



Integrated
Management
System

Addendum Review of Environmental Factors for Buchanan Precast Facility

Sydney Metro Integrated Management System (IMS)

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1. Introduction

Sydney Metro (as 'the Proponent' and determining authority) approved the re-establishment and operation of a precast facility (the Proposal) at a pre-existing site located on George Booth Drive, Buchanan, in the Cessnock local government area (LGA) (the Proposal site). This was approved through the Buchanan Precast Facility Review of Environmental Factors (the approved REF).

The Proposal is required to support the construction of the Sydney Metro – Western Sydney Airport (SM-WSA) through the production of precast concrete viaduct and bridge elements. The proposed use of the facility is temporary and is expected to operate for approximately two years. Once the precast works required for the Proposal are completed, the use of the facility will cease.

The approved REF included the following:

- Re-establishment of the precast facility, including removal of five trees and other vegetation
- Extension of the existing precast yard shed and hardstand to accommodate construction of precast concrete segments
- Extension of the existing storage/laydown area
- Installation of site office facilities including amenities
- Re-establishment of the existing on-site carpark facilities and internal roads (where required)
- Reconnection of the ancillary supporting infrastructure, including utilities, lighting and signage
- Production and dispatch of precast concrete segments
- Site decommissioning, including the removal of the site office, plant and equipment.

Since determination of the approved REF ongoing design development and construction planning has resulted in a change to the extension of the existing precast yard shed and hardstand to accommodate construction of precast concrete segments. The change involves the construction, use and decommissioning of a temporary shed and extension of a hardstand area instead of an extension of the existing precast yard (the proposed change). The temporary shed will be used to accommodate two additional viaduct precast moulds. The proposed change would be wholly within the Proposal site as described in the approved REF and shown in Figure 1 below.

Due to the minor nature of the change the following was not required:

- Additional consultation
- Further consideration of *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) matters of national environmental significance

The purpose of this Addendum REF is to describe the proposed change, to assess any potential environmental impacts of the proposed change having regard to the provisions of Section 5.5 of the *Environmental Planning and Assessment Act* (EP&A Act) 1979, and to identify any additional mitigation measures that may be needed to reduce potential impacts of the proposed change. This Addendum REF has been prepared in accordance with section 171 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation).

2. Description of the proposed change

The proposed change involves the removal of the existing precast yard shed extension and hardstand extension from the scope of the approved project and the addition of a temporary shed. The proposed precast yard shed extension that was assessed in the approved REF was required to accommodate two additional viaduct precast moulds, these moulds will now be placed in the temporary shed. The proposed change would also require a small hardstand extension in a different area of the Proposal site.

The proposed change would include the following:

- Removal of the existing precast yard shed extension and hardstand extension from the scope of works
- Construction, use, and decommissioning of a temporary shed approximately 80 metres in length by 28 metres in width and 21 metres high. The temporary shed would be located on an existing hardstand surface 85 metres east of the existing precast yard shed
- A hard stand extension of about 25 metres by 35 metres, to allow safe vehicle movements between the precast moulds. The location of the hardstand extension will occur in an area about 50 metres to the south of the location assessed in the approved REF as shown in Figure 2
- Clearing of two Grey gum (*Eucalyptus punctata*) trees. These two trees were initially in an area that would have been retained in the approved REF.

The proposed change is the result of ongoing design development and construction planning. The proposed change would remove the need to clear five trees assessed in the approved REF (three Grey gum (*Eucalyptus punctata*) and two Swamp paperbark (*Melaleuca linariifolia*). However two grey gums (*Eucalyptus punctata*) in a different area would still require removal. This will result in a net saving of three trees. Additionally the temporary shed will be located approximately 85 metres further from receivers compared to the existing precast yard shed extension. The change in footprint would reduce the amount of vegetation clearing and hardstand installation required to accommodate the two additional viaduct precast moulds.

The works are expected to commence in late October 2022 and take about eight weeks to complete. The works would be completed during standard construction hours, and the workforce and equipment / machinery to be used would remain consistent with that previously assessed in the approved REF.

The proposed change would be wholly within the Proposal site as described in the approved REF refer Figure 1. The key features of the proposed change are shown in Figure 2.



