An Extraordinary Meeting of Cumberland Local Planning Panel will be held at 11:30am at the Merrylands Administration Building, 16 Memorial Avenue, Merrylands on Wednesday, 1 May 2019.

Business as below:

Yours faithfully

Hamish McNulty
General Manager

ORDER OF BUSINESS

1. Receipt of Apologies
2. Declaration of Interest
3. Address by invited speakers
4. Reports
   - Development Applications
   - Planning Proposals
5. Closed Session Reports
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Item No: EELPP023/19

DEVELOPMENT APPLICATION - 128 RAILWAY PARADE, GRANVILLE

Responsible Division: Environment & Planning
Officer: Manager Development Assessment
File Number: DA-290/2018

<table>
<thead>
<tr>
<th>Application lodged</th>
<th>21 September 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant</td>
<td>Mr T Rizk</td>
</tr>
<tr>
<td>Owner</td>
<td>Mr T G Rizk and Mrs V M Rizk</td>
</tr>
<tr>
<td>Application No.</td>
<td>DA-290/2018</td>
</tr>
<tr>
<td>Description of Land</td>
<td>128 Railway Parade, GRANVILLE NSW 2142, Lot 1 DP 712492</td>
</tr>
<tr>
<td>Proposed Development</td>
<td>Demolition of dwelling and associated structures and construction of a two storey boarding house comprising 12 single rooms with associated at-grade car parking</td>
</tr>
<tr>
<td>Site Area</td>
<td>816.80m²</td>
</tr>
<tr>
<td>Zoning</td>
<td>R2 Low Density Residential (PLEP 2011)</td>
</tr>
<tr>
<td>Disclosure of political donations and gifts</td>
<td>Nil disclosure</td>
</tr>
<tr>
<td>Heritage</td>
<td>No</td>
</tr>
<tr>
<td>Principal Development Standards</td>
<td>Parramatta LEP 2011; <strong>Height of Building</strong> Permissible: 9 metres Proposed: 8.20 metres <strong>AND</strong> <strong>Floor Space Ratio</strong> Permissible: 0.5:1 (408.40sqm) Proposed: 0.5:1 (408.40sqm)</td>
</tr>
</tbody>
</table>

**SUMMARY:**

1. Development Application No. 290/2018 was received on 21 September 2018 for the demolition of dwelling and associated structures and construction of a two storey boarding house, comprising 12 single rooms with associated at-grade car parking.

2. The application was publicly notified to occupants and owners of the adjoining properties for a period of 21 days, between 9 October 2018 to 30 October 2018. In response, two (2) submissions were received, including a petition with over 100 signatures objecting to the proposal.

3. There are no significant variations to the planning controls.

4. The application is recommended for approval, subject to conditions as provided in the attached schedule.
5. The application is referred to the Panel as the proposal is considered to be contentious development.

REPORT:

Subject Site and Surrounding Area

The site forms Lot 1 DP 712492 and is known as 128 Railway Parade, GRANVILLE NSW 2142. The site has an area of 816.80m2, with a frontage to Railway Parade of 19.329 metres and secondary street frontage to Milton Street of 34.138 metres. The site has a fall of approximately 710mm from rear to front.

A site inspection of the premises carried out on the 8 October 2018 confirmed that the site is currently occupied by a single storey dwelling and ancillary feature, such as a garage and a carport. Access to the site is available via both street frontages. The locality is characterised by a variety of developments, including a mix of older single storey dwellings and newer two storey residences, mixed-use developments and industrial buildings. The railway corridor is located close to the north of the site and Woodville Road is also located close to the west of the site.

Figure 1 – Locality Plan of subject site
Across the road from the site on opposite ends of Milton Street and Railway Parade are B6 “Enterprise Corridor” zoned land-uses. Milton Street comprises of primarily single storey dwellings on the eastern side of the roadway and industrial premises on the western side of the roadway. Immediately opposite the site on the opposite side of Railway Parade includes a mixed-use development located over multiple properties; such as food and drink premises, residential apartments as well as a place of public worship, known as “Voice to the Nations”.

Figure 2 – Aerial view of subject site

Figure 3 – Street view of subject site
**Description of The Proposed Development**

Council is in receipt of a development application, seeking approval for the demolition of the dwelling and associated structures and the construction of a two storey boarding house, comprising 12 single rooms with associated at-grade car parking. The detailed breakdown of the proposal is as below:-

Demolition:

- Existing dwelling house, garage and awning.
- Removal of existing vehicular crossover over Railway Parade.

Construction:

- New two (2) storey boarding house.
- At-grade car parking at the rear of the site, accessible via a new vehicular crossover over the Milton Street (secondary street frontage). There are six (6) car spaces proposed; including three (3) spaces for bicycles and three (3) spaces for motorcycles.
- Boarding house to consist of twelve (12) bedrooms. A single lodger is proposed for each bedroom.
- Boarding house includes two (2) communal living rooms and a shared laundry.
- Boarding house includes an external enclosed waste bin area and a services room.

**Applicants Supporting Statement**

The applicant has provided a Statement of Environmental Effects prepared by Think Planners Pty. Ltd. dated the 27 July 2018 was received in support of the application.

**Contact with Relevant Parties**

The assessing officer has undertaken a site inspection of the subject site and surrounding properties and has been in regular contact with the applicant throughout the assessment process.

**Internal Referrals**

**Building Surveyor**

Council's Building Surveyor has provided the comments. No objections were raised subject to conditions of development consent; that the proposed building is constructed under a Class 3 classification as per the Building Code of Australia (BCA).
Development Engineer

Council’s Development Engineer has provided comments, pertaining to the proposed stormwater drainage system (including the provision of the on-site stormwater detention) and the parking design and the associated vehicular access/egress. It has been advised that the development proposal is satisfactory and therefore can be supported, subject to conditions of development consent.

Environment and Health

Council’s Health and Environmental Officer provided comments who has advised that the development proposal is satisfactory and therefore can be supported, subject to recommended conditions of consent to ensure that potential noise form the development is mitigated.

Landscape Officer

The development application was referred to Council’s Landscape Officer for comment who has advised that the development proposal is satisfactory, since there is substantial landscaping and plantings proposed on the site and therefore can be supported subject to recommended conditions of consent.

External Referrals

NSW Police

Comments were provided from the Cumberland Police Area Command. A risk assessment was carried out and a low risk rating was indicated for this locality. In this regard, there are no concerns regarding the above proposal, provided that conditions of development consent pertaining to appropriate safety and security measures are implemented to the development.

Planning Comments

The provisions of any Environmental Planning Instruments (EP&A Act s4.15 (1)(a)(i))

State Environmental Planning Policies

The proposed development is affected by the following State Environmental Planning Policies:

a) State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

Clause 7 of SEPP 55 requires Council to be satisfied that the site is suitable or can be made suitable to accommodate the proposed development. The matters listed within Clause 7 have been considered in the assessment of the development application.
<table>
<thead>
<tr>
<th>Matter for Consideration</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the application involve re-development of the site or a change of land use?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Is the development going to be used for a sensitive land use (e.g.: residential, educational, recreational, childcare or hospital)?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Does information available to you indicate that an activity listed below has ever been approved, or occurred at the site? acid/alkali plant and formulation, agricultural/horticultural activities, airports, asbestos production and disposal, chemicals manufacture and formulation, defence works, drum re-conditioning works, dry cleaning establishments, electrical manufacturing (transformers), electroplating and heat treatment premises, engine works, explosive industry, gas works, iron and steel works, landfill sites, metal treatment, mining and extractive industries, oil production and storage, paint formulation and manufacture, pesticide manufacture and formulation, power stations, railway yards, scrap yards, service stations, sheep and cattle dips, smelting and refining, tanning and associated trades, waste storage and treatment, wood preservation.</td>
<td>No</td>
</tr>
<tr>
<td>Is the site listed on Council’s Contaminated Land database?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Is the site subject to EPA clean-up order or other EPA restrictions?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Has the site been the subject of known pollution incidents or illegal dumping?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Does the site adjoin any contaminated land/Previously contaminated land?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Details of contamination investigations carried out at the site: The subject site has no history of any contamination. There are no concerns regarding possible land contamination and the risk to human health on the site.</td>
<td></td>
</tr>
<tr>
<td>Has the appropriate level of investigation been carried out in respect of contamination matters for Council to be satisfied that the site is suitable to accommodate the proposed development or can be made suitable to accommodate the proposed development?</td>
<td>Yes No</td>
</tr>
</tbody>
</table>

b) State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

Rail corridor - The application has been assessed in accordance with clauses 87 and 88 of this SEPP. It has been identified that the rail corridor is located further than twenty (25) metres away from the subject site. Also, penetration of the ground is no greater than two (2) metres deep, below the existing natural ground surface. The rail corridor will not have any visual or amenity impact on the proposal. The development will need to be carried out in accordance with the recommendations made in the acoustic report, by Far West Consulting Reference no. 193465 dated the 27 February 2019, to ensure that noise impacts surrounding the development are mitigated through appropriate measures in the building design.
Classified roadway - The application has been assessed in accordance with clause 102 of this SEPP. It has been identified that a classified road (Woodville Road) is located within 100 metres from the subject site. However, the site is not immediately adjacent to the roadway, nor does the site have an immediate street frontage to the roadway. The classified road will not have any visual or amenity impact on the proposal.

c) State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

The proposal does not exceed the biodiversity offsets scheme threshold. Therefore, the proposed vegetation removal is considered acceptable. Please refer to the DCP compliance table for further discussion.

d) State Environmental Planning Policy (BASIX) 2004

BASIX Certificate 1007784M issued on the 8 April 2019 has been submitted. The BASIX Certificate lists measures to satisfy BASIX requirements which have been incorporated into the proposal. A standard condition is also recommended to be imposed ensuring the measures detailed in the BASIX Certificate are implemented.

e) State Environmental Planning Policy (Affordable Rental Housing) 2009

The relevant objectives and provisions of SEPP (ARH) 2009 have been considered in the following assessment table:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1 Preliminary</strong></td>
<td></td>
<td></td>
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<tr>
<td>3 Aims of Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The aims of this Policy are as follows:</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>(a) to provide a consistent planning regime for the provision of affordable rental housing,</td>
<td></td>
<td></td>
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<tr>
<td>(b) to facilitate the effective delivery of new affordable rental housing by providing incentives by way of expanded zoning permissibility, floor space ratio bonuses and non-discretionary development standards,</td>
<td></td>
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<tr>
<td>(c) to facilitate the retention and mitigate the loss of existing affordable rental housing,</td>
<td></td>
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<tr>
<td>(d) to employ a balanced approach between obligations for retaining and mitigating the loss of existing affordable rental housing, and incentives for the development of new affordable rental housing,</td>
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<tr>
<td>(e) to facilitate an expanded role for</td>
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<tr>
<td>The development is not inconsistent with the aims of this policy.</td>
<td></td>
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<tr>
<td>Requirement</td>
<td>Yes/No</td>
<td>Comments</td>
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<tr>
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<tr>
<td>not-for-profit-providers of affordable rental housing,</td>
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<tr>
<td>(f) to support local business centres by providing affordable rental</td>
<td></td>
<td></td>
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<tr>
<td>housing for workers close to places of work,</td>
<td></td>
<td></td>
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<tr>
<td>(g) to facilitate the development of housing for the homeless and other</td>
<td></td>
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</tr>
<tr>
<td>disadvantaged people who may require support services, including group</td>
<td></td>
<td></td>
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<tr>
<td>homes and supportive accommodation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part 2 New affordable rental housing**

**Division 3 Boarding houses**

<table>
<thead>
<tr>
<th>26 Land to which Division applies</th>
<th>Y</th>
<th>The subject site is zoned R2 Low Density Residential Zone as identified in the PLEP 2011.</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Division applies to land within any of the following land use</td>
<td></td>
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</tr>
<tr>
<td>zones or within a land use zone that is equivalent to any of those</td>
<td></td>
<td></td>
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<tr>
<td>zones:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Zone R1 General Residential,</td>
<td></td>
<td></td>
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<tr>
<td>(b) Zone R2 Low Density Residential,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Zone R3 Medium Density Residential,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Zone R4 High Density Residential,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Zone B1 Neighbourhood Centre,</td>
<td></td>
<td></td>
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<tr>
<td>(f) Zone B2 Local Centre,</td>
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<tr>
<td>(g) Zone B4 Mixed Use.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>27 Development to which Division applies</th>
<th>Y</th>
<th>The development is proposed on land zoned R2 Low Density Residential in the Sydney region. This division applies to the development as the land is located within an accessible area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) This Division applies to development, on land to which this Division</td>
<td></td>
<td></td>
</tr>
<tr>
<td>applies, for the purposes of boarding houses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Despite subclause (1), this Division does not apply to development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>on land within Zone R2 Low Density Residential or within a land use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>zone that is equivalent to that zone in the Sydney region unless the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>land is within an accessible area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Despite subclause (1), this Division does not apply to</td>
<td></td>
<td></td>
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<tr>
<td>development.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The site is 793.20 metres from the southern entrance to Granville Railway Station.

The site is also within 400 metres of public bus stop(s), ID numbers 2142233 and 2142234) serviced with a regular bus route (907 Bankstown to
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>development on land within Zone R2 Low Density Residential or within a land use zone that is equivalent to that zone that is not in the Sydney region unless all or part of the development is within 400 metres walking distance of land within Zone B2 Local Centre or Zone B4 Mixed Use or within a land use zone that is equivalent to any of those zones.</td>
<td></td>
<td>Parramatta), that operates at least one bus per hour between 6am and 9pm, Monday to Friday, 8am to 6pm, Saturday and Sunday.</td>
</tr>
<tr>
<td>28 Development may be carried out with consent</td>
<td>Y</td>
<td>This clause does not apply.</td>
</tr>
<tr>
<td>Development to which this Division applies may be carried out with consent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Standards that cannot be used to refuse consent</td>
<td></td>
<td>Compliant. See discussion under the LEP.</td>
</tr>
<tr>
<td>(1) A consent authority must not refuse consent to development to which this Division applies on the grounds of density or scale if the density and scale of the buildings when expressed as a floor space ratio are not more than:</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>(a) the existing maximum floor space ratio for any form of residential accommodation permitted on the land, or</td>
<td>N/A</td>
<td>Residential accommodation is permitted on the land.</td>
</tr>
<tr>
<td>(b) if the development is on land within a zone in which no residential accommodation is permitted—the existing maximum floor space ratio for any form of development permitted on the land, or</td>
<td>N/A</td>
<td>Residential flat buildings are not permissible on the site.</td>
</tr>
<tr>
<td>(c) if the development is on land within a zone in which residential flat buildings are permitted and the land does not contain a heritage item that is identified in an environmental planning instrument or an interim heritage order or on the State Heritage Register—the existing maximum floor space ratio for any form of residential accommodation permitted on the land, plus:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) 0.5:1, if the existing maximum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirement</td>
<td>Yes/No</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
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<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>floor space ratio is 2.5:1 or less, or (ii) 20% of the existing maximum</td>
<td></td>
<td>The proposed building height is compliant with the LEP height development standards.</td>
</tr>
<tr>
<td>floor space ratio, if the existing maximum floor space ratio is greater</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>than 2.5:1.</td>
<td></td>
<td>Landscaping in the front yard has been provided and is compatible with the streetscape.</td>
</tr>
<tr>
<td>(2) A consent authority must not refuse consent to development to which this</td>
<td></td>
<td>The communal area that faces the secondary street frontage will receive minimum three hours of sunlight, between the hours of 9am to 3pm during mid-winter.</td>
</tr>
<tr>
<td>Division applies on any of the following grounds:</td>
<td></td>
<td>Private open space for lodgers has been provided at the rear of the site and is found to be compliant with the required area and dimensions.</td>
</tr>
<tr>
<td>(a) <strong>building height</strong> if the building height of all proposed buildings is</td>
<td>Y</td>
<td>A separate private open space area is not required for a boarding house manager.</td>
</tr>
<tr>
<td>not more than the maximum building height permitted under another</td>
<td></td>
<td></td>
</tr>
<tr>
<td>environmental planning instrument for any building on the land,</td>
<td></td>
<td>Development is not carried out by or on behalf of a social housing provider.</td>
</tr>
<tr>
<td>(b) <strong>landscaped area</strong> if the landscape treatment of the front setback</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>area is compatible with the streetscape in which the building is located,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) <strong>solar access</strong> where the development provides for one or more</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>communal living rooms, if at least one of those rooms receives a minimum of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 hours direct sunlight between 9am and 3pm in mid-winter,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) <strong>private open space</strong> if at least the following private open space</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>areas are provided (other than the front setback area):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) one area of at least 20 square metres with a minimum dimension of 3</td>
<td></td>
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<tr>
<td>metres is provided for the use of the lodgers,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) if accommodation is provided on site for a boarding house manager—one</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>area of at least 8 square metres with a minimum dimension of 2.5 metres is</td>
<td></td>
<td></td>
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<tr>
<td>provided adjacent to that accommodation,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) <strong>parking</strong> if:</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>(i) in the case of development carried out by or on behalf of a social</td>
<td></td>
<td></td>
</tr>
<tr>
<td>housing provider in an accessible area—at least 0.2 parking spaces are</td>
<td></td>
<td></td>
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<tr>
<td>provided for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirement</td>
<td>Yes/No</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
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<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>each boarding room, and (ii) in the case of development carried out by or on behalf of a social housing provider not in an accessible area—at least 0.4 parking spaces are provided for each boarding room, and (iiia) in the case of development not carried out by or on behalf of a social housing provider—at least 0.5 parking spaces are provided for each boarding room, and (iii) in the case of any development—not more than 1 parking space is provided for each person employed in connection with the development and who is resident on site, (f) accommodation size if each boarding room has a gross floor area (excluding any area used for the purposes of private kitchen or bathroom facilities) of at least: (i) 12 square metres in the case of a boarding room intended to be used by a single lodger, or (ii) 16 square metres in any other case.</td>
<td>Y</td>
<td>As the boarding house is for a private housing provider with twelve (12) bedrooms proposed, the number of parking spaces required is six (6) spaces, (12 x 0.5 = 6 spaces).</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>There is no parking required on the site for those people employed by the boarding house.</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>All twelve (12) rooms are single rooms and all meet the minimum gross floor area.</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>All boarding rooms have private bathroom and kitchen facilities.</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>Noted.</td>
</tr>
</tbody>
</table>

**Standards for boarding houses**

(1) A consent authority must not consent to development to which this Division applies unless it is satisfied of each of the following:

(a) if a boarding house has 5 or more boarding rooms, at least one communal room is proposed at ground floor level and an additional communal room on first floor. These
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>communal living room will be provided, (b) no boarding room will have a gross floor area (excluding any area used for the purposes of private kitchen or bathroom facilities) of more than 25 square metres, (c) no boarding room will be occupied by more than 2 adult lodgers, (d) adequate bathroom and kitchen facilities will be available within the boarding house for the use of each lodger, (e) if the boarding house has capacity to accommodate 20 or more lodgers, a boarding room or on site dwelling will be provided for a boarding house manager, (f) (Repealed) (g) if the boarding house is on land zoned primarily for commercial purposes, no part of the ground floor of the boarding house that fronts a street will be used for residential purposes unless another environmental planning instrument permits such a use, (h) at least one parking space will be provided for a bicycle, and one will be provided for a motorcycle, for every 5 boarding rooms.</td>
<td>Y</td>
<td>rooms are proposed to be available to all lodgers. The gross floor area for each boarding room is no more than 17.0m² and must be occupied by maximum one (1) adult lodger, as per the details provided in the plan of management.</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>The boarding house is proposed to accommodate a maximum of 12 lodgers. Accordingly, a boarding room for a boarding house manager is not required.</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>The land is not primarily zoned for commercial purposes.</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>12 boarding rooms three (3) spaces for bicycles and three (3) spaces for motorcycles and have been provided.</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>This application is for a new boarding house.</td>
</tr>
</tbody>
</table>

### 30AA Boarding houses in Zone R2 Low Density Residential

A consent authority must not grant development consent to a boarding house on land within Zone R2 Low Density Residential or within a land use zone that is equivalent to that zone unless it is satisfied that the boarding house has no more than 12 boarding rooms.

### 30A Character of local area

Under the savings provisions, this clause is not applicable to this application as this application was made before the commencement of these provisions which were introduced as part the 2019 amendments to the SEPP. Additionally, the site is zoned R2 and thus this clause is not applicable.
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A consent authority must not consent to development to which this Division applies unless it has taken into consideration whether the design of the development is compatible with the character of the local area.</td>
<td>Y</td>
<td>See discussion below.</td>
</tr>
</tbody>
</table>

**Clause 30A - Character of local area:**

The SEPP requires Council to consider whether the design of the development is compatible with the character of the local area. The NSW Land and Environment Court have issued a planning principle known as “compatibility in the urban environment”, which is a useful guide for the purposes of this assessment. The character assessment for the current proposal is provided in the following section:

**Part A – Identify the local area**

The local area for the purposes of this application is outlined on the zoning map below:

**Figure 4 – location of subject site within the R2 Low Density Residential zone**

**Part B – Determine the character of the local area**

The identified character area is within the zone “R2 Low Density Residential” and contains primarily one and two storey residential dwelling houses. In terms of urban design, the area is undergoing transition and it is likely that the existing older building stock of single dwellings will be redeveloped within the R2 areas to incorporate a mixture of 2 storey residential dwellings of modern construction. The ‘B6 Enterprise Corridor’ zone lies to the north and to the west of the site. The built form in this B6
zone consists of industrial/warehouse buildings and residential flat buildings. The future built form in the surrounding area is likely to consist of a mix of residential dwellings and warehouses.

Part C – Determine if development is compatible with character of the local area

In the decision of Project Ventures Development Pty Limited vs Pittwater Council (2005), the planning principle states that there are two important aspects of compatibility that need to be satisfied. An explanation about the proposal’s compatibility with the surrounding urban environment is detailed below:

1. Are the proposal's physical impacts on surrounding development acceptable?

The physical impacts generally include overlooking, overshadowing and constraining development potential. In terms of the physical impacts of the development, the following points are made:-

- The privacy impacts are mitigated through the use of adequate building separation and privacy treatment.
  i) 
- The proposal will not impact on the development potential of adjoining sites by isolating or by unduly constraining them as the proposal is within an existing allotment on a street corner.
  ii) 
- A minimum of 50% of each of the private open space areas for these two (2) adjoining properties will receive natural lighting between the hours of 9am to 12noon during mid-winter.
  iii) 
- The proposed northern and eastern elevations allow for passive surveillance opportunities and an interface with the primary and secondary street frontages.
  iv) 
- The proposal is a purpose built boarding house development, which has utilised architectural and design treatments to ameliorate the amenity impacts on neighbouring properties.
  v)

2. Is the proposal's appearance in harmony with the buildings around it and the character of the street?

The predominant building types within the local area are one and two storey residential dwelling houses, industrial buildings and a mixed-use development. To be considered compatible, a development should contain or at least respond to the essential elements that make up the character of the surrounding area. The proposed pitched roof form is consistent with the architectural style of the existing housing stock in the vicinity. The proposed two storey building form and materials and finishes are considered to be in harmony with the emerging surrounding
development. The front façade has been designed with balanced fenestration on both sides of the principal entrance that will harmonise the development to be consistent with a new two (2) storey dwelling in a low density residential zone. Also, since the site adjoins the land-use zone of “B6 Enterprise Corridor”, the site is within proximity of buildings with other classifications and designs; which means that the proposed two (2) storey building is not an unreasonable design in this locality.

The proposed front setback is also consistent with immediately adjoining development. The proposal is also considered to be in keeping with the future desired character of the area as defined in the planning controls that apply to the site, as discussed elsewhere in this report. In this regard, the proposal is considered to be visually compatible within this context, and responds to the varied elements and has been designed in a manner that is similar to a two storey dwelling or dual occupancy development, and is therefore in harmony with the rest of the two (2) streetscapes of Railway Parade and Milton Street.

**Local Environmental Plans**

**Parramatta Local Environmental Plan (PLEP) 2011**

The provision of Parramatta Local Environmental Plan 2011 is applicable to the development proposal. The proposal is consistent with the objectives of the “R2 Low Density Residential Zone” and is noted that the development achieves compliance with the key statutory requirements of the PLEP.

Permissibility:

The proposed development is defined as a “boarding house” and is permissible in the R2 – Low Density Residential zone.

Boarding house means a building that:

a) is wholly or partly let in lodgings, and

b) provides lodgers with a principal place of residence for 3 months or more, and

c) may have shared facilities, such as a communal living room, bathroom, kitchen or laundry, and

d) has rooms, some or all of which may have private kitchen and bathroom facilities, that accommodate one or more lodgers,

but does not include backpackers’ accommodation, a group home, hotel or motel accommodation, seniors housing or a serviced apartment.

Note. Boarding houses are a type of residential accommodation - see the definition of that term in this Dictionary.

The relevant matters to be considered under Parramatta Local Environmental Plan 2011 and the applicable clauses for the proposed development are summarised below. A comprehensive LEP assessment is contained in Appendix A.
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

<table>
<thead>
<tr>
<th>Provision</th>
<th>Compliance</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1 Preliminary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 Aims of Plan</td>
<td>Yes</td>
<td>The proposal is not inconsistent with regards to the aims of the plan.</td>
</tr>
<tr>
<td><strong>Part 2 Permitted or prohibited development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.7 Demolition requires development consent</td>
<td>Yes</td>
<td>The application seeks demolition of structures on site, which is permissible with consent.</td>
</tr>
<tr>
<td><strong>Part 4 Principal development standards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3 Height of buildings</td>
<td>Yes</td>
<td>The proposed height is 8.20 metres.</td>
</tr>
<tr>
<td>• 9m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4 Floor space ratio</td>
<td>Yes</td>
<td>The proposed FSR is 0.5:1 (408.40sqm)</td>
</tr>
<tr>
<td>• 0.75:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Part 6 Additional local provisions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 Acid sulfate soils</td>
<td>Yes</td>
<td>The site is within 500m of Class 1, 2, 3, or 4 land. However, the proposal is does not include works below 5 metres Australian Height Datum (AHD). In this regard, an acid sulphate soil management plan is not required.</td>
</tr>
<tr>
<td>• Class 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The provisions of any proposed instrument that is or has been the subject (EP&A Act s4.15 (1)(a)(ii))

The proposed development is not affected by any relevant Draft Environmental Planning Instruments.

The provisions of any Development Control Plans (EP&A Act s4.15 (1)(a)(iii))

Parramatta Development Control Plan 2011

The Part 5.1.4 ‘Planning Controls for Boarding Houses’ provides guidance for the design and operation of Boarding Houses, to achieve the aims and objectives of the Parramatta Local Environmental Plan 2011. A comprehensive assessment and compliance table against all other applicable DCP controls, relating to Boarding Houses, is contained in Appendix B of this report.

The provisions of any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4 (EP&A Act s4.15(1)(a)(iiia))

There is no draft planning agreement associated with the subject Development Application.

The provisions of the Regulations (EP&A Act s4.15 (1)(a)(iv))

The proposed development raises no concerns as to the relevant matters arising from the Environmental Planning and Assessment Regulations 2000 (EP&A Reg).
The Likely Environmental, Social or Economic Impacts (EP&A Act s4.15 (1)(b))

It is considered that the proposed development will have no significant adverse environmental, social or economic impacts in the locality.

The suitability of the site for the development (EP&A Act s4.15 (1)(c))

The subject site and locality is not known to be affected by any natural hazards or other site constraints likely to have a significant adverse impact on the proposed development. Accordingly, it is considered that the development is suitable in the context of the site and surrounding locality.

Submissions made in accordance with the Act or Regulation (EP&A Act s4.15 (1)(d))

Advertised (newspaper) ☒ Mail ☒ Sign ☒ Not Required ❌

In accordance with Council’s Notification requirements contained within the Parramatta Development Control Plan 2011, the proposal was publicly notified for a period of 21 days between the 9 October 2018 to the 30 October 2018. The notification generated two (2) submissions, in which one (1) submission included a petition with 100 signatures against the proposal. The issues raised in the public submissions are summarised and commented on as follows:-

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of car parking in the area</td>
<td>The proposal provides for six (6) car parking spaces, 3 motorcycle parking spaces and 3 bicycle spaces, complying with the minimum parking rates for vehicles, motorcycles and bicycles required under State Environmental Planning Policy (Affordable Rental Housing) 2009.</td>
</tr>
<tr>
<td>Increased traffic in the area</td>
<td>The use is not considered a traffic generating development as per Schedule 3 in the State Environmental Planning Policy (Infrastructure) 2007. The proposal is not likely to create increased traffic impacts in the local road network.</td>
</tr>
<tr>
<td>Proximity to schools and educational establishments</td>
<td>Boarding Houses are permissible with development consent within the R2 Low Density Residential zone pursuant to the Parramatta Local Environmental Plan 2011, as so are educational establishments.</td>
</tr>
<tr>
<td>Type of residents</td>
<td>The leasing of rooms to lodgers will be at the discretion of the managing agent and is to be registered in accordance with the Boarding Houses Act 2012 and Boarding Houses Regulation 2013. Furthermore, a condition of development consent will be endorsed to ensure that a CCTV security system is installed in order to capture any possible anti-social behaviour.</td>
</tr>
<tr>
<td>Unacceptable bulk and scale</td>
<td>The proposed boarding house has a built form, bulk and scale consistent with a two storey dwelling house which is consistent with newer development constructed in this area. As detailed in the SEPP (ARH) 2009 section, the proposed...</td>
</tr>
</tbody>
</table>
development is in keeping with the existing and proposed mixed-use character of the area.

| Overlooking and privacy | Side facing windows have a 3.0 metres setback from the eastern boundary. The first floor windows on the eastern elevation first will have fixed frosted glass panels up to a height of 1.60 metres above the finished floor level. Bathroom windows face the rear boundary, which have raised sill-heights of 1.60 metres above the finished floor level.

A condition of development consent has also been recommended to ensure that the proposed plantings adjacent to the eastern property boundary (six (6) Robyn Gordon Grevillea and one (1) Tuckeroo) are to be planted before the commencement of any construction work on the site. The intent of this condition is to allow plant establishment and growth during the construction phase of the project and prior to the occupation of the building commencing. This will assist in the provision of screening between the proposed eastern elevation and the eastern adjoining property of 126 Railway Parade.

A further condition is also recommended requiring the provision of fixed louvres to be installed over the first floor windows on the eastern elevation of the proposed building. The louvres shall be installed at an angle so as to minimise overlooking into the adjoining property, whilst still permitting northern solar access into the first floor windows of the proposed upper level rooms.

| Location Criteria | The site is within the accessible area criteria for the ARH SEPP and the PDCP2011, being within 800 metres to Granville Railway Station. In this regard, the site having two (2) frontages and situated on the edge of a residential zoning is considered appropriate for a Boarding House.

The public interest (EP&A Act s4.15(1)(e))

In view of the foregoing analysis it is considered that the development as proposed would not be consistent with the public interest.

Section 7.12 (Formerly S94a) Fixed Development Consent Levies

This part of the Act relates to the collection of monetary contributions from applicants for use in developing key local infrastructure.

Comments:

The development would require the payment of contributions in accordance with City of Parramatta Council Section 94A Development Contributions Plan (Amendment
No. 5). The calculation is based on a 1% levy on the cost of works. As at the 22 March 2018, the fee payable is $9,989.14. This figure is subject to indexation as per the relevant plan.

Disclosure of Political Donations And Gifts

The applicant and notification process did not result in any disclosure of Political Donations and Gifts.

CONCLUSION:

The development application has been assessed in accordance with the relevant requirements of the Environmental Planning and Assessment Act 1979, State Environmental Planning Policy No. 55 – Remediation of Land, State Environmental Planning Policy (Infrastructure) 2007, State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004, State Environmental Planning Policy (Affordable Rental Housing) 2009, Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, Parramatta Local Environmental Plan 2011 and Parramatta Development Control Plan 2011 and is considered to be satisfactory for approval subject to conditions.

The proposed development is appropriately located within the R2 – Low Density Residential zone under the relevant provisions of the Parramatta Local Environmental Plan 2011. The proposal is consistent with all statutory and non-statutory controls applying to the development. Minor non-compliances with Council’s controls have been discussed in the body of this report. The development is considered to perform adequately in terms of its relationship to its surrounding built and natural environment, particularly having regard to impacts on adjoining properties.

For these reasons, it is considered that the proposal is satisfactory having regard to the matters of consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979, and the development may be approved subject to conditions.

CONSULTATION:

There are no further consultation processes for Council associated with this report.

FINANCIAL IMPLICATIONS:

There are no further financial implications for Council associated with this report.

POLICY IMPLICATIONS:

There are no policy implications for Council associated with this report.

COMMUNICATION / PUBLICATIONS:

The final outcome of this matter will be notified in the newspaper. The objectors will also be notified in writing of the outcome.
REPORT RECOMMENDATION:

1. That Development Application No. DA-290/2018 for the demolition of dwelling and associated structures and construction of a two storey boarding house comprising 12 single rooms with associated at-grade car parking, on land at 128 Railway Parade, GRANVILLE NSW 2142 be approved subject to the attached conditions.

2. Persons whom have lodged submissions in respect to the application are to be notified of the determination of the application.

