

15 December 2021

Our Ref: R/2021/4/A  
File No: 2021/518032  
Your Ref: SSI-19238057

Angela Stewart  
Department of Planning, Industry and Environment  
Via Planning Portal

Dear Angela

### **Sydney Metro West - The Bays to Sydney CBD - SSI-19238057 - Advice on Environmental Impact Statement**

Thank you for your correspondence dated 3 November 2021 inviting the City of Sydney Council (the City) to comment on the State Significant Infrastructure (SSI) application for Sydney Metro West – The Bays to Sydney CBD. The SSI seeks consent for Stage 2 of the Sydney Metro West proposal, comprising all major civil construction work including station excavation and tunneling between The Bays and Sydney CBD.

The City supports the Sydney Metro West project (the Project) and has provided evidence and technical expertise to assist Transport for NSW's (TfNSW) investigations. We welcome the decision to include stations at Pyrmont and Hunter Street which will help ensure the future expanded Harbour CBD is served by rail and connected to other job-rich centres.

The City has reviewed the Environmental Impact Statement (EIS) and supporting documentation and raises the following points and relevant recommendations.

#### **Transport and Traffic (Chapter 6)**

##### ***Construction traffic management and safety***

The City Centre and Pyrmont are both highly dense urban environments. They have a current speed limit of 40km/h which has been put in place as a safety response to the large number of people walking within these environs. The increase in heavy vehicles in the area because of the Project will introduce an increased risk and should be mitigated as follows:

- Construction zone speed limits
  - The City recommends that the speed limit be reduced to 30km/h on those streets which are impacted by an increase in heavy vehicles. Metro should engage with Centre for Road Safety (CRS), TfNSW's Transport Planning Manager - Walking and the City to understand which streets this should apply to.
- Construction vehicle safety standards
  - The City recommends that Metro's construction contracts include requirements for a higher heavy vehicle safety standard than the heavy vehicle safety standard. Metro should engage with CRS early to determine the exact standards which should be included.

***Pymont Station***

- The City anticipates that there will be a separate CTMP for the construction of the Pymont Station.
- The City expects Sydney Metro West to consult with residents and businesses on the expected loss of parking and proposed haul routes.
- Eastern construction site (egress route)
  - The City recommends that the egress route for construction traffic avoid Union Street given that it is a busy street with a mix of residential and business properties.
- Western Construction site (egress route)
  - The City recommends that the egress route for construction traffic use Pymont Street, not Darling Drive.

***Hunter Street Station***

- The City anticipates that there will be a separate CTMP for the construction of the Hunter Street Station
- Eastern construction site (ingress route)
  - Construction traffic is required to turn right from Bent Street to O'Connell Street. The right turn movement is uncontrolled and there could be a risk of conflicts between right turning construction vehicles and oncoming traffic. The City recommends that traffic controllers are used to assist construction traffic with the right turn movements.
  - The City recommends an alternate route of Macquarie Street, Bent Street, O'Connell Street. The right turn from Macquarie Street to Bent Street is traffic signal controlled and it is a left turn from Bent Street to O'Connell Street.
- Western Construction site (alternate egress route)
  - Recommend that the alternate egress route via George and Margaret Street not be pursued, and that all construction vehicles turn right out of the site and use the primary outbound route.

**Recommendations - Transport and Traffic (Chapter 6)**

That the proponent:

- Works with TfNSW to reduce construction zone speed limits to 30km/h on those streets which are impacted by an increase in heavy vehicles
- Includes requirements for a higher heavy vehicle safety standard than the current heavy vehicle safety standard in construction contracts
- Avoids Union Street as an egress route for construction traffic
- Uses Pymont Street as the egress route for construction traffic, not Darling Drive
- Uses traffic controllers to assist construction traffic with right turn movements
- Uses the alternate route of Macquarie Street, Bent Street, O'Connell Street for construction traffic
- Does not pursue the alternate egress route via George and Margaret Street, and ensures that all construction vehicles turn right out of the site and use the primary outbound route

## Noise and Vibration (Chapter 7)

Construction noise impacts are predicted to be 'high' at the nearest receivers in the Pyrmont and Hunter Street (Sydney CBD) study areas during some of the noisiest scenarios.

Most of the construction works will operate during extended construction hours especially underground works which will be 24/7 and it is inevitable there will be impacts where construction is near to sensitive receivers. Acoustic sheds and other acoustic attenuations will need to be used to mitigate the noise impacts, where feasible. Noise and vibration monitoring will be required during construction.

The City recommends a respite period for the highly intrusive equipment, particularly during rock breaking works.

### Recommendations - Noise and Vibration (Chapter 7)

See Appendix 1 for a full list of associated recommendations.

## Non-Aboriginal and Aboriginal Heritage (Chapters 8 and 9)

### ***Pyrmont Station***

#### **Demolition**

The City notes that all existing buildings within the construction sites are to be demolished. Whilst most of the buildings are of little heritage significance there will be the demolition of a potential heritage item, the Former Gilbey's Gin Distillery Building, a representative example of an Art Deco warehouse building and one of few remaining distillery buildings left in NSW. This will have an adverse heritage impact which will be partly mitigated by the recommended archival recording and salvage of significant fabric.

The recommended mitigation NAH4 in the non-Aboriginal Technical Heritage Paper prepared by Artifact for salvage of significant fabric of Gilbey's Distillery for reuse in the project or elsewhere, should require the preparation of a detailed salvage methodology which should be conditioned.

#### **Archaeology**

As indicated in the non-Aboriginal Technical Heritage Paper, the mined excavation to depth of 20m within both construction sites would remove all archaeological resources and would result in a major impact to non-Aboriginal archaeological remains of local significance. This highlights the need for mitigation measure NAH6, that an Archaeological Research Design be prepared to identify the excavation methodology for predicted locally significant non-Aboriginal archaeological resources at the Pyrmont Station construction sites.