Legend

- Site Boundary
- Existing casting Shed/Building Facility
- Proposed Building/Facility extension
- Current Storage laydown area
- Proposed Storage Laydown Area extension
- Proposed Office Buildings
- Proposed Truck Wash out area
- Proposed Car Park Areas
- Proposed Routes



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Buchanan Precast Facility
Review of environmental factors
Site Layout Plan

Figure 1: Site Layout Plan as described in the approved REF



Figure 2: Location of proposed change, showing location of the new temporary shed, new hardstand area, and location of vegetation removal

3. Environmental Impact Assessment

Table 1 provides an assessment of the potential environmental impacts of the proposed change considering the impacts considered as part of the approved REF.

Table 1: Potential environmental impacts of the proposed change

Aspect	Nature and extent of impacts
Transport	The impacts to traffic and transport from the Project were described in Section 7.1.4 of the approved REF and are still relevant to the proposed change. No change to the approved project
Noise and vibration	The workforce and equipment / machinery to be used will remain consistent with that previously assessed in the approved REF. The nearest residential dwelling is located about 440 metres west of the Proposal site. The temporary shed would be further away from the sensitive receiver (about 680 metres to the west). The noise and vibration impacts would not be greater than those predicted in the approved REF as the proposed works are located further from sensitive receivers.
Biodiversity	The proposed change will result in the removal of two Grey gum (<i>Eucalyptus punctata</i>) trees. These two trees were initially in an area that would have been retained. The proposed change would remove the need to clear five trees assessed in the approved REF (three Grey gum (<i>Eucalyptus punctata</i>) and two Swamp paperbark (<i>Melaleuca linariifolia</i>) which will result in a net saving of three trees. This change is considered to have a minor positive impact compared to the approved project.
Landscape and visual character	<p>The approved REF includes a shed extension approximately 60 metres in length by 30 metres in width and 18 metres high. The proposed change includes a temporary shed approximately 80 metres in length by 28 metres in width and 21 metres high.</p> <p>The new shed will be slightly higher than the original shed extension proposed but would be of similar massing and is consistent with the existing environment which already includes a large shed approximately 135 metres in length by 30 metres in width and 18 metres in height. The sensitivity of the site is low due to its previously disturbed nature and existing facilities.</p> <p>The closest residential dwelling is located about 440 metres west of the Proposal site and the temporary shed would be an additional 85 metres east from the approved shed extension. The proposed change is located further away from sensitive receivers with no greater impact than that previously assessed in the approved REF. Additionally, the temporary shed would be largely screened from view by the existing precast yard shed. and visual impacts would be limited to the duration of the Project.</p> <p>The mitigation proposed in the approved REF are considered adequate to address visual impacts.</p>
Historical heritage	The proposed change will be undertaken within the footprint of the assessed approved REF with no greater impact to historical heritage than that predicted in the approved REF.
Aboriginal Heritage	The proposed change will be undertaken within the footprint of the assessed approved REF with no greater impact to Aboriginal heritage than that predicted in the approved REF.
Property, land use and socio-economic	The impacts to property, land use and socio-economic from the Project were described in Section 7.7.4 of the approved REF and are still relevant to the proposed change. No change to the approved project.
Soils and surface water quality	<p><u>Soils</u></p> <p>The approved REF required removal of a grass covered topsoil stockpile and removal of five trees to extend the existing precast yard shed and hardstand by approximately 60 metres. The grass covered topsoil stockpile is 2,000m³ and was to be relocated within the previously disturbed footprint of the precast facility and remained stockpiled. Minor earth works were required to extend the existing precast yard shed and hardstand by approximately 60 metres by 30 metres.</p>

Aspect	Nature and extent of impacts
	<p>The proposed change would require removal of part of a grass covered topsoil stockpile and minor earthworks for removal of two trees to extend the hardstand by approximately 25 metres by 35 metres. The topsoil would be relocated within the previously disturbed footprint of the precast facility and remained stockpiled.</p> <p>The proposed change would result in a smaller area of disturbance to the stockpile and a smaller area of disturbance needed to extend the hardstand surface.</p> <p><u>Surface water</u></p> <p>The proposed change would result in a smaller hardstand extension. However this is considered negligible. No change to the approved project.</p> <p><u>Contamination</u></p> <p>The proposed change will be undertaken within the footprint of the approved REF. Based on the site usage, contamination would not be expected to be present that would impact the ongoing land use as a precast facility. There are no known areas of contamination in the footprint of the approved REF</p>
Air quality	<p>The equipment / machinery to be used will remain consistent with that previously assessed in the approved REF. The nearest residential dwelling is located about 440 metres west of the Proposal site and the temporary shed would be an additional 85 metres east from the approved shed extension. The works will not result in medium or high air quality impacts and mitigation proposed in the approved REF are considered adequate to address minor short term impacts during construction</p>
Resource use and waste management	<p>No change to the approved project.</p>
Sustainability, climate change and greenhouse gases	<p>There may be a negligible increase in emissions generated in producing construction materials as the temporary shed is slightly larger than the shed extension.</p> <p>No change to the approved project.</p>
Cumulative impacts	<p>No change from the approved project</p>

