydney: Q3 2022
 - o TOGA: Q1 2024
- University of Technology Sydney Semester Dates
 - Semester Commences 01/08/2022
 - o Mid-session StuVac 26/09/2022 to 02/10/2022

2.9 Assurances

Assurances for the design of the works and proposed methodology will be provided by the AEO designers that have been engaged for the works. These designers include but are not limited to, TTW (Structure), BVN (Architecture), Stantec (Services), ARUP (Pedestrian Modelling), Holmes (Fire Engineer) to be peer reviewed by Stantec (AEO designer). The full design documentation will be provided to TfNSW for review as part of the IDR process. The relevant packages are listed below:

- Design of the demolition sequence and temporary structures provided in IDR package 1 for TfNSW review and comment
- Design of the retention systems provided in IDR package 2 for TfNSW review and comment
- Design of the new tunnel structure provided in IDR package 3 for TfNSW review and comment
- Services and external finishes provided in IDR package 6 for TfNSW review and comment



3 Design Considerations

There are several design considerations that have influenced the approach to the Devonshire Street Tunnel works. The following section steps through these items in detail.

3.1 Site Investigations & As Built Conditions

Site investigations have been conducted by BOJV in November 2021 to March 2022 within the Devonshire Street Tunnel and the adjacent retail tenancies. These specific investigations have verify as-built assumptions, inform detailed design and reports, and support the construction methodologies. The following site investigations were completed:

- Survey of existing services
- Above-ground hazmat survey
- Structural assessments
 - Core holes
 - o Compressive test strengths of existing elements
 - Test Pit Excavations

The investigation findings and recommendations have been provided in detailed design documentation issued in the Design Packages developed by the AEO design team.

Figure 1-9 shows the existing Devonshire Street Tunnel structure. The green, yellow, and red portions of the tunnel represent the various parts of the structure built at different times.



Figure 1-9: Devonshire Street Tunnel Existing Structure



3.2 Structural Design – Staged Demolition, Temporary Works, and Geotechnical Information

The structural design of the new overhead structure along with the temporary works associated with the removal of the existing structure has been developed by an AEO accredited engineer in Taylor Thomson & Whitting (TTW).

An assessment of the existing structural drawings in and adjacent to the Devonshire Street Tunnel has been considered in relation to demolition in this area, which consists of 2 structural types:

- The original Devonshire Street Tunnel structure, which is a cut and cover tunnel consisting of concrete encased steel beams spanning North-South onto masonry earth retaining walls on the North and South elevations.
- A reinforced concrete beam and slab structure spanning North-South from a primary column grid aligned with the existing Northern shopfronts and supported along the Southern Elevation on a reinforced concrete corbel which is part of the existing SRA house structure.

The structural arrangement of both areas identified above enables the staged demolition of existing slabs while maintaining adjacent stages in a stable condition. The staged excavation and subsequent demolition of the Devonshire Street Tunnel cut, and cover structure maintains stability of the tunnel structure at each stage of demolition.

The stability of surrounding structures has been considered, specifically along the Southern elevation where it is critical that SRA house (CPS) remains in a stable condition throughout the demolition and rebuild works. The proposed excavation on the Southern elevation of the DST is to remain until the new structure is complete. This ensures the lateral soil pressures are not reapplied to the DST Southern wall until the top restraint to the wall is reinstated by the new structure. An extent of the original DST structure is proposed to be retained along the Eastern boundary line. The purpose of this is to ensure that Platform 1 remains stable throughout the works along the Eastern Boundary and in the temporary excavation zone to the South of the DST, through to the completion of the permanent structure.

To open the tunnel prior to the new structure being complete a temporary gantry system has been designed. The Devonshire Street Tunnel temporary steel framing design is broken into a series of individually stabilised steel structures. Each zone is designed to enable installation and removal within a limited timeframe while remaining zones are maintained as stable. All frames are portalised in the N-S direction and braced on plan and with vertical bracing in the E-W direction.

Within the cut and cover structure area, the temporary steel gantry is designed to be supported on top of the retained Southern wall of the DST to maximise pedestrian traffic widths during construction of the upper ground concrete structure.

