

Mr Brendon Roberts Team Leader Key Sites Assessments Department of Planning and Environment GPO Box 39 Sydney NSW 2001

Attention: Michele Nettlefold

Dear Mr Roberts

Redevelopment of Harbourside Shopping Centre, Darling Harbour Notice of Exhibition (SSD 7874)

Thank you for your letter dated 12 December 2016 requesting Transport for NSW (TfNSW) comment on the above.

TfNSW understands that the proposal relates to a staged development application and the development application seeks approval for the concept proposal for the above. Comments on the concept proposal are provided below.

Sydney Light Rail – Inner West Line

There are a number of construction and operational issues resulting from the demolition existing pedestrian footbridge from the Harbourside car park across the light rail corridor at Convention stop and the construction of the Bunn Street footbridge across the light rail corridor north of Convention stop. It is also noted that the proposed construction activities are likely to interfere with the light rail operation. TfNSW requests that ongoing consultation is required between the applicant, TfNSW, light rail operator, and if required, Sydney Trains during the design and construction of the proposed development.

Construction Pedestrian and Traffic Management

Several construction projects, including the Sydney Light Rail project are likely to occur at the same time at this development within the CBD and Darling Harbour Precinct. The cumulative increase in construction vehicle movements from these projects could impact on bus services in the CBD, and the safety of pedestrians and cyclists within the CBD and Darling Harbour Precinct particularly during commuter peak periods. TfNSW requests that ongoing consultation is required between the applicant and CBD Coordination Office within TfNSW during the design and construction of the proposed development.

Vehicular Management

The proposed development is situated on Darling Drive which is a key route within the CBD. The Traffic and Transport Impact Assessment (Traffic Report) prepared to support the development application does not state the likely demand for the drop-off zone in Darling Drive. The vehicles queuing to access this drop off zone may cause delays and block vehicles on Darling Drive. In addition, any queuing due to vehicles accessing the car park and loading and servicing area may also cause delays and block vehicles on Darling Drive.

TfNSW requests that the applicant undertakes a detailed queuing analysis to identify the risks associated with the queuing on public roads and proposes mitigation measures to the satisfaction of the CBD Coordination Office within TfNSW and Roads and Maritime Services.

Coach Parking

Based on the Traffic Report, the use of the coach parking being installed in Darling Drive as part of the Sydney International Convention, Exhibition and Entertainment Centre (SICEEP) development, as well as the coach parking within the SICEEP site itself, is proposed. The future coach parking demand for both the SICEEP and Harbourside Shopping Centre developments have not been analysed in the Traffic Report.

TfNSW requests that the likely cumulative future demand for coach parking be identified and alternative locations for coach parking be identified if required, in consultation with the CBD Coordination Office within TfNSW.

Pedestrian Network

The new pedestrian linkage and changes to the existing pedestrian connections that are proposed as part of the development will impact on pedestrian flows in the vicinity of the site. TfNSW requests that an analysis of the pedestrian network within and surrounding the site be undertaken to ensure there is sufficient capacity to accommodate the future demands, including during special events in consultation with the CBD Coordination Office within TfNSW.

Darling Drive Cycleway

The proposed development has a frontage on Darling Drive, which forms part of the strategic cycleway network in the CBD. TfNSW advises that the design for the vehicular drop-off zone should take into consideration the future use of Darling Drive with the cycleway.

Wayfinding Strategies

The Traffic Report states that the Harbourside development is expected to introduce additional patronage for the light rail and ferry services adjacent to the development. TfNSW requests that the applicant develops wayfinding strategies and travel access guides to assist with increasing the mode share of walking and cycling.

Conditions of Consent

A detailed discussion of in relation to the issues that needs to be considered as part of any Stage 2 development application for the subject site is included in **TAB A**.

TfNSW requests that the applicant consults with the CBD Coordination Office within TfNSW and Sydney Trains to address the above issues. TfNSW would be pleased to consider any further material forwarded from the applicant.