ATTACHMENTS

1. Draft Notice of Determination  
2. Architectural Plans  
3. Landscape Plan  
4. Stormwater Plans  
5. Plan of Management  
6. Submissions Received  
7. Parramatta Local Environmental Plan 2011 - Compliance Table  
8. Parramatta Development Control Plan 2011 - Compliance Table  
DOCUMENTS ASSOCIATED WITH REPORT EELPP023/19

Attachment 1
Draft Notice of Determination
CONDITIONS OF DEVELOPMENT CONSENT

DA No: DA-290/2018
Property: 128 Railway Parade, GRANVILLE NSW 2142
Description: Demolition of dwelling and associated structures and construction of a two storey boarding house comprising 12 single rooms with associated at-grade car parking

1. **Approved Plans**

The development is to be carried out in accordance with the approved stamped plans as numbered below:

<table>
<thead>
<tr>
<th>Plan Number</th>
<th>Prepared By</th>
<th>Revision No.</th>
<th>Dated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Information A001 2018-21</td>
<td>Gus Fares Architects P/L</td>
<td>C</td>
<td>March 2018</td>
</tr>
<tr>
<td>Ground Floor Plan A101 2018-21</td>
<td>Gus Fares Architects P/L</td>
<td>C</td>
<td>March 2018</td>
</tr>
<tr>
<td>First Floor Plan A102 2018-21</td>
<td>Gus Fares Architects P/L</td>
<td>C</td>
<td>March 2018</td>
</tr>
<tr>
<td>Elevations &amp; Section A201 2018-21</td>
<td>Gus Fares Architects P/L</td>
<td>C</td>
<td>March 2018</td>
</tr>
<tr>
<td>Sediment &amp; Erosion Control Plan A8251-SW01</td>
<td>Alpha Engineering &amp; Development</td>
<td>E</td>
<td>14.03.2019</td>
</tr>
<tr>
<td>Landscape Plan LP-00 JALA-18-021</td>
<td>Jala Designs</td>
<td>C</td>
<td>14.03.2019</td>
</tr>
<tr>
<td>Ground Floor Drainage Plan A8251-SW02</td>
<td>Alpha Engineering &amp; Development</td>
<td>E</td>
<td>14.03.2019</td>
</tr>
<tr>
<td>First Floor &amp; Roof Drainage Plan A8251-SW03</td>
<td>Alpha Engineering &amp; Development</td>
<td>E</td>
<td>14.03.2019</td>
</tr>
<tr>
<td>BASIX Certificate No. 1007784M</td>
<td>Evergreen Energy Consultants</td>
<td></td>
<td>08.04.2019</td>
</tr>
<tr>
<td>Plan of Management</td>
<td>Gus Fares Architects P/L</td>
<td>A</td>
<td>18 June 2018</td>
</tr>
</tbody>
</table>

except as otherwise provided by the conditions of this determination (Note:- modifications to the approved plans will require the lodgement and consideration by Council of a modification pursuant to Section 4.55 of the Environmental Planning and Assessment Act (as amended)).

**Reason:** to confirm and clarify the terms of Council’s approval.

2. **Time period of consent**

This consent shall lapse five (5) years from the date of determination unless the approved building, engineering or construction work has been physically commenced in accordance with this consent.
Development consent for the use of land does not lapse if the approved use of any land, building or work is actually commenced prior to the date on which the consent would otherwise lapse.

Reason:- to satisfy the requirements of Section 4.53 of the Environmental Planning and Assessment Act (as amended).

3. Drainage and carpark design

Prior to issue of a Construction Certificate, amended plans addressing following shall be submitted to and approved by Cumberland Council’s Manager of Engineering and Traffic:

a) Stormwater runoff from the subject site shall be discharged by gravity system. The details shall be prepared by a suitably qualified person and must be in accordance with the Upper Parramatta River Catchment Trust “On-Site Detention Handbook” and Parramatta City Council’s Stormwater Disposal Policy and “Australian Rainfall & Runoff 1987”.

b) Area by passing the OSD shall be reviewed and OSD design shall be updated.

c) Proposed carpark and driveway surface levels and driveway longitudinal section shall be submitted.

d) Grated drains shall be provided across the driveway.

e) Width of the two-way driveway and circulation aisle shall be 6.1m at the site boundary.

f) Inlet and outlet pipe levels shall be annotated on the plans for the stormwater pipes from discharge control pit to the street gutter. Stormwater pipe within street shall have minimum 1% grade.

g) Driveway shall be minimum 1.0m from the southern boundary. Details shall be annotated on the plans.

h) Disabled car parking space shall be annotated on the site plan and floor plan.

Reason:- to ensure OSD system complies with Council’s DCP and stormwater connection complies with Council’s requirements and driveway and parking complies with Australian standard AS2880.1.

4. Plantings and associated temporary fencing (adjacent to eastern property boundary):

The approved plantings adjacent to the eastern property boundary (six (6) Robyn Gordon Grevillea and one (1) Tuckeroo) as indicated on the approved landscape plan in condition no. 1 of this consent must also be planted before the commencement of any construction work for the approved building.

The plants must be protected from any damage during construction. The minimum stock height of the Robyn Gordon Grevilleas must be 1.0 metres and the minimum stock height of the Tuckeroo must be minimum 1.50 metres. Furthermore, 1.80 metre high chain-mesh temporary fencing must be erected to ensure that these specified plantings are not damaged during construction works. The owner of the site must be responsible to ensure that these plants are adequately maintained during the construction phase.
**Reason:** to ensure that the visual privacy of the adjoining site is maintained through plantings.

5. **Installation of louvres (eastern elevation windows – first floor):**

Louvres are to be installed over the first floor windows on the eastern elevation of the approved building. The louvres are to extend forward by 200mm from the external wall of the building. The louvres must be installed in a vertical direction to the window sill, at an angle, that would minimise outlook onto the adjoining property and associate private open space area.

Amended plans (including elevation plans) must be provided to and approved by the Manager of Development Assessment to indicate compliance with the above requirements, prior to the issue of a Construction Certificate.

The louvres are to be installed in accordance with the details on the approved plan(s), prior to the issue of the Occupation Certificate.

**Reason:** to ensure that the visual privacy of the adjoining site is maintained through window louvres.

6. **Fencing**

The fencing along the Railway Parade and Milton Street frontages must not exceed a height of 1.20 metres, as measured above existing ground level and shall be a minimum of 50% transparent.

A fence height of 1.80 metres above the existing natural ground level, minimum 50% transparent, is only permitted along the Milton Street frontage, between the areas marked in red on the stamp approved plan *Ground Floor Plan A101 2018-21 by Gus Fares Architects P/L Revision C dated March 2018*. Specifically, the 1.80 metre fence is required between the internal wall, separating room 2 and the ground floor communal room, to the rear boundary. Also the sliding gate for the driveway must also be maximum 1.80 metres in height and minimum 50% transparent.

Amended plans and specifications are to be provided to the Principal Certifying Authority (PCA) to ensure compliance with this requirement, prior to the issue of a Construction Certificate. Works are to be completed, prior to the issue of an Occupation Certificate.

**Note:** No solid pre-coated metal fences (i.e. Colourbond or similar) are to be located along the primary or secondary frontage of the site.

**Reason:** to maintain reasonable levels of amenity to adjoining residential development and the streetscape and to comply with Council’s Development Control Plan provisions.

7. **Sydney Water Approval**

The approved development application plans must be accompanied by a valid Building Plan Assessment Approval Receipt. This receipt can be acquired through the "Sydney Water Tap" in system by the Sydney Water Authority.

Please refer to the web site www.sydneywater.com.au for:

- Information on the "Sydney Water Tap in" system and
• Registering and applying for the approval receipt for the Proposed Building Plan.
or telephone 13 20 92.

Note:

The consent authority or accredited certifier must either:
• ensure that a valid approval receipt has been obtained from Sydney Water before the issue of any Construction Certificate (receipt valid usually 1 year from the date of issue); or
• if there is a combined Development/Construction Certificate application, ensure that a valid approval receipt has been obtained prior to works commencing on site.

Reason:- to ensure the development does not damage or interfere with Sydney Water assets.

8. **Section 7.12 Contribution**

A monetary contribution comprising $9,989.14 is payable to Cumberland Council in accordance with Section 7.12 of the Environmental Planning and Assessment Act 1979 (as amended) and the Parramatta Section 7.12 Development Contributions Plan (Amendment No. 5).

The contribution is to be paid to Council prior to the issue of a Construction Certificate.

The contribution levy is subject to indexation on a quarterly basis in accordance with movements in the Consumer Price Index (All Groups Index) for Sydney issued by the Australian Statistician. At the time of payment, the contribution levy may have been the subject of indexation.

Parramatta Section 7.12 Development Contributions Plan (Amendment No. 5) can be viewed on Cumberland Council’s website at: www.cumberland.nsw.gov.au

Reason:- To comply with legislative requirements.

9. **Submission of Construction Certificate**

Construction works are not to commence until such time that a Construction Certificate for the proposed works has been issued by Council or an Accredited Certifier.

Where an Accredited Certifier issues a construction certificate, a copy of the following documents must be forwarded to Council within 2 days of issue, together with payment of the Council’s adopted registration fee: determination; application to which it relates; construction certificate issued; plans and specifications; any fire safety schedule; and any other documents lodged with the certificate.

Any modification involving building works to the approved development made under Section 4.55 of the Environmental Planning and Assessment Act 1979 (as amended) requires the submission of an amended construction certificate.

Reason:- to comply with the requirements of Section 4.19, 6.6, 6.7, 6.12, 6.13, 6.14 of the Environmental Planning and Assessment Act (as amended) and clause 142 of the Environmental Planning and Assessment Regulation 2000.
10. **Appointment of Principal Certifying Authority/Notice of Commencement of Work**

Site works are not to commence until:-

a) a construction certificate for the building work has been issued by the consent authority, and

b) the person having the benefit of the development consent has:-

i) appointed a principal certifying authority for the building work, and

ii) notified the principal certifying authority that the person will carry out the building work as an owner-builder, if that is the case, and

b1) the principal certifying authority has, no later than 2 days before the building work commences:-

i) notified the consent authority and the council (if the council is not the consent authority) of his or her appointment, and

ii) notified the person having the benefit of the development consent of any critical stage inspections and other inspections that are to be carried out in respect of the building work, and

b2) the person having the benefit of the development consent, if not carrying out the work as an owner-builder, has:-

i) appointed a principal contractor for the building work who must be the holder of a contractor licence if any residential building work is involved, and

ii) notified the principal certifying authority of any such appointment, and

iii) unless that person is the principal contractor, notified the principal contractor of any critical stage inspections and other inspections that are to be carried out in respect of the building work, and

c) the person having the benefit of the development consent has given at least 2 days’ notice to the council of the person’s intention to commence the erection of the building.

*Reason:* to comply with the requirements of Section 4.19, 6.6, 6.7, 6.12, 6.13, 6.14 of the Environmental Planning and Assessment Act (as amended).

11. **Principal Certifying Authority**

1) The person having the benefit of a development consent or complying development certificate for development involving building work or subdivision work may appoint the consent authority, the council or an accredited certifier as the principal certifying authority for the development.

1A) Despite subsection (1), such an appointment may not be made by any contractor or other person who will carry out the building work or subdivision work unless the contractor or other person is the owner of the land on which the work is to be carried out.

2) Despite subsection (1), an accredited certifier must not be appointed as the principal certifying authority for development involving subdivision work unless the subdivision to which the work relates is of a kind identified by an environmental planning instrument as one in respect of which an accredited certifier may be a
certifying authority.

3) A principal certifying authority for building work or subdivision work to be carried out on a site is required to be satisfied:-

a) that a construction certificate or complying development certificate has been issued for such of the building work or subdivision work as requires development consent and over which the principal certifying authority has control, before the work commences on the site, and

b) that the principal contractor for the work is the holder of the appropriate licence and is covered by the appropriate insurance, in each case if required by the *Home Building Act 1989*, before any residential building work over which the principal certifying authority has control commences on the site, unless the work is to be carried out by an owner-builder, and

c) that the owner-builder is the holder of any owner-builder permit required under the *Home Building Act 1989*, before an owner-builder commences on the site any residential building work over which the principal certifying authority has control, and

d) that building work or subdivision work on the site has been inspected by the principal certifying authority or another certifying authority on such occasions (if any) as are prescribed by the regulations and on such other occasions as may be required by the principal certifying authority, before the principal certifying authority issues an occupation certificate or subdivision certificate for the building or work, and

e) that any preconditions required by a development consent or complying development certificate to be met for the work before the issue of an occupation certificate or subdivision certificate have been met, before the principal certifying authority issues the occupation certificate or subdivision certificate.

4) A principal certifying authority must also comply with such other requirements of a like or different nature as may be imposed on principal certifying authorities by the regulations.

*Reason:* To comply with the requirements of Section 6.5 of the Environmental Planning and Assessment Act (as amended).

12. **Compliance with the Building Code of Australia**

All building work must be carried out in accordance with the requirements of the Building Code of Australia.

*Reason:* To ensure compliance with the requirements of the Building Code of Australia and to comply with Clause 98 of the Environmental Planning and Assessment Regulation 2000.

13. **Insurance requirements under the Home Building Act 1989**

A contract of insurance for residential building work must be in force before any building works commence, where the works are being undertaken by a builder and tradesperson and the works have a market value of greater than $20,000 (or as varied from time to time by the *Home Building Act 1989*).

Where the contract price or the reasonable market cost of the labour and materials involved does not exceed $20,000, there is no legal requirement for home warranty...
insurance to be obtained.

Contractors who carry out residential building work must still hold an appropriate licence with Fair Trading where the labour and materials involved are valued at over $1,000.

Home owners should be wary of any builder or tradesperson who says they do not need insurance if the value of work exceeds $20,000, or who suggests you obtain an owner-builder permit while they carry out the work for you.

NOTE: Evidence of the contract of insurance or owner builder permit, if required, must be submitted with the application for construction certificate. The construction certificate will not be released by Council unless this evidence is provided.

Reason:- to comply with Clause 98 of the Environmental Planning and Assessment Regulation 2000.

14. **Replacement of Principal Certifying Authorities**

Unless the relevant authority so approves in writing, a person may not be appointed to replace another person as the principal certifying authority for development.

A principal certifying authority appointed to replace another principal certifying authority must ensure that notice of the appointment and of the approval of that appointment is given to the consent authority (and, if the consent authority is not the council, to the council) within 2 days of the appointment.

Reason:- to comply with the requirements of Section 6.5 of the Environmental Planning and Assessment Act (as amended) and clause 162 of the Environmental Planning and Assessment Regulation.

15. **Notice to Allow Inspections**

To allow a principal certifying authority or another certifying authority time to carry out critical stage inspections or any other inspections required by the principal certifying authority, the principal contractor for a building site, or the owner-builder, must notify the principal certifying authority at least 48 hours before building work is commenced at the site if a critical stage inspection is required before the commencement of the work.

Reason:- to comply with the requirements of Clause 163 of the Environmental Planning and Assessment Regulation.

16. **Erection of Signs**

A rigid and durable sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:-

a) showing the name, address and telephone number of the principal certifying authority for the work, and

b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and

c) stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.
Note: Principal certifying authorities and principal contractors must also ensure that signs required by this clause are erected and maintained (see clause 227A which currently imposes a maximum penalty of $1,100.

Reason:- to comply with the requirements of Clause 98A and 136B of the Environmental Planning and Assessment Regulations.

17. **BASIX Requirements**

Under Clause 97A(3) of the Environmental Planning & Assessment Regulation 2000, it is a condition of this development consent that all the commitments listed in each relevant BASIX Certificate for the development are fulfilled. In this condition:-

a) Relevant BASIX Certification means:-

   i) A BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under Section 96 of the Act, a BASIX Certificate that is applicable to the development when this development consent is modified) or;

   ii) If a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and

b) BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000.

Reason:- To comply with the Environmental Planning and Assessment Regulations.

18. **Boarding Houses Act 2012**

The use and operation of the premises shall comply with the requirements of the Boarding Houses Act 2012 and all associated regulations and guideline. Prior to the operation of the premises as a boarding house the premises must be registered with the NSW Department of Fair Trading.

Reason:- to ensure the use and operation complies with the Boarding Houses Act 2012.

19. **Occupancy Agreements**

No occupation of the premises is to occur without each boarder having a current agreement for a period of at least 3 months.

Reason:- to ensure that the premises operates within the boarding house use definition of the Paramatta Local Environmental Plan 2011.

20. **Maximum occupancy**

All boarding rooms are not permitted to be occupied by more than one (1) adult lodger at any one time.

A schedule showing the boarding room number and the number of lodgers permitted to be accommodated in each must be displayed near the entrance of the premises.

The schedule shall include the name and a 24 hour contact telephone number of the owner and/or the boarding house manager. Each boarding room must be clearly
numbered in accordance with the schedule.

**Reason:** to confirm the terms of approval and to comply with the requirements of *State Environmental Planning Policy (Affordable Rental Housing) 2009*.

21. **House rules**

The owner/managing agent is required to have every resident sign an agreement upon commencement of their stay with regards to their behaviour. In addition, the house rules are to be displayed around the entire premise including the common room and within each room. The house rules are to address:-

- A limit to the number of invited guests per resident.
- Restriction on house parties/gatherings.
- Residence be strictly drug free and residents suspected of using illegal drugs could face eviction.
- Residents to consider the neighbours at all times.
- Prohibition of placing structures on balconies or displaying laundry.
- All complaints to be made to the caretaker or owner of the premises.

A copy of the final set of house rules to be established shall be provided to the Council for its records **prior to the issue of the Occupation Certificate**.

**Reason:** to promote satisfactory behaviour within the premise.

22. **Operational Plan of Management**

The premises shall be operated in accordance with the Plan of Management prepared by *Gus Fares Architects P/L, Revision A, dated 18 June 2018*. Where there is any conflict between the provisions of the operational plan of management and specific conditions of this consent, the specific conditions of this consent shall prevail.

**Reason:** to ensure on-going management of the boarding house is in accordance with the operational plan of management.

23. **Separate Development Consent**

No signs, whether for advertising, directory or identification purposes or for any other purpose, are to be erected on the land without the written consent of Council having first been obtained.

**Reason:** to limit and control advertising.

24. **Construction/Demolition Hours**

Site works, building works and demolition works, including the delivery of materials or equipment to and from the property are to be carried out between the hours of 7.00 am and 6.00 p.m. only from Mondays to Fridays and between 8.00 am and 4.00 p.m. only on Saturdays. No construction works or deliveries for the construction are to take place on Sundays or public holidays.

Prior to commencement of any demolition or construction work the applicant is to erect signs on the site, which are clearly visible from the footpaths adjoining the site boundaries, which state the permitted construction/demolition hours. These signs must also state "Any instances of site works, building works, demolition works or deliveries
outside the permitted hours can be reported to Cumberland Council on 8757 9000 during office hours or 0417-287-113 outside office hours".

Reason: to reduce nuisance to the surrounding properties during the construction period.

25. Demolition of buildings

The existing building/s shall only be demolished in accordance with the requirements of AS 2601-2001 "The Demolition of Structures".

Amongst others, precautions to be taken shall include compliance with the requirements of the WorkCover Authority of New South Wales, including but not limited to:-

a) Protection of site workers and the general public.
b) Erection of hoardings where appropriate.
c) Asbestos handling and disposal where applicable.
d) Any disused service connections shall be capped off to Council’s requirements.
e) The disposal of refuse is to be to an approved waste disposal depot.

Reason: to ensure protection of the public, environment and to uphold public health standards. This also complies with the requirements of clause 92 of the Environmental Planning and Assessment Regulation 2000.

26. Demolition – common sewerage system

If the land to which the application relates is served by a common sewerage system that is also used by others, then measures must be placed in effect and prior to the commencement of work to ensure the operation of the sewerage system is without disruption to other joint users.

Reason: to ensure demolition activities do not disrupt the operation of the sewerage system for other users of the system.

27. Demolisher Details

The demolisher/owner/applicant shall:-

a) Lodge with Council, and at least forty-eight (48) hours prior to the commencement of work (due to the potential impact on Council’s infrastructure):-

i) Written notice, indicating the date when demolition of the building is to commence.
ii) The demolisher’s full name and address.
iii) Details of Public Liability Insurance.

b) Comply with Australian Standard 2601 – 2001 "Demolition of Structures"; and,

c) Have a current public liability/risk insurance, and policy details of such shall be submitted to Council for its records.

d) Ensure that all possible/practicable steps are taken to prevent nuisance to the inhabitants of the surrounding neighbourhood from wind-blown dust, debris, noise and the like arising from the demolition works

This Consent shall not preclude the demolisher from giving notice to other statutory
authorities, such as Sydney Water Corporation, WorkCover, etc.

*Reason:* to ensure details of the demolition are provided to Council and relevant safety requirements are met.

28. **Demolition Works – noise and vibration**

The following shall be complied with:-

a) Vibration levels induced by the demolition activities shall not exceed 1mm/sec peak particle velocity (ppv) when measured at the footing of any occupied building.

b) Vibration levels induced by the demolition activities shall not exceed 3mm/sec peak particle velocity (ppv) when measured at the footing of any unoccupied building.

c) The upper noise level from the demolition operations measured over a period of 10 minutes must not exceed the background noise level by more than 10dB(A).

*Reason:* to ensure noise and vibration arising from the demolition works does not impact on the amenity of the surrounding area.

29. **Asbestos**

a) In the event that asbestos is on a site or building under demolition or construction, WorkCover NSW is to be contacted to ascertain the appropriate response, to ensure the safety and protection of existing and future workers and residents. An Asbestos Removal Contractor licensed by WorkCover NSW is to handle/transport and dispose of any products containing asbestos in a manner approved of by the Department of Environment and Conservation (DEC). Copies of tipping docketts are to be retained and able for viewing by Council officers on request.

e) Asbestos material can only be disposed of at a landfill site nominated by Waste Services NSW for that purpose. An appointment must be made with Waste Services NSW to dispose of asbestos materials at the nominated landfill.

c) Anyone who removes, repairs or disturbs bonded or a friable asbestos material must hold a current removal licence from Workcover NSW. Before starting work, a work site-specific permit approving each asbestos project must be obtained from Workcover NSW. A permit will not be granted without a current Workcover licence. All removal, repair or disturbance of or to asbestos material must comply with:-

i) Work Health and Safety Act 2011;

ii) The Work Health and Safety Regulation 2011;


*Note:* The Code of Practice and Guide referred to above are known collectively as the Worksafe Code of Practice and Guidance Notes on Asbestos. They are specifically referenced in the Occupational Health and Safety Regulation 2001
under Clause 259.

Under the Work Health and Safety Regulation 2011, the Worksafe Code of Practice and Guidance Notes on Asbestos are the minimum standards for asbestos removal work.

Council does not control or regulate the Worksafe Code of Practice and Guidance Notes on Asbestos. You should make yourself aware of the requirements by visiting <http://www.workcover.nsw.gov.au> or one of Workcover NSW’s offices for further advice.

d) In order to ensure safe handling of asbestos materials, the re-use or sale of asbestos building materials is strictly prohibited.

Reason: to ensure the safe handling, treatment and disposal of asbestos materials arising from the demolition/construction works.

30. **Services to be capped**

Prior to the commencement of demolition works, the applicant must ensure that utility services to the land upon which the building to be demolished stands, as well as the building itself, are terminated and capped in accordance with the requirements of supply authority, eg. Electricity-Supplier of Electricity to the subject premises, Gas-Supplier of Gas to the subject premises.

Reason: to ensure all services are capped adequately.

31. **Site to be kept in a clean condition**

Upon completion of demolition works and if no new building works are commenced on site, the site shall be kept in a clean manner with landscaping and fencing to the satisfaction of Council.

Reason: to control soil erosion, and not have any unsightly views.

32. **Neighbour 24 hour notification of commencement of demolition**

Prior to the commencement of work the applicant shall provide 24 hours’ notice in writing to the neighbours adjoining and opposite the site of the intended time and date of the start of the demolition work.

Reason: to ensure details of the demolisher are provided to neighbours.

33. **Tree Retention**

All reasonable measures shall be undertaken to ensure that the existing trees on the site, and including street trees adjacent to the site, (other than any tree approved for removal by Council) are not damaged during the approved demolition and construction works.

Reason: to protect trees in accordance with Council’s Development Control Plan.

34. **Discovery of additional information during remediation, demolition or construction**
Any new information which comes to light during remediation, demolition or construction works which has the potential to alter previous conclusions about site contamination shall be notified to the Council and the PCA immediately.

**Reason:** to ensure Council is informed of any new information relevant to site conditions and site contamination associated with the development.

35. **Information required prior to the issue of Construction Certificate**

The following documentation (where applicable) is to be submitted to Council or the Accredited Certifier, prior to the granting of the Construction Certificate:

a) Detailed building plans and specifications containing sufficient information to verify that the completed building will comply with the Building Code of Australia.

b) A list of any existing fire safety measures provided in relation to the land or any existing building on the land.

c) A list of any proposed fire safety measures provided in relation to the land or any existing building on the land.

d) A report prepared by a professional engineer detailing the proposed methods of excavation, shoring or pile construction, and what measures are to be implemented to prevent damage from occurring to adjoining or nearby premises as a result of the proposed excavation works. (NOTE: Any practices or procedures specified to avoid damage to adjoining or nearby premises are to be incorporated into the plans and specifications for the construction certificate).

e) Method of protecting window/door openings as required by BCA Part 3.

**Reason:** to ensure that adequate information is submitted to enable assessment or that the development can proceed with the concurrence of others.

36. **Prior to the issue of the Construction Certificate**

The following structural engineering details or design documentation (where appropriate) shall be submitted to the Principal Certifying Authority (Council or Accredited Certifier) prior to the issue of the Construction Certificate:

a) Reinforced concrete strip footings.

b) Reinforced concrete raft slab.

c) Suspended reinforced concrete slabs.

d) Structural steelwork.

e) Structural timber work exceeding the design parameters of AS1684-1999 "Residential timber-framed construction".

f) Upper floor joist layout

g) Retaining walls.

h) Roof trusses.

i) Wall/roof bracing

j) The existing structure is to be certified as being structurally adequate to carry out the proposed additional loadings.

k) Other.

**Reason:** to ensure the building or structure and its materials and components are capable of sustaining at an acceptable level of safety and serviceability.

37. **Infrastructure Fee**

The infrastructure inspection fee in accordance with Councils Fees and Charges Schedule shall be paid prior to the issue of the Construction Certificate.
**Reason:** to contribute to the cost of inspection and identification of any damage to Council’s infrastructure as a result of the development.

38. **Maintain plans on-site**

A copy of the approved plans & specifications and development consent conditions must be kept on the site at all times and be available to the Council officers upon request.

**Reason:** to ensure a record of the approved plans are readily available.

39. **PCA - Inspection of works – general & site management**

The building works are to be inspected by the principal certifying authority (or other suitably qualified person on behalf of the applicant if permitted by the PCA) to monitor compliance with Council’s approval and the relevant standards of construction.

Documentary evidence of compliance with Council’s approval and relevant standards of construction is to be maintained by the principal certifying authority.

Upon inspection of each stage of construction, the principal certifying authority (or other suitably qualified person on behalf of the applicant) is also required to ensure that adequate provisions are made for the following measures (as applicable), to ensure compliance with the terms of Council’s approval:

- Sediment control measures
- Provision of perimeter fences or hoardings for public safety and restricted access to building sites.
- Maintenance of the public place free from unauthorised materials, waste containers or other obstructions.

**Reason:** to ensure the development is adequately monitored during the construction phase.

40. **Items not to be placed on roadway**

The following items must not be placed on the footpath, roadway or nature strip at any time:

a) Building materials, sand, waste materials or construction equipment;
b) Bulk bins/waste skips/containers; or
c) Other items that may cause a hazard to pedestrians.

**Reason:** to ensure the public is not inconvenienced, placed in danger and to prevent harm to the environment occurring.

41. **Sign to be erected concerning unauthorised entry to the site**

A sign must be erected in a prominent position stating that unauthorised entry to the site is not permitted. The sign must also name the builder or other person responsible for the site and a telephone number at which the builder or other person can be contacted outside working hours. Where Council is not the Principal Certifying Authority, the sign shall also display the name and contact details of the nominated Principal Certifying Authority. The sign is to be removed when the building works have been completed.
Reason: to restrict public access to the site and to provide suitable contact details in a clear and conspicuous position.

42. Toilet accommodation for people working at the site

Suitable toilet accommodation is to be provided at the work site at all times. If temporary toilet accommodation is proposed, it must:

- Have a hinged door capable of being fastened from both inside and outside,
- Be constructed of weatherproof material,
- Have a rigid and impervious floor; and
- Have a receptacle for, and supply of, deodorising fluid.

Reason: to ensure suitable toilet accommodation is provided for workers.

43. Excavated and Filled Areas

All excavated and filled areas shall be battered to a slope not steeper than two (2) horizontal to one (1) vertical and the fill area shall continue a minimum of one metre past the edge of the house, or similarly be retained in accordance with a retaining wall detail approved by Council.

In the event that the retaining wall exceeds 600 mm when measured vertically from the base of the cut, the wall shall be designed by a practicing Structural Engineer, the details submitted to Council, and approved prior to work commencing.

Reason: to adequately retain excavated and filled areas and prevent soil movement, which may be detrimental to the subject or adjoining premises.

44. Fencing of Construction Sites – Rental details to be provided to the PCA

Public access to the site and building works, materials and equipment on the site is to be restricted, when work is not in progress or the site is unoccupied.

A temporary hoarding or fence is to be provided to protect the public, located to the perimeter of the site (unless the site is separated from the adjoining land by an existing structurally adequate fence, having a minimum height of 1.5 metres). Hoardings or fences are to have a minimum height of 1.8 metres and be constructed of solid plywood sheeting (painted white) or of cyclone wire fencing with geotextile fabric attached to the inside of the fence, to provide dust control.

Hoardings or fences are to be structurally adequate and be constructed in a good and workmanlike manner and the use of poor quality materials or steel reinforcement mesh as fencing is not permissible.

The public safety provisions and temporary fences must be in place prior to the commencement of any demolition, excavation or building works and be maintained throughout construction.

NOTE: Should ANY part of the fence or hoarding encroach beyond the boundaries of the site, it will be necessary to:

- Make payment to Council for the rental of the road reserve area in accordance with Council’s adopted charges (per metre per month – minimum 3 months)
BEFORE the fence/hoarding is erected.

- Supply evidence that the road reserve rental fee has been paid to the PCA and to any authorised Council officer.
- Comply with Council's specifications for the erection of Class A Hoardings.

Reason: to provide protection to public places and to prevent unauthorised access to the site.

45. Sedimentation Control

Prior to the commencement of site works, the following measures are to be implemented on the site to assist with sedimentation control during the construction phase of the project:

a) A dish shaped diversion drain or similar structure will be constructed above the proposed building works to divert run-off to a stable discharge area such as dense ground cover. This diversion drain is to be lined with turf or otherwise stabilised.

b) A sediment-trapping fence using a geotechnical fabric specifically designed for such purpose and installed to manufacturer’s specifications is to be placed below the construction area.

c) Vegetation and/or existing building structures will be cleared from the construction site only, other areas to remain undisturbed.

d) Restricting vehicle access to one designated point and having these driveways adequately covered at all times with blue metal or the like.

e) A vehicle wheel wash, cattle grid, wheel shaker or other appropriate device, shall be installed prior to commencement of any site works or activities, to prevent mud and dirt leaving the site and being deposited on the street.

f) Building operations such as brick cutting, washing tools or brushes and mixing mortar are not permitted on public roadways or footways or in any other locations which could lead to the discharge of materials into the stormwater drainage system.

g) Stockpiles of topsoil, sand, aggregate, soil or other material shall not be located on any drainage line or easement, natural watercourse, footpath or roadway and shall be protected with adequate sediment controls.

h) The installation of gutters, downpipes, and the connection of downpipes to the stormwater disposal system prior to the fixing of the roof cladding.

Such measures are to be maintained at all times to the satisfaction of Council and the Principal Certifying Authority. Failure to do so may result in the issue of penalty infringement notices.

Reason: to minimise soil erosion and control sediment leaving the site during construction and to prevent water pollution from occurring.

46. Display of a warning sign for soil and water management

Throughout the construction/remediation/demolition period, a warning sign for soil and water management must be displayed on the most prominent point of the building site, visible to both the street and site works.

Reason: to ensure all building workers are aware of the need to maintain the sediment and erosion control devices.
47. **Excavations extending below the base of footings of adjoining development**

Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must preserve and protect the building from damage and, if necessary, underpin and support the adjoining building in an approved manner.

The person causing the excavation must give the owner of the adjoining property at least seven (7) days written notice of its intention to excavate below the level of the base of the footing. The person must also furnish the adjoining property owner with particulars of the proposed work.

*Reason:* to ensure the support for neighbouring buildings.

48. **Survey Documentation**

A Registered Surveyors check survey certificate or compliance certificate is to be forwarded to the principal certifying authority (and a copy is to be forwarded to the Council, if the Council is not the principal certifying authority), detailing compliance with Council’s approval at the following stage/s of Construction:-

a) Prior to construction of the footings (prior to the pouring of concrete), showing the area of the land, building and boundary setbacks.

b) Prior to construction of the completed floor/floor slab of the *ground floor* (prior to pouring of concrete), showing the area of land, building and boundary setbacks and verifying that the building is being constructed at the approved levels.

c) Prior to construction of the completed floor/floor slab of the *first floor*, showing the land, building and boundary setbacks and verifying that the building is being constructed at the approved level.

d) On completion of the erection of the building showing the area of the land, the position of the building and boundary setbacks and verifying that the building has been constructed at the approved levels.

*Reason:* to ensure each stage of the development complies with the approved plans.

49. **Disposal of Site Water**

Site water discharged to Council’s stormwater system must have a suspended solid level of less than 50 mg/L. This may require treatment such as transfer to settling ponds, use of approved chemicals to settle out sediment or passing the contaminated water through a treatment device. Site water may also be disposed of through the services of a licensed liquid waste transporter.

*Reason:* to prevent water pollution from occurring.

50. **Noise from construction activities**

Noise from construction activities associated with the development shall comply with the NSW Interim Construction Noise Guidelines (DECCW) 2009.

*Reason:* to ensure noise arising from construction activities is in accordance with relevant legislation and Environment Protection Authority requirements.
51. **Dial before you dig (advisory)**

Dial Before You Dig is a free national community service designed to prevent damage and disruption to the vast pipe and cable networks which provides Australia with the essential services we use everyday – electricity, gas, communications and water.

Before you dig call “Dial before you dig” on 1100 (listen to the prompts) or facsimile 1300 652 077 (with your street no./name, side of street and the distance to the nearest cross street) or register online at www.dialbeforeyoudig.com.au for underground utility services information for any excavation areas.

The Dial Before You Dig service is also designed to protect Australia’s excavators. Whether you are a back yard renovator, an individual tradesman or a professional excavator the potential for injury, personal liability and even death exists every day. Obtaining accurate information about your work site significantly minimises these risks.

*Reason:* To ensure that essential services such as electricity, gas, communications and water are not affected by excavation or construction.

52. **Stormwater disposal**

Stormwater runoff generated from the development shall be directed to the On Site Detention system prior to being discharged to Milton Street gutter by a gravity system.