#### **Vibration**

Tunnelling and excavation have the potential to impact several heritage items and buildings in the Pyrmont Heritage Conservation due to vibration and can cause damage to significant fabric. Mitigation measure NAH8 does not indicate the need for dilapidation reports to be provided before works are carried out, and after completion of this stage of the project, and for rectification works to be carried out by the applicant where damage is found to be caused by the works. Dilapidation reports should be a condition of the project, and should include a photographic survey of affected properties, prepared by an appropriately qualified structural engineer and heritage consultant.

### **Mitigation measures**

The mitigation measures in Table 68 (pp 260-262) of the Technical Paper 3 (Non-Aboriginal heritage) should be made conditions of approval of the SSI, subject to the comments above.

### ***Hunter Street Station***

Several State and local heritage items are within the vicinity of the construction sites of Hunter Street Station. The former Skinners Family Hotel is within the eastern construction site.

The City recommends the following points be incorporated as conditions of consent:

- A copy of archival recording of former Skinners Family Hotel, NSW Club House Building, Former Bank Defin House, Richard Johnson Square, Gilbey's Distillery (26-32 Pyrmont Bridge Rd) and Pangas House (15-17 Hunter St), as recommended by Technical Paper 5, is to be deposited to City of Sydney archives.
- That a detailed investigation of the construction and structural condition of Skinners Family Hotel, NSW Sports Club House, Tank Stream and Bennelong Stormwater Channel no 29A be carried out and detailed methodologies for the protection of these heritage items developed by suitably qualified structural heritage consultants and project heritage consultants prior to commencement of any demolition and excavation works. The protection methodologies for Skinners Family Hotel must also specify mechanical impact prevention and weather protection of the building and specify measures to mitigate any potential vibration impacts.
- The design of site boundary hoardings at Hunter Street Station sites to consider street aesthetics, incorporating public arts and graphic heritage interpretations. The hoardings adjacent to Skinners Family Hotel provide an opportunity to reconstruct an imagery reflecting the streetscapes of George Street and Hunter Street as shown in Joseph Fowler's book 'Sydney 1848'. The City notes that the Skinners Family Hotel is a rare survival building of the 1848 streetscapes.

### **Recommendations - Non-Aboriginal and Aboriginal Heritage (Chapters 8 and 9)**

That the proponent:

- Prepares a detailed salvage methodology in relation to the salvage of significant fabric of Gilbey's Distillery
- Prepares an Archaeological Research Design to identify the excavation methodology for predicted locally significant non-Aboriginal archaeological resources at the Pyrmont Station construction sites
- Prepares dilapidation reports and includes a photographic survey of affected properties, prepared by an appropriately qualified structural engineer and heritage consultant
- Makes the mitigation measures in Table 68 (pp 260-262) of the Technical Paper 3 (Non-Aboriginal heritage) a condition of approval of the SSI
- Deposits a copy of archival recordings of former Skinners Family Hotel, NSW Club House Building, Former Bank Defin House, Richard Johnson Square, Gilbey's Distillery and Pangas House to the City's archives
- Carries out a detailed investigation of the construction and structural condition of Skinners Family Hotel, NSW Sports Club House, Tank Stream and Bennelong Stormwater Channel no 29A and provides detailed methodologies for the protection of these heritage items by suitably qualified structural heritage

consultants and project heritage consultants prior to commencement of any demolition and excavation works

- Specifies the protection methodologies for Skinners Family Hotel for mechanical impact prevention and weather protection of the building, and measures to mitigate any potential vibration impacts
- Considers street aesthetics in the design of site boundary hoardings at Hunter Street Station sites, and incorporates public art and graphic heritage interpretations

## Contamination (Chapter 16)

The City notes that the subject site has a long history of industrial uses, particularly at Pymont area with investigations identifying that:

- Fill soil is present across the site surface and is impacted with heavy metals, semi and non-volatile hydrocarbons, pesticides and phenols as well as asbestos.
- Acid sulphate soils are present within underlying natural soils. Class 1 and Class 2 of Acid Sulfate Soils have been identified along Darling Harbour, Pymont Bay and Johnston Bay areas.
- There is potential groundwater contamination within the Pymont Station site.
- Groundwater may be impacted with heavy metals with localised impacts of hydrocarbons and volatile compounds.

The City notes that:

- The proposed excavations may cause groundwater inflows to the excavations, and associated groundwater level drawdown of groundwater, and potential for migration from source sites towards the construction site and management of dewatering during construction.
- The acid sulphate soils (Class 1 and Class 2) could be present around Pymont Station but are unlikely to occur around Hunter Station. There is potential for the oxidation of acid sulphate soils and potentially impact groundwater quality, groundwater dependent ecosystems, groundwater users and surface water-groundwater interactions. Further detailed investigations and an Acid Sulfate Management Plan is required for the Pymont Station location.
- There is potential groundwater contamination in the vicinity of the Pymont Station and Hunter station construction sites. There is potential for underground storage tanks within the project site. Where contamination is identified to present a moderate or higher risk to receptors, a Remediation Action Plan or other Environmental Management Plan will be required. Additional groundwater monitoring would be required during construction and validation sampling after remediation works completed.

### **Recommendations - Contamination (Chapter 16)**

See Appendix 1 for a full list of associated recommendations.

## Public Domain (Chapters 15 and 17)

### ***Flooding & Drainage***

The proponent must:

- implement flood mitigation measures to manage potential flood impacts.
- minimise any changes to the conveyance capacity of existing stormwater systems.
- adopted, implemented, and conditioned the flooding mitigation measures outlined in Chapters 15 and 17 as part of the SSI.

