



Professor Mary O'Kane AC  
Chair  
Independent Planning Commission  
GPO Box 3415  
SYDNEY NSW 2001

Dear Professor O'Kane

**Qantas Flight Training Centre (SSD-10154)**

Please find attached a response to matters raised by the Independent Planning Commission (the Commission) in its correspondence dated 25 November 2019 (see **Attachment A**).

The Department has also provided updated Management and Mitigation Measures from the Applicant for the consideration of the Commission (see **Attachment B**).

Yours sincerely

A handwritten signature in black ink that reads 'C. Ritchie'.

Chris Ritchie  
Director  
Industry Assessments

26/11/19.

**Appendix A**  
**Qantas Flight Training Centre**

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**1. Compliance with the Draft Remediation of Land SEPP**

- The Department notes the Applicant has identified a non-compliance with the Draft Remediation of Land SEPP in relation to operational requirements for Category 2 remediation works, including hours of operation.
- Category 2 remediation works is defined as work not needing consent. Any remediation works undertaken under this application would likely be Category 1 remediation works as they would be undertaken within the framework of the development consent. Therefore, the Category 2 operational requirements would not apply.
- Notwithstanding, the Applicant has confirmed it is not proposing remediation works under the Development Application.
- Should any remediation works be undertaken under this consent, the consent requires works to be carried out within the recommended construction hours under Condition B24.
- Any works undertaken outside of these construction hours must be inaudible at the nearest sensitive receivers.

**Appendix B**  
**Management and Mitigation Measures**

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## Matter

## Mitigation Measures

### Biodiversity impact

1. All replacement trees and landscaping species will consist of a diversity of local provenance plant species from the Eastern Suburbs Banksia Scrub Bioregion where available and practical throughout the site.
2. Construction erosion and sediment control measures are to be installed and maintained in accordance with approved Construction Environmental Management Plan (CEMP) to minimise impact of possible construction sedimentation to local drainage.
3. A pre-clearance survey, completed by a suitably qualified ecologist, must be undertaken for native fauna immediately prior to the demolition of buildings.
4. Any native fauna found in the buildings should be appropriately captured prior to demolition commencing by a licensed wildlife carer and released in appropriate habitat locations.

### Trees

1. Appointment of Site Arborist: A site arborist shall be appointed prior to the commencement of work on site. The Site Arborist shall clearly mark out all trees to be removed and ensure that all trees documented for retention are preserved with the implementation of tree protection zones (TPZ), fencing and signage. The Site Arborist shall have a minimum qualification equivalent to a NSW TAFE Certificate Level 5 or above in Arboriculture.
2. Inspection Points: Give 5 working days' notice to allow inspections to be undertaken at the following stages:
  - a. Installation of Tree Protection Zones including Tree Protection Fencing, Silt Fencing and Signage by the Site Arborist;
  - b. Any modification of the Tree Protection Zone by the Site Arborist;
  - c. Works within the Tree Protection Zone by the Site Arborist; and
  - d. Completion of Construction Works by the Site Arborist and Site Supervisor.
3. Contractors and site workers shall receive a copy of these specifications prior to the commencement of work. Contractors and site workers undertaking any works within a TPZ shall sign the site log to confirm that they have read and understand these specifications prior to their undertaking.
4. Where applicable, all trees to be retained through the construction process shall be protected from mechanical damage and the indirect impacts of the construction process with the installation of Tree Protection Zones.
5. Tree Protection Fencing shall be installed at the perimeter of the TPZ. As a minimum the Tree Protection Fencing shall be 1.8 meters high temporary chain supported by steel stakes. This shall be fastened and supported to prevent sideways movement. The trees woody roots shall not be damaged during the installation of this Tree Protection Fencing. This Tree Protection Fencing shall be erected prior to the commencement of works on site and shall be maintained for the duration of the construction process.
6. Tree Protection Signage shall be attached to the TPZ and displayed in a prominent location. These signs shall be repeated in 10m intervals or closer where the fence changes direction. These shall be a minimum of a 72-foot size and each sign at least 600 x 500mm.
7. The area within the TPZ shall be mulched and maintained with 80mm of leaf litter mulch for the duration of the construction process. This mulch shall be spread by hand to limit the impact on underlying roots and shall be installed prior to the commencement of works on site. The Site Arborist shall inspect and approve the TPZ including mulching, signage, Tree Protection Fencing, Silt fencing and Signage prior to the commencement of works on site.
8. Materials and waste storage, site sheds and temporary services shall not be located within the TPZ unless specified. Storage points shall be covered when not in use and be no greater than 2m in height.
9. The TPZ may need to be modified during the works to allow access between the protected tree and the proposed construction. The TPZ shall