*Reason:* to prevent localised flooding

53. **Submission of full stormwater disposal details**

Full stormwater drainage details showing the proposed method of stormwater collection and disposal are to be submitted to Council or the Accredited Certifier to ensure the approved stormwater plans are incorporated with the Construction Certificate.

The details shall be prepared by a suitably qualified person and must be in accordance with the Upper Parramatta River Catchment Trust “On-Site Detention Handbook" and Stormwater drainage Guidelines and "Australian Rainfall & Runoff 1987". In this regard,

a. The proposed stormwater system shall be generally in accordance with the stormwater concept plans approved as part of condition 1 above.

b. **OSD tank access grates** shall be minimum 900x900 in size with double (2/900x450) hinged grates.

c. Maximum spacing between the grated access pits in the OSD shall not exceed 5.0m.

d. Stormwater runoff from access ways will have to undergo some form of industrial standard primary treatment/separation prior to disposal into existing stormwater systems. In this regard, stormwater treatment device capable of removing litter, oil, grease and sediment shall be provided prior to discharge to the stormwater system.

*Reason:* to ensure the stormwater is suitably discharged.
54. **Traffic Management**

A traffic management plan shall be submitted to and approved by Council for all demolition, excavation and construction activities associated with the development **prior to commencement of work.**

*Reason:* to minimise the impact on street traffic.

55. **Acoustic specifications:**

Plans and/or specifications indicating how compliance with the acoustic report conclusions *(reference 1963465, prepared by Far West Consulting Engineers (NSW) Building Services, dated 27 February 2019)* will be achieved are to be submitted to the Principal Certifying Authority (PCA), **prior to the issue of a Construction Certificate.**

*Reason:* to ensure that appropriate noise mitigation measures are implemented to the development.

56. **Fire Safety Upgrading & Essential Services**

The applicant/owner is to give written notice to the Principal Certifying Authority (PCA) of the measures that are to be implemented in the building or premises to ensure the safety of persons in the building in the event of fire. **The schedule of measures must be provided with the Construction Certificate application.**

The Construction Certificate is to include a schedule specifying all of the essential fire or other safety measures that are required for the building or premises to ensure the safety of persons in the building in the event of fire.

*Reason:* to ensure that the occupants of the boarding house are protected in an event of fire occurring in the approved building.

57. **Waste and recyclables storage area:**

The waste and recyclable storage area shall be adequately ventilated and constructed with a concrete floor and concrete or cement rendered walls covering the floor.

The floor shall be graded to an approved sewer connection incorporating a sump and galvanised grate cover or basket. A hot and cold hose cock shall be provided within the room. Details shall be provided with the Construction Certificate and endorsed on the construction drawings, and works completed **prior to the issue of an Occupation Certificate.**

*Reason:* to ensure the waste and recyclables storage area is appropriately constructed and able to be readily cleaned and maintained.

58. **Ongoing Waste Management**

Ongoing waste management within the development shall be carried out in accordance with the approved Waste Management Plan and the following requirements:

a) Appropriate waste management practices are to be adopted within the development at all times.

b) The waste storage room shall be kept in a clean, tidy and hygienic condition at all times.
c) The waste and recyclable storage area shall be fully enclosed, adequately ventilated and constructed with a concrete floor and concrete or cement rendered walls covering the floor. The floor shall be graded to an approved sewer connection incorporating a sump and galvanised grate cover or basket. A hot and cold hose cock shall be provided within the room. Details shall be provided with the Construction Certificate and endorsed on the construction drawings, and works completed prior to the issue of an Occupation Certificate.

d) A person shall be employed/nominated to manage the collection of waste material by Council, including, but not limited to bin placement at the road edge and retrieval of bins soon after collection of contents, cleansing of bins, storage of bins in the compound and the like.

e) The nature strip is to be kept in a clean and tidy condition upon garbage collection.

Reason:- to ensure appropriate ongoing waste management practices within the development in accordance with Council’s Development Control Plan requirements.

59. CCTV Camera System

The Management/Licensee shall install CCTV surveillance cameras in and around the premises, placed in strategic places such as the external entrance and exit doors. The surveillance tapes shall be kept for a period of 14 days for viewing by the police upon request. The CCTV Camera System is to be installed prior to the issue of any Occupation Certificate.

Reason:- to ensure that the use provides adequate visual surveillance and adequate records for the NSW Police to peruse is required.

60. Security Management Plan

The Licensee shall prepare and submit a Security Management Plan which specifies appropriate security patrol, training of staff, uniforms, numbers of security staff at different times, surveillance, weapons detection and other security and response methods in and around the site, for approval of Cumberland Council prior to the issue of a construction certificate.

Reason:- to ensure the development provides acceptable security measures to preserve residential amenity and patron and worker safety.

61. Target hardening strategies to reduce crime

The following target hardening strategies shall be undertaken on site to assist in the reduction of crime in the locality:-

a) CCTV digital cameras shall be installed in and around the premises, particularly at the entry and exit points to assist police to identify offenders of crime.

b) Warning signs strategically posted in and around the premises to warn intruders of the security measures.

c) Additional lightning be installed in and around the premises to act as a deterrent for crime. The lighting shall be installed in accordance with the Australian Standards 1158.3 1999.

The details shall be shown in the construction plans for approval by Council or the Accredited Certifier prior to the issue of a Construction Certificate.

Reason:- to reduce the incidence of late night crime in the locality and to improve public safety late at night.
62. **Footpath Construction – Milton Street**

The footpath adjoining Milton Street frontage shall be reconstructed in accordance with the Council’s Standard footpath construction requirements. Site boundary line levels shall be raised to the boundary line levels, with satisfactory end-transitions provided.

- Detail footpath design shall be submitted and approved by Council’s Works and Services section prior to the issue of any Construction Certificate.
- Street boundary levels obtained from Council shall be incorporated in the design.
- The details of construction requirements shall be requested from the Council prior to commencement of construction.
- Formwork inspection and footpath inspection shall be carried out by Council.
- All associated cost shall be borne by the applicant.
- The footpath shall be constructed at the completion of works and finished to the satisfaction of Council prior to the issue of an Occupation Certificate.
- All associated cost shall be borne by the applicant.

*Reason*: to provide a safe footpath for increased pedestrian use and one that will complement the Council requirements.

63. **Street boundary levels**

Street boundary levels for vehicle access and drainage purposes are to be obtained at the applicant’s cost from Council’s Service Planning Department prior to commencement of any works. These levels are to be incorporated in all drainage submissions required under this determination.

*Reason*: to ensure the correct levels are obtained and used for the development.

64. **Road opening permit**

Prior to commencement of any work on Council roads and footpaths, a road-opening permit shall be obtained from Council’s Service Planning Department.

*Reason*: to safeguard Council property against damage.

65. **Water Reuse**

The stormwater generated from the roof area shall be reused for the irrigation of the landscape area within the subject development site.

Full details of the Water reuse facilities shall be submitted to Council or the Accredited Certifier with the Construction Certificate.

On completion, a certificate from a registered plumber shall be submitted for the pipe network. The certification shall indicate the water reuse system has been installed in accordance with the approved water reuse design plans.
Reason:- to ensure the water reuse facilities within the development are constructed and maintained in good working order.

66. Arrangements for Electricity and Telephone Services

Satisfactory arrangements are to be made with Energy Australia, Telstra and/or Optus for the provision of services to and within the subject land. Written evidence of such arrangements shall be submitted to the Principal Certifying Authority (Council or Accredited Certifier), prior to the issue of the Construction Certificate.

NOTE: Prior to works commencing, the applicant is advised to contact each provider to determine the location of various services to avoid damage occurring.

Reason:- to ensure these services are available to the site.

67. Occupation Certificate

A person must not commence occupation or use of the whole or part of a new building unless an occupation certificate has been issued in relation to the building or part.

The application for an Occupation Certificate must be made to the Principal Certifying Authority (Council or an accredited certifier) using the approved form.

Reason:- to comply with the requirements of Section 6.9 of the Environmental Planning and Assessment Act (as amended).

68. Works within Council controlled lands

(1) For drainage works:

a) Within Council controlled lands.

b) Connecting to Council’s stormwater drainage system.

Inspections will be required:-

i) After the excavation of pipeline trenches.

ii) After the laying of all pipes prior to backfilling.

ii) After the completion of all pits and connection points.

(2) A minimum of 48 hours’ notice shall be given to Council to inspect works. Inspections may be arranged by telephoning Council’s Works and Services Section during office hours.

(3) Work is not to proceed until the works are inspected and approved by Council.

Reason:- to ensure works on public/Council controlled lands are carried out as per Council’s requirements.

69. Reinstatement of footpath and footpath crossing

The footpath and footpath crossing/s adjacent to the property shall be reinstated by Council at the completion of works with all costs being borne by the developer. Alternatives to the pre-payment for this work will be considered if written request is
made to Council.

Reason: to ensure the footpath and the footpath crossings are repaired from any damage caused during the construction phase.

70. Vehicle Driveway Crossings and Gutter Laybacks

Arrangements shall be made with Council for the prepaid construction of vehicular crossings and gutter laybacks at all property entrances and exits, and for the removal of all disused driveway crossings and gutter laybacks. Alternatives to the pre-payment for this work will be considered if written request is made to Council.

The gutter crossing and/or the removal of any redundant crossings must be constructed to the satisfaction of Council (and to the Council’s specifications including payment of any required bonds) or the prepayment made to Council for Council to carry out the work, prior to the issue of any Occupation Certificate.

Removal of obstructions, such as power poles, trees, drainage pits and the like shall be carried out at the applicant’s expense.

Reason: to ensure that works are carried out in accordance with Council’s standard.

71. Carrying capacity of driveways – Heavy duty

Suitable heavy-duty driveway crossings are to be installed at all ingress/egress points to the property at the applicant’s cost by Council. Alternatives to the pre-payment for this work will be considered if written request is made to Council.

The gutter crossing and/or the removal of any redundant crossings must be constructed to the satisfaction of Council (and to the Council’s specifications including payment of any required bonds) or the prepayment made to Council for Council to carry out the work, prior to the issue of any Occupation Certificate.

Reason: to ensure the driveways can support the expected weight of heavy vehicles likely to frequent the site.

72. Restoration works

Prior to commencement of any excavation work on Council roads or footpaths, the applicant shall pay for all restoration costs. The area of restoration shall be determined on site between the applicant or its contractor and Council’s Contracts & Maintenance Engineer.

Reason: to ensure that Council’s infrastructure is maintained in a safe and trafficable manner.

73. Redundant driveway

Prior to the issue of any Occupation Certificate, redundant driveway shall be removed and replaced with footpath and kerb & gutter at no cost to Council. Nature strip area also be restored at applicants cost.

Arrangements shall be made with Council’s Service Planning Department for the prepaid for the removal of all disused driveway crossings and gutter laybacks. Alternatives to the pre-payment for this work will be considered if written request is
made to Council.

**Reason:** to ensure Council’s assets are restored in accordance with Council’s standard.

74. **Sediment control**

Temporary measures shall be provided in accordance with the NSW Department of Housing, Managing Urban Stormwater, Soils and Construction Manual dated March 2004 and regularly maintained during demolition, excavation and construction to prevent sediment and polluted waters discharging from the site.

**Reason:** to ensure sediment and erosion controls are maintained during the construction process to prevent water pollution from occurring.

75. **Footpath /Nature strip maintenance during and after construction**

The footpath and nature strip within the street frontages shall be maintained during the period of construction to Council’s satisfaction.

**Reason:** to ensure pedestrian safety during the construction period.

76. **Off-site soil disposal**

Any soil disposed of offsite shall be classified in accordance with the procedures in the NSW EPA Environmental Guidelines: Assessment, Classification & Management of Liquid & Non-Liquid Wastes (1999).

**Reason:** to ensure soil disposed off-site is classified in accordance with relevant EPA requirements.

77. **Driveway surface treatment**

Driveway surface treatments must finish at the property boundary.

**Reason:** to ensure compliance with Council’s Development Control Plan requirements.

78. **Noise compliance report:**

A noise compliance report shall be submitted to Council, prior to the issuing of the Occupation Certificate. The report shall state that the noise reduction measures detailed in the acoustic report (reference 1963465, prepared by Far West Consulting Engineers (NSW) Building Services, dated 27 February 2019) have been implemented.

**Reason:** to ensure the appropriate noise mitigation measures have been implemented during the construction phase of the development.

79. **Roofing Materials – Reflectivity**

Roofing materials shall be factory pre-finished with low glare and reflectivity properties. The Certifying Authority shall be provided with certification from the applicant, with the Construction Certificate that the selected roofing material will not cause a glare nuisance or excessive reflectivity to adjoining or nearby properties.

**Reason:** to ensure that excessive glare or reflectivity nuisance from roofing materials
does not occur as a result of the development.

80. **Amenity**

The operation of the premises shall be conducted in such a manner as not to interfere with or materially affect the amenity of the neighbourhood by reason of noise, vibration, odour, fumes, vapour, steam, soot, ash, dust, waste water, waste products, grit, oil, or otherwise.

**Reason:** to protect the amenity of the locality.

81. **Water Pollution**

The operation of the premises shall be conducted in a manner which does not pollute waters as defined by the **Protection of the Environment Operations Act 1997**.

**Reason:** to protect waterways and stormwater systems from pollution.

82. **Removal of Litter**

In addition to Council’s street sweeping and cleansing operations, the owner/manager of the building shall ensure that the footpath, gutter, building entry and surrounds are kept clean and clear of litter at all times.

**Reason:** to maintain a satisfactory level of amenity in the locality.

83. **Service relocation / Adjustment**

The applicant shall locate any utility services affected by the proposal and shall be responsible for any damage to, or relocation of services required by the proposal including adjustment to the levels of pit lids etc. All works shall be carried out to the satisfaction of the relevant Authority or Council.

All the costs shall be borne by the applicant.

**Reason:** to protect utility services

84. **Surface runoff**

Allowances shall be made for surface runoff from adjacent properties, and to retain existing surface flow path systems through the site. Any redirection or treatment of these flows shall not adversely affect any other property.

**Reason:** to prevent adverse impact on adjoining properties.

85. **Stormwater disposal – on-site detention**

On-site stormwater detention storage is to be provided in conjunction with the stormwater disposal. The storage is to comply with Council’s on-site stormwater detention parameters. Where multiple detention basins with differing top water levels are used, the basins must be routed to the outlet pit independent of each other.

A positive covenant under Section 88E of the Conveyancing Act is to be created on the title of the property detailing the on-site stormwater detention system incorporated in the development. The wording of the instrument is to be submitted and approved by Council.
prior to lodgement at the Land Registration Services. Evidence confirming the positive covenant has been registered shall be submitted to Council prior to the issue of the Occupation Certificate.

Work as executed plan(s) and engineers’ certifications shall be submitted to and approved by Council prior to the endorsement of Positive Covenant.

Reason: - to prevent localised flooding by ensuring the detention system is maintained as designed.

86. Structural Engineering Certificate

The applicant shall submit a structural engineer’s certificate of adequacy verifying that the works as detailed on the approved plans for the storage tank have been completed under his/her supervision and that the design is adequate to support the anticipated design loads. The certificate shall be submitted to Council with the works-as-executed plan.

Reason: - to ensure the construction is structurally adequate.

87. Maintenance schedule – OSD

Prior to the issue of the occupation certificate, a maintenance schedule of the proposed on-site detention facility shall be submitted to Council for approval with the stormwater work-as-executed plan. This maintenance schedule shall be registered as part of the positive covenant.

Reason: - to ensure the onsite detention facility is in good working order

88. Work-as-Executed Plan

Prior to occupation of the building or issue of the occupation certificate, two (2) copies of the Works-as-Executed (W.A.E.) Plan prepared by a registered surveyor and certified by the design engineer shall be submitted to Principal Certifying Authority. Copy of the documents shall be submitted to Council if Council is not the Principal Certifying Authority. Works-As-Executed stormwater plans are to address the following:

a) The Work-As-Executed plans are prepared on the copies of the approved drainage plans issued with the Construction Certificate with the variations marked in red ink.

b) The Work-As-Executed plans have been prepared by a registered surveyor certifying the accuracy of dimensions, levels, storage volumes, etc.

c) The as built On-Site Detention (OSD) storage volumes are to be presented in a tabular form (depth verses volume table

d) OSD Works-As-Executed dimensions form (refer to UPRCT Handbook).


f) Approved verses installed Drainage Design (OSD) Calculation Sheet.

The above requirement shall be submitted to and approved by Council prior to Council
endorse the Positive Covenant documents.

Reason:- To ensure works comply with approved plans and adequate information is available for Council to update the Upper Parramatta River Catchment Trust.

89. **Arrangements for Water and Sewer Services**

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained.

Application must be made through an authorised Water Servicing Coordinator. Please refer to “Your Business” section of Sydney Water’s web site at www.sydneywater.com.au then the “e-developer” icon or telephone 132 092.

Following application a “Notice of Requirements” will detail water and sewer extensions to be built or charges to be paid. Please make early contact with the Coordinator, since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscaping design.

The Section 73 Certificate must be submitted to the Principal Certifying Authority (Council or accredited certifier) prior to occupation of the development.

Reason:- to ensure that adequate water and sewer services can be provided to the site.

90. **Final Fire Safety Certificate**

Prior to the issue of any Occupation Certificate, the owner of the building shall submit to the Principal Certifying Authority (Council or Accredited Certifier), a final fire safety certificate in relation to each essential fire safety measure specified in the fire safety schedule, attached to the development consent or construction certificate.

Such certificate shall state that each essential fire safety measure specified:-

a) Has been assessed by a properly qualified person, and
b) Was found, at the date of assessment, to be capable of performing to a standard not less than that required by the current fire safety schedule for the building for which the certificate is issued.

NOTES:

1. As soon as practicable after a final fire safety certificate is issued, the owner of the building to which it relates:-
   i) Must cause a copy of the statement (and current fire safety schedule) to be given to the Commissioner of NSW Fire Brigades, and
   ii) Must cause a further copy of the statement (and current copy of the current fire safety schedule) to be prominently displayed in the building.

2. A “fire safety measure” is defined as any measure (including any item of equipment, form of construction or fire safety strategy) that is, or is proposed to be, implemented in the building to ensure the safety of persons using the building in the event of fire.

Reason:- to ensure compliance with Regulations 149 & 171 of the Environmental Planning and Assessment Regulation 2000.
91. **Annual maintenance inspection of OSD**

Annual maintenance inspection summary of the onsite detention with associated certificates shall be sent to Council within the first month of every calendar year. In this regard:

- All critical inspections shall be carried out by a qualified person.
- A maintenance log book shall be maintained as per the approved maintenance schedule on site and readily available for inspection by a Council officer.
- All associated cost shall be borne by the owner

*Reason:* to ensure the onsite detention facility is in good working order

92. **Noise and Vibration**

The use of the premises shall not give rise to any of the following when measured or assessed at "sensitive" positions within any other property. These "sensitive" positions should be selected to reflect the typical use of a property (ie any outdoor areas for day and evening but closer to the façade at night time), unless other positions can be shown to be more relevant.

b) transmission of vibration to any place of different occupancy above the requirements of AS2670.
c) a sound pressure $L_{Aeq,period}$ at any noise sensitive position of any other premises or occupancy greater than the recommended amenity noise criteria detailed in the Department of Environment and Conservation, New South Wales (EPA) Industrial Noise Policy.
d) a sound pressure $L_{Aeq,15min}$ at any noise sensitive position greater than the intrusiveness criteria determined in accordance with the Department of Environment and Conservation, New South Wales (EPA) Industrial Noise Policy and does not contain any tones, low frequency or impulsive factors as defined in the Department of Environment and Conservation, New South Wales (EPA) Industrial Noise Policy table 4.1.

For assessment purposes, the above $L_{Aeq}$ sound levels shall be assessed over a period of 10-15 minutes and adjusted in accordance with EPA guidelines for tonality, frequency weighting, impulsive characteristics, fluctuations and temporal content where necessary.

*Reason:* to ensure adequate acoustic amenity in the locality.

93. **Air conditioning units – location and acoustics**

a) Air conditioning units are not to be visible from the street or public place and are not to obscure windows/window frames or architectural features of the building.

b) The operation of air conditioning units shall be so:

   (i) as not to cause "offensive noise" as defined under the Protection of the Environment Operations Act 1997;
   (ii) as to be inaudible at the nearest affected residence between the hours of 10.00pm and 7.00am on weekdays and 10.00pm and 8.00am on weekends and public holidays;
(iii) as not to discharge a condensate or moisture onto the ground surface of the premises or into a stormwater drainage system in contravention of the requirements of the Protection of the Environment Operations Act 1997.

c) Should Council receive noise complaints from neighbouring residents in relation to the air conditioning units, Council may issue a Noise Notice. Such notice may require you to engage the services of a competent and appropriately qualified Acoustic Consultant to undertake a noise level assessment of the air conditioning unit. If the unit is assessed as exceeding the permitted noise criteria, you may be directed to provide noise attenuation measures such as an acoustic enclosure and/or relocation of the unit.

Reason:- to ensure that air conditioning units associated with the development are appropriately located and do not detract from the appearance of the buildings and to ensure the operation of air conditioning units does not adversely impact on the acoustic amenity of the locality.

94. Compliance with Acts and Regulations for shared accommodation

The use and operation of the premises shall comply with the requirements of Part 1 Standards for places of shared accommodation in Schedule 2 Standards enforceable by Orders of the Local Government (General) Regulation 2005 for the construction, maintenance, and operation of places of shared accommodation.

The use of the premises as a boarding house shall comply with the requirements of clause 46 regarding Sleeping Accommodation of the Public Health Regulation, 2012.

Reason:- to ensure that the applicable regulations for the Boarding House are adhered to.

95. Use of building not to commence until conditions of consent satisfied

The use of the premises is not to commence until all terms of this consent have been satisfied.

Reason:- to ensure compliance with the terms of the development consent.

96. Building not to be adapted for another use

The building is to be used for the approved Boarding House only and is not to be altered or adapted for another use without the prior consent of Council.

Reason:- the building has only been approved for this use and other uses require a separate approval of Council.

97. Suitable arrangements to be made for garbage and recycling services

Suitable arrangements for garbage and recycling services are to be made with Council prior to occupation of the building.

Reason:- to ensure adequate garbage and recycling services are provided for the development.
98. **Provision of Street Numbers**

A street number is to be displayed in a prominent position at the entrance to the premises. Numbers are to be of a colour contrasting with the wall to which they are affixed.

*Reason*: to clearly identify the street number of the property.

99. **Mail Box Structure**

An Australia Post approved lockable mail box structure(s) shall be centrally located to the primary street entry of the site.

*Reason*: to ensure compliance with Council's Development Control Plan requirements.

100. **Fencing/gates and adjoining land**

There must be no encroachment of any part of the structure/s onto the adjoining premises or onto Council’s road reserve, footway or public place. Any gate openings shall be constructed so that the gates, when hung, will be fitted in such a manner that they will not open over the footway or public place.

*Reason*: to ensure the fence/gates do not restrict access and that encroachments do not occur.

101. **No alteration without prior Council approval**

The completed building is not to be altered externally in character or colour without the prior consent of Council.

*Reason*: to ensure the external appearance of the development is not obtrusive or offensive and does not degrade the visual quality of the surrounding area.

102. **Car parking to Comply with Approved Details**

The area set aside for the parking of vehicles as shown on the stamp approved plan *Ground Floor Plan A101 2018-21 by Gus Fares Architects P/L Revision C dated March 2018* shall be used by the occupants of the Boarding House only. The spaces are to be suitably sealed, marked, drained and freely accessible at all times. Carparking spaces must not be enclosed by any device, such as a wire or mesh cage, walls or other similar fixtures.

*Reason*: to ensure the car parking area is not used for purposes other than the parking of cars associated with the use.

103. **Vehicles Driven in Forward Direction**

All vehicles must be driven in a forward direction at all times when entering or leaving the premises.

*Reason*: to preserve and enhance the safe operation of the car parking area.

104. **Annual Fire Safety Statement**

The owner of any building in which fire safety measures are installed, must cause the
Council to be given an annual fire safety statement, within 12 months after the last such statement or final fire safety certificate was issued.

The certificate shall certify:-

a) That each essential fire safety measure has been assessed by a properly qualified person and was found, at the date of assessment, to be capable of performing to a standard not less than that required by the current fire safety schedule.

b) That a properly qualified person has inspected the building and has certified that, as at the date of inspection, the condition of the building did not disclose any grounds for a prosecution under Division C.

NOTES:

1. As soon as practicable after an annual fire safety statement is issued, the owner of the building to which it relates:-

   i) must cause a copy of the statement (and current fire safety schedule) to be given to the Commissioner of NSW Fire Brigades, and

   ii) must cause a further copy of the statement (and current copy of the current fire safety schedule) to be prominently displayed in the building.

2. A “fire safety measure” is defined as any measure (including any item of equipment, form of construction or fire safety strategy) that is, or is proposed to be, implemented in the building to ensure the safety of persons using the building in the event of fire.

   **Reason:** to ensure compliance with Regulation 171 of the Environmental Planning and Assessment Regulation 2000.

105. **Sanitary Compartment doors – All Buildings**

The door to a fully enclosed sanitary compartment must open outwards OR slide OR be readily removable from the outside of the compartment, unless there is a clear space of at least 1.2m between the closet pan within the sanitary compartment and the nearest part of the doorway.

   **Reason:** to comply with BCA F2.5 and Part 3.8.3.3.

106. **Termite Protection**

Where a primary building element in a building may be subject to attack by termites, those members will need to be protected in accordance with Clause 3.1.3.0 of the Building Code of Australia. Satisfactory compliance with this requirement is achieved by applying a preventative treatment in accordance with AS 3860.1-2000.

Where a patented method of physical protection or chemical treatment is carried out, a certificate shall be submitted to The Principal Certifying Authority from the installer/pest control firm indicating that the protection used complies with AS 3860.1-2000 and the Building Code of Australia. This certificate shall be forwarded to The Principal Certifying Authority prior to the pouring of any slab on ground or prior to a bearers and joist inspection.

Where an alternative method of treatment is proposed, it is to be provided in accordance with the requirements of Clause 3.1.3 and Clause P2.1 in Section 2 of the Building Code of Australia. Details of any proposed performance based compliance
system must be submitted to The Principal Certifying Authority for approval.

A durable notice must be permanently fixed to the building in a prominent location regarding the installation of termite barriers, such as in a meter box or the like indicating:-

i) The method of protection; and
ii) The date of installation of the system; and
iii) Where a chemical barrier is used, its life expectancy as listed on the National Registration Authority label; and
iv) The installer’s or manufacturer’s recommendations for the scope and frequency of future inspections for termite activity.

Reason:- to comply with Clause 3.1.3.0 of the Building Code of Australia and AS 3660.1-2000.

107. Household Type Hot Water System

The household type hot water system is to be supported on construction sufficient to carry the total mass at full capacity and is positioned to enable adequate access for operation, maintenance and removal. Roof space or otherwise concealed units are to have a safety tray and waste for the overflow. (Note: Installation in accordance with AS 1529 is considered satisfactory).

Reason:- to comply with AS 1529.
DOCUMENTS ASSOCIATED WITH REPORT EELPP023/19

Attachment 2
Architectural Plans
128 Railway Parade Granville
Gorges' Lodge
Boarding House
### General Information

<table>
<thead>
<tr>
<th>Council</th>
<th>Cumberland Council</th>
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<td>Project Address</td>
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<tr>
<td>Site area</td>
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<tr>
<td>Maximum allowable FSR</td>
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<td>Maximum allowable GPA</td>
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<td>Heritage</td>
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### Proposal

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<td>Proposed Floor Area</td>
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<td>Proposed GFA</td>
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<td>Proposed Car Spaces</td>
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<td>Proposed Height</td>
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### Footnotes

- **Issue**: General Considerations
- **Description**: Lighter Pattern
- **Date**: Jul 19
- **C3**: Carport, Accessible
- **C3**: Proposed
- **C3**: Boarding House

### Site Information

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<tr>
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DOCUMENTS ASSOCIATED WITH REPORT EELPP023/19

Attachment 3
Landscape Plan
DOCUMENTS ASSOCIATED WITH REPORT EELPP023/19

Attachment 4
Stormwater Plans
DOCUMENTS ASSOCIATED WITH REPORT EELPP023/19

Attachment 5
Plan of Management
Plan of Management

12 Rooms Boarding House
“The Gerges’ Lodge”

ADDRESS:
128 Railway Pde Granville NSW

Date: 18 JUNE 2018

Owner: Mr Sam and Tony Rizk

Architects: Gus Fares Architect Pty Ltd

Issue A
1. INTRODUCTION

1.1 This Plan of Management provides directions and controls on the use and management of the premise as a Boarding House. The directions and controls are to be strictly adhered to in the operation of the Boarding House, to ensure compliance with the conditions of Development Consent and health and amenity requirements for both the occupants and surrounding residents.

1.2 The Plan of Management refers to the plans prepared by Gus Fares Architects Pty Ltd dated June 2018 and Development Application

1.3 The Plan of Management has been prepared for the proposed Boarding House at premises 128 Railway Pde Granville.

1.4 The Boarding House is to be managed by a Property Manager/Managing Agent engaged by the owner who will be familiar with the content of the Plan of Management.

1.5 The location of the premises is 128 Railway Pde Granville as shown on the accompanied DA plans

2. DEFINITIONS

2.1 In this plan of Management:

a. Building: means the building/s known as 128 Railway Pde Granville
b. Business: means the operation of the building/s as a Boarding House.
c. Common Room: means the room identified as the common living room on the approved plans.
d. Common Areas: means the hallways and stairs as identified on the approved plans.
e. Common Open Space Area: means the external communal area as identified on the approved plans.
f. Council: means Cumberland Council
g. **Boarder, Lodger**: means a person having the benefit of the use a nominated bedroom and common rooms/area within the building.

h. **Manager**: means the Property Manager/Real estate Managing Agent engaged by the business proprietor.

i. **Owner**: means the registered proprietor/s of the building.

j. **Room**: means that part of the building occupied and used by a lodger.

k. **House Rules**: means an attached insertion to the lease for internal boarding house rules that govern the occupation of the premises.

### 3. DUTIES OF THE PROPERTY MANAGER/MANAGING AGENT

3.1 The proprietor shall engage a Property Manager (external) whose responsibilities are, but not limited to, the following:

The Manager shall:

a. Be contactable between the hours of 8am and 5pm Monday to Saturday inclusive; (and on Emergency Calls Only after hours)

b. Oversee all Lodgers concerns;

c. Enforce the minimum occupancy period;

d. Organise the cleaning and maintenance of the common areas and common open space areas;

e. Enforce the maximum occupancy levels;

f. Provide lodgers with appropriate information prior to the commencement of occupation;

g. Carry out inspections on a regular basis at a minimum of once every 3 months to ensure that the building is maintained in a clean and tidy condition and that all facilities and fittings are appropriately maintained;

h. Record all inspections in a log book which must be made available to Council upon request;

i. Organise the waste collection and facility needs for the site, and the ongoing storage and collection of waste on-site including transfer of waste to and from collection points for the waste collection services as required, and regular cleaning of bins/waste storage areas/rooms;

j. Maintain an incident register;

k. Maintain the electrical circuits to a safe standard;
l. Notify the Council in writing within 1 month of any change in the management and provide contact details for the new management.
m. Prepare and maintain complaints register of neighbouring residents;

n. Inform Council and Police any illegal activities or complaints;
o. Provide a sign that contains the phone number to be displayed at the front of the premises; any entry points to the site, common areas and office areas for emergency services and others.
p. Provide contact details to police and council

q. Make sure that the Boarding house internal rules known as "House Rules" are adhered to by all occupants.

4. MAXIMUM NUMBER OF LODGERS

4.1 The maximum number of lodgers in the building is twelve (12). The maximum number of persons per bedroom is 1 person per room.

Grand total: Strictly 12 Lodgers

It is the Manager’s responsibility is to ensure that the number of lodgers is not exceeded at any given time

5. MINIMISING IMPACTS ON RESIDENTS

So as to minimise impacts upon the residents of adjoining premises as well as residents of the building the following rules are to apply:

a. Lodgers are required to sign an agreement upon commencement of their stay to abide by the “House Rules” including the consequences of breaking the rules;
b. No Loud music or television noise or any noise of any sort is permitted after 10pm;
c. No parties are to be held on-site at any time; however small gathering is permitted as long as all visitors leave before 10pm (noise rule applies)
d. No visitors are permitted after 10pm;

e. No illegal activities in any sort will be tolerated on the premises; The police will be called immediately is caught; leases will be terminated if charged and found guilty.
f. All visitors should be required to sign in and out of the boarding house;
g. No use of the outdoor areas is permitted after 10pm on Sunday to Thursdays and after 11pm on Friday and Saturday;
h. No smoking within the premises or in areas which may affect the amenity of other residents of the boarding house or of residents of neighbouring properties.
i. Lodgers are required to provide management with personal details, including next of kin details, for emergency purposes. These details are to be kept in the management office for the duration of lodger's stay.

6. DISPLAY OF HOUSE RULES

The "House Rules" are to be attached to all leases and signed by all occupants and a copy is displayed on the premises and a copy is retained by the Manager; the House Rules details the followings:

a. Boarder behaviour, including that no smoking to be permitted in bedrooms.
b. Visitors Policy—such as No visitors in boarding rooms after 10pm;
c. All visitors should be required to sign in and out of the boarding house
d. No parties are held on-site at any time;
e. To minimise disruption to other residents or of other residents of neighbouring properties use of common open space area is not permitted after 10pm and noise level is to be kept at a minimum;
f. Common room and area are not to be used after 10pm on Sunday to Thursday and 11pm on Friday and Saturday. Lodgers to be considerate to adjoining neighbours, and other residents of the boarding house and to keep noise levels to a minimum;
g. Emergency contact numbers, including essential services, fire, ambulance, police and utilities such as gas, electricity, plumbing and the like to be displayed on the premises;
h. Alcohol is permitted within the premises as long as the lodgers adhere to responsible drinking policy and take precautions whilst drinking with others and not leave any drinks unattended;
i. All illegal drugs are not permitted within the premises. If caught with illegal drugs, responsible lodgers will be reported to the police and lease agreement could be terminated with no compensation if charged and found guilty.

j. No smoking is allowed inside the premises; smoking could trigger the smoke alarm and could cause harm to other lodgers.

k. Rules relating to smoke alarms and the responsibility of the lodgers to pay costs if they trigger a false alarm and due to smoking inside the premises or due to negligence that causes the fire brigade to attend the premises.

l. The House rules will be updated regularly to consider any emerging situation;

m. No night visitors; and visitors should leave the premises before 10pm.