### ***Temporary Dewatering***

Prior to discharging any water collected during excavation and construction into the City's stormwater drainage system, the proponent must seek approval from the City's Public Domain Unit. The proponent must submit a dewatering management plan with an *Application for Temporary Dewatering* which is available to download on the City's website, unless the applicant can put in place an alternative agreement with Sydney Water, or transport water off-site to an approved waste treatment facility.

### ***Preservation and Reinstatement of Public Assets***

To ensure that the existing condition of public assets is maintained, the proponent must ensure that all items within development site streetscapes are retained, protected and preserved, as far as possible during site establishment and associated construction works. Items include, but are not limited to, damage to footpaths; kerb and gutter; signage; survey marks; street furniture; utility pit lids; lighting; street trees; and adjacent carriageways.

Any rectification works undertaken to the public domain by the proponent must be in accordance with Council's technical specifications and requirements.

### ***Survey Marks***

The proponent must ensure that if any survey marks are encountered when undertaking demolition and site establishment works, the survey marks are to be retained and protected.

### **Recommendations - Public Domain (Chapters 15 and 17)**

That the proponent:

- Adopts and implements the flooding mitigation measures outlined in Chapters 15 & 17 and that these are conditioned in the SSI
- Ensures that no water collected on site during excavation and construction works is discharged into Council's stormwater system without prior approval.
- Ensures that all items within the development site streetscapes are retained, protected and preserved as far as possible during site establishment.
- Ensures that any rectification works undertaken are in accordance with Council technical specifications and requirements
- Ensures that survey marks are retained and protected during site establishment and construction works and if any marks are disturbed, they are restored in accordance with Surveyor Generals approval.

The above requirements are to be conditioned in the SSI

## Landscape & Visual Amenity (Chapter 11) and Biodiversity (Chapter 18)

The City notes that a preliminary Arboricultural Impact Assessment (AIA) prepared by a suitably qualified AQF level 5 Arborist has not been provided. The City recommends that the proponent carry out a preliminary AIA at the pre-design stage to allow opportunities and constraints to be identified to guide the design. It will also allocate a retention value and calculate the protection zone and structural root zone for each tree.

Section 11.9.1 “Concept Conditions of Approval’ in the EIS states that:

- C-BB Condition: *“As many mature trees as practicable must be retained. In addition, within ten years of the date of this approval or no later than the commencement of operation of the CSSI (whichever is earlier) there must be a net increase in the number of mature trees provided at a ratio of 2:1.”*
- C-B9 Condition: *“The CSSI must result in an increase in tree canopy coverage.”*

Without an arborist report and design details the proponent has not demonstrated that Condition C-BB will be achieved.

The City notes that section 18.7.2 of the EIS outlines that some tree trimming may be required and that a minimum of 12 existing trees will be removed. The City’s records show there are 27 street trees adjacent to the sites made up of 19 street trees surrounding 37-69 Union Street and eight street trees outside 26-32 Pymont Bridge Road. Most of these trees are large mature *Platanus x acerifolia* (London Plane) that are over 20 metres tall and form part of an avenue of planting. Street trees are very important Council owned and managed assets that contribute significantly to our urban environment and mitigate urban heat island effects. While section 3 of the EIS references targets and objectives in various State legalisation and planning guidelines pertaining to trees, there are no details demonstrating that any real effort has been made to retain existing trees. The City recommends that the proponent sets out how it will achieve the State targets and objectives described below.

- The Greater Sydney Region Plan 2018 - A target has been set to ‘*increase tree canopy cover to 40 per cent, up from the current 23 per cent*’. The scenic value of landscape is also acknowledged in the plan in Objective 28, including waterways, urban bushland, urban tree canopy and green ground cover, parks and open spaces, which create a ‘sense of identity’ for Greater Sydney.
- Our Greater Sydney 2056 Eastern City District Plan 2018 - Planning Priority E17 ‘*Increasing urban tree canopy cover and delivering Green Grid connections*’ aims to increase urban tree canopy cover (Objective 30) and create a ‘*green grid which links parks, open spaces, bushland and walking and cycling paths*’ (Objective 31) (Greater Sydney Commission, 2018, p.107).
- Greener Places - Intended to guide the design, planning and delivery of green infrastructure across NSW, including strategically planned, designed, and managed parks, bushland, gardens and tree lined streets to support ‘*good quality of life in an urban environment*’ (Office of the State Government Architect NSW, 2020b p.11). Green Infrastructure is considered to be an essential asset, and ‘*should be as integral to NSW as its roads, rail lines and stormwater pipes*’ (Office of the State Government Architect NSW, 2020b p.14).
- Draft Greener Places Design Guide - The urban tree canopy guide considers the network of trees in cities to play a ‘critical function’, and provides an array of benefits, stating: ‘*trees contribute to attractive urban places, providing seasonal variation and creating memorable landmarks*’ (Office of the State Government Architect NSW, 2020a p. 30). The target for the Greater Sydney Region is to

achieve 40 per cent urban tree canopy cover by 2056, including greater than 15 per cent urban tree canopy cover in CBD areas. The strategies to achieve this include the protection, maintenance and enhancement of existing urban tree canopy, and the creation of an 'interconnected urban tree canopy across NSW' (Office of the State Government Architect NSW, 2020a p. 39).