## Matter

### Mitigation Measures

remain as specified and only those works detailed in the proposed construction undertaken.

10. Upon the completion of works within a TPZ the protective fencing shall be reinstated as specified. Where the construction of new structures does not allow for the reinstatement of fencing, the TPZ shall be modified by the Site Arborist.

### 11. Complete comprehensive environmental investigations and CEMP.

#### 1. Wind mitigation features will be provided as per approved design and which include:

- a. Localised screening/planting at the Staff Outdoor Area;
- b. Open car park façade design;
- c. An awning over the southern entrances of the flight training centre; and
- d. Localised planting at the western site boundary, along the Sydney Water Drainage canal, and along the southern aspect of the flight training centre.

#### 2. Construction and potentially dust generating demolition activities would be limited during high wind events if sensitive receivers are considered to be significantly impacted.

#### 1. Inclusion of a lighting strategy, monitoring of the site by security patrol, an intercom system to provide a response in case of security issues and provision of CCTV cameras at key entry and exit points

#### 2. Preparation of a Plan of Management prior to commencement of the use to manage landscaping maintenance, rubbish and graffiti removal and lighting maintenance.

#### 3. The appointed Contractor shall outline how they will secure the Works under the Contract, and outline measures it deems necessary to ensure the security of the site and keep unauthorised persons out of the Works Zone, including erection of suitable Class A Hoardings, installation of security fencing, and consideration of use of traffic controllers and or security guards.

#### 4. The appointed Contractor will reasonably agree with the Superintendent that a security management plan for post-completion of the project or any Separable Portions is implemented.

#### 5. Provide project updates for staff and surrounding public in order to minimise curiosity.

#### 6. Erect site signage clearly delineating entrance points to construction zone and limit access to authorised personnel only.

#### 7. Ensure measures as outlined within the CEMP are implemented to manage safety and security of the site and pedestrians:

- a. Class A hoardings are erected along pedestrian pathways to be retained through site.
- b. Appointment of a single point of contact through construction and publication of these contact details.
- c. Establishment of regular construction coordination and access meeting with adjoining contractors to manage vehicular flows.
- d. Establishment of a complaints handling procedure with a register detailing the issue, actions taken and closure of all issues and actions.
- e. Australian Rail Track Corporation (ARTC) will review and approve construction plans and safe work method statements where there is a risk to rail safety. This monitoring will ensure compliance with the *Rail Safety National Law 2011* and a safe work environment for the subject site and immediate surrounding context.

### Safety and security



## Matter

### Mitigation Measures

#### Accessibility for persons with a disability

8. Accessible routes with compliant gradients, from site boundaries and accessible parking bays will be made available in accordance with the Accessibility Assessment Report.
9. The provision of clear signage will be provided to reduce the risk of users with a disability attempting non-compliant gradients.
10. Preparation of an Access Management Plan prior to occupation to communicate to staff so that they are aware of where safe access routes are located.
11. Sufficient lighting will be provided to ensure users with a sensory disability, in particular those with a visual impairment, can safely navigate the environment.
12. Provision of directional signage to assist users will be provided (particularly visitors who are unfamiliar with the Campus) to locate accessible parking bays.
13. Expectation that physical requirements for Pilots is known by all potential users of the flight training centre.