4. Conditions of approval

The proposed change is subject to compliance with the Conditions of Approval (CoA) in Table 9-1 of the Buchanan Precast Facility Determination report and replicated in Table 2 below.

No changes to the CoA are required as a result of the revised scope of works given they are wholly located within the existing approved footprint and impacts can be adequately addressed through existing mitigation measures and conditions.

Table 2: Conditions of approval

Ref	Impact/Issue	Mitigation measure
General		
G1	Environmental management	<p>An Environment Management Plan (EMP) will be prepared in accordance with the CEMF, CNVS, CTMF and submitted for review and endorsement by the Sydney Metro Environment Manager prior to commencement of the activity.</p> <p>As a minimum, the EMP will address the following:</p> <ul style="list-style-type: none"> • Any requirements associated with statutory approvals • Details of how the project will implement the identified safeguards outlined in the REF • Issue-specific environmental management plans • Roles and responsibilities • Communication requirements • Induction and training requirements • Procedures for monitoring and evaluating environmental performance, and for corrective action • Reporting requirements and record-keeping • Procedures for emergency and incident management • Procedures for audit and review. <p>The endorsed EMP will be implemented during the undertaking of the activity.</p>
G2	General notification	All businesses, residential properties and other key stakeholders (e.g. schools, local councils) affected by the activity will be notified at least seven days prior to commencement of the Proposal.
G3	General environmental awareness	<p>All personnel working on site will receive training to ensure awareness of environment protection requirements to be implemented during the project.</p> <p>This will include up-front site induction and regular "toolbox" style briefings.</p>
Transport		
T1	Traffic management	<p>A Construction Traffic Management Plan (CTMP) will be prepared in accordance with the Sydney Metro Construction Traffic Management Framework. The CTMP will include:</p> <ul style="list-style-type: none"> • Confirmation of haulage routes • Measures to manage Oversize Overmass deliveries, if required • Measures to manage heavy vehicle movements • Measures to maintain access to local roads and properties

Ref	Impact/Issue	Mitigation measure
		<ul style="list-style-type: none"> Site specific traffic control measures (including signage) to manage and regulate traffic movement Measures to maintain pedestrian and cyclist access Requirements and methods to consult and inform the local community of impacts on the local road network Access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads A response plan for any construction traffic incident Consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic Monitoring, review and amendment mechanisms.
T2	Traffic management	<p>Heavy vehicle movements to and from the Proposal site would be scheduled to minimise traffic disruption to the surrounding road network. This may include, but is not limited to:</p> <ul style="list-style-type: none"> Scheduling the movement of construction material, equipment and waste to occur outside of peak periods (during standard construction hours) where practical Scheduling heavy vehicle deliveries to be evenly dispersed as far as practical to minimise convoys or platoons and queuing outside the Proposal site
T3	Traffic incidents	In the event of a traffic-related incident, coordination would be carried out with Transport Coordination and/or other parts of Transport for NSW.
T4	Emergency vehicles access	Access to properties for emergency vehicles would be provided at all times
T5	Road safety	All trucks would enter and exit the Proposal site in a forward direction, where feasible and reasonable to minimise collision and safety risks
T6	Road safety	The loading and unloading of trucks would be planned to ensure each individual truck haulage capacity is fully utilised to reduce the total number of truck movements
T7	Road safety	All loading /unloading activities would occur within the Proposal site
T8	Road safety	Public roads and access points would not be obstructed by any materials, vehicles, skip bins or the like, under any circumstances
T9	Road safety	All vehicles transporting loose materials would have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the Proposal site
T10	Road safety	All vehicles leaving the site would be checked that they are clean of materials that may fall on the roadway before they are allowed to leave the site
T11	Staff parking	All staff parking would be provided on-site and no staff will park on surrounding local streets
Noise and vibration		
NV1	Noise impacts during works	During construction, receivers that would potentially be affected by noise from the works would be appropriately notified before the relevant works start. Notification will be delivered to sensitive receivers at least 7 days prior to commencement of works.
NV2	Noise exceedances at receivers	Attended noise monitoring is to be undertaken to verify that noise levels resulting from works are in accordance with the levels predicted in this noise and vibration assessment report, subject to obtaining the property owner/occupier's consent to access the property (where required). Noise monitoring is recommended to be conducted at CT3/1416 George Booth