The City recommends that:

- no existing street trees be removed, in particular, trees with a Landscape Rating or Retention Value Rating of Medium or above
- appropriate measures including design modifications are adopted to reduce development impacts to existing street trees
- the landscape design is informed by a Preliminary Arboricultural Impact Assessment prepared by a suitably qualified AQF level 5 Arborist, and assessed in an Arboricultural Impact Assessment, with appropriate design amendments made to retain existing street trees
- the proponent complies with the City's Street Tree Master Plan: [http://www.cityofsydney.nsw.gov.au/data/assets/pdf\\_file/0010/130240/STMP2011\\_150501-PartD.PDF](http://www.cityofsydney.nsw.gov.au/data/assets/pdf_file/0010/130240/STMP2011_150501-PartD.PDF)
- in accordance with AS4970-2009 Protection of Trees on Development Sites, a Project Arborist be engaged to assist with tree management advice during the various stages of the design and construction process. The Project Arborist should be qualified in arboriculture to Australian Qualifications Framework (AQF) level 5 or above and have at least five years demonstrated experience in managing trees within complex development sites.
- advice be sought from the Project Arborist regarding the likely impacts to the affected trees and how best to manage and minimise these impacts when working within structural root zones or tree protection zones. Prior to construction works commencing, the Project Arborist must outline tree protection measures relevant to the specific works and site conditions. The measures must be documented on relevant plans and form part of the site induction for construction works. Ongoing site supervision and advice must be provided by the project arborist to ensure that any impacts to tree health and structure are minimised.
- should any trees be removed, the City will be provided with adequate replacement tree planting or monetary compensation to the value of the removed trees. This will need to be negotiated with the City during the Detailed Design Stage.

#### **Recommendations - Landscape & Visual Amenity (Chapter 11) and Biodiversity (Chapter 18)**

That the proponent:

- Carries out a preliminary AIA at the pre-design stage to allow opportunities and constraints to be identified to guide the design
- Does not remove any existing street trees, in particular trees with a Landscape Rating or Retention Value Rating of Medium or above
- Adopts appropriate measures including design modifications to reduce development impacts to existing street trees
- Ensures that the landscape design is informed by a Preliminary AIA prepared by a suitably qualified AQF level 5 Arborist, and assessed in an AIA, with appropriate design amendments made to retain existing street trees



- Complies with the City's Street Tree Master Plan
- Engages a Project Arborist in accordance with AS4970-2009 Protection of Trees on Development Sites, to assist with tree management advice during the various stages of the design and construction process
- Seeks advice from the Project Arborist regarding the likely impacts to the affected trees and how best to manage and minimise these impacts when working within structural root zones or tree protection zones. Prior to construction works commencing, the Project Arborist must outline tree protection measures relevant to the specific works and site conditions. The measures must be documented on relevant plans and form part of the site induction for construction works. Ongoing site supervision and advice must be provided by the project arborist to ensure that any impacts to tree health and structure are minimised
- Provides the City with adequate replacement tree planting or monetary compensation to the value of the removed trees, should any trees be removed

## Waste management (Chapter 20)

The proponent must demonstrate that there has been adequate consideration of potential impacts on waste servicing and public place cleansing in the vicinity of the construction sites. This could include impacts on access for a City contractor to service residential buildings in the vicinity of the construction sites, access for City public place cleansing operations and the servicing of commercial properties by commercial waste service providers.

Table 6-1 in Part 6 of *Technical Paper 1 Transport and Traffic* outlines impacts and mitigation measures but does not explicitly reference waste servicing and public place cleansing. Early consultation with the City's Waste & Cleansing team could help mitigate this potential impact.

Waste servicing of the site should be conducted in accordance with the Waste Commercial Collection Time Zones in the City's Waste Policy - Local Approvals Policy for managing waste in public places.

The City is supportive of the proposed 95% resource recovery as outlined in the EIS. A Waste and Recycling Management Plan detailing the management of construction and demolition waste from the proposal, including tunnelling and building demolition, should meet the requirements as outlined in Section F of the City's Guidelines for Waste Management in New Developments. This includes, but is not limited to, a site plan for each construction site showing material storage areas away from public access for re-usable materials and recyclables during demolition and construction and demonstrating safe vehicle access and loading facilities.

An operational waste management plan will be required for completed developments.

### **Recommendations - Waste management (Chapter 20)**

That the proponent:

- Demonstrates that there has been adequate consideration of potential impacts on waste servicing and public place cleansing in the vicinity of the construction sites
- Ensures that waste servicing of the site is conducted in accordance with the Waste Commercial Collection Time Zones in the City's Waste Policy - Local Approvals Policy for managing waste in public places

- Ensures that the Waste and Recycling Management Plan meets the requirements of the City's Guidelines for Waste Management in New Developments
- Prepares an operational waste management plan for completed developments

## Sustainability, climate change and greenhouse gases (chapter 22)

The City:

- supports the use of the Infrastructure Sustainability Council of Australia (ISCA) Infrastructure rating tool and the target rating of 75 or greater, and the application of the GreenStar rating mechanism to those parts of the development to which that tool is suited (all infrastructure, stations, precincts and operations).
- notes in Chapter 22, table 22.3 that the Scope 3 emissions associated with manufacture of construction materials represent over one quarter of all estimated carbon emissions, with the manufacture of concrete being the major contributor to Scope 3 emissions. The inclusion of Scope 3 emissions in the estimate is an appropriate improvement in greenhouse gas emissions calculation methodology.
- recommends that the proponent establish a clear contractual commitment prior to construction to ensure that concrete used for the bulk of the tunnel construction works will be demonstrably lower in embodied carbon than standard concrete, given the very significant progress made in the commercial availability of concrete with significantly lower embodied carbon.
- recommends that the proponent make use of the existing robust benchmarking methods that are available for assessing the embodied carbon of concrete products, and the environmental performance declarations (EPDs) that exist for a range of commercial product lines.
- believes this major public infrastructure construction project should align with NSW government policy positions relating to the circular economy and Net Zero by 2050, and that the project should be used as a mechanism to influence market behaviour.
- notes that table 22-3 (page 22-5) appears to contain an error regarding carbon emissions from shotcrete (the figure in column headed Scope 3 differs from the figure in the final (totals) column).