#### Air Quality

1. A Design and Construction Contractor who is reputable and has proven record will be engaged.
2. The Principal will require the appointed contractor to ensure dust caused by any Works shall be restricted to a minimum and in accordance with Air Quality Reports and the CEMP.
3. The Principal will require the implementation of the following mitigation measures during the construction phase provided in the Air Quality Reports including:
  - a. Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.
  - b. Display the name and contact details of persons accountable for air quality and dust issues on the site boundary. This may be the environmental manager/engineer or the site manager.
  - c. Display the head or regional office contact information.
  - d. Preparation of a Dust Management Plan (DMP)(part of the Project CEMP) which may include measures to control other emissions, approved by the Local Authority.
  - e. The site manager will record all dust and air quality complaints, identify causes(s), take appropriate measure to reduce emissions in a timely manner and record the measures taken.
  - f. Make the complaints log available to the local authority when asked.
  - g. Record any exceptional incidents that cause dust and/or air emissions, either on-or offsite, and the action taken to resolve the situation in the logbook.
  - h. Perform daily on-site and off-site inspections where receptors (including roads) are nearby to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100m of site boundary.
  - i. Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked.
  - j. Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

## Mitigation Measures

- k. Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.
- l. Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
- m. Keep site fencing, barriers and scaffolding clean using wet methods.
- n. Cover, seed or fence stockpiles to prevent wind erosion.
- o. Ensure all on-road vehicles comply with relevant vehicle emission standards, where applicable.
- p. Ensure all vehicles switch off engines when stationary –no idling vehicles.
- q. Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.
- r. Ensure an adequate water supply on the site for effective dust/particulate matter suppression/ mitigation, using non-potable water where possible and appropriate.
- s. Use enclosed chutes and conveyors and covered skips.
- t. Minimise drop heights from loading shovels and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- u. Avoid bonfires and burning of waste materials.
- v. Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).
- w. Ensure effective water suppression is used during demolition operations. Hand held sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground.
- x. Use water-assisted dust sweeper(s) on the access and local roads to remove, as necessary, any material tracked out of the site.
- y. Avoid dry sweeping of large areas.
- z. Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- aa. Record all inspections of haul routes and any subsequent action in a site logbook.
- bb. Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).
- cc. Avoid explosive blasting, using appropriate manual or mechanical alternatives.
- dd. Avoid scabbling (roughening of concrete surfaces) if possible.
- ee. Ensure sand and other aggregates are stored in banded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- ff. Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.
- gg. For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.



## Matter

### Mitigation Measures

4. Operational phase air impacts will be managed by implementing the following mitigation measures:
    - a. Restrict the fuel type to be used in the fire cabins to "natural propane gas"
    - b. Idling vehicles to be switched off while on site.
  1. To mitigate against the high-water table and reduce impact on the existing materials at subgrade level, the Building Contractor us to dewater excavations locally to achieve the correct compaction of materials.
  2. The incorporation of Water Sensitive Design Urban Design principles and practices as part of the proposal includes rain gardens in order to improve the absorption of runoff and reduce flooding. Water tanks are also provided on site.
  3. Pollution control measures will clean stormwater at the required levels to discharge from the site and control measures will require on-going maintenance.
  4. Implementation of three Jellyfish filters and litter baskets to remove particles and pollutants and ensure the proposal meets stormwater targets and runoff is of an appropriate quality.
  5. In the circumstance that in-ground services are not in the position shown on the drawings the following is proposed:
    - a. A survey of existing services is to be undertaken to inform the design.
    - b. All services documentation will be provided to the design team.
    - c. Engage with authorities early, where issues arise, and gain approvals as required.
    - d. Complete comprehensive environmental investigations and CEMP.
  6. In the circumstance that excessive wet weather is experienced on a project the following is proposed:
    - a. Ensure suitable allowance in the program for inclement weather.
    - b. Prepare a strategy for delivering a reduced scope if there are major weather delays.
    - c. Wet weather delay allowance inserted into contract, any claims against the allowance being assessed by APP.
    - d. Ensure the final CEMP has strategies in place to mitigate groundwater.
- Water main**
1. To meet the potable water and fire services water supply demand for the project, a new 150mm galvanised mild steel water main will be installed. As per the Updated Hydraulics – Water Supply Reticulation advice the proposed new 150mm water main will be:
    - a. Connected into the existing 250mm in-ground private water supply at the corner of the Qantas Service Road.
    - b. The inground pipework will be extended from the point of connection and rise above ground adjacent to the nature strip inside the boundary fence on the proponent's land.
    - c. 150mm GMS pipework reticulates above ground wholly within the proponent's land between the boundary fence and the trees.
    - d. Bollard protection will be provided as required to prevent mechanical damage to the above ground pipework.
  2. The above ground pipework will be protected from mechanical damage through:
    - a. An existing continuous metal crash barrier will protect the pipework along the southern end outside the fence line and adjacent to the access road leading into the proposed Qantas flight training centre.