3.3 Pedestrian Analysis

A detailed pedestrian analysis has been undertaken to determine current pedestrian traffic conditions and to formed the basis for comparison with analysis and modelling completed to determine pedestrian traffic conditions while works are underway. This baseline analysis has formed a benchmark for management of pedestrians throughout the duration of the works.

The pedestrian analysis has been undertaken in two parts; Covering the works undertaken when the pedestrian diversion though the Southern retailers (CPS) is open, followed by the other scenario when works undertaken during the tunnel closure. The two parts are listed below:

Part 1 - During demolition of suspended structures while pedestrian diversion is in place

- Arup has completed a MassMotion model to assess how the pedestrian movements through the DST will be impacted by construction hoardings. Additional static and dynamic modelling was undertaken based on the following scenarios:
 - Pedestrian diversion through the Southern CPS retailers
 - Assessment of impacts to Henry Deane Plaza
 - Full hoardings complete with supports and ply finish upon completion of all demolition phases.
 - Pedestrian diversion through the Atlassian site which was ultimately rejected for the preferred CPS diversion.



Part 2 - During demolition of the in-ground portion of the tunnel (i.e., tunnel closure is required)

- Arup has undertaken a static assessment and review of the capacity of key external areas surrounding Central Station and potential impacts of closing the DST to the external pedestrian network.

The findings from Arup's pedestrian analyses have been coordinated with the design of the pedestrian diversion paths and temporary works arrangements to minimise the impact of the works on pedestrian flows.

Further outcomes from future pedestrian analyses will be communicated to key stakeholders and adjoining owners for consultation purposes.

3.4 Fire Life Safety

A Fire Life Safety Assessment for temporary access arrangements has been undertaken by Holmes (Fire Engineer) as part of the design development and completed prior to works commencing. This assessment will be used to finalise methodology and design for the temporary works associated with pedestrian diversion and confirm current assumptions regarding fire life safety services requirements.

3.5 **Temporary Essential Services**

Temporary essential services are critical to the function & operation of the tunnel. This information has formed part of the design for the pedestrian diversion and has been designed by an AEO accredited engineer (Stantec). This scope includes:

- Earthing and bonding
- Lighting
- Hydraulic services including drainage and stormwater
- Security

3.6 Signage

Temporary signage will be installed as required to fulfil requirements for statutory signage, directional signage, pedestrian information and to maintain the utility of the Devonshire Street Tunnel during phase 1 and 2 of the demolition.

All signage will be provided in line with Traffic Control Plans that are have been developed by the specialist traffic consultant.

During phase 3 and 4 demolition directional signage will direct pedestrians to a detour around the perimeter of Central Station while the tunnel is closed. The communication of these works is vital to ensure the public / users of the tunnel are disrupted as little as possible. These design considerations have assisted in developing the demolition methodology that ensures minimal impact to stakeholders and safety of pedestrians using the tunnel. All signage solutions will be developed in consultation with TfNSW and other relevant stakeholders. A design example for directional and other signage can be seen below.

Additionally, the current indicator panel (departure board) located near the western entrance to the tunnel will be relocated by Sydney Trains.





Figure 1-10: Example Directional Signage



4 Zone 1 & 2 Enabling Works

During the enabling works the tunnel will remain open to pedestrians with very minor disruption. BOJV will continue to consult with all relevant stakeholders throughout the process to ensure the safety of the public and workers is maintained. The primary focus of these works is to prepare the areas in and around the tunnel for demolition.

The works will be separated from the public using physical barriers such as A-Class hoardings, as well as spotters and traffic control were required to ensure that pedestrians are safe, and the flow of pedestrian traffic is not adversely affected. Where possible the enabling works will be undertaken during times of lower pedestrian activity to further minimise potential impacts.

The following enabling works are envisaged to be undertaken.

- Isolation & relocation of services within the tunnel (by BOJV Subcontractors & TfNSW Contractors)
- Isolation of services within retail tenancies
- Strip out of retail tenancies (North & South)
- Demolition of existing elements and structural alterations for the pedestrian diversion pathway through the Southern CPS retailers.
- Installation of overhead protection at the tunnel exit (western end of DST/Henry Deane Plaza)
- Modifications to Henry Dene Plaza awning
- Establishment of the pedestrian diversion including, lighting, signage, contrast, slip rating, security, and A-class hoardings.