### **Recommendations - Sustainability, climate change and greenhouse gases (chapter 22)**

That the proponent:

- Creates a clear contractual commitment prior to construction to ensure that concrete used for the bulk of the tunnel construction works will be demonstrably lower in embodied carbon than standard concrete
- Makes use of the existing robust benchmarking methods that are available for assessing the embodied carbon of concrete products, and the EPDs that exist for a range of commercial product lines
- Ensures that this major public infrastructure construction project aligns with NSW government policy positions relating to the circular economy and Net Zero by 2050, and that the project is used as a mechanism to influence market behaviour

Should you wish to speak with a Council officer about the above, please contact Elise Webster, Manager Transport Major Projects on 9265 9333 or at [ewebster@cityofsydney.nsw.gov.au](mailto:ewebster@cityofsydney.nsw.gov.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'G Jahn', with a large, stylized initial 'G'.

**Graham Jahn** AM LFRAIA Hon FPIA  
**Director**  
City Planning | Development | Transport

## Appendix 1 - Recommendations

### **Schedule 1A**

#### **(1) DEMOLITION, EXCAVATION AND CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN**

A site-specific noise management plan must be submitted to the Council for comment and approval prior to issue of any Construction Certificate.

The Plan must be prepared by a suitably qualified person who possesses the qualifications to render them eligible for membership of the Australian Acoustic Society, Institution of Engineers Australia or the Australian Association of Acoustic Consultants.

The plan must include but not be limited to the following:

- (a) identification of noise sensitive receivers near to the site.
- (b) A prediction as to the level of noise impact likely to affect the nearest noise sensitive receivers from the use and proposed number of high noise intrusive appliances intended to be operated onsite. A statement should also be submitted outlining whether or not predicted noise levels will comply with the noise criteria stated within the *City of Sydney Construction Hours /Noise Code of Practice 1992* for the typical construction hours of 07.00am to 7.00pm. Where resultant site noise levels are likely to be in exceedance of this noise criteria then a suitable proposal must be given as to the duration and frequency of respite periods that will be afforded to the occupiers of neighbouring property.
- (c) A representative background noise measurement ( $L_{A90, 15 \text{ minute}}$ ) should be submitted, assessed in the vicinity of any potentially affected receiver locations and measured in accordance with AS 1055:1.2.1997.
- (d) Confirmation of the level of community consultation that has/is and will be undertaken with Building Managers/ occupiers of the main adjoining noise sensitive properties likely to be most affected by site works and the operation of plant/machinery particularly during the demolition and excavation phases.
- (e) Confirmation of noise monitoring methodology that is to be undertaken during the main stages of work at neighbouring noise sensitive properties in order to keep complaints to a minimum and to ensure that noise from site works complies with the noise criteria contained within City's Construction Noise Code.
- (f) What course of action will be undertaken following receipt of a complaint concerning offensive noise.
- (g) Details of any noise mitigation measures that have been outlined by an acoustic consultant or otherwise that will be deployed on site to reduce noise impacts on the occupiers of neighbouring noise sensitive property to a minimum.
- (h) What plant and equipment is to be used on site, the level of sound mitigation measures to be undertaken in each case and the criteria adopted in their selection taking into account the likely noise impacts on the occupiers of neighbouring property and other less intrusive technologies available.

#### **(2) COMPLIANCE WITH DEMOLITION, EXCAVATION & CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN**

- (a) All works conducted on site which form part of this development must be carried out in accordance with the submitted Demolition, Excavation and Construction Management Plan.

- (b) Where all such control measures have been implemented and the resultant noise and/ or vibration levels at any sensitive receiver still exceed the council's applicable criteria stated in the Construction Hours/Noise Code 1992 and are giving rise to sustained complaints then the contractor must provide regular, appropriate and sustained periods of respite in consultation with Council's Health and Building unit. Approval to vary the authorised noise and vibration levels must be received in writing by the proponent from Council prior to activities being undertaken that exceed sanctioned emission levels. (Use where respite periods not specified under the approved DEC NMP)

Such periods must be set and agreed to by Council's Health and Building Unit.

### **(3) VIBRATION**

Operation of the use is not to result in the transmission of any perceptible vibration to an occupiable area within a separate premise.

### **(4) NOISE – COMMERCIAL PLANT / INDUSTRIAL DEVELOPMENT**

- (a) Noise from commercial plant and industrial development must not exceed a project amenity/intrusiveness noise level or maximum noise level in accordance with relevant requirements of the NSW EPA [Noise Policy for Industry 2017 \(NPfl\)](#) unless agreed to by the City's Area Planning Manager. Further:
- (i) Background noise monitoring must be carried out in accordance with the long-term methodology in [Fact Sheet B](#) of the NPfl unless otherwise agreed by the City's Area Planning Manager.
  - (ii) Commercial plant is limited to heating, ventilation, air conditioning, refrigeration and energy generation equipment.
- (b) An  $L_{Aeq,15\text{ minute}}$  (noise level) emitted from the development must not exceed the  $L_{A90,15\text{ minute}}$  (background noise level) by more than 3dB when assessed inside any habitable room of any affected residence or noise sensitive commercial premises at any time. Further:
- (i) The noise level and the background noise level must both be measured with all external doors and windows of the affected residence closed.
  - (ii) Background noise measurements must not include noise from the development but may include noise from necessary ventilation at the affected premise.
- (c) Corrections in [Fact Sheet C](#) of the NPfl are applicable to relevant noise from the development measured in accordance with this condition, however duration corrections are excluded from commercial noise.

## **Schedule 1B**

### **(5) ACID SULFATE SOILS**

- (a) If any new information comes to light during remediation, excavation, demolition or construction works which has the potential to alter previous conclusions about Acid Sulfate Soil identification and remediation, then this must be immediately notified to the Council and the Principal Certifying Authority.