Ref	Impact/Issue	Mitigation measure
		Drive, Buchanan - within 30 metres of the building, on the side closest to the precast facility. If the standard mitigation measures are not found to be adequate, further mitigation measures would be considered and implemented where feasible and reasonable
NV3	At source noise impacts	The following at-source control measures are recommended to reduce potential noise impacts: <ul style="list-style-type: none"> • Sound Power or Sound Pressure Levels compliant plan and equipment • Equipment selection • Use and siting of plant • Non-tonal reversing alarms • Minimise disturbance arising from delivery of goods • Reduce noise from mobile plant through additional fittings • Limit use of engine compression breaks • Limit equipment in use.
NV4	Noise barriers	Any buildings or structures on site shall be used as a noise barrier, where practicable to provide shielding to the nearest affected receivers.
NV5	Noise impacts during works	The EMP would include a relevant section for construction noise and vibration management which must be prepared in accordance with the Sydney Metro Construction Noise and Vibration Standard. The EMP would be regularly updated to account for any changes in noise management issues and strategies.
NV6	Construction hours and scheduling	Construction and operation would be carried out during standard construction hours. Work generating high noise levels should be scheduled during less sensitive time periods, such as after 8 am.
NV7	Site inductions	All employees, contractors and subcontractors are to receive an environmental induction. The induction must at least include: <ul style="list-style-type: none"> • Noise and vibration mitigation measures • Permissible hours of work • Limitations to noise generating activities with special audible characteristics • Location of nearest sensitive receivers • Construction employee parking areas • Designated loading/unloading areas and procedures • Site opening/closing times • Environmental incident procedures • Behavioural practices (no dropping of materials from height, excessive revving of engines etc).
NV8	Verification monitoring	A noise monitoring program should be carried out for the duration of works in accordance with the EMP and any approval conditions.
Biodiversity		
B1	Potential fauna impact	Employment of a fauna spotter/catcher experienced in native fauna identification for pre-clearance works, to avoid direct impacts to species. Clearing works will be undertaken in accordance with the CEMF. Species identified as likely to occur within the Proposal area include snakes.
B2	Potential impact to adjacent vegetation	Avoid impacts to adjacent vegetation, including exclusion zones around trees to be retained (including a buffer for the tree root zone) and vegetation around dams.

Ref	Impact/Issue	Mitigation measure
B3	Unexpected threatened species	An unexpected threatened species finds procedure is to be contained in the EMP and followed if a threatened species is encountered that has not previously been identified and assessed in the environmental assessment
B4	Biosecurity risk	Biosecurity risks (i.e. weeds) must be managed in accordance with the Biosecurity Act 2015: <ul style="list-style-type: none"> • Machinery, vehicles, and footwear to be cleaned and washdown procedure adhered to, prior to moving to a new location from site • Disposal of sealed bagged weeds to a licenced waste disposal facility
Historical heritage		
NA1	Historical heritage	An unexpected heritage finds procedure is to be contained in the EMP and followed in the event that any unexpected heritage items, archaeological remains or potential relics of Historical origin are encountered
Aboriginal heritage		
AH1	Aboriginal heritage	An unexpected heritage finds procedure is to be contained in the EMP and followed in the event that any unknown or potential Aboriginal object/s, including skeletal remains are encountered
Property, land use and socio-economic		
P1	Property, land use and socio-economic management	Storage of plant and equipment is to be undertaken only within the previously disturbed footprint of the precast yard and within the footprint of the land leased by the Proposal for the precast facility
Soils and surface water quality		
SW1	Soil and water management	Environmental safeguards (e.g. sediment fences, sumps) are to be inspected and repaired to consistent with the Blue Book – “Managing Urban Stormwater: Soils and Construction” (4th Edition Landcom, 2004)
SW2	Contaminated land	An EMP will be prepared and implemented prior to construction. The EMP will include an Unexpected Contaminated Land Finds Protocol, or similar, which would document the process for the investigation, remediation and/or management of contamination if identified during the works. If contaminated areas are encountered during construction, appropriate control measures will be implemented to manage the immediate risks of contamination. All other works that may impact on the contaminated area will cease until the nature and extent of the contamination has been confirmed and any necessary site-specific controls or further actions identified in consultation with the Sydney Metro Environment Manager and/or EPA
SW3	Accidental spills	A site-specific emergency spill plan will be developed and include spill management measures. The plan will address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including Sydney Metro and/or EPA)
SW4	Storage of substances	Storage of fuels, oils and other potentially harmful substances are to be stored in appropriately bunded areas
SW5	Elevated pH run off	Bunded areas will be available to collect concrete waste to ensure that runoff leaving the site would not pollute nearby land or waterways
Landscape and visual character		
L1	Visual impact	To reduce the potential visual impact of construction activities: <ul style="list-style-type: none"> • Work sites will be left tidy at the end of each work day