The “House Rules” will be attached to all leases and should be signed by all lodgers to confirm understanding to these rules before entering into any lease. The House rules are enforceable by the Boarding Houses; lodgers who do not adhere to the House Rules can have their leases terminated and are liable to any damages caused to the premises and other lodgers. In addition

7. FIRE SAFETY

No smoking policy applies to all the premises including rooms and common spaces

All fire safety features within the building are to be regularly maintained in accordance with any statutory requirements.

A copy of the annual fire safety statement and current fire safety schedule for the premises must be prominently displayed in the reception area.

A floor plan must be permanently fixed to the inside of the door of each sleeping room to indicate the available emergency egress routes from the respective sleeping room.

All residents are to be made aware of the fire safety features of the building and what to do in the event of an emergency.

All staff shall be trained in relation to the operation of the approved Emergency Management & Evacuation Plan.
8. CLEANING AND MAINTENANCE

The subject premises are at all times to be maintained in a safe and healthy condition. In this regard, all common areas are to be cleaned to a professional standard at least once a week. The cleaning and maintenance is to occur to both the area and fixtures and fittings in the area.

In additional all boarders are to be made aware, upon their entering into an agreement to occupy, of their responsibilities in relation to the maintenance and cleaning of the facility.

Further, the common open space areas are to be maintained in a neat and orderly manner. This will require twice/month garden maintenance during spring and summer and once/month garden maintenance during autumn and winter.

9. BOARDER/LODGER INFORMATION

All boarders are to be made aware of the contents and their obligations under approved Plan of Management.

In this regard:

- A full copy of the approved Plan of Management is to be permanently supplied and retained in each boarding room and each common area.
- A copy of the approved Plan of Management is to be made available upon request.
- The House Rules will be signed upon signing the lease and will be displayed/or a copy retained by the Manager.

10. REGISTRATION THE BOARDING HOUSE

The boarding house will be registered by the owners with the NSW Fair Trading within the first month of occupation in accordance with the Laws; and all leases are to comply with the NSW Fair Trading regulations in
regards of terms and conditions, conflict resolution, tribunals and bonds etc...

For more information, the owners need to contact the NSW Fair Trading on 143220 or check information on the website www.fairtrading.nsw.gov.au

11. BOARDING HOUSE FURNITURE AND FACILITIES

Supply of furniture to the private rooms is not essential; however, if the owners decided to furnish the rooms the furniture will consist on the followings:

Each boarding room can be provided (subject to owners) with:

a. One (1) single bed or one (1) double bed depended on room size;
b. One student desk & chair;
c. Microwaves
d. Washing machine and or Laundry facilities

The following facilities will be provided to lodgers in every room:

a. Clothes storage facility of 1m³ or greater;
b. Window furnishing/blind;
c. Phone line (not including access to provider);
d. Internet/data line (not including access to provider).

The followings are not supplied by owner:

a. Kitchen utensils
b. Mattresses
c. Bed sheets, bed covers and pillows/pillow cases
d. Detergents, cleaning agents
e. Cleaning equipment such as brooms; buckets and vacuum cleaner etc...

The Furniture of the common rooms is essential; the followings apply to common rooms:

a. The common living room is to be provided with a sofa, sink, microwaves and a bench...
b. The common open space on the first floor and sixth floor level contains number of bench seats.

c. A broom, bucket and mop are to be kept in the laundry for use by lodgers as necessary.

12. WASTE MANAGEMENT & RECYCLING

Residents of the facility are to be encouraged where possible to take advantage of Council's waste and recycling facilities. It is the responsibility of the boarder to sort garbage and place it in the appropriate receptacles.

The manager is to be responsible for the collection arrangements, including making sure that the waste containers are placed adjacent to the kerb on the day of collection and removed back onto the property promptly after collection, and including the servicing of special waste such as "sharps" and/or sanitary napkin receptacles. Where receptacles are provided for the disposal of sanitary napkins, these are to be serviced and readily cleaned on a regular basis.

Collection responsibilities of the manager include all regular garbage, recycling and green waste collection services, as well as household cleanup collection, ensuring goods for collection are managed in accordance with Council's collection requirements (information available on Council's website).

13. SAFETY & SECURITY

The following matters are to be provided within the property:

- Internal signage indicating the property caretaker or manager and contact numbers;

- Contact details of the managers and caretakers of the premises should be provided to police and council; these details also need to
be placed at the front of the premises; any entry points to the site, common areas and office areas for emergency services and others;

- A Contact number for external complaints by surrounding neighbours should be provided to nearby residents. This number should also be placed on all entry points to the site;

- Emergency contact numbers for essential services including fire, ambulance, police and utilities such as gas, electricity, plumbing and the like;

- Perimeter lighting;

- The entrance door, doors from boarding rooms to balconies and each boarding room shall be fitted with a classroom latch (dead bolt) which is able to be opened from the inside by a single handle motion.

- Individual room keys (a master key is to be maintained by the manager and made available to the fire brigade);

- Landline telephone within a common area available for use by residents in the event of an emergency.

- CCTV with 24 hours recording (with record up to 28days) in all common areas.

[END OF PLAN OF MANAGEMENT]
DOCUMENTS ASSOCIATED WITH REPORT EELPP023/19

Attachment 6
Submissions Received
Dear Mr Vincent Alberti & CUMBERLAND COUNCIL,

RE: DA-290/2018

Proposal: Demolish of dwelling & associated structures and construction of a two storey boarding house comprising 12 single rooms with associated at-grade car parking

Application No: DA-290/2018
Applicant: Mr T Rizk
Property: Lot 1 DP 712492, 128 railway Parade, GRANVILLE NSW 2142

We wish to direct our objections to the Proposal Application No. DA-290/2018. It is an outrage that such proposal can be taken seriously and considered for approval. The area is of high congestion with schools and child care centres that are in the immediate close proximity to the proposed boarding house.

Boarding houses in general are known to have negative impacts to sensitive community areas and proven repeatedly on there reputation for undesired problems that includes safety concerns that no one wants in such an area.

The boarding home proposal will directly be opposite the child Kumon Granville Education Centre tutorial school. Next to the Kumon Granville Education Centre is the Voice To The Nations Church.

Around the corner is the South Parramatta-Granville Preschool, then next door is the Wesley Life Skills disability services and care facility. Further down is Granville Public School and Granville Public School Pre-school. Nearby is the Palm Child Care Centre and also Frances Frisk Child Care Centre. All these are closer than Granville TAFE or UWS.

Granville is already approved for over development allowing further over-congestion, this inappropriate proposed dense dwellings will only exacerbate problems. The DA-290/2018 proposal Application is inappropriate in this already struggling community. This area should not become a dumping ground for the locality.

Adjacent to Granville station are three huge multi-rise apartments under construction. The area is already overloaded. Not enough areas for parks to relax and exercise is provided to all the thousands of people who will be introduced to the area or the existing people in the community. This development will further exacerbate problems to the amenities.
The State Environmental Planning Policy No 70-Affordable Housing (Revised Schemes) Current version 29 June 2018 to date Clause 9:
Identification of need for affordable housing
Pursuant to section 7.32 (1) of the Act, this Policy identifies that there is a need for affordable housing in each of the following local government areas within the Greater Metropolitan Region:
(a) Canada Bay, (b) City of Randwick, (c) City of Ryde, (d) City of Sydney, (e) City of Willoughby,
(f) Inner West, (g) Northern Beaches.
Granville is NOT identified as a need for affordable housing.

Boarding houses by nature tend to attract characters of type who are itinerant, who can have no community spirit or feelings for the community in general. Being so close to children schools and day care centres is a concern the community naturally shares.

Additionally development proposal is riddled with inconsistencies throughout, and contradictions rendering it totally unreliable, making it impossible for anyone and everyone trying to evaluate what the DA is proposing. The proposed DA is evidently demonstrating uncertainty about the boarding house. Are we expected to second guess projects intentions here? Given the flaw circumstances of the DA, the DA certainly should be rejected. To illustrate some of the many flaws:

In document, “Statement of environmental effects”:
page 12, “The development is designed...more aligned with studio apartment as opposed to traditional boarding house...”, states the DA are in fact studio apartments rather than a boarding house, not permitted in this zoning.

page 13, “...12 rooms,” further down, “Tenants include single retirees,” retirees are associated as seniors, seniors housing is not permissible according to the LEP.

page 13, “Tenants include...young couples.” Given the DA claims to have 12 rooms, 12 rooms with "young couples", means 24 people. Also given 24 people, when 20 or more people are accommodated there is requirements to provide a on-site resident manager and this DA fails to provide one.

page 21, “...with the northern side occupied by a child care facility,”, false statement, this is the children Kumon Granville Education Centre tutorial school, been there for at least 5 years.

page 21, “...the western side is occupied by industrial land uses.”, false, the sight is light industry as per zoning.

page 39, “...and vehicle areas are contained within a basement...”, stating that a underground parking is planned, where are the plans to show this?

page 27, “...proposed excavation is relatively minor.”, however a basement car park is stated within the document on page 39.

No Movement and circulation - parking and vehicular Access documents provided.

No internal floor plans provided to determine layout, overlooking, room sizes, how many rooms 16 metres square or more (potential for two tenants), FSR to see if it complies with standards.

Second floor communal room has balcony overlooking street, page 13, with potential for 12 or more residents and visitors, this area has the potential to become a disruptive source to the spirit
of the area, here partying, drinking and carrying on all day is possible in this designated area.

The development is more in line to a block of units and appears to proclaim to use SEPP boarding house rules to circumnavigate rules for high density block of units not allowed within in low density residential zone.

I request my personal information be suppressed by Council under section 58 of the Privacy and Personal Information Protection Act 1998 ("PPIP Act").

As the Granville area now falls and relies on the CUMBERLAND COUNCIL jurisdiction, we trust that the decision for the Proposal Application No. DA-290/2018 be rejected. And any future DA needs to be on public exhibition to allow the community to make proper submissions.

Thank You
We write in connection with the above-mentioned application. We wish to object strongly to the construction of a boarding house at this location.

Together with the people of Granville within the Cumberland council, we have collected and attached to this application the signatures of over 160 residents within the Cumberland region, who are all opposed to this development. All of these signatories, as only a small sample of the wider Cumberland population, are significantly concerned with and object to the construction of this new boarding house.

This is on the grounds of, but not limited to, the following reasons:

• The entire Granville area is already heavily congested.
• Milton Street and Railway Parade are a mixture of residential, business and commercial premises. However, these streets were all historically mainly residential.
• The changes in zoning during the last decade have meant much development and pressure on this area.
• The streets are heavily congested, with there being no parking for residents outside their own homes already.
• There are no safe or spacious areas for children to play outside.
• Traffic is always heavy and congested leading up to the main roads such as Parramatta and Woodville road.
• The noise levels will be compromised with the addition of 12 new rooms within a boarding house on this street.
• The safety of residents is being compromised.

We strongly oppose this development and do not see any benefit to existing residents to add a boarding house in this location. It will only further the congestion issues already apparent in this area.

If this application is to be decided by councillors please take notice that we would appreciate being invited as a part of this meeting. The residents are distressed and very concerned of the impacts that such a development will have on their livelihood, their children and their property. We would appreciate that you keep us informed of your committee outcomes.
Thank you for your understanding and we look forward to hearing from you.

If you would like to contact us at any time about this formal objection, please contact us at the above addresses.

Or via email at:
**Petition to Cumberland Council**

Hamish McNulty, General Manager, Cumberland Council

#### FROM LOCAL RESIDENTS

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EELPP023/19 – Attachment 6
# Petition to Cumberland Council –

**Hamish McNulty, General Manager, Cumberland Council**

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## Petition to Cumberland Council –

**Hamish McNulty, General Manager, Cumberland Council**

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# Petition to Cumberland Council

**Hamish McNulty, General Manager, Cumberland Council**

### Petition Summary and Background

- **DA PROPOSAL NO.: DA-290/2018**—Demolish existing dwelling and erect a 12 Room Boarding House

### Action Petitioned for

- SAY NO TO THIS DEVELOPMENT. WE OPPOSE THIS DEVELOPMENT

### Petition Printout

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EELPP023/19 – Attachment 6
Petition to Cumberland Council –
Hamish McNulty, General Manager, Cumberland Council

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<td>NC</td>
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</tbody>
</table>

EELPP023/19 – Attachment 6
<table>
<thead>
<tr>
<th>Printed Name</th>
<th>Signature</th>
<th>Address</th>
<th>Comment</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NO</td>
<td>21/1/19</td>
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<td>NO</td>
<td>24/1/19</td>
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<td>NO</td>
<td>29/5/19</td>
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<td>NO</td>
<td>24/6/19</td>
</tr>
</tbody>
</table>
Attachment 7
Parramatta Local Environmental Plan 2011 - Compliance Table
### Appendix A

**Parramatta Local Environmental Plan 2011 (PLEP)**

The relevant objectives and provisions of PLEP 2011 have been considered in the following assessment table:

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1 Preliminary</strong></td>
<td></td>
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</tr>
<tr>
<td>1.2 Aims of Plan</td>
<td></td>
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</tr>
<tr>
<td>(1) This Plan aims to make local environmental planning provisions for land in Auburn in accordance with the relevant standard environmental planning instrument under section 33A of the Act.</td>
<td>☒</td>
<td></td>
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</tr>
<tr>
<td>(2) The particular aims of this Plan are as follows:</td>
<td></td>
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</tr>
<tr>
<td>(a) To encourage a range of development, including housing, employment and recreation, that accommodates the needs of the existing and future residents, workers and visitors of Parramatta.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(b) To foster environmental, economic, social and physical wellbeing so that Parramatta develops as an integrated, balanced and sustainable city.</td>
<td></td>
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</tr>
<tr>
<td>(c) To identify, conserve and promote Parramatta's natural and cultural heritage as the framework for its identity, prosperity, liveability and social development.</td>
<td></td>
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</tr>
<tr>
<td>(d) To improve public access to the city and facilitate the maximum use of improved public transport, together with walking and cycling.</td>
<td></td>
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</tr>
<tr>
<td>(e) To minimise risk to the community in areas subject to environmental hazards, particularly flooding and bushfire, by restricting development in sensitive areas.</td>
<td></td>
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</tr>
<tr>
<td>(f) To protect and enhance the natural environment, including areas of remnant bushland in Parramatta, by incorporating principles of ecologically sustainable development into land use controls.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(g) To improve public access along waterways where natural values will not be diminished.</td>
<td></td>
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</tr>
<tr>
<td>(h) To enhance the amenity and characteristics of established residential areas.</td>
<td></td>
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<tr>
<td>(i) To retain the predominant role of Parramatta's industrial areas.</td>
<td></td>
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</tr>
<tr>
<td>(j) To ensure that development does not detract from the economic viability of Parramatta's commercial centres.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(k) To ensure that development does not detract from the operation of local or regional road systems.</td>
<td></td>
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</tr>
<tr>
<td>(l) To ensure development occurs in a manner that protects, conserves and enhances natural resources, including waterways, riparian land, surface and groundwater quality and flows and dependant ecosystems.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(m) To protect and enhance the viability, identity and diversity of the Parramatta City Centre and recognise it as the pre-eminent centre in</td>
<td></td>
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</tr>
</tbody>
</table>

The proposal is considered to be consistent with the aims of the PLEP 2011.
<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n) to encourage development that demonstrates efficient and sustainable use of energy and resources in accordance with ecologically sustainable development principles.</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td><strong>1.9 Application of SEPPs</strong></td>
<td></td>
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</tr>
<tr>
<td>(1) This Plan is subject to the provisions of any State environmental planning policy and any regional environmental plan that prevail over this Plan as provided by section 38 of the Act.</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>This will not apply to this application.</td>
</tr>
<tr>
<td>(2) The following State environmental planning policies and regional environmental plans (or provisions) do not apply to the land to which this Plan applies:</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• State Environmental Planning Policy No 1—Development Standards</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>1.9A Suspension of covenants, agreements and instruments</strong></td>
<td></td>
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</tr>
<tr>
<td>(1) For the purpose of enabling development on land in any zone to be carried out in accordance with this Plan or with a development consent granted under the Act, any agreement, covenant or other similar instrument that restricts the carrying out of that development does not apply to the extent necessary to serve that purpose.</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>There are no known covenants, agreements or instruments applying to the land which will prevent the development proceeding in accordance with the plan.</td>
</tr>
<tr>
<td>(2) This clause does not apply:</td>
<td></td>
<td></td>
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<tr>
<td>(a) to a covenant imposed by the Council or that the Council requires to be imposed, or</td>
<td></td>
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<tr>
<td>(b) to any prescribed instrument within the meaning of section 183A of the Crown Lands Act 1989, or</td>
<td></td>
<td></td>
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<tr>
<td>(c) to any conservation agreement within the meaning of the National Parks and Wildlife Act 1974, or</td>
<td></td>
<td></td>
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<tr>
<td>(d) to any Trust agreement within the meaning of the Nature Conservation Trust Act 2001, or</td>
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<tr>
<td>(e) to any property vegetation plan within the meaning of the Native Vegetation Act 2003, or</td>
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<tr>
<td>(f) to any bio-banking agreement within the meaning of Part 7A of the Threatened Species Conservation Act 1995, or</td>
<td></td>
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<tr>
<td>(g) to any planning agreement within the meaning of Division 6 of Part 4 of the Act</td>
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<tr>
<td>(3) This clause does not affect the rights or interests of any public authority under any registered instrument.</td>
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<tr>
<td>(4) Under section 28 of the Act, the Governor, before the making of this clause, approved of subclauses (1)–(3).</td>
<td></td>
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<tr>
<td><strong>Part 2 Permitted or prohibited development</strong></td>
<td></td>
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<tr>
<td><strong>2.3 Zone objectives and land use table</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(1) The Table at the end of this Part specifies for each zone:</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>The proposed development satisfies the objectives of the zone.</td>
</tr>
<tr>
<td>Clause</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Comments</td>
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<tr>
<td>--------</td>
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<tr>
<td>(d) development that is prohibited.</td>
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<tr>
<td>(2) The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone.</td>
<td></td>
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</tr>
<tr>
<td>(3) In the Table at the end of this Part:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(a) a reference to a type of building or other thing is a reference to development for the purposes of that type of building or other thing, and</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(b) a reference to a type of building or other thing does not include (despite any definition in this Plan) a reference to a type of building or other thing referred to separately in the Table in relation to the same zone.</td>
<td></td>
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</tr>
<tr>
<td>(4) This clause is subject to the other provisions of this Plan.</td>
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</tr>
</tbody>
</table>

Notes.

1. Schedule 1 sets out additional permitted uses for particular land.
2. Schedule 2 sets out exempt development (which is generally exempt from both Parts 4 and 5 of the Act). Development in the land use table that may be carried out without consent is nevertheless subject to the environmental assessment and approval requirements of Part 5 of the Act or, if applicable, Part 3A of the Act.
3. Schedule 3 sets out complying development (for which a complying development certificate may be issued as an alternative to obtaining development consent).
4. Clause 2.6 requires consent for subdivision of land.
5. Part 5 contains other provisions which require consent for particular development.

2.5 Additional permitted uses for particular land

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Development on particular land that is described or referred to in Schedule 1 may be carried out:</td>
<td></td>
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<tr>
<td>(a) with consent, or</td>
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<tr>
<td>(b) if the Schedule so provides—without consent, in accordance with the conditions (if any) specified in that Schedule in relation to that development.</td>
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</tr>
<tr>
<td>(2) This clause has effect despite anything to the contrary in the Land Use Table or other provision of this Plan.</td>
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</tr>
</tbody>
</table>

2.6 Subdivision—consent requirements

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Land to which this Plan applies may be subdivided, but only with consent.</td>
<td></td>
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</tr>
</tbody>
</table>

Notes.

1. If a subdivision is specified as exempt development in an applicable environmental planning instrument, such as this Plan or State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, the Act enables it to be carried out without development consent.
2. Part 6 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 provides that the strata subdivision of a

No additional uses in accordance with this clause are being applied in this application.

Subdivision is not permitted for this Boarding House.
<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building in certain circumstances is complying development.</td>
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</tr>
<tr>
<td>(2) Development consent must not be granted for the subdivision of land on which a secondary dwelling is situated if the subdivision would result in the principal dwelling and the secondary dwelling being situated on separate lots, unless the resulting lots are not less than the minimum size shown on the Lot Size Map in relation to that land.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Note. The definition of secondary dwelling in the Dictionary requires the dwelling to be on the same lot of land as the principal dwelling.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Zone R2 Low Density Residential</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Objectives of zone</td>
<td></td>
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<tr>
<td>• To provide for the housing needs of the community within a low density residential environment.</td>
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<tr>
<td>• To enable other land uses that provides facilities or services to meet the day to day needs of residents.</td>
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</tr>
<tr>
<td>• To ensure that non-residential land uses are located in a context and setting that minimises impacts on the amenity of a low density residential environment.</td>
<td></td>
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</tr>
<tr>
<td>• To allow for a range of community facilities to be provided to serve the needs of residents, workers and visitors in residential neighbourhoods.</td>
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</tr>
<tr>
<td>2 Permitted without consent</td>
<td></td>
<td></td>
<td></td>
<td>The land is zoned R2 Low Density Residential which permits the type of development being a boarding house development. The relevant objectives are complied with.</td>
</tr>
<tr>
<td>Home occupations</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3 Permitted with consent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Community facilities; Dual occupancies; Dwelling houses; Educational establishments; Emergency services facilities; Environmental facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Health consulting rooms; Home-based child care; Home businesses; Home industries; Hospitals; Hostels; Neighbourhood shops; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Roads; Seniors housing; Water recycling facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Prohibited</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any development not specified in item 2 or 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part 4 Principal development standards</td>
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<tr>
<td>4.1 Minimum subdivision lot size</td>
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<tr>
<td>(1) The objectives of this clause are as follows:</td>
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</tr>
<tr>
<td>(a) to ensure that new subdivisions reflect characteristic lot sizes and patterns of the area.</td>
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</tr>
<tr>
<td>(2) This clause applies to a subdivision of any land shown on the Lot Size Map that requires development consent and that is carried out after the commencement of this Plan.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Extraordinary Cumberland Local Planning Panel Meeting  
1 May 2019

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the Lot Size Map in relation to that land.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) This clause does not apply in relation to the subdivision of individual lots in a strata plan or community title scheme.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4A) Despite subclause (3):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) the size of any battleaxe lot, or other lot with an access handle, must not be less than 670m², and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) if a lot is a battleaxe lot, or other lot with an access handle, the area of the access handle is not to be included when calculating the size of the lot for the purposes of this clause.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4B) Subclause (3) does not apply to the subdivision of a lot in any of the following zones if there is a dual occupancy on the lot and one dwelling will be situated on each lot resulting from the subdivision:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Zone R2 Low Density Residential,</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(b) Zone R3 Medium Density Residential,</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(c) Zone R4 High Density Residential.</td>
<td></td>
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</tr>
</tbody>
</table>

4.3 Height of buildings

(1) The objectives of this clause are as follows:

(a) to nominate heights that will provide a transition in built form and land use intensity within the area covered by this Plan,

(b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development,

(c) to require the height of future buildings to have regard to heritage sites and their settings,

(d) to ensure the preservation of historic views,

(e) to reinforce and respect the existing character and scale of low density residential areas,

(f) to maintain satisfactory sky exposure and daylight to existing buildings within commercial centres, to the sides and rear of tower forms and to key areas of the public domain, including parks, streets and lanes.

(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.

(2A) Despite subclause (2), any development on land identified with a thick blue line and labelled "Area 1" on the Height of Buildings Map is not to exceed the height determined in accordance with the Table to this clause:

<table>
<thead>
<tr>
<th>Site area</th>
<th>Maximum height</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 650m²</td>
<td>15m</td>
</tr>
<tr>
<td>&gt; 650 ≤ 2,100m²</td>
<td>21m</td>
</tr>
<tr>
<td>&gt; 2,100 ≤ 3,200m²</td>
<td>39m</td>
</tr>
<tr>
<td>&gt; 3,200m²</td>
<td>52m</td>
</tr>
</tbody>
</table>

The maximum height of buildings permitted in this zone is 9 metres. The proposed development has a maximum building height of 8.20 metres.
4.4 Floor space ratio

(1) The objectives of this clause are as follows:
(a) to regulate density of development and generation of vehicular and pedestrian traffic,
(b) to provide a transition in built form and land use intensity within the area covered by this Plan,
(c) to require the bulk and scale of future buildings to have regard to heritage sites and their settings,
(d) to reinforce and respect the existing character and scale of low density residential areas.

(2) The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.

(2A) Despite subclause (2), any development on land identified with a thick blue line and labelled “Area 1” on the Floor Space Ratio is not to exceed the relevant floor space ratio determined in accordance with the Table to this clause:

<table>
<thead>
<tr>
<th>Site area</th>
<th>Maximum FSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 950m²</td>
<td>1.5:1</td>
</tr>
<tr>
<td>&gt; 950 ≤ 2,100m²</td>
<td>3.5:1</td>
</tr>
<tr>
<td>&gt; 2,100 ≤ 3,200m²</td>
<td>4.5:1</td>
</tr>
<tr>
<td>&gt; 3,200m²</td>
<td>6:1</td>
</tr>
</tbody>
</table>

The maximum FSR of 0.5:1 is permitted in the zone (408.40m²).

The proposed development is 0.5004:1 (408.70m²). This is an excess of 0.30sqm of gross floor area. Since this is a very minor non-compliance of less than 1% of the maximum permissible gross floor area, this application is recommended for approval; subject to the imposition of a condition of development consent will be endorsed to ensure that the gross floor area is reduced to 408.40m². This calculation of FSR specifically includes the internal gross floor area of the boarding house only.

Furthermore, another condition of development consent will be endorsed, to ensure that the external bin area (8.30m²) is reduced to an enclosure of 1.35 metres above the finished floor level.

Also, a further condition of development consent will be endorsed to ensure that the proposed external services room (2.60m²) will be altered to a plant room.

These three (3) specified conditions need to be endorsed, to ensure that the entire gross floor area on the site does not breach the maximum permissible FSR on the site.

Subject site is not identified within the Area 1 on the Height of Buildings Map.

4.6 Exceptions to development standards

(1) The objectives of this clause are:
(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development, and
(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(3) Consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:
(a) that compliance with the development standard is unreasonable or unnecessary in
<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) that there are sufficient environmental planning grounds to justify contravening the development standard.</td>
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<td>(b) Consent must not be granted for development that contravenes a development standard unless:</td>
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<tr>
<td>(i) the consent authority is satisfied that:</td>
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<tr>
<td>(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and</td>
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<tr>
<td>(b) the concurrence of the Director-General has been obtained.</td>
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<tr>
<td>(5) In deciding whether to grant concurrence, the Director-General must consider:</td>
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<tr>
<td>(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and</td>
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<tr>
<td>(b) the public benefit of maintaining the development standard, and</td>
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<tr>
<td>(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.</td>
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<tr>
<td>(6) Development consent must not be granted under this clause for a subdivision of land in Zone RUI Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:</td>
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<tr>
<td>(a) The subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or</td>
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<tr>
<td>(b) The subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.</td>
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<tr>
<td>(7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).</td>
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<td>(8) This clause does not allow consent to be granted for development that would contravene any of the following:</td>
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<tr>
<td>(a) a development standard for complying development,</td>
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<td>(b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental</td>
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<tr>
<td>Clause</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Comments</td>
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<tr>
<td>Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated, (c) clause 5.4. (ca) a development standard that relates to the height of a building, or a floor space ratio, in Parramatta City Centre (as referred to in clause 7.1 (1)) by more than 5%.</td>
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<tr>
<td><strong>Part 6 Miscellaneous provisions</strong></td>
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<tr>
<td>5.4 Controls relating to miscellaneous permissible uses</td>
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<tr>
<td>(1) Bed and breakfast accommodation</td>
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<tr>
<td>If development for the purposes of bed and breakfast accommodation is permitted under this Plan, the accommodation that is provided to guests must consist of no more than 3 bedrooms. <strong>Note.</strong> Any such development that provides for a certain number of guests or rooms may involve a change in the class of building under the Building Code of Australia.</td>
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<tr>
<td>(2) Home businesses</td>
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<tr>
<td>If development for the purposes of a home business is permitted under this Plan, the carrying on of the business must not involve the use of more than 50m² of floor area.</td>
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<tr>
<td>(3) Home industries</td>
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<tr>
<td>If development for the purposes of a home industry is permitted under this Plan, the carrying on of the home industry must not involve the use of more than 50m² of floor area.</td>
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<td>(4) Industrial retail outlets</td>
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<tr>
<td>If development for the purposes of an industrial retail outlet is permitted under this Plan, the retail floor area must not exceed: (a) 5% of the gross floor area of the industry or rural industry located on the same land as the retail outlet, or (b) 400m², whichever is the lessor.</td>
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<tr>
<td>(5) Farm stay accommodation</td>
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<tr>
<td>If development for the purposes of farm stay accommodation is permitted under this Plan, the accommodation that is provided to guests must consist of no more than 3 bedrooms.</td>
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<td>(6) Kiosks</td>
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<tr>
<td>If development for the purposes of a kiosk is permitted under this Plan, the gross floor area must not exceed 10m².</td>
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<td>(7) Neighbourhood shops</td>
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<tr>
<td>If development for the purposes of a neighbourhood shop is permitted under this Plan, the retail floor area must not exceed 80m².</td>
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<td>(8) Roadside stalls</td>
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<tr>
<td>If development for the purposes of a roadside stall is permitted under this Plan, the gross floor area must not exceed 8m².</td>
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<td>(9) Secondary dwellings</td>
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<tr>
<td>If development for the purposes of a secondary dwelling is permitted under this Plan, the total floor area of the dwelling</td>
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</table>

No miscellaneous land use proposed as part of this application. Therefore, Clause 5.4 does not apply to the development application.
<table>
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<tr>
<th>Clause</th>
<th>Yes</th>
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<th>N/A</th>
<th>Comments</th>
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<tbody>
<tr>
<td>(excluding any area used for parking) must not exceed whichever of</td>
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<td></td>
<td>The proposed design satisfies this clause as a detailed roof plan was</td>
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<td>the following is the greater:</td>
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<td>provided.</td>
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<td>(a) 60m²;</td>
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<td>(b) 5% of the total floor area of the principal dwelling.</td>
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<tr>
<td>5.6 Architectural roof features</td>
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<tr>
<td>(1) The objectives of this clause are:</td>
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<tr>
<td>(a) to allow roof features that integrate with the</td>
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<td>building composition and form, where the</td>
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<tr>
<td>height of the building also satisfies the</td>
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<tr>
<td>objectives of clause 4.3 of this Plan.</td>
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<tr>
<td>(2) Development that includes an architectural roof feature that</td>
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<tr>
<td>exceeds, or causes a building to exceed, the height limits set by</td>
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<td>clause 4.3 may be carried out, but only with consent.</td>
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<tr>
<td>(3) Development consent must not be granted to any such development</td>
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<td>unless the consent authority is satisfied that:</td>
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<tr>
<td>(a) the architectural roof feature:</td>
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<tr>
<td>(i) comprises a decorative element on the uppermost portion of a</td>
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<td>building, and</td>
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<td>(ii) is not an advertising structure, and</td>
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<td>(iii) does not include floor space area and is not</td>
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<td>reasonably capable of modification to include floor space area, and</td>
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<td>(iv) will cause minimal overshadowing, and</td>
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<td>(b) any building identification signage or equipment for servicing</td>
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<tr>
<td>the building (such as plant, lift motor rooms, fire stairs and the</td>
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<td>like) contained in or supported by the roof feature is fully</td>
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<tr>
<td>integrated into the design of the roof feature.</td>
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<tr>
<td>5.7 Development below mean high water mark</td>
<td></td>
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<td></td>
<td>The proposal does not include works below the mean high water mark.</td>
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<tr>
<td>(1) The objective of this clause is to ensure appropriate</td>
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<tr>
<td>environmental assessment for development carried out on land covered</td>
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<tr>
<td>by tidal waters.</td>
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<tr>
<td>(2) Development consent is required to carry out development on any</td>
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<td>land below the mean high</td>
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<td>water mark of any body of water subject to tidal influence (including</td>
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<tr>
<td>the bed of any such water).</td>
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<tr>
<td>5.9 Preservation of trees or vegetation</td>
<td></td>
<td></td>
<td></td>
<td>There are no street trees and trees located on the site that will be</td>
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<tr>
<td>(1) The objective of this clause is to preserve the amenity of the</td>
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<tr>
<td>area, including biodiversity values, through the preservation of</td>
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<tr>
<td>trees and other vegetation.</td>
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<tr>
<td>(2) This clause applies to species or kinds of trees or other</td>
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<tr>
<td>vegetation that are prescribed for the purposes of this clause by a</td>
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<tr>
<td>development control plan made by the Council.</td>
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<tr>
<td>Note. A development control plan may prescribe the trees or other</td>
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<td>vegetation to which this clause applies by reference to species, size,</td>
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<td>location or other manner.</td>
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<td>(3) A person must not ringbark, cut down, top, lop, remove, injure</td>
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<td>or willfully destroy any tree or other vegetation to which any such</td>
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<td>development control plan applies without the authority conferred by:</td>
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<tr>
<td>Clause</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Comments</td>
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<tr>
<td>(a) development consent, or</td>
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<td>(b) a permit granted by the Council</td>
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<td>(4) The refusal by the Council to grant a permit to a person who has</td>
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<td>duly applied for the grant of the permit is taken for the purposes of</td>
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<td>the Act to be a refusal by the Council to grant consent for the</td>
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<td>carrying out of the activity for which a permit was sought.</td>
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<td>(5) This clause does not apply to a tree or other vegetation that the</td>
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<td>Council is satisfied is dying or dead and is not required as the</td>
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<tr>
<td>habitat of native fauna.</td>
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<td>(6) This clause does not apply to a tree or other vegetation that the</td>
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<tr>
<td>Council is satisfied is a risk to human life or property.</td>
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<td>(7) A permit under this clause cannot allow any ringbarking, cutting</td>
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<td>down, topping, lopping, removal, injuring or destruction of a tree or</td>
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<td>other vegetation:</td>
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<tr>
<td>(a) that is or forms part of a heritage item, or that is within a</td>
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<tr>
<td>heritage conservation area, or</td>
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<tr>
<td>(b) that is or forms part of an Aboriginal object or that is within an</td>
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<td>Aboriginal place of heritage significance, unless the Council is</td>
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<td>satisfied that the proposed activity:</td>
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<td>(c) is of a minor nature or is for the maintenance of the heritage</td>
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<tr>
<td>item, Aboriginal object, Aboriginal place of heritage significance or</td>
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<tr>
<td>heritage conservation area.</td>
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<td>(d) would not adversely affect the heritage significance of the</td>
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<tr>
<td>heritage item, Aboriginal object, Aboriginal place of heritage</td>
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<tr>
<td>significance or heritage conservation area.</td>
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<tr>
<td><strong>Note.</strong> As a consequence of this subclause, the activities</td>
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<td>concerned will require development consent. The heritage provisions</td>
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<td>of clause 5.10 will be applicable to any such consent.</td>
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<tr>
<td>(8) This clause does not apply to or in respect of:</td>
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<td>(a) the clearing of native vegetation:</td>
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<tr>
<td>(i) that is authorised by a development consent or property</td>
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<tr>
<td>vegetation plan under the <em>Native Vegetation Act</em> 2003, or</td>
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<td>(ii) that is otherwise permitted under Division 2 or 3 of Part 3 of</td>
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<td>that Act, or</td>
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<tr>
<td>(b) the clearing of vegetation on State protected land (within the</td>
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<tr>
<td>meaning of clause 4 of Schedule 3 to the <em>Native Vegetation Act</em> 2003</td>
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<tr>
<td>that is authorised by a development consent under the provisions of</td>
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<td>the <em>Native Vegetation Conservation Act</em> 1997 as continued in force</td>
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<td>by that clause, or</td>
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<tr>
<td>(c) trees or other vegetation within a State forest,</td>
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<td>or land reserved from sale as a timber or forest reserve under the</td>
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<td><em>Forestry Act</em> 1916, or</td>
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<td>(d) action required or authorised to be done by or under the <em>Electricity Supply Act</em> 1995, the <em>Roads Act</em> 1993 or the <em>Surveying and Spatial Information Act</em> 2002, or</td>
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<tr>
<td>(e) plants declared to be noxious weeds under the <em>Noxious Weeds Act</em></td>
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<tr>
<td>1993. <strong>Note.</strong> Permissiblity may be a matter that is</td>
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</tbody>
</table>
### 5.9AA Trees or vegetation not prescribed by development control plan

1. This clause applies to any tree or other vegetation that is not of a species or kind prescribed for the purposes of clause 5.9 by a development control plan made by the Council.
2. The ringbarking, cutting down, topping, lopping, removal, injuring or destruction of any tree or other vegetation to which this clause applies is permitted without development consent.