## Matter

## Mitigation Measures

- b. A new continuous metal crash barrier is proposed along the northern end of the above ground pipework adjacent to the access road leading into catering building loading dock and proposed car park.
  - c. Provision of a new continuous concrete culvert over the new pipework.
  - d. Provision of an above ground isolation for ease of access to shut down supply in the event of pipe damage. This arrangement will be implemented in conjunction with the measures listed above.
1. Preparation of a Site Audit Statement to Principle Certifying Authority prior to the issue of OC. The auditor will operate in collaboration with the identified environmental consultant during the construction phase of the development and in accordance with an agreed Contamination Management Strategy prepared in accordance with Condition A11.

## Presence of Contaminated Ground

2. Commencement of piling, utility installation, bulk earthworks and pouring of foundations are approvable upon receipt of Section B Site Audit Statement.
3. The issue of an Occupation Certificate cannot occur until the receipt of a Section A Site Audit Statement.
4. In the circumstance that any unexpected contamination of ground and latent conditions is experienced the following is recommended:
  - a. Undertake in ground testing and additional testing of building fabric such as, roof, walls, windows and floors.
  - b. Engage an EPA Auditor to determine the suitability of not remediating land which will enable a reduction in program.
  - c. Complete comprehensive environmental investigations and CEMP.

## Reflectivity

1. Implementation of the following recommendations as outlined in the Solar Light Reflectivity Report:
  - a. The maximum normal specular reflectance of visible light on the facade and windows on all levels of the 279° western aspects of the car park development is to be 11%.
  - b. Note that if glazed balustrades are used along the 279° western aspects of the car park development, they are to have a maximum normal specular reflectance of visible light of 8%.
  - c. All other glazing (windows and balustrades) should have a maximum normal specular reflectance of visible light of 20%.

## Visual and lighting

1. Engagement of a specialist lighting consultant input in the design and specification of lighting to meet NCC approved levels.
2. Car park building to be constructed in non-visually dominant colours to minimise perceived bulk, with open façade to all sides to reduce the mass of the building.
3. Ornamental green façade with climbing plants that will grow across stainless steel wires to be implemented at the entrance to the flight training centre.
4. To improve the visual appearance of the car park the following landscape elements have been included in the design:
  - a. Retention of existing trees to the west of the car park and augment with additional landscape green terrace outside the building footprint.
  - b. Retention and protection of the existing growth of Casuarina trees to the south of the structure along the Sydney Water Channel.
  - c. At the ground plane a planter incorporating climbers to grow up the mesh of the façade for the height of the ground floor, to ground the building and provide a green datum.
  - d. At the completion of Stage 2 a raised planter and pergola structure on the roof to accommodate both trailing and climbing plants.



## Matter

## Mitigation Measures

This landscaped treatment will perform the dual function of providing shade to the parked cars and visual mitigation for taller surrounding buildings and the public domain where the structure will be visible.

- e. Inclusion of 21 façade planters at approximately 1.5m x 4m cantilevered from the car park structure – at the northern, eastern and southern facades.
  - f. Implementation of green roof on bus stop shelter.
5. Implementation of native planting including layers of grasses and shrubs to create green buffers around the building and an attractive frontage to King Street.