Establishment of the pedestrian diversion is shown in the figures below. Figure 1-11 illustrates the intended location of the pedestrian diversion during zone 1 and zone 2 of the demolition works. This pedestrian diversion allows for the separation between the public and the construction works. Separation will be provided using an A-class hoarding and will include all required directional signage and lighting.



Atlassian Building Central







5 Zone 1 & 2 Devonshire Street Tunnel Demolition

Following the completion of the enabling works and the opening of the pedestrian diversion as shown above, the staged demolition of the Devonshire Street Tunnel will commence. The demolition works are broken into four zones each of which will be completed during the proposed timeframes to minimise impacts on pedestrians and other stakeholders. Zones 1 & 2 have been identified to maximise the use of the pedestrian diversion and limit impacts to pedestrian movements. The methodology for Zones 1 & 2 demolition is described below with the main thoroughfare closures anticipated occur between 8pm on a Friday evening and 5am on Monday morning on each associated works weekend.



Figure 1-12: Context Plan (Zone 1 & Zone 2)



During zone 1 and 2 works the pedestrian diversion will be open, to maintain safe pedestrian flow through the Atlassian Site. Once each stage of the demolition works has been completed the main pedestrian thoroughfare will be reopened for public use for use throughout the working week.

Zone 1 represents the most western portion of the tunnel structure, which is demolished in accordance with the structural staging plans shown in figure 1-14 and 1-15. The staging plans are coloured such that red represents structural elements being demolished and blue represents structural elements to be retained at the current stage of the works.



Figure 1-13: Zone 1 Demolition Context Plan





Figure 1-14: Indicative Demolition Zone 1 Structural Staging 1



Figure 1-15: Indicative Demolition Zone 1 Structural Staging 2



Zone 2 represents the commencement of the next portion of the structure as is documented in figure 1-16. Figure 1-17 and 1-18 below demonstrates the proposed demolition methodology for this zone.









Figure 1-17: Indicative Demolition Zone 2 Structural Staging 1



Figure 1-18: Indicative Demolition Zone 2 Structural Staging 2



6 Zone 3 & 4 Enabling Works

Figures 1-19, 1-20 and 1-21 best illustrate how the eastern retention wall will be completed and the fill zone surrounding the DST will be removed in preparation for demolition. The methodology as shown below has been developed by an AEO accredited engineer in TTW. The below listed item must be considered as part of the enabling works prior to demolition in zone 3 and zone 4.

- Eastern pile retention wall completion
- Zone 1 & 2 demolition completion
- Protection of Platform 1
- Removal of fill above and adjacent to the inground tunnel structure









Figure 1-20: Indicative Demolition of Existing Structural Slab



Figure 1-21: Indicative Completion of Eastern Retaining Wall within Atlassian Site





Figure 1-22: Indicative Removal and Batter of Fill Zone Surrounding the DST

During these enabling works the Devonshire Street Tunnel is proposed to remain open to the public, limiting the impact of the works to commuters.



7 Zone 3 & 4 Tunnel Closure and Proposed Pedestrian Route

During The tunnel closure for demolition of zone 3 and 4 of the inground portion of the Devonshire Street Tunnel, a pedestrian diversion around Central Station will be developed in consultation with TfNSW and key stakeholders.

The proposed pedestrian diversion during the tunnel closure is shown in figure 1-23 below. Pedestrian modelling for this diversion is being undertaken by ARUP. Further details relating to the pedestrian diversion and the associated pedestrian diversion can be found in Appendix A.



Figure 1-23: Indicative Alternate Pedestrian Route

Prior to the reopening of the main pedestrian thoroughfare following demolition works in each zone a detailed inspection and checklist will be completed to ensure that the area is safe for pedestrian traffic. An example of the proposed check list can be seen below.