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>The clause will not apply to this development application.</td>
</tr>
</tbody>
</table>

### 5.10 Heritage conservation

Heritage items, heritage conservation areas and archaeological sites (if any) are shown on the Heritage Map. The location and nature of any such item, area or site is also described in Schedule 5.

1. **Objectives**
   - The objectives of this clause are:
   - (a) to conserve the environmental heritage of Auburn, and
   - (b) to conserve the heritage significance of heritage items and heritage conservation areas including associated fabric, settings and views, and
   - (c) to conserve archaeological sites, and
   - (d) to conserve places of Aboriginal heritage significance.

2. **Requirement for consent**
   - Development consent is required for any of the following:
   - (a) demolishing or moving a heritage item or a building, work, relic or tree within a heritage conservation area,
   - (i) a heritage item.
   - (ii) An Aboriginal object.
   - (iii) A building, work, relic or tree within a heritage conservation area.
   - (b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,
   - (c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,
   - (d) disturbing or excavating a heritage conservation area that is a place of Aboriginal heritage significance,
   - (e) erecting a building on land:
   - (i) on which a heritage item is located or that is within a heritage conservation area or,
   - (ii) on which an Aboriginal object is located or that...

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>The site is not listed in the PLEP 2011 as containing any items of heritage. However, the site is within the vicinity of several local heritage items, but does not immediately adjoin any site with a known heritage item. In this regard, a heritage impact report was not requested during the assessment of this application. Furthermore, the proposed design is compatible with the character of the local neighbourhood. In this regard, the proposal will not visually intrude or affect the amenity of any of the local heritage listed items.</td>
</tr>
</tbody>
</table>
Extraordinary Cumberland Local Planning Panel Meeting  
1 May 2019

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>is within an Aboriginal place of heritage significance,</td>
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<tr>
<td>(f) subdividing land:</td>
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<tr>
<td>(i) on which a heritage item is located or that is</td>
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<tr>
<td>within a heritage conservation area or,</td>
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<tr>
<td>(ii) on which an Aboriginal object is located or that</td>
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<tr>
<td>is within an Aboriginal place of heritage</td>
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<tr>
<td>significance.</td>
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<tr>
<td>(3) When consent not required</td>
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<tr>
<td>However, consent under this clause is not</td>
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<td>required if:</td>
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<tr>
<td>(a) the applicant has notified the consent authority</td>
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<tr>
<td>of the proposed development and the consent</td>
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<tr>
<td>authority has advised the applicant in writing before</td>
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<tr>
<td>any work is carried out that it is</td>
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<tr>
<td>satisfied that the proposed development:</td>
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<tr>
<td>(i) is of a minor nature, or is for the maintenance</td>
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<td>of the heritage item, archaeological site, or a</td>
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<tr>
<td>building, work, relic, tree or place within a</td>
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<tr>
<td>heritage conservation area, and</td>
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<tr>
<td>(ii) would not adversely affect the significance of</td>
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<tr>
<td>the heritage item, archaeological site or</td>
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<tr>
<td>heritage conservation area, or</td>
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<tr>
<td>(b) the development is in a cemetery or burial</td>
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<tr>
<td>ground and the proposed development:</td>
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<tr>
<td>(i) is the creation of a new grave or monument, or</td>
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<tr>
<td>excavation or disturbance of land for the</td>
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<tr>
<td>purpose of conserving or repairing monuments or</td>
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<tr>
<td>grave markers, and</td>
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<tr>
<td>(ii) would not cause disturbance to human</td>
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<tr>
<td>remains, relic, Aboriginal objects in the form of</td>
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<tr>
<td>grave goods, or to an Aboriginal place of</td>
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<tr>
<td>heritage significance, or</td>
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<tr>
<td>(c) the development is limited to the removal of a</td>
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<tr>
<td>tree or other vegetation that the Council is</td>
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<td>satisfied is a risk to human life or property, or</td>
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<tr>
<td>(d) the development is exempt development:</td>
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<tr>
<td>(4) Effect of proposed development on heritage</td>
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<td>The consent authority must, before granting</td>
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<td>consent under this clause, consider the effect of the</td>
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<tr>
<td>proposed development on the heritage</td>
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<tr>
<td>significance of the heritage item or heritage</td>
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<tr>
<td>conservation area concerned. This subclause applies regardless of</td>
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<td>whether a heritage impact statement is prepared under</td>
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<td>subclause (5) or a heritage conservation management</td>
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<tr>
<td>plan is submitted under subclause (6).</td>
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<tr>
<td>(5) Heritage impact assessment</td>
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<tr>
<td>The consent authority may, before granting</td>
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<tr>
<td>consent to any development on land:</td>
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<tr>
<td>(a) on which a heritage item is situated, or</td>
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<tr>
<td>(b) within a heritage conservation area, or</td>
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<tr>
<td>(c) within the vicinity of land referred to in</td>
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<tr>
<td>paragraph (a) or (b), require a heritage impact</td>
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<td>statement to be prepared that assesses the</td>
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<td>extent to which the carrying out of the</td>
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<tr>
<td>proposed development would affect the</td>
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<tr>
<td>heritage significance of the heritage item or</td>
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<tr>
<td>heritage conservation area concerned;</td>
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<tr>
<td>(6) Heritage conservation management plans</td>
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<tr>
<td>The consent authority may require, after</td>
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<tr>
<td>Clause</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Comments</td>
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<tr>
<td>considering the significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.</td>
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<tr>
<td>(7) Archaeological sites</td>
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<tr>
<td>The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977 applies):</td>
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<tr>
<td>(a) notify the Heritage Council of its intention to grant consent, and</td>
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<tr>
<td>(b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.</td>
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<tr>
<td>(8) Aboriginal places of heritage significance</td>
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<tr>
<td>The consent authority must, before granting consent under this clause to the carrying out of development in a place of Aboriginal heritage significance:</td>
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<tr>
<td>(a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place, and</td>
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<tr>
<td>(b) notify the local Aboriginal communities (in such way as it thinks appropriate) about the application and take into consideration any response received within 28 days after the notice is sent.</td>
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<tr>
<td>(9) Demolition of item of State significance</td>
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<tr>
<td>The consent authority must, before granting consent for the demolition of a nominated State heritage item:</td>
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<tr>
<td>(a) notify the Heritage Council about the application, and</td>
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</tr>
<tr>
<td>(b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.</td>
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<tr>
<td>(10) Conservation incentives</td>
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</tr>
<tr>
<td>The consent authority may grant consent to development for any purpose of a building that is a heritage item, or of the land on which such a building is erected, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that:</td>
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<tr>
<td>(a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and</td>
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<tr>
<td>(b) the proposed development is in accordance with a heritage conservation management document that has been approved by the consent authority, and</td>
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<tr>
<td>(c) the consent to the proposed development would require that all necessary conservation work identified in the heritage conservation management plan is carried out, and</td>
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<tr>
<td>(d) the proposed development would not adversely affect the heritage significance of</td>
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</tbody>
</table>
The heritage item, including its setting or the heritage significance of the Aboriginal place of heritage significance, and (e) the proposed development would not have any significant adverse effect on the amenity of the surrounding area.

### Part 6 Additional Local Provisions

#### 6.1 Acid Sulfate Soils

1. The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.

2. Development consent is required for the carrying out of works described in the Table to this subclause on land shown on the Acid Sulfate Soils Map as being of the class specified for those works.

<table>
<thead>
<tr>
<th>Class</th>
<th>Works</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Any works.</td>
</tr>
<tr>
<td>2</td>
<td>Works below the natural ground surface. Works by which the watertable is likely to be lowered.</td>
</tr>
<tr>
<td>3</td>
<td>Works more than 1m below the natural ground surface. Works by which the watertable is likely to be lowered more than 1m below the natural ground surface.</td>
</tr>
<tr>
<td>4</td>
<td>Works more than 2m below the natural ground surface. Works by which the watertable is likely to be lowered more than 2m below the natural ground surface.</td>
</tr>
<tr>
<td>5</td>
<td>Works within 500m of adjacent Class 1, 2, 3 or 4 land that is below 5m Australian Height Datum and by which the watertable is likely to be lowered below 1m Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.</td>
</tr>
</tbody>
</table>

3. Development consent must not be granted under this clause for the carrying out of works unless an acid sulfate soils management plan has been prepared for the proposed works in accordance with the Acid Sulfate Soils Manual and has been provided to the consent authority.

4. Despite subclause (2), development consent is not required under this clause for the carrying out of works if:

   (a) a preliminary assessment of the proposed works prepared in accordance with the Acid Sulfate Soils Manual indicates that an acid sulfate soils management plan is not required for the works, and

   (b) the preliminary assessment has been provided to the consent authority and the consent authority has confirmed the assessment by notice in writing to the person proposing to carry out the works.

5. Despite subclause (2), development consent is not required under this clause for the
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1 May 2019

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
</tr>
</thead>
</table>
| carrying out of any of the following works by a public authority (including ancillary work such as excavation, construction of access ways or the supply of power):  
(a) emergency work, being the repair or replacement of the works of the public authority required to be carried out urgently because the works have been damaged, have ceased to function or pose a risk to the environment or to public health and safety,  
(b) routine maintenance work, being the periodic inspection, cleaning, repair or replacement of the works of the public authority (other than work that involves the disturbance of more than 1 tonne of soil),  
(c) minor work, being work that costs less than $20,000 (other than drainage work).  
(6) Despite subclause (2), development consent is not required under this clause to carry out any works if:  
(a) the works involve the disturbance of less than 1 tonne of soil, such as occurs in carrying out agriculture, the construction or maintenance of drains, extractive industries, dredging, the construction of artificial water bodies (including canals, dams and detention basins) or foundations or flood mitigation works, or  
(b) the works are not likely to lower the watertable. | ☑ | ☑ | ☑ | No significant earthworks are proposed. |

6.2 Earthworks  
(1) The objectives of this clause are as follows:  
(a) to ensure that earthworks for which a development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features of the surrounding land,  
(b) to allow earthworks of a minor nature without separate development consent.  
(2) Development consent is required for earthworks, unless:  
(a) the work is exempt development under this Plan or another applicable environmental planning instrument, or  
(b) the work is ancillary to other development for which development consent has been given.  
(3) Before granting development consent for earthworks, the consent authority must consider the following matters:  
(a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,  
(b) the effect of the proposed development on the likely future use or redevelopment of the land,  
(c) the quality of the fill or of the soil to be excavated, or both,  
(d) the effect of the proposed development on the existing and likely amenity of adjoining properties,  
(e) the source of any fill material and the destination of any excavated material,  
(f) the likelihood of disturbing relics.
### 6.3 Flood planning

1. The objectives of this clause are as follows:
   
   (a) to minimise the flood risk to life and property associated with the use of land,
   
   (b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,
   
   (c) to avoid significant adverse impacts on flood behaviour and the environment.

2. This clause applies to land at or below the flood planning level.

3. Development consent must not be granted for development on land to which this clause applies unless the consent authority is satisfied that the development:

   (a) is compatible with the flood hazard of the land, and

   (b) is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and

   (c) incorporates appropriate measures to manage risk to life from flood, and

   (d) is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and

   (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.

4. A word or expression used in this clause has the same meaning as it has in the NSW Government's Floodplain Development Manual published in 2005, unless it is otherwise defined in this clause.

5. In this clause:

   - **flood planning level** means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5m freeboard.

### 6.7 Foreshore building line

1. The objective of this clause is to ensure that development in the foreshore area will not impact on natural foreshore processes or affect the significance and amenity of the area.

2. Development consent must not be granted for development on land in the foreshore area except for the following purposes:

   (a) the extension, alteration or rebuilding of an existing building wholly or partly in the foreshore area,

   (b) the erection of a building in the foreshore area, if the levels, depth or other exceptional features of the site make it appropriate to do

<table>
<thead>
<tr>
<th>Clause</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>(g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area. Note. The National Parks and Wildlife Act 1974, particularly section 86, deals with disturbing or excavating land and Aboriginal objects.</td>
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<tr>
<td>6.3 Flood planning</td>
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<tr>
<td>(1) The objectives of this clause are as follows:</td>
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<tr>
<td>(a) to minimise the flood risk to life and property associated with the use of land,</td>
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<tr>
<td>(b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,</td>
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<tr>
<td>(c) to avoid significant adverse impacts on flood behaviour and the environment.</td>
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</tr>
<tr>
<td>(2) This clause applies to land at or below the flood planning level.</td>
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<tr>
<td>(3) Development consent must not be granted for development on land to which this clause applies unless the consent authority is satisfied that the development:</td>
<td></td>
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<tr>
<td>(a) is compatible with the flood hazard of the land, and</td>
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<tr>
<td>(b) is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and</td>
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<tr>
<td>(c) incorporates appropriate measures to manage risk to life from flood, and</td>
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<tr>
<td>(d) is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and</td>
<td></td>
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</tr>
<tr>
<td>(e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.</td>
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</tr>
<tr>
<td>(4) A word or expression used in this clause has the same meaning as it has in the NSW Government's Floodplain Development Manual published in 2005, unless it is otherwise defined in this clause.</td>
<td></td>
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<tr>
<td>(5) In this clause:</td>
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<tr>
<td>flood planning level means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5m freeboard.</td>
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</tr>
<tr>
<td>6.7 Foreshore building line</td>
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</tr>
<tr>
<td>(1) The objective of this clause is to ensure that development in the foreshore area will not impact on natural foreshore processes or affect the significance and amenity of the area.</td>
<td></td>
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</tr>
<tr>
<td>(2) Development consent must not be granted for development on land in the foreshore area except for the following purposes:</td>
<td></td>
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</tr>
<tr>
<td>(a) the extension, alteration or rebuilding of an existing building wholly or partly in the foreshore area,</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(b) the erection of a building in the foreshore area, if the levels, depth or other exceptional features of the site make it appropriate to do</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
(c) boat sheds, sea retaining walls, wharves, slipways, jetties, waterway access stairs, swimming pools, fences, cycleways, walking trails, picnic facilities or other recreation facilities (outdoor).

(3) Development consent must not be granted under subclause (2) unless the consent authority is satisfied that:

(a) the development will contribute to achieving the objectives for the zone in which the land is located, and

(b) the appearance of any proposed structure, from both the waterway and adjacent foreshore areas, will be compatible with the surrounding area, and

(c) the development is not likely to cause environmental harm such as:

(i) pollution or siltation of the waterway, or

(ii) an adverse effect on surrounding uses, marine habitat, wetland areas, flora or fauna habitats, or

(iii) an adverse effect on drainage patterns, and

(d) the development will not cause congestion of, or generate conflicts between, people using open space areas or the waterway, and

(e) opportunities to provide continuous public access along the foreshore and to the waterway will not be compromised, and

(f) any historic, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance of the land on which the development is to be carried out and of surrounding land will be maintained, and

(g) in the case of development for the alteration or rebuilding of an existing building wholly or partly in the foreshore area, the alteration or rebuilding will not have an adverse impact on the amenity or aesthetic appearance of the foreshore.
Attachment 8

Parramatta Development Control Plan 2011 - Compliance Table
### Appendix B

**Parramatta Development Control Plan 2011 (PDCP)**

The relevant objectives and provisions of PDCP 2011 have been considered in the following assessment table:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes / No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.4 Site Considerations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.4.1 Views and Vistas</strong></td>
<td>Yes</td>
<td>The site is not identified as having significant views and vistas as per Appendix 2. The site is not located in the Harris Park Conservation Area. Significant views and vistas will not be impacted by this proposal.</td>
</tr>
<tr>
<td>Is the site flood affected by local or mainstream flooding?</td>
<td>No</td>
<td>The site is not identified as flood prone.</td>
</tr>
<tr>
<td><strong>2.4.2 Protection of Waterways</strong></td>
<td>No</td>
<td>The site does not adjoin a waterway.</td>
</tr>
<tr>
<td>Does the site adjoin a waterway?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the site comprise of indigenous species?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.4.3 Protection of Groundwater</strong></td>
<td>No</td>
<td>A basement car parking is not proposed.</td>
</tr>
<tr>
<td>Is a basement carpark proposed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.4.3.1 Soil Management</strong></td>
<td>Yes</td>
<td>Conditions of development consent will be endorsed to ensure that the construction phase will have appropriate sediment and erosion management.</td>
</tr>
<tr>
<td>Are there adequate erosion control measures?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.4.3.2 Acid sulfate soils</strong></td>
<td>Yes</td>
<td>The site is given a Class 5 acid sulfate soil rating and is located within 500 metres of land with a Class 4 acid sulfate soil rating. The watertable of land with a Class 4 rating is unlikely to be lowered as a result of the proposed development since extensive excavation works are not proposed.</td>
</tr>
<tr>
<td><strong>2.4.3.3 Salinity</strong></td>
<td>No</td>
<td>The site is of low salinity potential, and accordingly, salinity is unlikely to impact on the development.</td>
</tr>
<tr>
<td>Is the site identified as being of moderate or high salinity potential or of known salinity by the ‘Salinity Study Map for Western Sydney 2008’?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, have investigations been undertaken in accordance with the Western Sydney Salinity Code of Practice 2003?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, does landscaping comprise of low water use species and are irrigation systems low water usage?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.4.4 Land Contamination</strong></td>
<td>No</td>
<td>The site is not contaminated, nor is there any previous history on the site that may have caused contamination.</td>
</tr>
<tr>
<td>Is the site identified as or likely to be contaminated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes have the requirements of SEPP 55 been satisfied?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.4.5 Air Quality</strong></td>
<td>Yes</td>
<td>It is unlikely that air quality will be significantly impacted from the proposal, as the proposal is for residential purposes and is not any pollution-generating industry.</td>
</tr>
<tr>
<td>Have appropriate controls been placed on the development to ensure that during demolition and construction that the development does not contribute to increased air pollution?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.4.6 Development on Sloping Land</strong></td>
<td>Yes</td>
<td>The proposal responds to the site characteristics and the slope of the land, as the proposed</td>
</tr>
<tr>
<td>Requirement</td>
<td>Yes / No</td>
<td>Comment</td>
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<td>----------------------------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>2.4.7 Biodiversity</strong>&lt;br&gt;Is vegetation removal appropriate?&lt;br&gt;Does the landscape plan incorporate indigenous planting listed in Appendix 3?&lt;br&gt;If the site contains or adjoins bushland is a Statement of Flora/Fauna Impact Required?</td>
<td>Yes</td>
<td>There are currently no significant trees on the site that will be affected by the proposal. The proposed landscape plan however indicates that some plantings will occur within the front and side setback areas of the site, that will help to soften the built form and ensure that the objectives of Part 3.3.1 of this DCP are achieved.</td>
</tr>
<tr>
<td><strong>2.4.7.2 Development on land abutting the E2 Environmental Protection zone and W1 Natural Waterways zone</strong>&lt;br&gt;Does the site adjoin land zoned E2 or W1?&lt;br&gt;If yes, does the development satisfy the design principles?</td>
<td>No</td>
<td>The site does not adjoin land zoned E2 “Environmental Conservation” or W1 “Natural Waterways”.</td>
</tr>
<tr>
<td><strong>2.4.8 Public Domain</strong>&lt;br&gt;Does the building appropriately address the public domain?&lt;br&gt;Does the development provide appropriate passive surveillance opportunities?&lt;br&gt;Have appropriate public domain enhancements including street tree planning, footpath construction or reconstruction been included as conditions of consent?</td>
<td>Yes</td>
<td>The subject site has substantial fenestration from first floor that will allow surveillance over the public domain.</td>
</tr>
<tr>
<td><strong>3.1 Preliminary Building Envelope</strong>&lt;br&gt;Frontage&lt;br&gt;Minimum 15m frontage</td>
<td>N/A</td>
<td>Subject site has a 19.329 metre wide frontage to Railway Parade. However, this DCP control does not apply as there is no frontage restriction for a boarding house.</td>
</tr>
<tr>
<td>Height&lt;br&gt;Maximum height is shown on the PLEP 2011 Height of Buildings Map – 9 metres.</td>
<td>Yes</td>
<td>The proposed development has a maximum building height of 8.20 metres.</td>
</tr>
<tr>
<td>Front Setback&lt;br&gt;Is the setback consistent with the prevailing setback along the street and no less than 3m?</td>
<td>Yes</td>
<td>A 5.20 – 7.98 metre front setback (ground floor) has been proposed and is consistent with the front setback of the immediately building, between the western elevation to the front boundary.</td>
</tr>
<tr>
<td>Side Setback&lt;br&gt;Minimum 900mm</td>
<td>N/A</td>
<td>Since the proposed building has a Class 3 classification under the Building Code of Australia, a minimum of 3 metre side setbacks are required and have been proposed in this instance.</td>
</tr>
<tr>
<td>Rear Setback&lt;br&gt;Minimum 30% site length except on corner sites and on land containing a heritage item or within a heritage conservation area, where the rear setback is to be at least 15% of the site length</td>
<td>Yes</td>
<td>A 10.935 metres rear setback has been proposed. The rear setback is 32.03% of the site length and does comply with this DCP.</td>
</tr>
<tr>
<td>Deep Soil and Landscaping&lt;br&gt;Minimum 30%, including at least 50% at the rear of the site and 15% at the front of the site – dimensions not less than 4m x 4m.</td>
<td>N/A</td>
<td>This DCP control does not apply as there are no deep soil and landscaping area restrictions for a boarding house. Given this, there are adequate pervious surfaces as proposed on the landscape plan. The proposed deep soil zone consists of an area of 123.0m² and covers 15.06% of the site. This deep soil area is located within the front setback.</td>
</tr>
<tr>
<td>Requirement</td>
<td>Yes / No</td>
<td>Comment</td>
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</tbody>
</table>
| **Landscaped Area**  
Minimum 40% (including deep soil zone)  
Is the landscaped area in accordance with the definition contained in the DCP glossary? | N/A | This DCP control does not apply as there are no deep soil and landscaping area restrictions for a boarding house. Given this, there are adequate pervious surfaces as proposed on the landscape plan.  
The overall landscaped area has a total calculated area of 325.20m² and covers 39.81% of site. This area is situated predominantly throughout the front and side setback areas of the site and helps to visually soften the appearance of the built form from both street frontages. |
| **3.2 Building Elements** | Yes | This proposal has been designed to be compatible in form and relative to the spatial characteristics of the local area.  
As the site is geographically situated on the corner of a low density residential zoning, the appearance of the front façade and secondary façade is similar to a double storey building with balconies and fenestration. In this regard, the building elements (i.e. roof pitch design, building columns and façade articulation) complement and enhance the visual character of both street frontages.  
The proposal blends with the streetscape, as Railway Parade consists of mixed-use developments located on the opposite northern side, industrial buildings being located to the west of the site and a mix of single storey and double storey dwellings on the southern side of Railway Parade, adjoining the subject site.  
The building height and mass preserves site characteristics and is sensitive to the amenity issues of surrounding or nearby development. |
| **3.2.6 Fences** | Yes | Fencing details were requested by Council. 1.20 metre fencing, with 50% transparency will be required along the street frontages. 1.80 metre fencing, with 50% transparency will also be provided towards the rear of the site to screen the private open space and rear parking area from the streetscape. |
| **3.3 Environmental Amenity** | Yes | The proposal is consistent with the objectives of this part. |
| **3.4 Social Amenity** | Yes | The proposal is consistent with the objectives of this part. |
| **3.5 Heritage**  
New buildings will need to respect and acknowledge the existing historic townscape of Parramatta so that new and old can benefit from each other. | Yes | The site is not listed in the PLEP 2011 as containing any items of heritage. However, the site is within the vicinity of several local heritage items, but does not immediately adjoin any site with a known heritage item. In this regard, a heritage impact report was not requested during |
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes / No</th>
<th>Comment</th>
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<tbody>
<tr>
<td><strong>3.6 Movement and Circulation</strong></td>
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<tr>
<td><strong>3.6.2 Parking and Vehicular Access</strong></td>
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<tr>
<td><em>Bicycle parking</em></td>
<td>Yes</td>
<td>The development is located within an accessible area and the car parking rate of 0.5 spaces per boarding room applies to the site, since the boarding house is not on behalf of a social housing provider. Six (6) spaces have been provided for the proposed boarding house. There are three (3) bicycle spaces proposed and three (3) motorcycle spaces proposed, located within the parking area at the rear of the site. There is no parking required on the site for those people employed by the boarding house as there are less than 20 rooms. The rear car parking area will be accessible via the Milton Street (secondary street) frontage, via a vehicular crossover that has a width of 5.50 metres wide. The proposed driveway is 5.60 metres at the property boundary. A condition of development consent will be endorsed to ensure that the driveway for two-way circulation will be provided with a 6.10 metre width at the property boundary.</td>
</tr>
<tr>
<td><em>Boarding houses parking</em></td>
<td></td>
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</tr>
<tr>
<td>• 1 bicycle space per 5 boarding rooms</td>
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<td></td>
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<tr>
<td>• 1 space per 10 boarding rooms plus</td>
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<tr>
<td>• 1 space per on-site manager (where applicable) plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 1 motorcycle space per 5 boarding rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.6.2 Sustainable Transport</strong></td>
<td>N/A</td>
<td>A share car system is not proposed for the boarding house.</td>
</tr>
<tr>
<td>Is a publicly accessible car share parking space required and provided?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.6.3 Accessibility and Connectivity</strong></td>
<td>N/A</td>
<td>A site through link is not proposed for this small scale development.</td>
</tr>
<tr>
<td>Is a 3m wide pedestrian through link required and provided?</td>
<td></td>
<td></td>
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<tr>
<td><strong>3.7 Residential Subdivision</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.7.1 General</strong></td>
<td>N/A</td>
<td>Subdivision is prohibited for this proposal.</td>
</tr>
<tr>
<td>Are equal or similar proportions proposed for each allotment?</td>
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<tr>
<td>Is a minimum frontage of 7.5m provided for each dwelling?</td>
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<td></td>
</tr>
<tr>
<td><strong>3.7.2 Site Consolidation and Isolation</strong></td>
<td>N/A</td>
<td>The proposal is situated on one single allotment and does not require the consolidation of adjoining allotments, as there are no site area restrictions of a Boarding House development in this DCP. Also, the site is not isolated, given that it is not a battle-ax lot and has two (2) active street frontages.</td>
</tr>
<tr>
<td>Refer to the Planning Context discussion</td>
<td></td>
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</tr>
<tr>
<td><strong>5.1 Boarding Houses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.1.4 Planning Controls for Boarding Houses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location Criteria</strong></td>
<td>Yes</td>
<td>The site is situated within 400 metres of public bus stop(s), ID numbers 2142233 and 2142234 serviced with a regular bus route (907 Bankstown to Parramatta), that operates at least one bus per hour between 6am and 9pm, Monday to Friday, 8am to 6pm, Saturday and Sunday. The site is also located within 800 metres from the entrance to Granville Railway Station (via the Railway Parade side).</td>
</tr>
<tr>
<td>• Site located within 400m from a bus service</td>
<td></td>
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</tr>
</tbody>
</table>
Table 1 Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes / No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building Form and Appearance</strong></td>
<td></td>
<td>The proposed development is consistent with the existing character of the area and the building has adequate setbacks from property boundaries. The proposal has now been amended to reduce the visual bulk along the street corner. The main entrance of the boarding house is oriented towards Railway Parade. The southern adjoining property will still not receive adequate amount of solar access through the northern fenestration windows. However, the private open space of the southern dwelling will not be immensely overshadowed between 9am to 12noon due to the orientation of the site. The communal open space for the boarding house, that is located at the south-west corner of the site, will have solar access between the hours of 12noon to 3pm.</td>
</tr>
<tr>
<td>• New building shall be consistent with the predominant built form and design elements of the surrounding locality and streetscape</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• Provide main entrance to the front of the dwelling.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• New buildings shall not adversely solar access of adjoining properties and communal open space.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>• Landscaped treatment shall be compatible with the streetscape.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Building Envelope Controls</strong></td>
<td></td>
<td>The proposed building envelope is consistent with the building envelope required for a single dwelling house. In this regard, the proposed setbacks are as follows:- Front setback = 5.20 – 7.98 metres  Side setbacks = 3 – 3.62 metres (eastern orientation) and 3 – 3.20 metres (western orientation) Rear setback = 10.03 – 12.07 metres (southern orientation); the length of the site is 34.108 metres, which means that the rear setback length is 30.14% of the site length.</td>
</tr>
<tr>
<td>• Boarding house within R2 Low Density Residential Zone shall refer to 3.1.3 of the PDGP 2011 requirement.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Occupation Requirement</strong></td>
<td></td>
<td>The proposed boarding house has 12 bedrooms, with maximum 12 lodgers at any one time. This will be endorsed via a condition of development consent:</td>
</tr>
<tr>
<td>• Maximum 12 bedrooms with maximum 12 residents for boarding houses within the R2 Low Density Residential Zone.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• The length of the lease must be for a minimum of 3 months.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Operational Management</strong></td>
<td></td>
<td>A caretaker’s room has not been proposed. The plan of management was submitted with the development application. A condition of development consent will be endorsed to ensure that the management of the Boarding House is carried out in accordance with the information provided in the plan.</td>
</tr>
<tr>
<td>• An on-site manager shall be available if the boarding house has 20 or more lodgers.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>• The Plan of Management must be provided.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Size and Design for Bedrooms</strong></td>
<td></td>
<td>All bedrooms are compliant with the minimum size requirements. The provided plan of management indicates that a maximum of one (1) lodger will be permitted in each room. This will be endorsed via a condition of development consent.</td>
</tr>
<tr>
<td>• Single Person bedroom = 12m²</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• Single person bedroom with ensuite = 15m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Maximum 25m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Size and Design for Bathrooms</strong></td>
<td></td>
<td>Every boarding room has an ensuite, with a shower and a toilet.</td>
</tr>
<tr>
<td>• 1 bath or shower and washbasin per 10 residents</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Size and Design for Kitchens, Laundries and Clothes Drying facilities</strong></td>
<td></td>
<td>Each boarding room has its own kitchenette. A washing machine with a laundry tub will be provided within the common laundry room on the ground.</td>
</tr>
<tr>
<td>• Kitchen and dining = 20m² up to 12 residents</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• 1 washing machine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirement</td>
<td>Yes / No</td>
<td>Comment</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
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<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Minimum Size and Design for Internal Communal Living Areas and External Recreation Areas</strong></td>
<td>Yes</td>
<td>Only (1) common living room is required for this boarding house. However, there are two (2) being proposed in this instance. Common living rooms are 20.90m² (ground floor) and 15.30m² (first floor). 25.70m² of communal open space has been proposed with minimum 3 x 3 metre dimension at the southeast west of the site.</td>
</tr>
<tr>
<td><strong>Visual Privacy</strong></td>
<td>Yes</td>
<td>The private open space area will be screened by 1.80 metre fencing.</td>
</tr>
<tr>
<td><strong>Access for People with Disabilities</strong></td>
<td>Yes</td>
<td>Rooms 1 and 5 (two (2) rooms) are designed as adaptable room with ensuite facilities. These rooms are situated on ground floor and directly face the primary street frontage. A condition of development consent will be endorsed to ensure that the rooms are designed in accordance with the Australian Standard AS 1428.1.</td>
</tr>
</tbody>
</table>
| **Sustainability, Energy Efficiency and Solar Access**                     | Yes      | The communal open space is located to the south-western corner of the 2 storey component which will receive three hours of sunlight throughout the allocated space between 12pm to 3pm during mid-winter. Since the subject site has a north-south orientation, overshadowing from the subject building into adjoining properties are unavoidable. Elevation shadow diagrams were requested by Council and an assessment has been carried out against the shadow diagrams. Since the proposed building setback is greater than 10 metres, it is not perceived that the length of shadow casts will not adversely affect habitable rooms of adjoining dwellings. **Overshadowing impacts on 1 Milton Street:** The provided diagrams show that only the first northern elevation window (closest to Milton Street) will be overshadowed between 9am to 10am during mid-winter. This means that three (3) hours of sunlight into internal areas are guaranteed. The proposal will not adversely affect the rear private open space area, as it will receive at least 3 hours of sunlight between 9am and 12noon during mid-winter. **Overshadowing impacts on 126 Railway Parade:** At least 50% of the private open space area will receive at least 3 hours sunlight between 9am and 12noon during mid-winter. The western facing windows of 126 Railway Parade will be overshadowed between 12 noon to 3pm during mid-winter, which means that three (3)
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes / No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Car and Bicycle Parking</strong></td>
<td>Yes</td>
<td>The car parking rate of 0.5 spaces per boarding room applies to the site (since boarding house is not on behalf of a social housing provider). Six (6) spaces have been provided for the proposed boarding house. There are three (3) bicycles spaces proposed and three (3) motorcycle spaces proposed, located within the parking area at the rear of the site. There is no parking required on the site for those people employed by the boarding house as there are less than 20 rooms.</td>
</tr>
<tr>
<td>• Car parking spaces and bicycle storage spaces shall referred to Section 3.6.2 of the PDCP 2011.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Waste Management</strong></td>
<td>Yes</td>
<td>A bin storage area (8.30m²) is designed at the south-western corner of the building, close to the proposed driveway gate, that will allow waste contractors to easily obtain access to the bin area. A condition of development consent will be endorsed to ensure that these facilities are maintained as per the relevant legislation that involves appropriate health and safety standards.</td>
</tr>
</tbody>
</table>
Item No: EELPP024/19

DEVELOPMENT APPLICATION - 49-53 PINE ROAD, YENNORA

Responsible Division: Environment & Planning
Officer: Manager Development Assessment
File Number: DA - 2018/297/1

<table>
<thead>
<tr>
<th>Application lodged</th>
<th>17 August 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant</td>
<td>Urbis Pty Ltd c/- Precast Elements Pty Ltd</td>
</tr>
<tr>
<td>Owner</td>
<td>Dr C H Stoermer</td>
</tr>
<tr>
<td>Application No.</td>
<td>2018/297/1</td>
</tr>
<tr>
<td>Description of Land</td>
<td>Lot 2, Section K, DP 939790 49 – 53 Pine Road, Yennora</td>
</tr>
<tr>
<td>Proposed Development</td>
<td>Retrospective approval for the change of use of an existing industrial premises to manufacturing of concrete panels with associated parking</td>
</tr>
<tr>
<td>Site Area</td>
<td>10,825m²</td>
</tr>
<tr>
<td>Zoning</td>
<td>IN1 General Industrial, and E2 Environmental Conservation</td>
</tr>
<tr>
<td>Disclosure of political donations and gifts</td>
<td>Nil disclosure</td>
</tr>
<tr>
<td>Heritage</td>
<td>The subject site does not contain a heritage item, is not located within a heritage conservation area, nor within the vicinity of a heritage item.</td>
</tr>
<tr>
<td>Principal Development Standards</td>
<td>Floor Space Ratio</td>
</tr>
<tr>
<td></td>
<td>No Applicable</td>
</tr>
<tr>
<td></td>
<td>Development Standard</td>
</tr>
<tr>
<td>Issues</td>
<td>Car Parking</td>
</tr>
</tbody>
</table>

Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019
SUMMARY:

Council is in receipt of a Development Application from Urbis Pty Ltd c/- Precast Elements Pty Ltd seeking retrospective approval for the change of use of an existing industrial premises to manufacturing of concrete panels with associated parking at 49 - 53 Pine Road, Yennora. The Development Application Architectural Plans are provided as Attachment 1 to this report.