Ref	Impact/Issue	Mitigation measure
		<ul style="list-style-type: none"> If night work is to occur, lighting for will comply with relevant Australian Standards, including AS4282-1997 (Control of the obtrusive effects of outdoor lighting)
Resource use and waste management		
R1	Resource use and waste management	An EMP will be prepared and implemented prior to construction. The PEMP would detail risks and standard management measures to reduce impacts on resource use and waste management
Air quality		
AQ1	Air quality management	An EMP will be prepared and implemented prior to construction. The EMP would detail risks and standard management measures to reduce impacts on air quality
Sustainability, climate change and greenhouse gases		
S1	Sustainability management	An EMP will be prepared and implemented prior to construction. The EMP would detail risks and standard management measures to reduce impacts on resource use and waste management
Cumulative impacts		
C1	Cumulative construction impacts	<p>Consultation will be undertaken with surrounding projects or developments if they occur during construction to:</p> <ul style="list-style-type: none"> Increase awareness of construction timeframes and impacts Coordinate impact mitigation and management (e.g. respite periods)

5. Conclusion

The proposed change to the Buchanan Precast Facility is subject to assessment under Division 5.1 of the EP&A Act.

This Addendum REF has considered and assessed the potential impacts and potential benefits of the proposed change in accordance with section 171 of the EP&A Regulation (refer to Section 7 of the approved REF and Section 3 of this Addendum REF) and concluded that:

- The proposed change is not "likely to significantly affect the environment" for the purposes of Division 5.1 of the EP&A Act
- The proposed change is not "likely to significantly affect threatened species" for the purposes of Part 7 of the *Biodiversity Conservation Act 2016*.

Consequently, no environmental impact statement or species impact statement (or biodiversity development assessment report) is required to be prepared under Division 5.1 of the EP&A Act or Part 7 of the BC Act. It is also considered that the proposed change does not trigger the need for referral or approval under the Commonwealth EPBC Act.

Based on Sydney Metro's careful consideration of the environmental impact assessment contained in the Review of Environmental Factors, and this Addendum REF, it is recommended that the Proposal proceed subject to the Conditions of Approval contained in Section 4 of this Report.

6. Determination

Addendum Review of Environmental Factors: Buchanan Precast Facility

I, [REDACTED], Director Environment, Sustainability and Planning, Sydney Metro, state as follows:

- I have examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the Proposal assessed in the Buchanan Precast Facility Review of Environmental Factors and this Addendum Review of Environmental Factors in accordance with Section 5.5 of the *Environmental Planning and Assessment Act 1979* (NSW).
- I have formed a view that the Proposal is not likely to have a significant impact on the environment, having regard to the environmental factors specified in the environmental factors guidelines that apply to the activity, as required by clause 171 (1) of the *Environmental Planning and Assessment Regulation 2021* (NSW). Therefore, an Environmental Impact Statement is not required.
- I have formed a view that the Proposal will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values. Therefore, a Biodiversity Development Assessment Report is not required.
- I have formed a view that the Proposal does not trigger the need for referral or approval under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).
- I determine, on behalf of Sydney Metro, that the Proposal may proceed in accordance with the Conditions of Approval and environmental management measures, as described in this Addendum Review of Environmental Factors, consistent with the Proposal described in the Buchanan Precast Facility Review of Environmental Factors, the Buchanan Precast Facility Determination Report and this Addendum Review of Environmental Factors.

Signature:



Name:



Title: Director Environment Sustainability and Planning

Date: 27 October 2022