DEVONSHIRE STREET TUNNEL CLOSURE CHECKLIST (EXAMPLE ONLY)						
Project:		Atlassian Central	Date of Closure:			
Location:		Devonshire Street Tunnel adjacent Henry Deane Plaza	Duration of Closure:			
	CLOSURE CHECKLIST		ALL BOXES TO BE CHECKED PRIOR TO CLOSURE OF DST			
				SUBCONTR	ACTOR	BOJV
1. Traffic Control in place as per CPTMP						
2.	2. Directional signage & fencing in place as per briefing					
3.	3. Lighting and essential services					
4.	4. Protection to finishes adequately installed					

REOPEN CHECKLIST		ALL BOXES TO BE CHECKED PRIOR TO HANDING OVER AREA		
		SUBCONTRACTOR	BOJV	
1.	Dismantle hold point achieved. Hoarding structure is stable			
2.	All saw dust, rubbish and material swept back and removed from top deck of hoarding			
3.	Temporary handrails in place where applicable			
з.	All machinery, tools, material, and rubbish cleared from the work area			
4.	All material clear and vehicles removed from the DST			
5.	Final walk completed between BOJV & Subcontractor. Confirmation area is clear			
6.	All fencing removed and stored on-site			
7.	Upon completion of hoarding removal, fascia reinstated to live edge			

	DAILY PERMIT SIGNOF	TO BE COMPLETED DAILY PRIOR TO CLOSURE / REOPENING		
BOJV & Subcontractor to	o confirm above checklists have been c			
DATE	<u>CLOSURE / REOPEN</u>	<u>TIME</u>	<u>SUBCONTRACTOR</u> SUPERVISOR	<u>BOJV</u> SUPERVISOR
	CLOSURE			
	REOPEN			





8 Zone 3 & 4 Devonshire Street Tunnel Demolition

During demolition of zone 3 and 4 the tunnel will need to be closed to the public to allow for the completion of the tunnel demolition. The current planning is based on a single extended closure with the final dates being negotiated with TfNSW and Dexus. During the shutdown, works will be monitored closely to ensure the planned works will be completed in time for the tunnel be reopened to pedestrians on the agreed date. A contingency closure period has also been proposed to ensure these critical works can be completed.

This strategy will mitigate the impact of the works on the public by scheduling shutdowns at times agreed with TfNSW and the wider stakeholder group. Furthermore, BOJV is currently in consultation with the relevant stakeholders to ensure that impacts are minimised and eliminated where possible. The below images demonstrate where works will be undertaken during each stage and how pedestrians will be managed.

Zone 3 and 4 of the demolition interfaces with the retained tunnel structure. The retained parts of the tunnel will be protected during the demolition works as to not cause any damage to surrounding structures.



Figure 1-24: Indicative Zone 3 Context Plan





Figure 1-25: Indicative Demolition Zone 3 Structural Staging





Figure 1-26: Indicative Zone 4 Context Plan















Figure 1-29: Demolition Zone 4 Structural Staging 3



9 Installation of Devonshire Street Tunnel Gantry System

Following the completion of the demolition works in each zone, a gantry system in the form of a B-class hoarding will be installed starting in zone 4 and ending in zone 1.

This temporary structure will serve a dual-purpose as overhead protection to pedestrians throughout the duration of the construction works as well as being the primary support structure for the new UGF concrete slab. The B-class hoarding has been designed by an AEO accredited engineer and can be seen in the figures below. Pedestrian modelling is being undertaken and has been considered in the design of the below gantry system.



Figure 1-30: Indicative Devonshire Street Tunnel B-Class Hoarding



Figure 1-31: Indicative Devonshire Street Tunnel B-Class Hoarding 3D View





Figure 1-32: Indicative Devonshire Street Tunnel B-Class Hoarding Structural Steel Marking Plan



Atlassian Building Central (08) 07 05 BOUNDARY ATLASS UPPER GROUND SLA 11 NINA WALL ╢ ł 2 800 ATLASSIAN PILE CAP SECTION 1A 04 NO CATIVE TEMPORARY WAS PLATFORM ATLAS 11 ø. PLATFORM STRUCTURE FOOTINGS ASSUMED EXTEND TO DST ROOF. THIS NEEDS TO BE VERYED ON STF. EXISTING STEEL BEAMS BELOW PLATFOR ASSEMED TO BE PROVIDING VERTICAL SU DEVONSHIRE STREET TUNNEL ATLASS AN PILE CAP DEVONSHIRE STREET TUNNEL FOOTING SECTION 18