## Noise and Vibration

1. Noise emissions from the project (operational) are to comply with the project intrusiveness and amenity noise criteria at all times (as identified in Table 16 of the EIS and the Interim Construction Noise Guideline (ICNG)(DECC 2009)), for all receivers.
2. Construction noise will be limited to +10dBA above background noise and outside normal hours, low-noise activities are to be no more than +5dBA.
3. Specific restrictions are proposed to manage potential noise impacts on Travelodge, including low noise construction activities to commence from 6:00am Monday to Sunday and impact pile driving will only be undertaken between 9:00am and 12:00pm and 2:00pm and 5:00pm Monday to Sunday.
4. Noisy work will be identified and communicated to relevant stakeholders and neighbours, providing them with sufficient notice.
5. Where possible, noisy equipment is to be located further away from residential/hotel neighbours wherever possible.
6. Where appropriate, bored piles will be used rather than driven piles.
7. Vibration monitors may be provided near buildings (if applicable) as an early warning alarm during adjacent piling & structural works.
8. Less intrusive construction methodologies where required to meet 'vibration criteria for human comfort and structural damage'.
9. Vibration isolation where required to meet 'vibration criteria for human comfort and structural damage'.
10. Acoustic treatment of new mechanical plants shall be undertaken to control noise emissions at or below the intrusiveness criteria (Table 17 of the EIS).
11. Plant can be satisfactorily attenuated to levels complying with the noise emission criteria (Table 17 of the EIS) through appropriate location and, if necessary, standard acoustic treatments such as noise screens, enclosures, in-duct treatments (silencers/lined ducting) or similar.
12. Acoustic rectification treatment shall be designed for existing plant if an acoustic review determines this is necessary.
13. Prepare, update and subsequently implement the Noise Management Plan, to minimise and manage noise impacts associated with the project to minimise disruption including:
  - a. The contractor is to prepare a Construction Noise Management Plan prior to receiving the CC to ensure the noise requirements outlined in the ICNG is met and to manage noise impacts associated with the project to minimise disruption including:
    - i. Strategies to ensure compliance with operational and construction noise levels
    - ii. At-source acoustic attenuation measures.
    - iii. Implement a noise monitoring log to record any complaints, the issue/impact and record how this was managed accordingly.

**Matter**

**Mitigation Measures**

**Construction Traffic Impacts**

14. The following road network improvements are currently being undertaken or completed by RMS as part of the North Airport Precinct upgrade to assist with traffic management:
  - a. Road network improvements including widening O’Riordan Street to three lanes in each direction between Bourke Road and Robey Street.
  - b. Making Robey Street one way eastbound between Qantas Drive and O’Riordan Street – already completed.
  - c. Making O’Riordan Street one way southbound between Robey Street and Joyce Drive (westbound) – already completed.
  - d. Providing a new right turn bay from O’Riordan Street into King Street (westbound).
  - e. Providing dual left turn lanes from O’Riordan Street into Bourke Road.
  