- (b) All works are to be in accordance with the NSW Acid Sulfate Soils Management Advisory Committee, Acid Sulfate Soils Assessment Guidelines 1998 for the works that are classified as being in an Acid Sulfate Soils Zone Class 1 and Class 2

**(6) ACID SULFATE SOILS – DETAILED SITE ASSESSMENT**

A detailed acid sulfate soil assessment must be carried out by a suitably qualified environmental consultant in accordance with the *Acid Sulfate Soils Assessment Guidelines (Acid Sulfate Soils Management Advisory Committee August 1998)*. The detailed assessment must be submitted to the City's Area Planning Manager for approval and approved in writing prior to the issue of a Construction Certificate.

Where the detailed site assessment confirms that the site is subject to Acid sulfate soils which may affect the integrity development then an Acid Sulfate Soils Management Plan must also be prepared and submitted to the City for approval and approved in writing prior to the issuance of a Construction Certificate

**(7) ACID SULPHATE SOIL MANAGEMENT PLAN**

An Acid Sulphate Soil Management Plan must be prepared by a suitably qualified person in accordance with the *Acid Sulphate Soil Assessment Guidelines (Acid Sulfate Soils Management Advisory Committee August 1998)*. The Management Plan must be submitted to and approved in writing by the City's Area Planning Manager prior to the issue of a Construction Certificate

**(8) DETAILED ENVIRONMENTAL SITE INVESTIGATION**

A Detailed Environmental Site Investigation (DESI) is to be carried out by a suitably qualified and competent environmental consultant and submitted to the City Area Planning Manager for further review in accordance with the NSW Government Office of Environment and Heritage, Guidelines for Consultants Reporting on Contaminated Sites, Contaminated land Management Act 1997 and SEPP 55 Remediation of Land" confirming that the site is suitable (or will be suitable, after remediation) for the proposed use.

Where the DESI states that the site requires remediation, a Remediation Action Plan (RAP) is to be prepared by a suitably qualified and competent environmental consultant in accordance with the NSW Government Office of Environment and Heritage, Guidelines for Consultants Reporting on Contaminated Sites and the Contaminated land Management Act 1997 and submitted to the City Area Planning Manager for approval.

Note: Where the DESI concludes that the site is suitable for the proposed use it is to be peer reviewed by a NSW EPA Accredited Site Auditor and a Section A Site Audit Statement submitted to the City Area Planning Manager certifying that the site is suitable for the proposed use

The DESI and RAP must be peer reviewed by a NSW EPA Accredited Site Auditor and include a section B Site Audit Statement or a letter of Interim advice from the Site Auditor certifying that the RAP is practical and the site will be suitable after remediation for the proposed use.

**(9) SITE AUDIT STATEMENT**

Prior to the commencement of works associated with the built form of the development (excluding building work directly related to remediation) a section A Site Audit Statement (SAS) is to be obtained from a NSW EPA Accredited Site Auditor is to be submitted to the Council's Area Planning Manager. The SAS must confirm that the site has been remediated in accordance with the approved Remediation Action Plan and clearly state that site is suitable for the proposed use. Conditions on the Site Audit Statement shall form part of the consent.

- (a) Where the SAS is subject to conditions that require ongoing review by the Auditor or Council these should be reviewed and approved by Council before the SAS is issued. In circumstances where the SAS conditions (if applicable) are not consistent with the consent, a S96 application pursuant to the Environmental Planning & Assessment Act 1979 shall be submitted to ensure that they form part of the consent conditions.
- (b) An Occupation Certificate must not be issued by the PCA unless a Site Audit Statement has been submitted to the Council in accordance with this condition.

**(10) SITE AUDIT STATEMENT – ENVIRONMENTAL MANAGEMENT PLAN**

Where the ongoing land use suitability and release of the Final (Section A) Site Audit Statement (SAS) is dependent upon the implementation of an Environmental Management Plan (EMP) in relation to any residual contamination remaining onsite this must be submitted to and approved by the Site Auditor and the City's Area Planning Manager prior to the issue of the SAS.

A covenant shall be registered on the title of the land binding the owners and future owners to be responsible for ongoing maintenance and any future rehabilitation works required in terms of the encapsulated/remaining contaminated materials, including the discharge or prevention of discharge there from of any contaminants or for any works subsequently required by the NSW Environment Protection Authority

A copy of the revised land title highlighting the covenant must be submitted to the City's Area Planning Manager and the Principal Certifying Authority prior to the issue of an Occupation Certificate.

**(11) COMPLIANCE WITH APPROVED ENVIRONMENTAL MANAGEMENT PLAN**

Any future intrusive ground works carried out that have the potential to conflict with any residual contamination remaining onsite must only be carried out in accordance with the Environmental Management Plan as referenced by the Site Auditor on the final Site Audit Statement and approved by the Council.

**(12) REGISTRATION OF COVENANT**

A covenant shall be registered on the title of the land and a copy of the title submitted to the Council's Area Planning Manager and the Principal Certifying Authority prior to the issue of an Occupation Certificate, giving notice of the former land use and contamination of the site and the existence of any remaining encapsulated contaminated material which are subject to ongoing environmental management.

A covenant shall be registered on the title of the land binding the owners and future owners to be responsible for ongoing maintenance and any future rehabilitation works required in terms of the encapsulated/remaining contaminated materials, including the discharge or prevention of discharge there from of any contaminants and for any works subsequently required by the NSW Environment Protection Authority

### **(13) DECOMMISSIONING OF UNDERGROUND PETROLEUM STORAGE TANKS**

The removal of underground petroleum storage tanks must be undertaken in accordance with Safework NSW requirements which includes writing to the Chief Inspector of Dangerous Goods and complying with any conditions imposed and all relevant NSW Environmental Protection Authority/Office of the Environment and Heritage Guidelines and Australian Standards including following;

NSW EPA Technical Note: *Decommissioning, Abandonment and Removal of UPSS* (January 2010),

NSW EPA Technical Note: *Investigation of Service Station Sites* (April 2014),

*AS 1940 –2004: Storage and handling of flammable and combustible liquids,*

*AS 4976 – 2008: The removal and disposal of underground petroleum storage tanks.*

A site contamination assessment must be conducted in accordance with the *Guidelines for Consultants Reporting on Contaminated Sites* (NSW Office of the Environment and Heritage 2011) and the *Sampling Design Guidelines* (NSW Environmental Protection Authority September 1995) to determine whether petroleum has contaminated soil and groundwater in the vicinity of the storage system and whether remediation is required to ensure the land remains suitable for the continued approved land use.