Thank you again for the opportunity of providing advice for the above development application. If you require clarification of any issue raised, please don't hesitate to contact Mark Ozinga, Principal Manager Land Use Planning and Development on 8202 2198.

Yours sincerely

Margaret Prendergast 23.2.17

Margaret Prendergast Coordinator General CBD Coordination Office

Objective Number - CD16/17588

Comments for Stage 2 Development Proposal

Comments on any Stage 2 development proposal will include the following items.

Light Rail Safety Interface Agreement

There are a number of construction and operational issues resulting from the close proximity of buildings to the light rail corridor and above the corridor (eg. craning over the corridor). These issues are related to noise and vibration, transport and access, safety, property, creation of easements and protection of services for light rail. To address these issues, TfNSW requests a Rail Safety Interface Agreement and relevant Conditions of Consent are in place prior to the commencement of works.

Interference with Light Rail Operation

The proposed construction activities are likely to interfere with the light rail operation. Therefore, the applicant shall enter into an Agreement(s) with TfNSW, the light rail operator, and if required, Sydney Trains as the land owner to protect assets, services etc. and to recover costs that TfNSW, Sydney Trains and the light rail operator incurs in the development.

Prior to the Issue of the Construction Certificate

TfNSW requests that the Agreement(s) and other requirements shall include, but not be limited to, the following:

- Pre-construction dilapidation reports in the vicinity of the project (especially the new Bunn Street footbridge), including joint inspection with the representatives from TfNSW, the light rail operator and Sydney Trains;
- Protection of TfNSW land, easements and infrastructure the applicant must ascertain our reasonable requirements in relation to protection of TfNSW land, easements and infrastructure and submit all relevant documentation;
- Requirement for safety interface agreement with the light rail operator;
- Risk assessment workshop with TfNSW, light rail operator and Sydney Trains to identify the likelihood and risks of light rail vehicle derailment and mitigation measures and any mitigation measures – e.g. derailment barriers - to be endorsed by ASA. If ASA does not endorse the proposed mitigation measures then any structure (like the Bunn Street footbridge across the light rail corridor) must comply with AS 5100;
- Design, installation and use of light, signs and reflective material must limit glare and reflectivity to the satisfaction of TfNSW and light rail operator;
- Craneage operation must comply with ASA standard (e.g. no slewing over the light rail corridor under load etc) - If a crane is to be used at any stage of the proposed works, the applicant is to submit to Sydney Trains a plan showing all craneage and other aerial operations for the development and must comply with all Sydney Trains and Light Rail Operator's requirements;
- Interference with light rail operations The applicant needs to enter into an agreement with TfNSW, Sydney Trains and light rail operator (enter into a Works Deed providing for, but not be limited to, provision of design, reports, drawings, as builts, requirement for track monitoring, Light Rail Operator rules and procedures; cost recovery; insurances with certain provisions regarding the policy must not contain any exclusion in relation to work on or near the rail corridor, rail infrastructure; indemnities and liabilities; requirements for shutdowns etc.);

- It is advised that demolition of the existing of the existing footbridge from the Harbourside car park and the construction of the new bridge will invariably require shutdowns. TfNSW requires information on timing and construction methodology of these structures in particular in situ or pre-cast construction; and
- The design and construction of the development must comply with ASA standard relating to external developments (T HR CI 12080 ST).

During Construction:

TfNSW requests the building works adjacent to or above the light rail corridor shall include, but not be limited to, the following:

- No metal ladders, tapes and plant/machinery, or conductive material are to be used within 6 horizontal metres of any live electrical equipment. This applies to the train pantographs and 1500V catenary, contact and pull-off wires of the adjacent tracks, and to any high voltage aerial supplies within or adjacent to the rail corridor.
- All piling and excavation within 25m of the light rail corridor are to be supervised by a geotechnical engineer, experienced with such excavation projects;
- Not rock anchors/bolts to be installed on the land or in the light rail corridor; and
- During all stages of the development extreme care taken to prevent any form of pollution entering into the light rail corridor.