15. Traffic management strategies will be implemented in accordance with the Construction Pedestrian and Traffic Management Plan including:
  - a. Traffic management measures, construction warning/guidance signs and devices will be provided in King Street, Kent Road and on the internal access roads within the Qantas Corporate Campus, in accordance with the Australian Standards and the Roads and Maritime Service’s Manual for Traffic Control at Work Sites.
  - b. Truck movements to be restricted to designated truck routes. At no time will trucks be permitted to park on-street in the vicinity of the site during construction.
  - c. During demolition, excavation and construction, trucks transporting material to and from the site will be accommodated on-site.
  - d. Access arrangements and vehicle movements to and from the site will be managed by qualified traffic controllers.
  - e. Access to the construction compound (located on the northern side of King Street, west of O’Riordan Street) will be provided onto King Street and through the corporate campus site to Qantas Drive and Kent Road. Works will be staged to minimise traffic effects on the operation of the surrounding road network and to maintain appropriate access for the continued Qantas operations on site, including access to the Corporate campus.
  - f. All construction deliveries will be in accordance with Council’s requirements and the NSW Police regulations.
  - g. During construction, King Street South, could be expanded to provide up to 170 additional car parking spaces and alleviate parking impacts.
  - h. Pedestrian containment fencing will be provided adjacent to the construction activity to provide a safe path of travel for pedestrians walking between King Street and the corporate campus.
  - i. The design, set out and erection of the construction hoarding and containment fencing will be the responsibility of the site contractor/buildier.
  - j. Pedestrian warning signs and construction safety signs/devices will be located adjacent to the driveways and the construction compounds, in accordance with SafeWork NSW requirements.
  - k. The arrival and departure of trucks and the movements of pedestrians across the driveways will be managed and controlled by qualified traffic controllers.
  - l. Truck drivers will be inducted, and work personnel will be required to wear high visibility fluorescent safety vests and Personnel Protective Equipment (PPE). Wet weather clothing will also be made of high visibility fluorescent material.
  - m. Construction traffic to be restricted to the main road network through the area. Trucks will be prevented from accessing other roads



## Matter

## Mitigation Measures

- in the vicinity of the site.
- n. Construction activity will be staged and coordinated with the on-going operation of the site to minimise traffic impact on the surrounding network.
- Construction management**
1. Ongoing consultation with ARTC throughout the construction process will occur to ensure there will be no operational impacts to the adjacent rail line. Ongoing meetings will be held on the following matters:
    - a. All proposed earthworks, including piling and excavations, in the vicinity of the rail corridor including safe work method statements and construction methodologies.
    - b. Coordination of overlapping construction programs in relation to the Rail Corridor Duplication and the project.
  2. Ongoing consultation and communication with surrounding properties will occur to ensure neighbouring residents remain informed about construction activities. This includes:
    - a. Appointment of a single point of contact through construction and publication of these contact details.
    - b. Establishment of regular construction coordination and access meeting with adjoining contracts to manage vehicular flows.
    - c. Establishment of a complaints handling procedure with a register detailing the issue, actions taken and closure of all issues and actions.
- Operational Traffic and Parking**
1. Existing pedestrian footpaths will be upgraded to meet the 2m requirement where possible, noting site constraints which restricts the upgrades of all paths.
  2. New footpaths will be constructed surrounding the car park building and flight training centre to further improve site permeability and connectivity.
  3. All parking areas, including parking bays, ramps and circulation aisles, have been designed in accordance with the Australian Standards.
  4. A parking guidance system may be implemented if found necessary, to inform motorists of the number of vacant parking spaces on each level.
  5. Access driveways and internal roads around the flight training centre have been designed to cater for service vehicles ranging from rigid trucks to articulated vehicles, in accordance with the Australian Standards.
  6. All bicycle routes within the project site will be upgraded with improved signage and connectivity, however the ongoing maintenance and quality of the bicycle paths outside of the project is not included in the project scope.
  7. Preparation of a Travel Demand Management Strategy and Workplace Travel Plan
  8. Should worst case scenario arise, and traffic is queuing into King Street, a photo recognition system would be installed in place of using swipe card access to control faster vehicular access to the site.
- Heritage**
1. During the excavation process, should any object with archaeological potential be uncovered, all work is to cease, and a suitably qualified archaeologist engaged.
  2. Prior to demolition, any identified significant moveable objects should be documented and stored in another secure areas, for example Gantas' archives.
  3. Implement an 'unexpected finds protocol' to ensure that if, during excavation, any items of potential archaeological significance are uncovered



## Matter

### Mitigation Measures

they are identified, managed, protected and preserved.