Subsequent remediation of the site must be undertaken in accordance with the *Managing Land Contamination – Planning Guidelines, State Environmental Planning Policy 55 – Remediation of land* (Department of Urban Affairs and Planning 1998) including notification to Council's Area Planning Manager at the start and completion of land remediation.

The removal or in-situ decommissioning of the underground petroleum storage system and any subsequent contamination assessment, preparation of a remediation strategy and final decommissioning reporting must be carried out by a duly qualified person, who has competencies and experience in relation to this area of work that are recognised as appropriate by the relevant industry and the NSW Environmental Protection Authority.

### **(14) DISCHARGE OF CONTAMINATED GROUNDWATER**

Contaminated groundwater must not be discharged into the City's stormwater drainage system.

Options for the disposal of groundwater include disposal to sewer with prior approval from Sydney Water or off-site disposal by a liquid waste transporter for treatment/disposal to an appropriate waste treatment/processing facility.



**(15) ENVIRONMENTAL MANAGEMENT PLAN**

Prior to the issue of a Construction Certificate an Environmental Management Plan (EMP) must be prepared for the site and submitted to Council's Area Planning Coordinator | Area Planning Manager for written approval. The EMP must consider all potential environmental impacts from the approved works including but not limited to sedimentation control, contamination containment, stockpiles, noise and vibration, odours and dust emissions.

All works must be undertaken onsite in accordance with the approved Construction Environmental Management Plan.

**(16) IMPORTED FILL MATERIALS**

All fill imported onto the site must be validated to ensure the imported fill is suitable for the proposed land use from a contamination perspective. Fill imported on to the site shall also be compatible with the existing soil characteristic for site drainage purposes.

The City may require details of appropriate validation of imported fill material to be submitted with any application for future development of the site. Hence all fill imported onto the site should be validated by either one or both of the following methods during remediation works:

- (a) Imported fill must be accompanied by documentation from the supplier which certifies that the material is not contaminated based upon analyses of the material for the known past history of the site where the material is obtained; and/or
- (b) Sampling and analysis of the fill material shall be conducted in accordance with NSW EPA (1995) Sampling Design Guidelines.

**(17) NOTIFICATION – NEW CONTAMINATION EVIDENCE**

Council's Area Planning Manager and the Principal Certifier must be notified of any new information which comes to light during remediation, demolition or construction works which has the potential to alter previous conclusions about site contamination.

**(18) CLASSIFICATION OF WASTE**

Prior to the exportation of waste (including fill or soil) from the site, the waste materials must be classified in accordance with the provisions of the Protection of the *Environment Operations Act 1997* and the *NSW DECC Waste Classification Guidelines, Part1: Classifying Waste (July 2009)*. The classification of the material is essential to determine where the waste may be legally taken. The *Protection of the Environment Operations Act 1997* provides for the commission of an offence for both the waste owner and the transporters if the waste is taken to a place that cannot lawfully be used as a waste facility for the particular class of waste. For the transport and disposal of industrial, hazardous or Group A liquid waste advice should be sought from the EPA.

**(19) STOCKPILES**

- (a) No stockpiles of soil or other materials must be placed on footpaths or nature strips unless prior approval has been obtained from the City's Construction Regulation Team.

- (b) All stockpiles of soil or other materials must be placed away from drainage lines, gutters or stormwater pits or inlets.
- (c) All stockpiles of soil or other materials likely to generate dust or odours must be covered.
- (d) All stockpiles of contaminated soil must be stored in a secure area and be covered if remaining more than 24 hours

**(20) UNDERGROUND PETROLEUM STORAGE SYSTEM – DECOMMISSIONING REPORT**

The underground petroleum storage system must be investigated for contamination and a site investigation report obtained from a suitably qualified Environmental Consultant in accordance with NSW Environmental Protection Authority guidelines, must be submitted to Council's Area Planning Manager within 60 days of completion of either validation that no site remediation is necessary or completion of any necessary remediation works. The report must provide confirmation that the site is suitable for continued approved land use or prior approved remediation criteria.

The report must be undertaken in accordance with clause 13 and 15 of the *Protection of the Environment (Underground Petroleum Storage Systems) Regulation 2014* and the NSW Department of the Environment, Climate Change and Water *Underground Petroleum Storage System Technical Note: Site Validation Reporting – January 2010* and *Guidelines for Consultants Reporting on Contaminated Sites (NSW Office of the Environment and Heritage 2011)*.

The decommissioning report must contain:

- (a) A description of the scale and nature of any contamination originally present,
- (b) A description of the remedial methods used, including objectives, where applicable,
- (c) A statement about the site's ongoing or future use,
- (d) A description of the extent of any remaining contamination and how this was assessed,
- (e) A site plan delineating the area being validated and any contamination remaining after site works,
- (f) A clear conclusion on the suitability of the site for its ongoing or future use.

**(21) ASBESTOS REMOVAL WORKS**

- (a) All works removing asbestos containing materials must be carried out by a suitably licensed asbestos removalist duly licensed with Safework NSW, holding either a Friable (Class A) or a Non-Friable (Class B) Asbestos Removal Licence which ever applies.

A copy of the relevant licence must be made available to any authorised Council officer on request within 24 hours.