The subject development is classified as ‘Integrated Development’ under the Water Management Act, 2000, due to the proximity of the proposed use to the natural watercourse, Prospect Creek. The development has been assessed by the Department of Primary Industries - Office of Water, and confirmed to be a ‘Controlled Activity Approval’, however, due to the existing hardstand area to the rear of the site, does not necessitate General Terms of Approval (GTA’s).

The subject development is also classified as ‘Designated Development’ under the Environmental Planning and Assessment Regulations, 2000, due to the site being within 100 metres of a natural waterbody, Prospect Creek, and within 250 metres of a residential zone not associated with the development, located to the west of the site. An Environmental Impact Statement has been prepared in accordance with the Secretary’s Environmental Assessment Requirements (SEARs). The development has been assessed by the Department of Planning and Environment, and confirmed there are no issues of State or Regional significant that apply to the proposal, identifying no specific condition requirements for the proposal.
The Development Application was publicly notified for a period of 30 days from 12 September 2018 to 12 October 2018 in accordance with the Environmental Planning and Assessment Regulations, 2000, requirements associated with ‘Designated Development’ and ‘Advertised Development’. In response, no submissions were received.

The site is affected by Mainstream Flooding. The development has been assessed by Council’s Development Engineer to be acceptable, noting no building works are proposed.

The site is zoned Part IN1 General Industrial, and Part E2 Environmental Conservation, pursuant to the Holroyd Local Environmental Plan (HLEP) 2013, with the subject use limited to the land zoned IN1 General Industrial. Industrial activity is permissible with development consent in the IN1 General Industrial zone.

The proposal is consistent with the aims and objectives of Environmental Planning and Assessment Regulations, 2000, Water Management Act, 2000, State Environmental Planning Policy No. 55 (Remediation of Land), Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (Deemed SEPP), Holroyd Local Environmental Plan (HLEP) 2013, Draft SEPP (Environment), and Holroyd Development Control Plan (HDCP) 2013.

The Development Application was referred for comments externally to Department of Planning and Environment, Department of Primary Industries - Office of Water, and Endeavour Energy, and internally to Council’s Development Engineer, Traffic Engineer, Tree Management Officer, Environmental Health Officer, Resource Recovery Officer, and Building Surveyor, to which the application is supported.

The proposed development has been assessed against the relevant matters for consideration pursuant to Section 4.15 of the Environmental Planning and Assessment Act, 1979, including likely impacts, the suitability of the site for the development, and the public interest, and the proposed development is considered appropriate.

The variations sought via the subject application are as follows:

<table>
<thead>
<tr>
<th>vi)</th>
<th>Control</th>
<th>vii) Required</th>
<th>viii) Provided</th>
<th>ix)</th>
<th>% Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>x)</td>
<td>Car Parking</td>
<td>xi) Min. 54 spaces</td>
<td>xii) 26 spaces</td>
<td>xiii)</td>
<td>51.85%</td>
</tr>
</tbody>
</table>

The application is being reported to the Cumberland Local Planning Panel (CLPP) for determination, as the subject development is classified as ‘Designated Development’ under the Environmental Planning and Assessment Regulations, 2000.

In light of the above, it is recommended that the Cumberland Local Planning Panel Approve the Development Application, subject to the Draft Notice of Determination provided at Attachment 15 to this report.
REPORT:

Subject Site and Surrounding Area

The subject site is known as 49 - 53 Pine Road, Yennora, and is legally described as Lot 2, Section K, and DP 939790. The site is an irregular mid-block, and has a frontage of 60.35 metres to Pine Road, and depth of 132.510 metres along the northern boundary and 226.695 metres along the southern boundary. The western (rear) boundary of the site adjoins Prospect Creek. The total site area is 10,825sqm, and is illustrated in Figure 2 below:

The subject site currently contains:

- A single storey warehouse located along the northern boundary.
- A single storey warehouse located along the southern boundary, gantries within.
- Two storey office building between the existing warehouse buildings.
- Gantries between the existing warehouse buildings.
- Existing trees and vegetation, predominately maintained to the rear of the site within the E2 Conservation zone, which are unaffected by the proposal.

The surrounding locality is characterised as follows:

- **North** 55 - 61 Pine Road, Yennora – Industrial, warehouse and commercial tenancies.
- **East** 32 Pine Road, Yennora – Warehouse and distribution centre.
- **South** 43 - 47 Pine Road, Yennora – Production and distribution centre.
• West Prospect Creek (natural waterway) with bordering vegetation, with Fairfield High School and associated sport fields beyond.

The topography of the site is maintained to a 0.08% gradient, with a 2 metre fall across the site from East to West. The site is affected by Mainstream Flooding.

The subject site is situated on the western side of Pine Road. Figure 3 below illustrates an aerial perspective of the site and the general surroundings.

Figure 3 – Aerial Photo (Source: Cumberland Council, 2018)

The site is zoned Part IN1 General Industrial, and Part E2 Environmental Conservation, pursuant to the Holroyd Local Environmental Plan (HLEP) 2013, with the subject use limited to the land zoned IN1 General Industrial, as shown in Figure 4 below:

Figure 4 – Zoning Map (Source: Cumberland Council, 2018)
The subject site does not contain a heritage item, is not located within a heritage conservation area, nor within the vicinity of a heritage item.

**Description of The Proposed Development**

The proposal is for retrospective approval for the change of use of an existing industrial premises to manufacturing of concrete panels with associated parking.

Specific details of the proposed development, as outlined within the Applicant’s Environmental Impact Statement (EIS), prepared by Urbis, dated 17 August 2018, are as follows:

**Nature of the Use**

Precast Elements produced a maximum of 75 tonnes of concrete product per day, with an annual production capacity of 20,625 tonnes.

The northern warehouse is capable of manufacturing 400m² of concrete panels per day.

The storage capacity is presently for 190 panels inside and a further provision of 240 panels outside. The main warehouse is serviced by 2 x 12.5t and a 1 x 10t overhead gantries.

The southern warehouse is utilised for the manufacturing of small precast items up to 5t in weight.

Concrete is delivered to the site in premixed concrete trucks, the trucks reverse into the eastern entry of the warehouse and pours the premixed concrete into the pre-prepared panel moulds.

Panel moulds are created in the southern warehouse using wooden planes and reinforced mesh. The mould is constructed on top of a rubber base that is lined with Reckli stripping wax.

The poured concrete is left to dry and cure overnight, which occurs under natural conditions, without the need for artificial heating or cooling. The following day the dry moulds are removed from the warehouse via the gantries and stored outside and left to cure before being loaded onto trucks for transport off site.

**Hours of Operation**

Precast Elements seeks consent for the following operating hours:

- 24 hours, seven days a week for the warehouse, with the following restrictions on vehicle access and deliveries:
  - Deliveries: 7am to 5pm; and
  - Product distribution (leaving the site): 3am to 5pm.
Whilst the general operating hours are 4am – 7pm, Precast Elements needs expanded operating hours to respond to market demand. 24 hour operation is typical of manufacturing companies, and reflects the shift work nature of the business operations.

Staff

Precast elements has fluid staff arrangements which respond to market demand. On a general basis, Precast Elements employs 35 permanent staff, on a shift basis, as outlined below:

- 5 people – 4am to 1pm.
- 13 people – 6am to 3pm.
- 12 people – 8am to 5pm.
- 5 people – 10am to 7pm.

Vehicular Access

Vehicular access to the site is via the existing 16m wide vehicular cross over to Pine Road in the east. The proposed use of the site will maintain the existing vehicular access. It is proposed that light and medium rigid vehicles will circulate the site along hardstand areas around the warehouse to the hard stand area to the west of the buildings.

All vehicles are able to enter and exit in a forward direction.

Parking

The site currently contains nine formalised car parking spaces within the eastern front setback (inside the fence). Four car spaces are located to the east of the office building and five car spaces are located within the south east corner of the site.

Planner’s Comment: Following Council’s assessment of the Application, a Deferral of Determination letter was issued on 15 February 2019, which sought a plan which outlines the provision of additional parking on site to service the development. The Application was subsequently amended on 18 March 2019 to include the provision of additional parking on site, supported by a Traffic Plan, which outlined the provision of 26 spaces within the front setback area.

Loading Facilities

All loading and unloading will take place within the existing warehouses.

Waste Management

Precast Elements participates in the Bin Trim Rebate Recycling Programs through the NSW Environmental Protection Authority, will all waste generated by production
disposed of using a licensed contractor. The site provides a number of forms of waste, with the following waste practices undertaken on site.

- 3,000L paper recycling bin (6m in area), collected fortnightly by a front lifting truck;
- 4,500L general waste (8m in area), collected 3 times per week by a front lifting truck;
- Rigid foam recycling area, collected fortnightly by a front lifting truck;
- 6m concrete recycle bin, collected monthly by a reversing truck 20m+;
- 6m steel recycle bin, collected monthly by a reversing truck 20m+; and
- Concrete bunded waste area (6m x 6m in area), collected by a concrete truck that reverses into the area.

**Applicants Supporting Statement**

The applicant has provided an Environmental Impact Statement, prepared by Urbis, dated 17 August 2018, which was received by Council on 17 August 2018 in support of the application.

Additional correspondence was received by Urbis dated 18 March 2019 in response to Council’s request for amended plans and additional information.

**Contact With Relevant Parties**

The assessing officer has undertaken an inspection of the subject site and has been in contact with the applicant throughout the assessment process.

**Internal Referrals**

**Development Engineer**

The Development Application was referred to Council’s Development Engineer for comments as the site is subject to Mainstream flooding. Council’s Development Engineer has advised that the proposed development is supported without the imposition of conditions, noting no building works are proposed.

**Traffic Engineer**

The Development Application was referred to Council’s Traffic Engineer for comments, who has advised that the traffic arrangement is supportable, subject to standard conditions of consent, which have been imposed within the draft Notice of Determination provided as Attachment 15 to this report.

Council’s Traffic Engineer further identified the provision of 26 off-street parking spaces is supported, subject to the addition of 15 car parking spaces being provided between the existing warehouse buildings. Refer to commentary provided under the
heading Car Parking within the Planning Comments section below, for further discussion.

Tree Management Officer

The Development Application was referred to Council’s Tree Management Officer for comments, noting the existing trees on site, who has advised that the proposed development is supportable, subject to the imposition of a condition to ensure the large mature Eucalyptus Tereticornis (Forest Red Gum) is to remain isolated from all works associated with the proposed use. A condition has been imposed within the draft Notice of Determination provided as Attachment 15 to this report.

Environmental Health Officer

The Development Application was referred to Council’s Environmental Health Officer for comments, noting the proposed use, who has advised that the proposed development is supportable, subject to standard conditions of consent, which have been imposed within the draft Notice of Determination provided as Attachment 15 to this report.

Resource Recovery Officer

The Development Application was referred to Council’s Resource Recovery Officer for comments, noting the proposed waste management arrangements, who has advised that the proposed development is supportable.

Building Surveyor

The Development Application was referred to Council’s Building Surveyor for comments, who has advised that the proposed development is supportable, subject to standard conditions of consent, which have been imposed within the draft Notice of Determination provided as Attachment 15 to this report.

External Referrals

Department of Planning and Environment

The Development Application was referred to the Department of Planning and Environment for comments, noting the proposed development is classified as ‘Designated Development’ under the Environmental Planning and Assessment Regulations, 2000, due to the site being within 100 metres of a natural waterbody, Prospect Creek, and within 250 metres of a residential zone not associated with the development, located to the west of the site. The Department of Planning and Environment has assessed the application, and confirmed there are no issues of State or Regional significant that apply to the proposal, identifying no specific condition requirements.

Department of Primary Industries – Office of Water

The Development Application was referred to the Department of Primary Industries – Office of Water for comments, noting the proposed development is classified as
‘Integrated Development’ under the Water Management Act, 2000, due to the proximity of the proposed use to the natural watercourse, Prospect Creek. The Department of Primary Industries - Office of Water has confirmed the development requires a ‘Controlled Activity Approval’, however, due to the existing hardstand area to the rear of the site, does not necessitate General Terms of Approval (GTA’s).

**Endeavour Energy**

The Development Application was referred to Endeavour Energy for comments who has advised that the proposed development is supported.

**Planning Comments**

*Section 4.15 of the Environmental Planning and Assessment Act 1979 (EP & A Act)*

The provisions of any Environmental Planning Instruments (EP & A Act s4.15 (1)(a)(i))

The following Environmental Planning Instruments are relevant to the assessment of the subject modification application:

a) **State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)**

The requirement at Clause 7 of SEPP 55 for Council to be satisfied that the site is suitable or can be made suitable to accommodate the proposed development has been considered in the following table:

<table>
<thead>
<tr>
<th>Matters for consideration</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the application involve re-development of the site or a change of land use?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the development going to be used for a sensitive land use (e.g.: residential, educational, recreational, childcare or hospital)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does information available to you indicate that an activity listed below has ever been approved, or occurred at the site?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acid/alkali plant and formulation, agricultural/horticultural activities, airports, asbestos production and disposal, chemicals manufacture and formulation, defence works, drum re-conditioning works, dry cleaning establishments, electrical manufacturing (transformers), electroplating and heat treatment premises, engine works, explosive industry, gas works, iron and steel works, landfill sites, metal treatment, mining and extractive industries, oil production and storage, paint formulation and manufacture, pesticide manufacture and formulation, power stations, railway yards, scrap yards, service stations, sheep and cattle dips, smelting and refining, tanning and associated trades, waste storage and treatment, wood preservation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the site listed on Council's Contaminated Land Database?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Matters for consideration

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the site subject to EPA clean-up order or other EPA restrictions?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the site been the subject of known pollution incidents or illegal dumping?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the site adjoin any contaminated land/previouely contaminated land?</td>
<td>☒</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the appropriate level of investigation been carried out in respect of contamination matters for Council to be satisfied that the site is suitable to accommodate the proposed development or can be made suitable to accommodate the proposed development?</td>
<td>☒</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Details of contamination investigations carried out at the site:

The site is not identified in Council’s records as being contaminated, however, the site adjoins 55 & 63 Pine Road, Yennora, and is directly opposite 32 Pine Road, Yennora, which have previously been issued Site Audit Statements.

A Preliminary Site Investigation has been submitted with the subject application, prepared by SLR Consulting Australia Pty Ltd, in accordance with the NSW EPA Guidelines for Consultants Reporting on Contaminated Sites and the National Protection of the Environment (Assessment of Site Contamination) Measure (2013 Amendment). The report concludes:

- The potential for significant, widespread contamination to be present at the site is considered to be low;

- The site is considered suitable for the proposed change of land use (from general industrial to industry activity); and

- A Stage 2 Detailed Site Investigation is not warranted, however, further assessment is required:
  - An assessment to include clay content and pH analysis to determine the site specific Ecological Investigation Levels (EIL) limit to be used for metal concentrations;
  - Further soil sampling to confirm whether zinc concentrations in soil are above the EIL limit for a commercial / industrial land scenario; and
  - Asbestos quantification to confirm that the asbestos identified within the exposed site soils is below the
Matters for consideration

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPM (2013) guideline limit for a commercial / industrial land use scenario.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Following Council’s assessment of the Application, a Deferral of Determination letter was issued on 15 February 2019, requesting the above noted assessment be undertaken, and the findings be submitted to Council. A Soil Contamination Assessment prepared by SLR Consulting Australia Pty Ltd was subsequently submitted, which concluded:

- Asbestos in the soil does not exceed the relevant human health criteria for a commercial / industrial setting; and
- Although zinc concentrations have been detected at concentrations above the site-specific EIL limit for commercial / industrial land use, it is considered that the potential for significant, widespread contamination to be present at the site to be low. Further, the zinc concentrations are significantly below the human health guideline for an industrial setting and therefore these concentrations are not considered to impact the suitability of the site for its intended use.

Council’s Environmental Health Officer has advised that the subject site is suitable for the proposed use, subject to standard conditions of consent, which have been imposed within the draft Notice of Determination provided as Attachment 15 to this report.

b) Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (Deemed SEPP)

The subject site is identified as being located within the area affected by the Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (Deemed SEPP). An assessment of the proposal has revealed:

- The subject site is not affected by acid sulphate soils;
- The proposed development does not disturb the bank or foreshore along the Georges River tributaries;
- The proposal will not increase flooding or stormwater runoff;
- Discharging of industrial waste is not proposed;
- The proposal will not cause land degradation by way of erosion, sedimentation, pollution, salinity or acidity; and
• The proposal will not cause adverse impacts to the sensitive natural environments within the catchment area.

The proposed development has been assessed by the Department of Primary Industries - Office of Water, who raises no issues, as no impact on the catchment is envisaged, noting the existing hardstand area to the rear of the site.

c) Holroyd Local Environmental Plan 2013 (HLEP 2013)

The provision of the HLEP 2013 is applicable to the development proposal. It is noted that the development achieves compliance with the statutory requirements of the HLEP 2013.

Permissibility

• The site is zoned Part IN1 General Industrial, and Part E2 Environmental Conservation, pursuant to the Holroyd Local Environmental Plan (HLEP) 2013, with the subject use limited to land zone IN1 General Industrial. The proposed development is permissible with consent.

*Industrial activity* means the manufacturing, production, assembling, altering, formulating, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, transforming, processing, recycling, adapting or servicing of, or the research and development of, any goods, substances, food, products or articles for commercial purposes, and includes any storage or transportation associated with any such activity.

No Development Standards related to Height of Building and Floor Space Ratio are applicable to the subject site. A comprehensive LEP assessment is contained in Attachment 16 to this report.


The following draft Environmental Planning Instruments are relevant to the assessment of the subject modification application:

a) Draft State Environmental Planning Policy (Environment)

The draft SEPP relates to the protection and management of our natural environment with the aim of simplifying the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. The changes proposed include consolidating the following seven existing SEPPs:

• State Environmental Planning Policy No. 19 – Bushland in Urban Areas.
• State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.
• State Environmental Planning Policy No. 50 – Canal Estate Development.
• Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment.
The draft policy will repeal the above existing SEPPs and certain provisions will be transferred directly to the new SEPP, amended and transferred, or repealed due to overlaps with other areas of the NSW planning system.

As noted within the assessment above under the heading ‘Greater Metropolitan Regional Environmental Plan No. 2 - Georges River Catchment (Deemed SEPP)’, the proposed development has been assessed by the Department of Primary Industries - Office of Water, who raises no issues, as no impact on the catchment is envisaged, noting the existing hardstand area to the rear of the site.

**The provisions of any Development Control Plans (EP & A Act s4.15 (1)(a)(iii))**

The following Development Control Plans are relevant to the assessment of the subject modification application:

a) **Holroyd Development Control Plan 2013 (HDCP 2013)**

The HDCP 2013 applies to the subject site. The proposed development has been assessed and found to comply with the provisions of the HDCP 2013, with the exception of car parking, which is discussed below. A comprehensive assessment against the provisions of the HDCP 2013 is contained in Attachment 17 to this report.

**Car Parking**

- The HDCP 2013 requires the following minimum car parking spaces to service the development:

<table>
<thead>
<tr>
<th>Control</th>
<th>Required</th>
</tr>
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<tbody>
<tr>
<td>Office Gross Floor Area</td>
<td>1 space per 40m²</td>
</tr>
<tr>
<td>Factories Gross Floor Area</td>
<td>1 space per 70m²</td>
</tr>
<tr>
<td>Warehouse Gross Floor Area</td>
<td>1 space per 300m²</td>
</tr>
</tbody>
</table>

|                         | 884m² / 40m² = 22 spaces |
|                         | 2,021m² / 70m² = 29 spaces |
|                         | 860m² / 300m² = 3 spaces  |

| Total                  | 54 spaces                  |

In this regard, the application is supported by the provision of 26 car parking spaces within the front setback area, which results in a shortfall of 28 car parking spaces.

A Traffic Impact Assessment Report prepared by Ason Group, dated 14 August 2018 has been submitted with the application, which notes the following regarding car parking:

Noting that the development is existing, the detailed operation requirements is already known, and the travel behaviour of employees is understood. Thus, the
parking requirement has been based on a first principles assessment to account for the unique and known characteristics of the proposal.

Based on a maximum of 35 employees present on-site at any one time, 35 parking spaces would need to be provided. However, Ason Group has been advised that approximately 35% of staff members commute to work via public transport, notable via train (with the train station a 1.3km walk from the site). This would result in approximately 23 employees commuting to work via private vehicle.

In addition, it has been advised that there are a number of employees who car share. RMS Guide data details that industrial workers’ private vehicles have an average occupancy of 1.26 persons. Applying this occupancy rate to the 23 employees commuting via private vehicle, would equate to a demand of 18 spaces.

Therefore, 26 formal parking spaces are to be provided on site, which would accommodate the additional operation parking demands of the proposed development. Noting that on-site observations recorded 21 vehicles parked on-site, the balance of 5 parking spaces would generally accommodate visitor parking and any additional staff demand that was not observed during the site inspections, noting that some staff currently park on-street. This results in a net benefit to on-street parking capacities.

The application was referred to Council’s Traffic Engineer, who identified the provision of 26 off-street parking spaces is supported, subject to the addition of 15 car parking spaces being provided between the existing warehouse buildings.

Subsequently, a plan was prepared and issued to the Applicant, which reflected the above, with the following response issued:

It is not physically possible to provide dual use parking within the operational zone.

The location of the parking proposed by Council’s Traffic Engineer is within the operation zone, which includes the use of gantries that traverse along the full extent of this area. Parking in this location would interfere with the day-to-day operations and ultimately result in an operational hazard.

In this regard, conditions of consent have been imposed within the Draft Notice of Determination contained in Attachment 15:

- Restricting the number of employees to 35 persons; and
- Requiring the preparation of a Traffic and Transport Management Plan which identifies a strategy in the event that employees journey to work patterns change, and the demand for on-site parking increases.
Noting the above, the variation to the car parking standard is supported on merits, as the development is consistent with the objective under Part A, Clause 3.1 – Minimum Parking Spaces of the HDCP 2013, those being:

O1. To ensure that adequate and convenient off-street parking facilities are provided for all vehicles generated by the various types of development.

O2. To ensure that off-street parking facilities do not interfere with traffic flow and safety in adjacent streets or endanger pedestrian traffic on or off the site.

O3. To limit traffic generation associated with private vehicle use, in order to encourage public transport, walking and cycling, as alternative forms of transport, where possible.

**The provisions of any Planning Agreement that has been entered into under Section 7.4, or any Draft Planning Agreement that a Developer has Offered to Enter into under Section 7.4 (EP & A Act s4.15(1)(a)(iiiia))**

There is no planning agreement or draft planning agreement associated with the subject Development Application.

**The provisions of the Regulations (EP & A Act s4.15 (1)(a)(iv))**

In accordance with Schedule 3, Part 1, Clause 14 – Concrete Works of the Environmental Planning and Assessment Regulations, 2000 (The Regulations), the proposed development is identified as 'Designated Development', noting the use relates to the manufacture of concrete products, and the site is located within 100 metres of a natural waterbody, Prospect Creek, and within 250 metres of a residential zone not associated with the development, located to the west of the site. The Regulations defines concrete works as:

14 Concrete works

(1) Concrete works that produce pre-mixed concrete or concrete products and:

a) that have an intended production capacity of more than 150 tonnes per day or 30,000 tonnes per year of concrete or concrete products, or

b) that are located:

   (i) within 100 metres of a natural waterbody or wetland, or

   (ii) within 250 metres of a residential zone or dwelling not associated with the development.

(2) This clause does not apply to concrete works located on or adjacent to a construction site exclusively providing material to the development carried out on that site:
a) for a period of less than 12 months, or

b) for which the environmental impacts were previously assessed in an environmental impact statement prepared for that development.

An Environmental Impact Statement (EIS) has been prepared in accordance with the Secretary’s Environmental Assessment Requirements (SEARs). The development has been assessed by the Department of Planning and Environment, and confirmed there are no issues of State or Regional significant that apply to the proposal, identifying no specific condition requirements for the proposal.

**The likely Environmental, Social or Economic Impacts (EP & A Act s4.15 (1)(b))**

It is considered that the proposed development will have no significant adverse environmental, social or economic impacts in the locality.

**The Suitability of the Site for the Development (EP & A Act s4.15 (1)(c))**

It is considered that the development is suitable in the context of the site and surrounding locality.

**Submissions made in accordance with the Act or Regulation (EP & A Act s4.15 (1)(d))**

Advertised (newspaper) ☒ Mail ☐ Sign ☒ Not Required ☐

In accordance with public participation requirements of the Environmental Planning and Assessment Regulations, specifically Clauses 78 and 89 related to ‘Designated Development’ and ‘Advertised Development’, the proposal was publicly notified for a period of 30 days from 12 September 2018 to 12 October 2018. In response, no submissions were received.

Amended plans were received during the process of the application, which, due to the minor nature of the changes proposed, and as no submissions were received during the first notification period, re-notification was not warranted.

**The public interest (EP & A Act s4.15(1)(e))**

The public interest is served by permitting the orderly and economic use of land, in a manner that is sensitive to the surrounding environment and has regard to the reasonable amenity expectations of surrounding land users. In view of the foregoing analysis, it is considered that approval of the proposed use would not be contrary to the public interest.

**Section 4.46 of the Environmental Planning and Assessment Act 1979 (EP & A Act)**

Due to the proposed development being within 40 metres of a natural watercourse, Prospect Creek, which adjoins the sites western boundary, the subject development.
is classified as ‘Integrated Development’ pursuant to Clause 4.46 of the EP & A Act, requiring approval under the Water Management Act, 2000.

In accordance with Clause 91 – Activity Approvals of the Water Management Act, 2000, the proposed use necessitates a ‘Controlled Activity Approval’.

Controlled activity means:

(a) the erection of a building or the carrying out of a work (within the meaning of the Environmental Planning and Assessment Act 1979), or

(b) the removal of material (whether or not extractive material) or vegetation from land, whether by way of excavation or otherwise, or

(c) the deposition of material (whether or not extractive material) on land, whether by way of landfill operations or otherwise, or

(d) the carrying out of any other activity that affects the quantity or flow of water in a water source.

A Water Environmental Assessment Report prepared by SLR Consulting Australia Pty Ltd, dated 15 August 2018, has been submitted with the application, which notes that the development and current management measures observed will adequately control impacts related to:

- Groundwater;
- Soil contamination; and;
- Stormwater run-off peak flow rates and volumes.

Therefore, the following controls are required to be implemented, which include:

- Management and operation of the bunded wash area is described, implemented and audited under the Site’s Environmental Management Plan, this will ensure bunds are kept clean of sediment when not in use and bunded areas are used appropriately by staff.

- Undertake bunding adequacy assessment and implement findings / recommendations of the report to ensure bund capacity and positioning is adequate.

- Management of first flush stormwater collected in the bunded areas during rain events.

The development has been assessed by the Department of Primary Industries - Office of Water, and confirmed the development requires a ‘Controlled Activity Approval’, however, due to the existing hardstand area to the rear of the site, does not necessitate General Terms of Approval (GTA’s).
**Section 7.11 (Formerly S94 Contributions)**

The subject development does not require the payment of contributions in accordance with Holroyd Section 94 Development Contributions Plan 2013.

**Disclosure of Political Donations and Gifts**

The NSW Government has introduced disclosure requirements for individuals or entities with a relevant financial interest as part of the lodgement of various types of development proposals and requests to initiate environmental planning instruments or development control plans.

The application and notification process did not result in any disclosure of Political Donations or Gifts.

**CONCLUSION:**

The proposed development has been assessed against the matters for consideration listed in Section 4.15 of the EP & A Act, 1979, and is considered to be satisfactory. Any likely impacts of the development have been satisfactorily addressed and the proposal is considered to be in the public interest.

The proposed development is consistent with the objectives of HLEP 2013, and is permissible in the zone with Development Consent. The proposal also complies with the HDCP 2013, with the exception of the car parking requirements, with the variation considered supportable on its merits.

**CONSULTATION:**

There are no further consultation processes for Council associated with this report.

**FINANCIAL IMPLICATIONS:**

There are no further financial implications for Council associated with this report.

**POLICY IMPLICATIONS:**

There are no policy implications for Council associated with this report.

**COMMUNICATION / PUBLICATIONS:**

The final outcome of this matter will be notified in the newspaper. The objectors will also be notified in writing of the outcome.

**REPORT RECOMMENDATION:**

That Development Application 2018/297/1 seeking retrospective approval for the change of use of an existing industrial premises to manufacturing of concrete panels with associated parking at 49 - 53 Pine Road, Yennora, be
Approved, subject to the conditions contained in Attachment 15 of this report.

ATTACHMENTS

1. Architectural Plans
2. SEARS Requirements
3. Survey Plan
4. Environmental Management Plan
5. Environmental Assessment Program
6. Water Environmental Assessment Report
7. Preliminary Biodiversity Report
8. Traffic Impact Assessment Report
9. Site Waste Minimisation and Management Plan
10. Air Quality Impact Assessment
11. Hazards and Risk Assessment
12. Preliminary Site Investigation
13. Soil Contamination Assessment
14. Noise Impact Assessment
15. Draft Notice of Determination
16. Holroyd Local Environmental Plan 2013 Compliance Assessment
17. Holroyd Development Control Plan 2013 Compliance Assessment
DOCUMENTS
ASSOCIATED WITH
REPORT EELPP024/19

Attachment 1
Architectural Plans
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 2
SEARS Requirements
Dear Ms Weber

Precast Concrete Product Manufacturing (Concrete Works)
49-53 Pine Road, Yennora (Lot 2 DP 939790)
Secretary's Environmental Assessment Requirements (SEAR) 1192

Thank you for your request for the Secretary’s Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the above development proposal. I have attached a copy of these requirements.

In support of your application, you indicated that your proposal is both designated and integrated development under Part 4 of the Environmental Planning and Assessment Act 1979 and requires an approval under the Protection of the Environment Operations Act 1997 (POEO Act). It is noted that your proposal may not be a scheduled activity under the POEO Act and you should confirm this with the Environment Protection Authority (EPA). Notwithstanding, the Department has consulted with the EPA in preparing the SEARs and attaches a copy of their requirements.

The Department has consulted with the Roads and Maritime Services as required by Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007. The Department has also consulted with the Office of Environment and Heritage, the Department of Primary Industries and WaterNSW. A copy of their requirements for the EIS are attached.

If other integrated approvals are identified before the Development Application (DA) is lodged, you must undertake direct consultation with the relevant agencies, and address their requirements in the EIS.

If your proposal contains any actions that could have a significant impact on matters of National Environmental Significance, then it will require an additional approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). This approval is in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Commonwealth Department of the Environment and Energy on (02) 6274 1111.