#### Archaeology

1. In the event that sub-surface material in the form of building footings, structural remains or artefact deposits are found in the course of site works, the following steps are recommended:
  - a. All works cease in the vicinity of the find to avoid further disturbance of remains.
  - b. The person who makes the discovery is to notify the head contractor/site manager of the site.
  - c. The head contractor/site manager is to seek advice from an archaeological consultant to assess the find. The assessment may require notification to the Heritage Division in accordance with s146 of the Heritage Act 1977. Depending on the nature of the find, additional assessment and possibly a s140 excavation permit may be required prior to the recommencement of excavation in the affected area.
  - d. No works are to continue until the find has been assessed and managed in accordance with the guidance of the archaeologist and/or the Heritage Division.
  - e. Recommence work following approval by archaeologists and/or Heritage Division.

2. It is considered unlikely that human skeletal remains will be present within the site, however, should such finds be uncovered all works must stop in the vicinity of the find and the NSW Police be contacted immediately for investigation. Works must not recommence until directed by the Police.

#### Hazardous materials

1. Hazardous materials survey will be conducted prior to works commencing on site.
2. During demolition or refurbishment works, if any materials that are not referenced in the report are suspected of containing asbestos are encountered, then works must cease and an asbestos hygienist should be notified to determine whether the material contains asbestos.
3. Synthetic Mineral Fibres Materials that are likely to be disturbed during any proposed demolition or refurbishment works will be handled in accordance with the *Code of Practice for the Safe Use of Synthetic Mineral Fibres*.
4. Any works that are likely to disturb LCP surfaces will be conducted in accordance with the *Guide to Lead paint Management and Part 7.2 of the NSW Work Health & Safety Regulation, 2011*.
5. Appropriately licenced contractors will be engaged to remove any hazardous materials found.
6. Appropriate signage and exclusion zones maintained during applicable works.
7. Complete comprehensive Environmental investigations and CEMP.
8. The Principal Contractor will be required to conduct daily toolbox meetings with all personnel to review management procedures and identify/discuss daily site conditions and potential hazard.
9. Complete comprehensive Environmental investigations and CEMP.

#### Human health and contamination

1. Compliance with Acid Sulfate Soil Management Plan (ASSMP) and CEMP. The ASSMP provides detailed mitigation measures for the earthworks program, stockpile management and contingency plans. This includes:
  - a. Excavation activities will occur in a staged process to allow efficient assessment and management of the excavated materials.
  - b. Excavated materials will be placed on an impermeable surface such as a PVC liner or compacted clay with a 300mm layer of

- crushed limestone.
- c. The stockpiled materials should be either treated/neutralised with lime at a rate designed from in situ sampling data (if available) or the stockpiles should be assessed for ASS/PASS and neutralised accordingly.
  - d. Excavations into ASS/PASS material should be filled as soon as practicable to minimise the amount of time ASS/PASS are exposed to the atmosphere.
  - e. Excavated ASS/PASS should be laid down in layers up to 300mm thick with lime applied as the required rate between layers.
  - f. The ASS/PASS and lime should be mixed with an excavator taking care not to damage the impervious later at the base.
  - g. The stockpiles should be covered and banded to prevent rain fall and stormwater ingress and prevent runoff from the stockpile entering the receiving environment.
  - h. The stockpiles should have a runoff capture drain to allow any runoff to be managed.
  - i. Runoff should be sampled and managed accordingly before release to the environment/stormwater.
  - j. The stockpiled material should be sampled and analysed for SPOCAS to validate the effectiveness of the treatment/neutralisation.
  - k. If sampling of the stockpile following treatment/neutralisation shows the suitability criteria to not be met, then additional treatment/neutralisation is required.
  - l. If site conditions do not allow for on-site treatment/neutralisation, then off-site disposal to a licensed facility is required.
  - m. If excavations are required below the water table and dewatering is required, a dewatering management plan will be prepared
  - n. If stockpile runoff is shown to be unsuitable for release to the environment or the local stormwater network, a water treatment plan for disposal will be required.
  - o. If stockpiled runoff breaches the bund, excavation of the impacted area and treatment/neutralisation will be required.
2. Preparation of a Remedial Action Plan if any works proposed are to be done in the vicinity of the underground storage tanks located in the bus refuel area, however it is noted that this area does not currently sit within the development footprint.
  3. Preparation of an Environmental Management Plan (EMP) to manage any contamination and the impacted groundwater located beneath the site.
1. All erosion and sediment control measures will be designed in accordance with the *Managing Urban Stormwater – Soils & Construction – Soils & Construction Volume 1 2004 (Landcom)*.
  2. Appropriate hoardings to be provided around the site.
  3. Ensure construction vehicles have been appropriately cleaned before exiting the site.
  4. Ensure sufficient wetting-down is completed during demolition and excavation activities.
  5. Ensure stockpiles are sufficiently protected.
  6. Implement best practice erosion and sedimentation controls in accordance with the CEMP.
  7. Sediments will be removed prior to discharge to the existing stormwater system and an adequate overland flow path will be provided to avoid stormwater blockages.