Figure 1-33: Indicative Devonshire Street Tunnel B-Class Hoarding Elevation



Figure 1-34: Indicative Devonshire Street Tunnel B-Class Hoarding Elevation



Following the installation of the hoarding, temporary lighting and signage will be installed and commissioned in preparation for the reopening of the tunnel to the public. Furthermore, painted plywood facing will be installed to the face of all structural steel elements as shown in figure 1-34.

There will be an extended period between the demolition of the existing tunnel structure and the completion of the permanent new structure that this temporary gantry system will be in place and form the main pedestrian thoroughfare through the Devonshire Street Tunnel into Henry Dene Plaza. This period is anticipated to be progressively from completion of demolition in January 2023 to stripping of the new tunnel roof structure (UGF) in Q1 2025.

9.1 Customer Experience

As the B-class gantry system will remain in place until the upper ground permanent structure is complete in Q1 2025. During this time the floor finishes will be retained in their original condition and any wall finishes in retained portions of the structure will also be retained in their original condition where possible.

The internal walls to the temporary gantry structure will be painted plywood and will be maintained in a clean condition free of graffiti until the temporary gantry is removed.

Slips, trips, and falls will be managed through the retention of the current floor finishes and the installation and commissioning of temporary lighting within the B-class hoarding to meet requirements. In addition to this, passenger information displays will be relocated into a suitable location by Sydney Trains' Contractors as part of the site enabling works and clear directional signage will be installed to maintain the utility and ease of use of the Devonshire Street Tunnel for all pedestrians.



10 Next Steps & Permanent Works

10.1 TfNSW Inspection and Acceptance

BOJV, Dexus, TfNSW, Sydney Trains and the wider TfNSW stakeholder group have held detailed consultation and coordination workshops commencing in December 2021 through to May 2022. These workshops have been extremely beneficial in the finalisation and demonstration of the DST planning and communicating the design, planning, methodology, interfaces, and safety assurances for the DST works. Additionally, the Construction Licences required for these activities have been agreed in PDA Schedule 5.

Consultation with TfNSW, their stakeholders, and subject matter experts will be ongoing throughout the finalisation of the pedestrian diversion and communication planning for the Devonshire Street Tunnel including in the period after it is reopened to the public in the temporary state and while the permanent structure is being completed.

Furthermore, following the installation of the temporary gantry system TfNSW will be provided the opportunity to inspect and temporary works and sign off the completed works prior to the tunnel being reopened to pedestrians.

10.2 New Structure

The new UGF structure will be built over the top of the temporary gantry system. This structure will form the new tunnel structure and can be seen in figure 1-35 below.



Figure 1-35: Atlassian Permanent Structure

The upper ground floor slab will utilise the structural steel gantry as formwork while it is being built, following which, the temporary structure will be able to be removed and the tunnel structure in its permanent state completed. The removal of the gantry system will require the tunnel to be closed and a pedestrian diversion established similarly to during the demolition works. Specifically, all required pedestrian modelling will be completed, all directional and statutory signage will be in place and any temporary services as required for





pedestrian diversions will be installed and maintained while the tunnel is closed. Furthermore, closures will be coordinated with relevant stakeholders and where possible timed for periods of low pedestrian to minimise impacts.

10.3 Finishes, Services, Commissioning & Handover

Works relating to permanent services and finishes will then be completed. These works will be coordinated in consultation with the relevant stakeholders including TOGA, TAHE, TfNSW and CPS and will form part of Design Package 6 for TfNSW review. These works require further coordination and design development prior to the development of a final methodology. Once this design development is undertaken further details will be appended to this management plan. Finally, commissioning and handover of the completed structure will be undertaken with works as executed documentation issued to relevant parties.



11 Appendix A: Tunnel Closure Proposed Pedestrian Route