Should you have any further enquiries, please contact Bianca Thornton, Planning Services, at the Department on the details above.

Yours sincerely,

Kelly McHool

ADirector
Industry Assessments
as delegate of the Secretary.
### Environmental Assessment Requirements

**Section 78A (8) of the Environmental Planning and Assessment Act 1979.**

**Designated Development**

<table>
<thead>
<tr>
<th>SEAR Number</th>
<th>1192</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposal</strong></td>
<td>Operation of a precast concrete product manufacturing facility with a maximum production capacity of 77 tonnes per day or 20,825 tonnes per annum and environmental protection works.</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>49-53 Pine Road, Yennora (Lot 2 DP 939790) in the Cumberland local government area.</td>
</tr>
<tr>
<td><strong>Applicant</strong></td>
<td>Precast Elements Pty Ltd</td>
</tr>
<tr>
<td><strong>Date of Issue</strong></td>
<td>January 2018</td>
</tr>
</tbody>
</table>

**General Requirements**

The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

**Key Issues**

The EIS must include an assessment of all potential impacts of the proposed development on the existing environment (including cumulative impacts if necessary) and develop appropriate measures to avoid, minimise, mitigate and/or manage these potential impacts. As part of the EIS assessment, the following matters must also be addressed:

- **strategic context** — including:
  - a detailed justification for the proposal and suitability of the site for the development;
  - a demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, development control plans (DCPs), or justification for any inconsistencies; and
  - a list of any approvals that must be obtained under any other Act or law before the development may lawfully be carried out.

- **air quality** — including:
  - a description of all potential sources of air and odour emissions;
  - an air quality impact assessment in accordance with relevant Environment Protection Authority guidelines; and
  - a description and appraisal of air quality impact mitigation and monitoring measures.

- **noise and vibration** — including:
  - a description of all potential noise and vibration sources during operation, including road traffic noise;
  - a noise and vibration assessment in accordance with the relevant Environment Protection Authority guidelines; and
  - a description and appraisal of noise and vibration mitigation and monitoring measures.

- **soil and water** — including:
  - a description of local soils, topography, drainage and landscapes;
  - an assessment of potential impacts to watercourses and riparian lands on and nearby the site;
  - an assessment of flooding impacts associated with the development;
  - a detailed site water balance;
  - an assessment of potential impacts on the quality and quantity of surface and groundwater resources;
  - details of the stormwater and wastewater management systems (including seepage), water monitoring program and other measures to mitigate surface and groundwater impacts; and
  - a description and appraisal of impact mitigation and monitoring measures.
### Environmental Planning Instruments and other policies

The EIS must assess the proposal against the relevant environmental planning instruments, including but not limited to:

- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017;
- State Environmental Planning Policy No 19—Bushland in Urban Areas;
- State Environmental Planning Policy No 33—Hazardous and Offensive Development;
- State Environmental Planning Policy No 55—Remediation of Land;
- Greater Metropolitan Regional Environmental Plan No 2—Georges River Catchment;
- Holroyd Local Environmental Plan 2013; and
- relevant development control plans and section 94 plans.

### Guidelines

During the preparation of the EIS, you should consult the Department's Register of Development Assessment Guidelines, which is available on the Department's website at planning.nsw.gov.au under Development Proposals/Register of Development Assessment Guidelines. Whilst not exhaustive, this Register contains some of the guidelines, policies, and plans that must be taken into account in the environmental assessment of the proposed development.

### Consultation

During the preparation of the EIS, you must consult the relevant local, State and Commonwealth government authorities, service providers and community groups, and address any issues they may raise in the EIS. In particular, you should consult with:

- Environment Protection Authority;
- Department of Primary Industries;
- Roads and Maritime Services;
- WaterNSW;
- Cumberland Council; and
- the surrounding landowners and occupiers that are likely to be impacted by the proposal.

Details of the consultation carried out and issues raised must be included in the EIS.

### Further consultation after 2 years

If you do not lodge an application under Section 78A(8) of the Environmental Planning and Assessment Act 1979 within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to any further requirements for lodgement.
Dear Ms Thomton,

I refer to your email of 8 December 2017 requesting the NSW Environment Protection Authority's (EPA) input to the Secretary's Environmental Assessment Requirements (SEARs) for an application for retrospective change of use approval for a precast concrete product manufacturing facility located at 49-53 Pine Road, Yennora – SEAR 1192.

Please see Attachment A for the EPA's comments.

If you have any questions in relation to this letter please contact Mark Hanemann on 9965 6345 or via email at mark.hanemann@epa.nsw.gov.au.

Yours sincerely,

[Signature]

ERIN BARKER
Unit Head Sydney Industry
Environment Protection Authority
ATTACHMENT A

Request for Secretary’s Environmental Assessment Requirements
Precast concrete manufacturing facility, 48-83 Pine Road, Yennora – SEAR 1192

Environment Protection Licence
Based on the information provided, it is unclear whether the proposal will require an Environment Protection Licence under schedule 1 of the Protection of the Environment Operations Act 1997 ("POEO Act").

Clause 6 of schedule 1 states:

6. Cement or lime works
(1) This clause applies to the following activities:

- cement or lime handling, meaning the handling of cement, fly ash, powdered lime (other than agricultural lime) or any other similar dry cement products.
- cement or lime production, meaning the production of cement or lime:
  (a) by heating argillaceous or calcareous materials to produce cement clinkers, grinding clinkers or slags, or
  (b) by hydrating quicklime.

(2) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if it meets the criteria set out in Column 2 of that Table.

<table>
<thead>
<tr>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 1</td>
</tr>
<tr>
<td>Activity</td>
</tr>
<tr>
<td>cement or lime handling</td>
</tr>
<tr>
<td>cement or lime production</td>
</tr>
</tbody>
</table>

Clause 13 of schedule 1 states:

13. Concrete works
(1) This clause applies to concrete works, meaning the production of pre-mixed concrete (concrete batching).

(2) The activity to which this clause applies is declared to be a scheduled activity if it has a capacity to produce more than 30,000 tonnes per year of concrete products.

Scheduled development works
Under section 47 of the POEO Act an environment protection licence is required for "work at any premises at which scheduled activities are not carried on that is designed to enable scheduled activities to be carried on at the premises." If the proposal is granted consent and is deemed to be a scheduled activity under Schedule 1 of the POEO Act, the proponent must obtain an Environment Protection Licence from the EPA prior to commencing any construction works.

Community Liaison
The EIS should include a Community Engagement Plan that includes:
• Details of when and how the proponent will engage with the local community and businesses, both during construction and ongoing operation;

• Details of how the identified needs and priorities of the local community and businesses will be considered in operational procedures and decision-making at the site; and

• How the proponent will provide timely and relevant information to the community, especially during significant or emergency events where there is potential for harm to the environment or human health.

The EPA recommends that the proponent establishes a 24-hour complaints hotline to enable real-time responses to community complaints relating to construction or operation of the site.

The EPA recommends that the proponent establishes a website that will:

• enable the community and local businesses to register queries/complaints;

• enable the proponent to advise the community about environmental incidents at the site in real-time; and

• enable the publication of monitoring results (see below).

**Air Quality**

The EIS should include an Air Quality Impact Assessment ("AQIA"), which should consider the requirements of the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (2016)*. The AQIA should identify all potential air emissions, including dust, during construction and operation, and should provide details of any air quality impacts, and proposed mitigation, management and monitoring measures for point source and fugitive emissions.

The EIS should include a commitment to publish all air monitoring results on the proponent’s website as soon as possible.

**Soil and Water Management**

The EIS should include a Water Management Plan (WMP) that details an appropriate water quality management, monitoring and reporting regime, with reference to the *Australian and New Zealand guidelines for fresh and marine water quality: Volume 1 (2000)*. The WMP should include:

• Details of any discharges to stormwater or wastewater during construction and operation, including volumes, pollutants and locations of discharges;

• Details of proposed stormwater management measures during construction and operation, including:
  
  • details of erosion and sediment controls;
  
  • how and when stormwater will be tested prior to discharge;
  
  • the location of proposed sampling points, including justification for the locations that demonstrates that the samples collected will be representative of the water being discharged;
  
  • details of proposed sampling criteria and trigger levels;
  
  • details of actions that will be taken in the event of exceedences of identified trigger values for specified pollutants in water proposed to be discharged from the site; and
  
  • who will be responsible for ensuring water sampling is undertaken as per the WMP.

• details of measures proposed to minimise water use during the construction and operational phases of the project, including details of water treatment or re-use.

The EIS should include a commitment to publish all water monitoring results on the proponent’s website as soon as possible.
Noise Impacts
The EIS should include a Noise Impact Assessment (NIA) that details any proposed noise management, monitoring and reporting regime, with reference to:

- The Interim Construction Noise Guideline (EPA, 2009).

The EIS should include a commitment to publish all noise monitoring results on the proponent's website as soon as possible.

Waste Management
The EIS should provide details of liquid waste and non-liquid waste management, including:

- details of the quantities and classification of waste and wastewater to be generated on site;
- the transportation, assessment and handling of waste generated at the site;
- the methods for storage and disposal of all waste materials, including stockpiling, at the site;
- any waste processing related to the project including on-site treatment;
- the proposed controls for managing the environmental impacts of these activities; and
- details of the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste Avoidance and Resource Recovery Strategy 2014.

Dangerous Goods and Hazardous Materials
The EIS should provide details of the following for the construction and operational phases:

- the type and quantity of any dangerous goods and hazardous materials to be used or stored; and
- procedures for the classification, assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of, in addition to the requirements for liquid and non-liquid wastes.

Incident Management
The EIS should include a comprehensive assessment of the potential for incidents to occur at any stage of the project, the measures to be used to minimise the risk of incidents and the procedures to be employed in the event of an incident.
20 December 2017

Our Reference: SYD17/01728
Department Ref: SEAR 1192

Bianca Thornton
Planning Officer
Industry Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Bianca Thornton

Dear Ms. Thornton

APPLICATION FOR SEARs
REQUEST FOR INPUT: CONCRETE WORKS, 49-53 PINE ROAD, YENNORA (LOT 2 DP 939790) – SEAR 1192

Reference is made to your email received 8 December 2017 requesting Roads and Maritime Services (Roads and Maritime) to provide details of key issues and assessment requirements regarding the abovementioned development modification for inclusion in the Secretary’s Environmental Assessment Requirements (SEARs).

Roads and Maritime has reviewed the Applicant’s request for SEARs and advises that the following should be addressed within the Environmental Impact Statement (EIS):

- a Traffic Impact Assessment which details all daily and peak traffic and transport movements likely to be generated (light and heavy vehicle, public transport, pedestrian and cycle trips) during construction (if required) and operation of the development;
- details of the proposed days of the week and hours of operation on each day;
- details of the current daily and peak hour vehicle, public transport, pedestrian and bicycle movements and existing traffic and transport facilities provided on the road network located adjacent to the proposed development;
- an assessment of the operation of existing and future transport networks including public transport, pedestrian and bicycle provisions and their ability to accommodate the forecast number of trips to and from the development;
- details the type of heavy vehicles likely to be used (e.g. B-doubles) during the operation of the development and the impacts of heavy vehicles on nearby intersections;
- details of access to, from and within the site from the road network including intersection location, design and sight distance (i.e. turning lanes, swept paths, sight distance requirements);
- impact of the proposed development on existing and future public transport and walking and cycling infrastructure within and surrounding the site;
• an assessment of the existing and future performance of key intersections providing access to the site, and any upgrades (road/intersections) required as a result of the development. The assessment needs to be supported by appropriate modelling and analysis to the satisfaction of Roads and Maritime Services;

• an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the development;

• plans of any road upgrades or new roads required for the development, if necessary;

• demonstrate the measures to be implemented to encourage users of the development to make sustainable travel choices, including walking, cycling, public transport and car sharing;

• appropriate provision, design and location of on-site bicycle parking, and how bicycle provision will be integrated with the existing bicycle network;

• the existing and proposed pedestrian and bicycle routes and end of trip facilities within the vicinity of and surrounding the site and to public transport facilities as well as measures to maintain road and personal safety in line with CPTED principles.

• details of the proposed number of car parking spaces and compliance with appropriate parking codes and justify the level of car parking provided on the site;

• details of access and parking arrangements for emergency vehicles;

• detailed plans of the proposed layout of the internal road network and parking provision on-site in accordance with the relevant Australian Standards;

• details of any likely dangerous goods to be transported on arterial and local roads to/from the site, if any, and the preparation of an incident management strategy, if necessary; and

• If required, preparation of a draft Construction Traffic Management Plan which includes:
  o details of vehicle routes, number of trucks, hours of operation, access management and traffic control measures for all stages of construction;
  o assessment of cumulative impacts associated with other construction activities;
  o an assessment of road safety at key intersections in the vicinity of the site;
  o details of anticipated peak hour and daily truck movements to and from the site;
  o details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements;
  o details of temporary cycling and pedestrian access during constructions;
  o an assessment of traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrians, cyclists and public transport operations.

Should you have any further inquiries in relation to this matter, please do not hesitate to contact the undersigned by email at development.sydney@rms.nsw.gov.au.

Yours sincerely,

[Signature]

Aleks Tancevski
Senior Land Use Planner
Network Sydney South Precinct
Hi Bianca,

Please see below some assessment requirements from DPI fisheries regarding this proposal.

A clear definition of the proposed environmental protection works will need to be provided, including identifying whether these works will be situated within the top of bank of Prospect Creek and plans for the proposed works. Prospect Creek is important key fish habitat within Western Sydney. DPI Fisheries recommends that any creek bank stabilisation works associated with this proposal considers the use of soft engineering design options. The REF for this works will need to address impacts on the habitats within the creek, creek bank and riparian zone from such works, and include measures to mitigate such impacts such as the use of erosion and sediment controls.

Regards,

Carla Ganassin | Fisheries Manager | Aquatic Ecosystems Unit
NSW Department of Primary Industries | Fisheries NSW
Block E, Level 3, 84 Crown Street, Wollongong NSW 2500
SEND MAIL TO: Locked Bag 1 | Nelson Bay NSW 2315
T: 02 4222 8342 | F: 02 4225 9056 | E: carla.ganassin@dpi.nsw.gov.au
W: www.dpi.nsw.gov.au

Conserv, Share, Provide

PERSUIT APPLICATION FORMS & FISH HABITAT PROTECTION POLICIES AT:
EMAIL COMPLETED APPLICATIONS TO: ahp.central@dpi.nsw.gov.au
Hello Bianca,

DPI Ag will not be providing comments on this referral as there will be no impact on rural lands or industries at this location.

Kind regards

John
J.G.

John Galea
Agriculture Land Use Planning Officer
DPI Agriculture | Agriculture Land Use Planning
NSW Department of Primary Industries
Level 12 | 10 Valentine Avenue | Parramatta NSW 2124
T: +61 2 9842 8607 | 
E DPI: landuse.enquiries@dpi.nsw.gov.au
E DPI Ag: landuse.ag@dpi.nsw.gov.au

W: www.industry.nsw.gov.au

Agriculture Land Use Planning information and guidelines are available at: http://www.dpi.nsw.gov.au/agriculture/lup

Plan, Resource, Grow
Building thriving, sustainable Agriculture for tomorrow’s communities
Dear Bianca,

Please be advised that the Greater Sydney Planning Team in the Office of Environment and Heritage does not have an interest in this matter.

Regards,

Rachel Lonie
Senior Project Officer, Greater Sydney Branch
Regional Operations Directorate, Office of Environment and Heritage
Level 6, 10 Valentine Ave Parramatta (PO Box 644) NSW 2124
T: 9635 6837 W: www.environment.nsw.gov.au
OUT18/1187

Ms Bianca Thornton
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001
bianca.thornton@planning.nsw.gov.au

Dear Ms Thornton

Re: Concrete Works, 49-53 Pine Rd Yennora (Lot 2 DP 939790) SEAR 1192

Thank you for your email of 08 December 2017 seeking Lands and Water (L&W) comments on the SEARs request for the above designated development proposal.

L&W has reviewed the supporting documentation accompanying the request for Secretary’s Environmental Assessment Requirements (SEARs) and provides the following comments and further detail in Attachment A.

It is recommended that the EIS be required to include, if relevant:

- Annual volumes of surface water and groundwater proposed to be taken by the activity (including through inflow and seepage) from each surface and groundwater source as defined by the relevant water sharing plan.

- Assessment of any volumetric water licensing requirements (including those for ongoing water take following completion of the project).

- The identification of an adequate and secure water supply for the life of the project. Confirmation that water can be sourced from an appropriately authorised and reliable supply. This is to include an assessment of the current market depth where water entitlement is required to be purchased.

- A detailed and consolidated site water balance.

- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.

- Full technical details and data of all surface and groundwater modelling.

- Proposed surface and groundwater monitoring activities and methodologies.
• Assessment of any potential cumulative impacts on water resources, and any proposed options to manage the cumulative impacts.

• Consideration of relevant policies and guidelines.

• A statement of where each element of the SEARs is addressed in the EIS, i.e. in the form of a table.

• If construction of the proposed facility requires excavation works the EIS needs to provide details on the maximum depth of the excavation and the depth to groundwater. If groundwater is likely to be intercepted or extracted by the proposal, depending on the volumes encountered and the duration of pumping, a licence may be required from L&W Division in relation to construction excavation/dewatering activities.

For further information please contact Ian Forbes, Water Regulation Officer at L&W (Newcastle office) on t: (02) 4904 2559; e: ian.forbes@dpi.nsw.gov.au.

Yours sincerely

Irene Zinger
Manager Regulatory Operations - Metro
Lands and Water

22 January 2018
Attachment A

General Assessment Requirements for general projects
Lands and Water

The following detailed assessment requirements are provided to assist in adequately addressing the assessment requirements for this proposal.

Key Relevant Legislative Instruments

This section provides a basic summary to aid proponents in the development of an Environmental Impact Statement (EIS), and should not be considered a complete list or comprehensive summary of relevant legislative instruments that may apply to the regulation of water resources for a project.

The EIS should take into account the objects and regulatory requirements of the Water Act 1912 (WA 1912) and Water Management Act 2000 (WM Act), and associated regulations and instruments, as applicable.

Water Management Act 2000 (WM Act)

Key points:
- Volumetric licensing in areas covered by water sharing plans
- Works within 40m of waterfront land
- SSD & SSI projects are exempt from requiring water supply work approvals and controlled activity approvals as a result of the Environmental Planning & Assessment Act 1979 (EP&A Act).
- No exemptions for volumetric licensing apply as a result of the EP&A Act.
- Basic landholder rights, including harvestable rights dams
- Aquifer interference activity approval and flood management work approval provisions have not yet commenced and are regulated by the Water Act 1912
- Maximum penalties of $ 2.2 million plus $ 264,000 for each day an offence continues apply under the WM Act
- Flood management works

Water Act 1912 (WA 1912)

Key points:
- Volumetric licensing in areas where no water sharing plan applies
- Monitoring bores
- Aquifer interference activities that are not regulated as a water supply work under the WM Act.
- No exemptions apply to licences or permits under the WA 1912 as a result of the EP&A Act.
- Regulation of water bore driller licensing.

Water Management (General) Regulation 2011

Key points:
- Provides various exemptions for volumetric licensing and activity approvals
- Provides further detail on requirements for dealings and applications.

Access Licence Dealing Principles Order 2004

Harvestable Rights Orders
Lands and Water

**Water Sharing Plans** these are considered regulations under the WM Act

It is important that the proponent understands and describes the ground and surface water sharing plans, water sources, and management zones that apply to the project. The relevant water sharing plans can be determined spatially at [www.ourwater.nsw.gov.au](http://www.ourwater.nsw.gov.au). Multiple water sharing plans may apply and these must all be described.

The **Water Act 1912** applies to all water sources not yet covered by a commenced water sharing plan.

The EIS is required to:

- Demonstrate how the proposal is consistent with the relevant rules of the Water Sharing Plan including rules for access licences, distance restrictions for water supply works and rules for the management of local impacts in respect of surface water and groundwater sources, ecosystem protection (including groundwater dependent ecosystems), water quality and surface-groundwater connectivity.

- Provide a description of any site water use (amount of water to be taken from each water source) and management including all sediment dams, clear water diversion structures with detail on the location, design specifications and storage capacities for all the existing and proposed water management structures.

- Provide an analysis of the proposed water supply arrangements against the rules for access licences and other applicable requirements of any relevant WSP, including:
  - Sufficient market depth to acquire the necessary entitlements for each water source.
  - Ability to carry out a “dealing” to transfer the water to relevant location under the rules of the WSP.
  - Daily and long-term access rules.
  - Account management and carryover provisions.

- Provide a detailed and consolidated site water balance.
- Further detail on licensing requirements is provided below.

**Relevant Policies and Guidelines**

The EIS should take into account the following policies (as applicable):

- NSW Guidelines for Controlled Activities on Waterfront Land (NOW, 2012)
- NSW Aquifer Interference Policy (NOW, 2012)
- Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW, 2012)
- NSW State Rivers and Estuary Policy (1993)
- NSW Wetlands Policy (2010)

L&W policies can be accessed at the following links:


Lands and Water


Licensing Considerations

The EIS is required to provide:

- Identification of water requirements for the life of the project in terms of both volume and timing (including predictions of potential ongoing groundwater take following the cessation of operations at the site – such as evaporative loss from open voids or inflows).

- Details of the water supply source(s) for the proposal including any proposed surface water and groundwater extraction from each water source as defined in the relevant Water Sharing Plan/s and all water supply works to take water.

- Explanation of how the required water entitlements will be obtained (i.e. through a new or existing licence/s, trading on the water market, controlled allocations etc.).

- Information on the purpose, location, construction and expected annual extraction volumes including details on all existing and proposed water supply works which take surface water, (pumps, dams, diversions, etc).

- Details on all bores and excavations for the purpose of investigation, extraction, dewatering, testing and monitoring. All predicted groundwater take must be accounted for through adequate licensing.

- Details on existing dams/storages (including the date of construction, location, purpose, size and capacity) and any proposal to change the purpose of existing dams/storages.

- Details on the location, purpose, size and capacity of any new proposed dams/storages.

- Applicability of any exemptions under the Water Management (General) Regulation 2011 to the project.

Water allocation account management rules, total daily extraction limits and rules governing environmental protection and access licence dealings also need to be considered.

The Harvesatable Right gives landholders the right to capture and use for any purpose 10% of the average annual runoff from their property if in the Eastern or Central Divisions. The Harvestable Right has been defined in terms of an equivalent dam capacity called the Maximum Harvestable Right Dam Capacity (MHRDC). The MHRDC is determined by the area of the property (in hectares) and a site-specific run-off factor. The MHRDC includes the capacity of all existing dams on the property that do not have a current water licence. Storages capturing up to the harvestable right capacity are not required to be licensed but any capacity of the total of all storages/dams on the property greater than the MHRDC may require a licence.

For more information on Harvestable Right dams, including a calculator, visit: http://www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/Harvesting-runoff

Dam Safety

Where new or modified dams are proposed, or where new development will occur below an existing dam, the NSW Dams Safety Committee should be consulted in relation to any safety issues that may arise. Conditions of approval may be recommended to ensure safety in relation to any new or existing dams.

Lands and Water

Surface Water Assessment
The predictive assessment of the impact of the proposed project on surface water sources should include the following:

- Identification of all surface water features including watercourses, wetlands and floodplains transected by or adjacent to the proposed project.
- Identification of all surface water sources as described by the relevant water sharing plan.
- Detailed description of dependent ecosystems and existing surface water users within the area, including basic landholder rights to water and adjacent/downstream licensed water users.
- Description of all works and surface infrastructure that will intercept, store, convey, or otherwise interact with surface water resources.
- Assessment of predicted impacts on the following:
  - flow of surface water, sediment movement, channel stability, and hydraulic regime,
  - water quality,
  - flood regime,
  - dependent ecosystems,
  - existing surface water users, and
  - planned environmental water and water sharing arrangements prescribed in the relevant water sharing plans.

Groundwater Assessment
To ensure the sustainable and integrated management of groundwater sources, the EIS needs to include adequate details to assess the impact of the project on all groundwater sources.

Where it is considered unlikely that groundwater will be intercepted or impacted (for example by infiltration), a brief site assessment and justification for the minimal impacts may be sufficient, accompanied by suitable contingency measures in place in the event that groundwater is intercepted, and appropriate measures to ensure that groundwater is not contaminated.

Where groundwater is expected to be intercepted or impacted, the following requirements should be used to assist the groundwater assessment for the proposal:

- The known or predicted highest groundwater table at the site.
- Works likely to intercept, connect with or infiltrate the groundwater sources.
- Any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.
- Bore construction information is to be supplied to L&W by submitting a “Form A” template. L&W will supply “GW” registration numbers (and licence/approval numbers if required) which must be used as consistent and unique bore identifiers for all future reporting.
- A description of the watertable and groundwater pressure configuration, flow directions and rates and physical and chemical characteristics of the groundwater source (including connectivity with other groundwater and surface water sources).
- Sufficient baseline monitoring for groundwater quantity and quality for all aquifers and GDEs to establish a baseline incorporating typical temporal and spatial variations.
- The predicted impacts of any final landform on the groundwater regime.
Lands and Water

- The existing groundwater users within the area (including the environment), any potential impacts on these users and safeguard measures to mitigate impacts.
- An assessment of groundwater quality, its beneficial use classification and prediction of any impacts on groundwater quality.
- An assessment of the potential for groundwater contamination (considering both the impacts of the proposal on groundwater contamination and the impacts of contamination on the proposal).
- Measures proposed to protect groundwater quality, both in the short and long term.
- Measures for preventing groundwater pollution so that remediation is not required.
- Protective measures for any groundwater dependent ecosystems (GDEs).
- Proposed methods of the disposal of waste water and approval from the relevant authority.
- The results of any models or predictive tools used.

Where potential impact/s are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:

- Any proposed monitoring programs, including water levels and quality data.
- Reporting procedures for any monitoring program including mechanism for transfer of information.
- An assessment of any groundwater source/aquifer that may be sterilised from future use as a water supply as a consequence of the proposal.
- Identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).
- Description of the remedial measures or contingency plans proposed.
- Any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.

Groundwater Dependent Ecosystems

The EIS must consider the potential impacts on any Groundwater Dependent Ecosystems (GDEs) at the site and in the vicinity of the site and:

- Identify any potential impacts on GDEs as a result of the proposal including:
  - the effect of the proposal on the recharge to groundwater systems;
  - the potential to adversely affect the water quality of the underlying groundwater system and adjoining groundwater systems in hydraulic connections; and
  - the effect on the function of GDEs (habitat, groundwater levels, connectivity).

- Provide safeguard measures for any GDEs.

Watercourses, Wetlands and Riparian Land

The EIS should address the potential impacts of the project on all watercourses likely to be affected by the project, existing riparian vegetation and the rehabilitation of riparian land. It is recommended the EIS provides details on all watercourses potentially affected by the proposal, including:

- Scaled plans showing the location of:
  - wetlands/swamps, watercourses and top of bank;
Lands and Water

- riparian corridor widths to be established along the creeks;
- existing riparian vegetation surrounding the watercourses (identify any areas to be protected and any riparian vegetation proposed to be removed);
- the site boundary, the footprint of the proposal in relation to the watercourses and riparian areas; and
- proposed location of any asset protection zones.

- Photographs of the watercourses/wetlands and a map showing the point from which the photos were taken.
- A detailed description of all potential impacts on the watercourses/riparian land.
- A detailed description of all potential impacts on the wetlands, including potential impacts to the wetlands hydrologic regime; groundwater recharge; habitat and any species that depend on the wetlands.
- A description of the design features and measures to be incorporated to mitigate potential impacts.
- Geomorphic and hydrological assessment of watercourses including details of stream order (Strahler System), river style and energy regimes both in channel and on adjacent floodplains.

Landform rehabilitation

Where significant modification to landform is proposed, the EIS must include:

- Justification of the proposed final landform with regard to its impact on local and regional surface and groundwater systems;
- A detailed description of how the site would be progressively rehabilitated and integrated into the surrounding landscape;
- Outline of proposed construction and restoration of topography and surface drainage features if affected by the project; and
- An outline of the measures to be put in place to ensure that sufficient resources are available to implement the proposed rehabilitation.

Consultation and general enquiries

General licensing enquiries can be made to Advisory Services: water.enquiries@dpi.nsw.gov.au, 1800 353 104.

Assessment of state significant development enquiries, or requests for review or consultation should be directed to the Water Regulation Coordination Unit, water.referalls@dpi.nsw.gov.au.


End Attachment A
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 3
Survey Plan
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 4

Environmental Management Plan
Environmental Management Plan (EMP)

Revision A.2

Precast Elements Pty Limited
49 Pine Road
YENNORA NSW 2161
ABN: 48 612 925 372
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Environmental Management Plan

1 INTRODUCTION

1.1 Purpose

The Environmental Management Plan has been prepared in accordance with the Guideline for the Preparation of Environmental Management Plans (EMP Guideline) prepared by the Department of Infrastructure, Planning and Natural Resources (DIPNR).

1.2 Confidentiality

This work is confidential and may not be disclosed in whole or in part without the written authority of Precast Elements Pty Limited – ABN 48 612 925 372. This work and the information and concepts contained in it are the copyright of Precast Elements. Use or copying of the work in whole or in part without the written authority of Precast Elements infringes copyright.

Authority can be requested in writing from the General Manager of Precast Elements as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Cullen-Word</td>
<td>General Manager</td>
<td>0421 382 404</td>
<td><a href="mailto:david@precastelements.com.au">david@precastelements.com.au</a></td>
</tr>
<tr>
<td>Millie Booth</td>
<td>General Manager</td>
<td>0419 042 562</td>
<td><a href="mailto:millie@precastelements.com.au">millie@precastelements.com.au</a></td>
</tr>
</tbody>
</table>

Table 1 - Confidentiality Table

1.3 Copyright

Copyright in this document belongs to Precast Elements Pty Limited. Reproduction in any form is prohibited unless approval has been provided by a General Manager in writing prior to use, including incorporation into agreement for the supply of goods and services.

This assists in ensuring the latest version document is referred to, and information is current and relevant.

1.4 Revision Table

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Details of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>28 August 2017</td>
<td>Initial Release for Comment</td>
</tr>
<tr>
<td>B</td>
<td>14 August 2018</td>
<td>Updated</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>This Environmental Management Plan will be updated post-approval of the designated development application</td>
</tr>
</tbody>
</table>

Table 2 - Revision Table
Environmental Management Plan

1.5 Approval
This Environmental Management Plan and any subsequent revisions/updating shall be controlled by the quality co-ordinator and approved by a General Manager before re-issue of this page and changed pages described in the revision table below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Position</th>
<th>Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared By</td>
<td>General Manager</td>
<td>David Cullen-Ward</td>
<td></td>
</tr>
<tr>
<td>Reviewed By</td>
<td>Technical Manager</td>
<td>Bassem Wehbe</td>
<td></td>
</tr>
<tr>
<td>Approved By</td>
<td>General Manager</td>
<td>Millie Booth</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 - Approval Table

1.6 Organisation
The organisation that this Environmental Management Plan applies to is as follows.

<table>
<thead>
<tr>
<th>Registered Business Name</th>
<th>Precast Elements Pty Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Business Number</td>
<td>612 925 372</td>
</tr>
<tr>
<td>Australian Company Number</td>
<td>612 925 372</td>
</tr>
</tbody>
</table>

Table 4 - Organisation Table

1.7 Site Location
The addresses for the organisation is as follows.

<table>
<thead>
<tr>
<th>Manufacturing Address</th>
<th>49 Pine Road Yemnora NSW 2161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postal Address</td>
<td>PO Box 237 Guildford NSW 2161</td>
</tr>
</tbody>
</table>

Table 5 - Location Table

1.8 Contact Details
The telephone numbers for the site are as follows.

<table>
<thead>
<tr>
<th>Main Telephone</th>
<th>02 9003 1330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Facsimile</td>
<td>02 9003 1331</td>
</tr>
<tr>
<td>Complaints</td>
<td>02 9003 1337</td>
</tr>
</tbody>
</table>

Table 6 - Contact Table

1.9 Review Frequency
To verify its effectiveness, this plan will be reviewed and updated regularly to take into account:
- after a notifiable incident that is reportable to the regulator occurs
- changes in specifications and standards of any primary raw materials
- changes in the scope of works, or significant manufacturing methodology
- correction of errors or ambiguities that may alter the interpretation of the document
- management reviews and/or outcomes of surveillance, regular internal and external audits
- modifications related to changes in Precast Elements practices
- positive and negative client or community feedback
- significant changes in the organisational structure including appointment of General Managers
- incorporate any future conditions of approval or consent issued by Council or other statutory bodies;
Environmental Management Plan

As a minimum, a comprehensive review will be undertaken by the General Manager annually and any changes will be reflected in the Revision Table and marked in the right-hand margin for easy reference.

1.10 Distribution

Issue of the Environmental Management Plan is controlled to ensure efficient distribution of the latest and current version to approved persons.

The General Manager shall define distribution requirements for this plan and referenced documents. Plan revision status and distribution shall be registered in these. When an update is issued, it is the responsibility of the holder to replace superseded material with the current issue. Superseded material should be DESTROYED or if retained marked "SUPERSEDED" as appropriate.

The distribution of this document is as follows.

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<th>Revision</th>
<th>Name</th>
<th>Title</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASTER</td>
<td>A</td>
<td>David CULLEN-WARD</td>
<td>Production/Project Manager</td>
<td>Precast Elements</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 - Issue Table

1.10.1 Declaration

All issued documents that are registered should have their receipt acknowledged by the recipient by completing the following declaration to confirm that the document has been read and understood, and that all superseded versions have either been destroyed, marked superseded or returned to the issuer.

Copies of the declaration should be returned to a General Manager at Precast Elements.