**Sediment, erosion and dust controls**

## Matter

### Mitigation Measures

8. Dust suppression measures including construction vehicle suppression and cleaning system are to be in place as procedures to control erosion and sediment.
  9. Conduct regular visual inspections of silt socks and all other sedimentation controls to ensure integrity of the systems is maintained at all times.
  10. Provide dedicated wash-out facilities for use by relevant subcontractors.
1. A comprehensive survey of the existing site shall be conducted to identify existing materials for reuse or recycling. Salvageable materials include sandstone, bricks, timber, and similar materials suitable for re-use.
  2. Excavated materials shall be reused on the site wherever possible. Any surplus materials needing to be exported from the site will be sorted into separate classifications i.e. soil, rock, concrete, steel, aluminium, timber, etc. and exported to facilities which are appropriately licenced to accept them.
  3. Prior to commencement of demolition and excavation works, a hazardous material and contaminated ground survey will be undertaken. Any hazardous materials identified will be disposed of in accordance with statutory and EPA requirements.
  4. Preparation and implementation of a project specific Waste Management Plan (WMP) to manage all waste streams expected to be generated from the site.
  5. Complete comprehensive Environmental investigations and CEMP
  6. Validation of waste classification will be required before spoil material is removed from the site.
  7. Bins closed between uses and bunding around bins to "trap" litter.
  8. All spoil must be transported to a site that is licenced to receive that category of spoil/waste as appropriate.
1. Implement automatic fire detection to provide occupant warning and notification to fire brigade. The primary activation mechanism of the emergency warning system is an automatic fire detection system, including heat detectors within the open deck car park. Where manual call points are proposed, they will be supplementing rather than replacing the automatic activation.
  2. Implementation of fire aid firefighting equipment (fire hose reels and fire extinguishers).
  3. The fire hydrant booster assembly of the flight training centre will be located along and parallel to King Street in a location that is accessible by appliances and preferred by FRNSW during the design options analysis process.
  4. The fire hydrant booster assembly of the car park will be located at the south-west corner in the south elevation adjacent to the car park entry, also accessible by appliances.
  5. Sufficient means of egress and emergency plan and staff training.
  6. Implementation of fire resisting building elements
  7. The flight training centre will have fire compartmentation.
  8. Natural ventilation of heat and smoke in the carpark to slow down temperature increase and delay onset of untenable conditions.
  9. Planters proposed at the multi-storey car park comply with fire safety regulations.
  10. Pre-incident planning with adjacent fire stations.

### Construction Waste Management

### Fire and incident management



**Matter**

**Mitigation Measures**

**Social Impacts**

11. Site inductions will include site requirements for all employees working during the construction phase. The weekly toolbox talks will reinforce these requirements which include:

- a. No inappropriate language.
- b. No throwing rubbish on streets.
- c. Parking of vehicles legally.
- d. Wearing appropriate clothing.

**Contributions**

1. The payment of Section 7.11 contributions will be made in accordance with the City of Botany Bay S7.11 Development Contributions Plan 2016 (Amendment 1) on the net increase in occupancy which as per Bayside Council's submission equates to 146.40 workers. At the 2019/2020 rate of \$4,648.99 per worker the contribution would be \$680,612.14.