Prior to Occupancy

TfNSW requests the applicant shall provide, but not be limited to, the following prior to the occupation of the development:

- Post-construction dilapidation reports in the vicinity of the project (especially the new Bunn Street footbridge), including joint inspection with the representatives from TfNSW, light rail operator and Sydney Trains;
- A maintenance plan for any structures that interface with light rail corridor (e.g. footbridges) to TfNSW; and
- As built drawings.

Information Required from the Applicant

TfNSW requests that the applicant provide the information for TfNSW and Sydney Trains approval prior to issuing the relevant construction certificate, not limited to, the following:

- Final geo-technical and structural drawings;
- Final construction methodology;
- Final cross sectional drawings;
- Detailed survey plan;
- Electrolysis report prepared by electrolysis expert on the electrolysis risk to the development from stray currents;
- Acoustic assessment demonstrating how this development will comply with DP&E document titled "Development Near Rail Corridors and Busy Roads- Interim Guidelines";
- Risk assessment associated with possible light rail vehicle derailment;
- Assessment on use of lights, signs and reflective materials which are visible from the rail corridor; and
- Details of insurances.

Consultation with TfNSW

TfNSW requests that the applicant engages in ongoing consultation with TfNSW, the light rail operator and Sydney Trains throughout the detailed design and construction of the Project and that relevant designs and management plans be submitted to TfNSW for approval prior works commencing.

Relocation of Sydney Trains Services/Infrastructure

The relocation of any Sydney Trains services or infrastructure are to be at the applicants cost and to Sydney Trains Requirements and Standards.

Protection of Sydney Trains' Land, Easements and TfNSW's Infrastructure

Prior to the issuing of a Construction Certificate or the commencement of works (whichever occurs first) the applicant need to liaise with Sydney Trains to ascertain its requirements in relation to the protection of Sydney Trains' land, easements and TfNSW's infrastructure. The applicant is to submit to Sydney Trains all relevant documentation as requested by Sydney Trains and obtain Sydney Trains' written endorsement.

Construction Pedestrian and Traffic Management Plan

Several construction projects, including the Sydney Light Rail Project are likely to occur at the same time as this development within the within the CBD and Darling Harbour Precinct. The cumulative increase in construction vehicle movements from these projects could have the potential to impact on general traffic and bus operations within the within the CBD and Darling Harbour Precinct, as well as the safety of pedestrians and cyclists particularly during commuter peak periods.

TfNSW requests that the applicant be conditioned to the following:

- Prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the CBD Coordination Office, light rail operator and the Sydney Light Rail Team within TfNSW. The CPTMP needs to specify, but not limited to, the following:
 - Location of the proposed work zone;
 - Location of the crane;
 - o Haulage routes;
 - o Construction vehicle access arrangements;
 - Proposed construction hours;
 - o Estimated number of construction vehicle movements;
 - Construction program;
 - o Consultation strategy for liaison with surrounding stakeholders;
 - Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works;
 - Cumulative construction impacts of projects including Sydney Light Rail Project. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the road network; and
 - o Should any impacts be identified, the duration of the impacts and measures

proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP.

• Submit a copy of the final plan to the Coordinator General, CBD Coordination Office for endorsement, prior to the commencement of any work.

Vehicular Management

The vehicles queuing to access this drop off zone may cause delays and block vehicles on Darling Drive. In addition, any queuing due to vehicles accessing the car park and loading and servicing area may also cause delays and block vehicles on Darling Drive.

TfNSW requests that the applicant be conditioned to the following:

- A drop off zone management plan to manage vehicles accessing the site; and
- A car park and loading dock management plan.

Cost of Works and Signage

All works/regulatory signage associated with the proposed development are to be at no cost to TfNSW/Roads and Maritime Services