- (b) Five days prior to the commencement of licensed asbestos removal, Safework NSW must be formally notified of the works. All adjoining properties and those

opposite the development must be notified in writing of the dates and times when asbestos removal is to be conducted. The notification must identify the licensed asbestos removal contractor and include a contact person for the site together with telephone number and email address.

- (c) All work must be carried out in accordance with the *Work Health and Safety Regulation 2017* and the NSW Government and SafeWork NSW document entitled *How to manage and control asbestos in the work place: Code of Practice (Safework NSW) December 2011* and the *City of Sydney Managing Asbestos Policy dated 21 October 2013 and associated guidelines*.
- (d) The asbestos removalist must use signs and barricades to clearly indicate the area where the asbestos removal work is being performed. Signs must be placed in positions so that people are aware of where the asbestos removal work area is and should remain in place until removal is completed and clearance to reoccupy has been granted. Responsibilities for the security and safety of the asbestos removal site and removal must be specified in the asbestos removal control plan (where required). This includes inaccessible areas that are likely to contain asbestos.
- (e) Warning signs must be placed so they inform all people nearby that asbestos removal work is taking place in the area. Signs must be placed at all of the main entry points to the asbestos removal work area where asbestos is present. These signs must be weatherproof, constructed of light-weight material and adequately secured so they remain in prominent locations. The signs must be in accordance with AS 1319 -1994 *Safety Signs for the Occupational Environment* for size, illumination, location and maintenance.
- (f) Asbestos waste must only be transported and disposed of at an EPA licensed waste facility.
- (g) No asbestos products are to be reused on the site (i.e. packing pieces, spacers, formwork or fill etc).
- (h) No asbestos laden skips or bins are to be left in any public place without the written approval of Council.
- (i) A site notice board must be located at the main entrance to the site in a prominent position and must have minimum dimensions of 841mm x 594mm (A1) with any text on the notice to be a minimum of 30 point type size.

The site notice board must include the following:

- (i) contact person for the site;
- (ii) telephone and facsimile numbers and email address; and
- (iii) site activities and time frames.

## **Schedule 1C**

### **(22) HOURS OF WORK AND NOISE – OUTSIDE CBD**

The hours of construction and work on the development must be as follows:

- (a) All work, including building/demolition and excavation work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (eg. loading and unloading of goods, transferring of tools etc) in connection with the proposed development must only be carried out between the hours of 7.30am and 5.30pm on Mondays to Fridays, inclusive, and 7.30am and 3.30pm on Saturdays, with safety inspections being permitted at 7.00am on work days, and no work must be carried out on Sundays or public holidays.
- (b) All work, including demolition, excavation and building work must comply with the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436 - 2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites.
- (c) Notwithstanding the above, the use of a crane for special operations, including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on-site tower cranes which warrant the on-street use of mobile cranes outside of above hours can occur, subject to a separate application being submitted to and approved by Council under Section 68 of the Local Government Act 1993 and Sections 138/139 of the Roads Act 1993.

Note: Works may be undertaken outside of hours, where it is required to avoid the loss of life, damage to property, to prevent environmental harm and/or to avoid structural damage to the building. Written approval must be given by the Construction Regulation Team, prior to works proceeding

The *City of Sydney Code of Practice for Construction Hours/Noise 1992* allows extended working hours subject to the approval of an application in accordance with the Code and under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

### **(23) HAZARDOUS AND INDUSTRIAL WASTE**

Hazardous and/or industrial waste arising from the demolition/operational activities must be removed and/or transported in accordance with the requirements of the NSW Work Cover Authority pursuant to the provisions of the following:

- (a) *Protection of the Environment Operations Act 1997*
- (b) *Protection of the Environment Operations (Waste) Regulation 2005*
- (c) *Waste Avoidance and Resource Recovery Act 2001*
- (d) *Work Health and Safety Act 2011*
- (e) *Work Health and Safety Regulation 2017*.

### **(24) VEHICLE CLEANSING**

Prior to the commencement of work, suitable measures are to be implemented to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site. It is an offence to allow, permit or cause materials to pollute or be placed in a position from which they may pollute waters.

**(25) EROSION AND SEDIMENT CONTROL**

The Soil and Water Management Plan (SWMP) or Erosion and Sediment Control Plan (ESCP) which has been approved by the Principal Certifier must be implemented in full during the construction period.

During the construction period:-

- (a) erosion and sediment controls must be regularly inspected, repaired and maintained in working order sufficient for a 10 year Average Recurrence Interval (ARI) rainfall event;
- (b) erosion and sediment control signage available from Council must be completed and attached to the most prominent structure visible at all times when entering the site for the duration of construction; and
- (c) building operations and stockpiles must not be located on the public footway or any other locations which could lead to the discharge of materials into the stormwater system.

**(26) COVERING OF LOADS**

All vehicles involved in the excavation and/or demolition process and departing the property with demolition materials, spoil or loose matter must have their loads fully covered before entering the public roadway.

**(27) USE OF HIGH NOISE EMISSION APPLIANCES / PLANT**

- (a) The operation of high noise emission appliances, plant and/or machinery such as pile – drivers, rock breakers and hydraulic hammers and those which are not listed in Groups B, C, D, E or F of Schedule 1 of the *City of Sydney Code of Practice for Construction Hours/Noise 1992* and Australian Standard 2436-2010 *Guide to Noise Control on Construction, Maintenance and Demolition Sites* is restricted to the hours of:

08.30 - 12.00am and 1.00pm - 4.30pm Monday to Friday

09.00 - 12.00am and 1.00pm - 3.00pm Saturdays

- (b) All reasonable and feasible steps must be undertaken to ensure that the work, including demolition, excavation and building complies with the *City of Sydney Code of Practice for Construction Hours/Noise 1992* and Australian Standard 2436- 2010 *Guide to Noise Control on Construction, Maintenance and Demolition Sites*.