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
<th>Organisation</th>
</tr>
</thead>
</table>

Table 8 - Declaration Table
Environmental Management Plan

2 REFERENCES

2.1 Standards

AS / NZS ISO 14001:2016 - Environmental management systems - Requirements with guidance for use

2.2 Statutory References

Environmental Planning Legislation
Environmental Planning and Assessment Act, 1979 (NSW) (and instruments made under it)
Environmental Planning and Assessment Regulation 2000
Environmental Planning and Assessment Amendment Act, 2014 (NSW)
Local Government Act, 1993 (NSW)
Roads Act, 1993 (NSW)
Soil Conservation Act, 1938 (NSW)
Biodiversity Conservation Act 2016
Native Vegetation Act, 2003 (NSW)
Environment Protection and Biodiversity Conservation Act, 1999 (Cth)
Land and Environment Court Act, 1979 (NSW)
Native Title Act, 1993 (Cth)
Dams Safety Act, 1978 (NSW)
Dams Safety Act, 2015 (NSW)
Coastal Protection Act, 1979 (NSW)
National Parks and Wildlife Act, 1974 (NSW)
Biodiversity Conservation Act, 2016 (NSW)
Environment Protection and Biodiversity Conservation Act, 1999 (Cth)
Fisheries Management Act, 1994 (NSW)
Fisheries Management Act Amendment Act, 2009 (NSW)
Fisheries Management Act Amendment Act, 2015 (NSW)
Marine Pollution Act, 2012 (NSW)
Water Act, 1912 (NSW)
Water Management Act, 2000 (NSW)
Heritage Act, 1977 (NSW)
Wilderness Act, 1987 (NSW)
Plantations and Reafforestation Act, 1999 (NSW)
Australian Heritage Council Act, 2003 (Cth)
Aboriginal and Torres Strait Islander Heritage Protection Act, 1984 (Cth)
Sydney Water Catchment Management Act, 1998 (NSW)
Surveying and Spatial Information Act, 2002 (NSW)
Ozone Protection Act, 1989 (NSW)
Protection of the Environment Production/Project Act, 1997 (NSW)
Protection of the Environment Production/Project Amendment (Scheduled Activities and Waste) Regulation, 2008 (NSW)
Sydney Water Act, 1994 (NSW)
Pesticides Act, 1999 (NSW)
Waste Avoidance and Resource Recovery Act, 2001 (NSW)
Protection of the Environment Production/Project (Clean Air) Regulation, 2010 (NSW)
Contaminated Land Legislation
Contaminated Land Management Act, 1997 (NSW)
Rural Fires Act, 1997 (NSW)
Hazardous Substances
Environmentally Hazardous Chemicals Act, 1985 (NSW)
Dangerous Goods (Road and Rail Transport) Act, 2008 (NSW)
Radiation Control Act, 1990 (NSW)
Radiation Control Amendment Act, 2010 (NSW)
Environmental Management Plan

State Environmental Planning Policies
SEPP No. 14 – Coastal Wetlands (gazetted 01.10.11)
SEPP No. 26 – Littoral Rainforests (gazetted 01.10.11)
SEPP No. 44 – Koala Habitat Protection (gazetted 05.08.16)
SEPP No. 58 – Protecting Sydney’s Water Supply (gazetted 24.12.98)
SEPP (Infrastructure) 2007
SEPP No. 33 – Hazardous and Offensive Development
SEPP No. 55 – Remediation of Land
Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment
## Definitions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent Person</td>
<td>A person who has acquired, through training, qualification, or experience, or a combination of these, the knowledge and skills, including Environmental knowledge and skills, qualifying that person to perform the task required by a standard.</td>
</tr>
<tr>
<td>Control of Hazards / Risks</td>
<td>In Australia, the 'control of risks' is used, to mean the process of elimination or minimization of risks.</td>
</tr>
<tr>
<td>Environment</td>
<td>Surroundings in which Precast Elements operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships.</td>
</tr>
<tr>
<td>Event</td>
<td>Any unplanned situation resulting in, or having a potential injury, ill-health, damage or other loss. Also refer to Incident.</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan – this document</td>
</tr>
<tr>
<td>Hazard</td>
<td>A source or a situation with a potential to harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.</td>
</tr>
<tr>
<td>IFR</td>
<td>Incident Frequency Rate (No./1000000 hours worked)</td>
</tr>
<tr>
<td>Incident</td>
<td>An event that is notifiable to the regulator.</td>
</tr>
<tr>
<td>JSEA</td>
<td>Job Safe Environmental Analysis</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td>Organisation</td>
<td>A company, corporation, firm, enterprise or institution, or other legal entity or part thereof, whether incorporated or not, public or private, that has its own function and administration. Precast Elements</td>
</tr>
<tr>
<td>Precast Elements</td>
<td>Precast Elements Pty Limited (ABN 48 612 925 372)</td>
</tr>
<tr>
<td>Personal Protective Equipment</td>
<td>Personal Protective Equipment</td>
</tr>
<tr>
<td>Risk</td>
<td>A level of danger or seriousness (i.e. the consequence) of injury or harm occurring, and how likely it is that this will occur (i.e. likelihood/probability). NOTE: Wherever the term ‘risk’ occurs in this EMP this should be taken to mean ‘environmental risk’.</td>
</tr>
<tr>
<td>Safety</td>
<td>A state in which the risk of harm (to persons) or damage is limited to an acceptable level</td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet (formerly known as &quot;MSDS&quot; or &quot;Material Safety Data Sheet&quot;)</td>
</tr>
<tr>
<td>Labourer</td>
<td>Meaning of Labourer ‘A person is a Labourer if the person carries out work in any capacity for a person conducting a business . . . ’</td>
</tr>
<tr>
<td>WHS</td>
<td>Work Health Safety</td>
</tr>
</tbody>
</table>
4. CONTEXT OF THE ORGANIZATION

4.1 Company Overview

Precast Elements' facility is approximately 11,000m² comprising of two "all weather" manufacturing sheds, and large outdoor storage areas. All areas are concrete paved.

The main shed is serviced by 2x12.5T, and 1x10T overhead gantries.

At full capacity the main shed (92x17m) is capable of manufacturing 400m² of panels Precast Elements per day. The storage capacity is currently 190 panels inside, and a further provision for 240+ panels outside.

The second shed (70x12m) has been set aside to manufacture small precast items up to 5T in weight.

Precast Elements seek customers and suppliers that work well together to achieve a common goal, which is successful projects.

target market area – greater Sydney

Our precast yard is situated in the Western suburbs of Sydney and has market influence over the Greater Sydney area, as well as the Illawarra Region to the South, the Hunter Region to the North, and as far as Canberra to the West.

Our target market can be split into the following categories:

civil works
high-density residential buildings
industrial/commercial buildings
special projects
transport infrastructure

4.2 Scope of Works

The Scope of Works involves the manufacture of the following precast concrete items:

bridge elements
floor plates for floor systems
hollow-core slabs
linear structural elements
retaining wall elements
ribbed floor elements
special roof elements
stairs
wall elements

Precast Elements has developed the Environmental Management Plan in preparation to achieve accreditation in the near future by third party certifying body to AS / NZS ISO 14001:2004 – Environmental management systems - Requirements with guidance for use (the standard).

Precast Elements plans to maintain this accreditation for its manufacturing site by commissioning a certifying body to complete periodic surveillance audits of its Production/Project. This certificate will be made available to interested parties upon request in writing to the General Manager of Precast Elements.

The management system consists of a set of policies and procedures that provide the framework for environmental management processes.

These policies and procedures are implemented, maintained and kept current in accordance with the standard and the procedures themselves. The Environmental Management Plan will also be implemented at site level when delivery and installation is required.
Environmental Management Plan

Precast Elements compliments these procedures with additional procedures, work instructions, forms and tools to demonstrate and record verifications of hazard controls.

4.3 EMP Scope

The Environmental Management Plan outlines
- authority and responsibility of Labourers
- company policy
- emergency preparedness / response
- objectives and targets
- organisation chart
- risk management processes
- Inductions
- Environmental rules

This document sets out the site Environmental Management Plan adopted by Precast Elements.

4.4 EMP Purpose

The EMP has been prepared to outline how Precast Elements plans to:
- comply with state and national law, regulations and codes of practice
- maintain the health and welfare of people and ecosystems influenced by their activities
- measure and evaluate performance on each project
- plan and implement work processes and management processes

The EMP shall be maintained and kept up to date by the General Manager for the duration of each client project. The EMP shall be made available to all interested parties including site Labourers, Subcontractors and Suppliers.
Environmental Management Plan

5 LEADERSHIP

5.1 Policy

The Precast Elements Environmental Policy has been developed and endorsed by management. It is displayed where Labourers are located such as offices and lunchrooms on Noticeboards, and included in the induction process for all Labourers.

A copy of the policy is available in the appendix of this document for reference, and can be provided to any interested party on request.

The Environmental Policy is reviewed at intervals not exceeding 12 months from last review, and after a significant event.

5.2 Organisation Structure and Responsibility

5.2.1 Responsibility

The individual competencies that are required for each role within the organisation are directly linked to the Position Description of each role.

These are listed below.

<table>
<thead>
<tr>
<th>Title / Function</th>
<th>Responsibility and Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Manager</td>
<td>Amend and approve project environmental management procedures</td>
</tr>
<tr>
<td></td>
<td>Attend and contribute to Site Environmental and Consultation Meetings</td>
</tr>
<tr>
<td></td>
<td>Attend relevant Training to show commitment for the process and gain knowledge</td>
</tr>
<tr>
<td></td>
<td>Attend the Management System Review Meeting</td>
</tr>
<tr>
<td></td>
<td>Evaluate the Risk Assessment Process</td>
</tr>
<tr>
<td></td>
<td>Facilitate investigations</td>
</tr>
<tr>
<td></td>
<td>Facilitate the risk management process and provide suggestions</td>
</tr>
<tr>
<td></td>
<td>Issue a Environmental Directive when and where required</td>
</tr>
<tr>
<td></td>
<td>Lead by example and stimulate a high level of environmental awareness at all times</td>
</tr>
<tr>
<td></td>
<td>Overall authority and responsibility for all aspects of the environment</td>
</tr>
<tr>
<td></td>
<td>Participate in any pre-arranged workplace inspection or conduct them independently</td>
</tr>
<tr>
<td></td>
<td>Provide training, information and advice on the Environmental Management System and</td>
</tr>
<tr>
<td></td>
<td>environmental issues</td>
</tr>
<tr>
<td></td>
<td>Review Event Investigation Reports to ensure Corrective and Follow-up Actions are effective</td>
</tr>
<tr>
<td></td>
<td>Review standards, legislation and industry best practice for integration into the</td>
</tr>
<tr>
<td></td>
<td>environmental management system and communicate to site management</td>
</tr>
<tr>
<td></td>
<td>Review the results of internal and external Audits</td>
</tr>
<tr>
<td></td>
<td>Review the results of statistical data to ensure initiatives prevent adverse trends</td>
</tr>
<tr>
<td></td>
<td>Review environmental performance data reports and provide feedback as necessary</td>
</tr>
</tbody>
</table>

| Production/Project Manager | Assist in generation of site-specific health and safety rules and comply with these rules   |
|                           | Attend Audit Meetings and provide assistance as required                                     |
|                           | Consults with Labourers and Subcontractors on decisions that may have an impact on their   |
|                           | health and safety and to resolve any OHS disputes                                           |
|                           | Determines and submit project audit requirements, including those that apply to              |
|                           | Subcontractors and to the Project Manager                                                   |
|                           | Ensure that appropriate facilities and work processes are set up to ensure the safe storage, |
|                           | transport, handling and disposal of chemicals, hazardous substances, dangerous goods or     |
|                           | other liquids or gases                                                                      |
# Environmental Management Plan

<table>
<thead>
<tr>
<th>Title / Function</th>
<th>Responsibility and Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that risk assessments are carried out and controls have been documented and are being properly implemented</td>
<td></td>
</tr>
<tr>
<td>Immediately direct employee or subcontractors to cease work and rectify a problem whenever unsafe practices are detected</td>
<td></td>
</tr>
<tr>
<td>Immediately report all notifiable events involving injury to or death of employees, subcontractors or dangerous occurrences to the General Manager</td>
<td></td>
</tr>
<tr>
<td>Implement the company environmental procedures and the requirements of the EMP in a timely manner</td>
<td></td>
</tr>
<tr>
<td>Monitor the progress of corrective and preventative actions to ensure that sufficient resources have been allocated to the task to be completed within the specified timeframe</td>
<td></td>
</tr>
<tr>
<td>Provides labourers with adequate supervision, plant, equipment, materials and training to perform work safely</td>
<td></td>
</tr>
<tr>
<td>Raise Corrective Action Requests as required and ensure that they are implemented in a timely manner</td>
<td></td>
</tr>
<tr>
<td>Report on Environmental performance to the General Manager (Monthly Report)</td>
<td></td>
</tr>
<tr>
<td>Review all Injury Reports, Hazard Reports and Event Investigations to verify that corrective and preventive actions and their timeframe are appropriate</td>
<td></td>
</tr>
<tr>
<td>Trained and competent in administration of Precast Elements Systems and Procedures, as well as the Acts, Regulations, Codes and Standards that apply to the workplace</td>
<td></td>
</tr>
<tr>
<td>Ultimate authority and responsibility for all aspects of WHS</td>
<td></td>
</tr>
<tr>
<td>Undertake a formal review of this EMP with a frequency not less than every 12 months</td>
<td></td>
</tr>
</tbody>
</table>

**Supervisor(s)**
- Assess site Labourers for competency and request training as required.
- Call for emergency services if required. Upon completion of the emergency:
  - Commence the event reporting process
  - Comply with site specific health and safety rules
  - Conduct daily Pre-start Meetings and weekly Toolbox Meetings
  - Ensure that all Labourers are provided with initial training on the safe operation and maintenance of equipment
  - Inform the General Manager of all events no matter how minor
- Monitor and review risks through regular site inspection and task observations
- Organise induction for new staff
- Primary responsibility is to plan works before starting, and to request and allocate adequate resources to ensure activities are undertaken efficiently and safely
- Provide instruction and directives to crew Labourers, Sub-contractors and Suppliers and ensure they have read, understood and signed the JSEA
- Report all damage to plant, equipment, material or property to the General Manager
- Restrict access to preserve the scene to prevent loss of evidence
- To ensure activities are being undertaken safely and as per the JSEA
- To ensure hazard identification, risk assessment and plan adequate controls before starting each activity by completing/reviewing the JSEA

**Safety & Environment Officer(s)**
- Assess site Labourers for competent and arrange training as required
- Assist Suppliers in creation of JSEAs
- Call for emergency services if required. Upon completion of the emergency:
  - Commence the event reporting process
  - Conduct workplace inspection on a daily basis
  - Determine schedule for emergency preparedness inspections
  - Determine the frequency of evacuation exercises Factory in consultation with the Wardens and elected Safety Representatives
Environmental Management Plan

<table>
<thead>
<tr>
<th>Title / Function</th>
<th>Responsibility and Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop an Emergency Plan in consultation with site representatives, trained or responsible ‘Wardens’, first aid attendants, elected Safety Representatives or employees</td>
</tr>
<tr>
<td></td>
<td>Ensure all safety resources are made available at site level and all arrangements are implemented to manage site-related risks</td>
</tr>
<tr>
<td></td>
<td>Ensure all Labourers performing construction work on the project site receive appropriate induction, including General Construction Industry Induction, Site Specific Induction and Work Activity Induction</td>
</tr>
<tr>
<td></td>
<td>Ensure that all Labourers are provided with initial training on the safe operation and maintenance of equipment</td>
</tr>
<tr>
<td></td>
<td>Ensure that implementation of JSEA is monitored through regular surveillance (Task Observations)</td>
</tr>
<tr>
<td></td>
<td>Immediately report all damage to plant, equipment, material or property to the General Manager</td>
</tr>
<tr>
<td></td>
<td>Inform the General Manager of all events no matter how minor</td>
</tr>
<tr>
<td></td>
<td>Issue Improvement Notices for instances where Labourers or subcontractors are performing activities that are non-compliant with legislation or Precast Element’s policies</td>
</tr>
<tr>
<td></td>
<td>Maintain all project-related safety &amp; environmental records</td>
</tr>
<tr>
<td></td>
<td>Maintain training records</td>
</tr>
<tr>
<td></td>
<td>Monitor and review risks through regular checking or surveillance</td>
</tr>
<tr>
<td></td>
<td>Monitor quality and effectiveness of Pre-start Meetings and weekly Toolbox Meetings</td>
</tr>
<tr>
<td></td>
<td>Provide safety instructions and directives to Supervisors, Labourers and suppliers</td>
</tr>
<tr>
<td></td>
<td>Restrict access to preserve the scene to prevent loss of evidence</td>
</tr>
<tr>
<td></td>
<td>Review Pre-start and Toolbox Meeting Records</td>
</tr>
<tr>
<td></td>
<td>Review Subcontractor’s management plans, JSEA and safety related documentation against act, regulations, codes and standards</td>
</tr>
<tr>
<td>Labours</td>
<td>Complying and respond to emergency and evacuation procedures</td>
</tr>
<tr>
<td></td>
<td>Complying with the EMP and site rules including all JSEAs</td>
</tr>
<tr>
<td></td>
<td>Correctly using all personal protective equipment</td>
</tr>
<tr>
<td></td>
<td>Providing suggestion, through agreed consultation methods, on how to improve WHS issues</td>
</tr>
<tr>
<td></td>
<td>Report events to the Production/Project Manager</td>
</tr>
<tr>
<td></td>
<td>Seeking assistance if unsure of environmental rules or how to safely perform a task</td>
</tr>
<tr>
<td></td>
<td>To work in a safe manner without risk to themselves, others or the environment</td>
</tr>
</tbody>
</table>

Table 8 - Responsibility and Authority Table
6 PLANNING

6.1 Hazard Identification, Risk Assessment and Control

Precast Elements identifies all hazards in the workplace, assesses the risks involved and develops controls to eliminate, or minimise the risks to as low as reasonably practicable. The risk management process is carried out in consultation with Labourers.

All hazards identified are recorded onto the Hazard Register (04.01.3.2), and is reviewed at a minimum of monthly and after each project to identify any improvements to the way hazards are controlled.

6.1.1 Identify Hazards

Prior to commencement of a project a number of Risk Assessments are conducted.

These include:

- design
- emergency preparedness
- first aid
- environmental
- traffic movement

In addition, Precast Elements breaks down specific work activities into job tasks to assist in identifying all potential hazards.

For each of the work activities and associated job tasks identified in the Hazard Register, Precast Elements has identified potential hazards and their risks.

To assist in identifying hazards and risks, Precast Elements has considered the use of resources such as:

- codes of practice
- industry publications (i.e. safety alerts; hazard profiles for specific trade groups)
- standards
- workplace consultation (i.e. pre-start meetings)
- workplace experience

Controls shall be developed in consultation with those Labourers performing the task. Where practical, the Production/ Project Manager will be involved in the consultation process.

All controls are checked for suitability by the Supervisor and approved for use by a General Manager prior to use.

Hazards are ranked in order of priority (i.e. Consequence and Severity) to assist in identifying what hazards to control sequence.

6.1.2 Hazard Reporting

Precast Elements encourages all Labourers to report hazards immediately to their Supervisor. This can be informally or formally.

Precast Elements investigates all reported hazards and implements control measures to eliminate and / or minimise the likelihood of an event. Precast Elements regularly reviews and evaluates the effectiveness of control measures until the hazard is addressed and / or all risks have been mitigated or reduced.

Discussions regarding the previous worksite activities and tasks are raised at the commencement of the following worksite to allow for feedback from Labourers to management to be recorded and raised to management.

A record of these discussions is made on the notes taken at the meeting.

Pre-Start Meeting

Toolbox Talk
Environmental Management Plan

6.1.1.3 Assessment of Risks

Precast Elements has identified a ranking for potential workplace hazards by referring to the categories ranging from low to extreme in a Risk Matrix.

The Risk Matrix is used to determine the impact of a hazard, how likely it is that this risk will occur and therefore how detailed control measures will need to be to eliminate or minimise the risk.

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Severity of Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insignificant</td>
</tr>
<tr>
<td>Almost Certain</td>
<td>Mod</td>
</tr>
<tr>
<td>Likely</td>
<td>Med</td>
</tr>
<tr>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Unlikely</td>
<td>Low</td>
</tr>
<tr>
<td>Rare</td>
<td>Low</td>
</tr>
</tbody>
</table>

Table 10 - Risk Matrix

Based on the likelihood of the occurrence and the severity of the consequences a risk rating is developed ranging from Low to Extreme.

The purpose of the risk rating is to assist in making decisions, based on the outcomes of risk assessment, about which risks need controls implemented and the priority for implementation.

Decisions should take account of the wider context of the risk and include consideration of the tolerance of the risks. Decisions should be made in accordance with legal, regulatory and other requirements. In some circumstances, the risk rating can lead to a decision to undertake further analysis. The risk rating can also lead to a decision not to treat the risk in any way other than maintaining existing controls.

As a general rule, risks rated as Extreme should be given priority to implement controls or otherwise reassessed to a level of Medium or High. Risks rated as Low may be tolerated in some circumstances using existing controls.

Controls are determined by the level of the hazard and an appropriate management response if applied to the management of the hazard as detailed in the Management Response Table.

### Table 11 - Management Response

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme</td>
<td>STOP – Analyse work method and ensure substantial controls are implemented (e.g. Permit Systems) and documented. Final methodology to be approved by a General Manager. Closely supervise progress and ongoing compliance during activity.</td>
</tr>
<tr>
<td>High</td>
<td>Method developed and a detailed Job Safety Environmental Analysis or similar documented by Supervisor in consultation with the Labourers and confirms all Labourers undertaking the activity understand the hazards associated with the activity and Labourers agree in writing to implement and maintain the controls to as low as reasonably practicable.</td>
</tr>
<tr>
<td>Medium</td>
<td>Supervisor to ensure documented Job Safety Environmental Analysis is prepared prior to commencing activity. Supervisor confirms Labourers implement and maintain the controls to as low as reasonably practicable.</td>
</tr>
<tr>
<td>Low</td>
<td>Supervisor to renew activity and record agreements on a Toolbox Talk form. Use of a Job Safety Environmental Analysis is preferred.</td>
</tr>
</tbody>
</table>
Environmental Management Plan

6.1.4 Planning

All hazards will be provided to the General Manager for incorporation into the EMP to form the Hazard Register. Details of hazards and controls will be contained in the EMP and provided to the Client and Subcontractors, as required by contractual and legal obligations.

The Hazard Register will be amended as additional hazards are identified and controls altered to suit the work environment. The General Manager is responsible for evaluating the effectiveness of the Hazard Register process following an event, non-conformance or system failure. Changes to the Hazard Register changes which affect the workforce will be communicated during Pre-start or Toolbox Meetings.

Activities defined as High Risk Construction Work in accordance with WHS Regulation 2011 that are applicable to Production/Project in the factory are listed in the appendix.

6.1.2 Legal Requirements

This EMP has been designed to assist Precast Elements’ management to adhere to the current Acts and associated Regulations. PE maintains a register of relevant Acts, Regulations, Standards and Codes of Practice, as they apply to the Production/Project of the organisation and activities on any client projects. Process-related legal and other requirements are listed on the JSEA. All applicable requirements are reflected within task steps and/or controls provided within the JSEA.

PE identifies changes to the organisation’s legal obligations by:

- engaging a proprietary subscription service to provide periodic legislative alerts and updates
- reviewing websites published by the various enforcing government authorities for media releases and updates

When any changes are identified, the General Manager initiates a review of the change details to decide if the change will lead to the review and subsequent amendment of the management system and whether/how to communicate these changes to the organisation.

The Acts, Regulations, Codes of Practice and Standards that may be applicable are listed in the Referenced Documents section at the front of the EMP.

6.1.3 Objectives and Targets

As part of Precast Elements’ commitment to Environment, specific targets and the related Key Performance Indicators (KPI) have been defined and will be measured during all activities.

The Precast Elements safety targets include:

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Duration</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFR</td>
<td>Monthly</td>
<td></td>
<td>Zero</td>
</tr>
<tr>
<td>Close-out of hazard and event investigations</td>
<td>Each event</td>
<td></td>
<td>2 weeks from event</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100% of time</td>
</tr>
<tr>
<td>Pre-start meetings</td>
<td>Daily</td>
<td></td>
<td>Project</td>
</tr>
<tr>
<td>Toolbox meetings</td>
<td>Weekly</td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>Site Inspections</td>
<td>Weekly</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Task Observations</td>
<td>Monthly</td>
<td></td>
<td>80%</td>
</tr>
</tbody>
</table>

Table 12 - Objectives and Targets Table

Regular reporting (ie. monthly) of these objectives and targets are undertaken by the Safety & Environment Officer, and reported to management. Outcomes and progressive tracking of these objectives and targets are posted to the Noticeboard for all Labourers to remain informed.
Environmental Management Plan

7 SUPPORT

7.1 Resources

The Organisational Chart is included in the appendix of this document. It defines the Title / Function and the reporting relationships. Labourers may vary from time to time in line with production demands and other organisational objectives.

Details of the organisation chart can be located in the human resources management system and updated when changes occur.

7.2 Competency

All high-risk tasks shall be completed by Labourers with an appropriate competency. Works shall be executed in accordance with

Australian Standard
certificate / licence requirements
Job Safety Environment Analysis
relevant code of practice

Competency requirements for each task shall be identified in the relevant work activity JSEA.

7.3 Awareness

Persons will be made aware of our environmental systems and obligations through training, consultation, and reporting.

All training will be instigated by the General Manager as the need is recognised. Additional training may be required before:

a new activity or process
changes in methodology - change in plant or equipment
changes in Labourers
a change in working environment

General Manager is to ensure all Labourers are adequately trained to a level of competency sufficient to ensure the health and safety of all Labourers during the manufacturing processes.

The Safety & Environment Officer will ensure that the Training Matrix is maintained for all Labourers. In addition, copies of qualifications are filed for verification and audit. When any deficiencies in skills are detected, the site management team will ensure that appropriate training is provided and the register is updated by the Safety & Environment Officer. For field training, unskilled Labourers will be closely Supervised using the "buddy" system

i.e. - a competent Labourer and where required, using a training log book to record observations and competency progress

Labourers will be selected for specific tasks on the basis of their known and / or documented competency.

7.3.1 General Construction Induction

Every Labourer employed to undertake Construction Work on the site must have undertaken an approved General Health and Safety Induction Training for the Construction Industry.

Evidence of this qualification must be provided prior to receiving the Site Specific Induction.
Environmental Management Plan

7.3.2 Site Specific Induction

All Labourers on the Site must have undertaken the Site Specific Induction before accessing the site. Some of the information covered at this induction includes:

- access to information
- Acts
- Code of Practices
- Job Safety Environmental Analysis (JSEA)
- Regulations
- Safety Data Sheets (sds)
- Forms
- Site Access and Egress
- Site Emergencies and Evacuation Procedures
- Site facilities
- Site hazards and controls
- Site environmental & safety rules
- Standards
- Environmental Management Plan (EMP)

Everyone shall abide by the site rules. In many cases the information is also signposted around the site. Acts, Regulations, Standards and Codes of Practice required for the development of JSEA are available from a General Manager.

Visitors and delivery drivers (e.g. concrete pour) do not require the Site Specific Induction but must be escorted at all times by an inducted Labourer.

7.3.3 Evaluation of Training

A General Manager shall ensure that both internal and external training has been effective for achieving training objectives, leading to improved outcomes. The evaluation can be done in a variety of ways:

- assess and document on the Labourers Annual Performance Review Form
- carry out site inspection and task observations
- prepare and monitor environmental Performance statistics via a monthly WHS&E report
- witness the trained employees’ or subcontractors’ performance during daily Supervision

Outcomes of monitoring and evaluation activities provide an indication of the effectiveness of the training provided to the organisation. The General Manager may:

- change the frequency of training or refresher intervals
- change the training provider
- provide feedback to the training provider
- request change of the course content

7.4 Communication

By visiting the factory and other work sites (ie. client sites) to discuss environmental issues, General Manager and Labourers are able to determine if planned arrangements and expectations are being met. Talking with Labourers allows feedback on the management system’s effectiveness and the raising of any concerns.

When a General Manager visits a workplace they shall participate in any pre-arranged workplace inspections such as Safety Walks and shall sign onto the Workplace Inspection Checklist. If an inspection has not previously been arranged they should conduct an inspection with a site representative (Labourer or Safety & Environment Officer) and document their findings.
Environmental Management Plan

Consultation within Precast Elements includes Pre-Start and Toolbox Meetings, as well as Safety & Environment Officer Meetings with management. General Managers shall attend any prearranged meetings during site visits to ensure they are aware of any Labourer issues.

When General Managers become aware of non-compliance to safety requirements, they may issue safety directives. This ensures there are no misunderstandings or varying interpretations of requirements and the entire organisation is compliant.

General Managers are involved in the review of Event Investigation reports to ensure corrective and follow-up actions are effective. This process allows General Managers to resolve and prevent significant environmental issues from occurring.

General Managers review performance data reports from each of the areas that report to them and provide feedback as necessary. This process allows for early recognition of negative trends and focuses safety resources on areas of higher priority.

Precast Elements promotes the active participation of all Labourers in environmental decisions. Employees are consulted and given opportunity, encouragement and training to be proactively involved in environmental matters affecting the organisation and their work activities.

Precast Elements will establish the consultation arrangements with the workforce at the commencement of the project. The consultation arrangement shall be advertised through a toolbox. Consultation occurs with employees, subcontractors or their elected representatives in reference to, but not limited to, the following subjects/topics:

- changes to the organisation’s policies and procedures or work routines which may affect environmental
- control measures and corrective actions for the management of hazards and risks
- employee representation
- hazard identification and risk assessment processes
- proposed changes to the work environment
- purchased items that may affect their health and safety

All workplace consultation is recorded and occurs on a daily basis.

- meeting schedule
- pre-start meetings - every shift
- project start-up meeting - prior to commencement of onsite construction work
- project start-up meeting
- site meetings
- toolbox meetings - weekly

Prior to commencement of work a Daily Pre-Start Meeting will be held at the factory or onsite with the a Precast Elements General Manager or Supervisor and Labourers. The meeting will be used to discuss issues raised by:

- failures
- opportunities for improvement
- scheduling
- EMP

A Site Inspection shall be conducted as part of this meeting (or on the first site visit) to ensure that all hazards have been identified and that systems are in place, if required in the event of an emergency situation.
Environmental Management Plan

Environmental information is shared electronically and on Noticeboards. Information that can be provided includes:

- attainment of awards
- company news
- customer or client complaints
- feedback from the general public
- product recalls and quality
- regulatory alerts and guides
- safety alerts

General Managers may further distribute this information to customer, subcontractors and others if applicable.

Alerts, memos and other records of communication shall be displayed at the Factory on a Noticeboard or other suitable location.

7.4.1.1 Pre-Start Meetings

A brief meeting at the start of the day gives everyone clarity about environmental needs to be done and why. General Manager or Supervisor and Labourers conduct short (10 – 15 minutes) job environmental awareness and planning meetings with their work crew at the start of every shift and job. Hazards specific to the day’s work and their control measures are discussed, including review of any environmental system tools that apply (eg. JSEA).

Some of the principles that apply are:

- everyone in the work team attends
- meeting is brief
- there are no interruptions
- to the point

Previous day, or days (if first shift back after being rostered off), environmental issues / events are discussed.

The supervisor’s role is that of a coach and must be positive.

Positive reinforcement fuels the process and everyone participates.

Labourers who are not able to attend a Pre-start Meeting at the beginning of the day need to read and acknowledge (sign) the Pre-Start Meeting Record. This will ensure they are aware of the hazards affecting the work and site.

A copy of the Pre-Start Meeting is placed onto the Noticeboard for the duration of the workshift, and then archived for future reference.

7.4.1.2 Toolbox Meetings

Toolbox Meetings are lead by the General Manager or their nominee. This is a regular consultation meeting that has an agenda. It reviews the following since the last meeting.

- Actions conducted
- Events

There is a General Manager nominated topic and a section allowing for Labourers to raise items of concern or suggestions. It should be conducted at a minimum of weekly and should last from 20 to 30 minutes.

Toolbox Meetings are a mechanism for providing on the job training using General Manager nominated topics.

Delivery drivers (eg. Concrete Truck) and visitors do not need to be part of the Toolbox Meeting as they should be escorted at all times when in the factory.
7.5 Documented Information

The organisation shall establish, implement and maintain procedures for controlling all relevant documents and data required by this standard to ensure that:

- Documents are located on the server in a controlled environment
- These documents are available to any interested party
- The templates are managed in a secure environment
- Documents that contain sensitive or confidential information have access restricted
- A table of review is created to determine the frequency documents are formally reviewed
8 OPERATION

This EMP contains a large amount of information and management system requirements. The General Manager shall review the EMP content and nominated Labourers at suitable intervals, subject to construction activities and update the document as required. Any change in a hazard or risk in the project requires a review of the EMP by the Precast Elements Production/Project Manager.

8.1 Operational Planning

Before undertaking work activities the following activities need to be assessed:

- Hazard identification
- Risk assessments
- Control of hazards
- Evaluation of implementation
- Purchasing

8.1.1 Design of Controls and Procedures

Precast Elements uses a systematic approach to eliminate or if not possible, minimize environmental hazards during the design stage.

Precast Elements shall implement controls to eliminate or minimise hazards. The Hierarchy of control shall be used where the controls from most effective to least effective are as follows.

Elimination – The best way to remove the risk is to remove the hazard completely. Many hazards can be eliminated this way at the design, planning and purchasing stages.

Substitution – If elimination is not practicable, consider substituting the hazard with a less hazardous one. This is often used for chemicals and noisy equipment. Examples include using a detergent instead of a chlorinated solvent or a water-based paint rather than solvent based and using quieter equipment.

Isolation – This involves physically separating the source of harm from people by distance or using barriers. For instance, install guard rails around exposed edges and holes in floors; use remote control systems to operate machinery; store chemicals in a fume cabinet.

Engineering Controls – These involve the use of measures to change the physical characteristics of the hazard. These can typically take the form of:

- Design modification
- Enclosures, exhaust ventilation or automation
- Installation of guarding

Administrative Controls – This type of hazard control uses ‘systems of work’ to control risks. Examples include training; lock out systems, rostering work, housekeeping, signage, etc.

Personal Protective Equipment – PPE can be used as a short-term control measure until a ‘higher order’ control has been provided. It can also be used to supplement other measures used to control risk. PPE should be selected by competent Labourers and stored; fitted and maintained correctly. PPE should not be used as the sole control measure, and should always be used in conjunction with a high control measure.

8.1.2 Managing Change

Where changes are made to the manufacturing facilities, or new processes are added the General Manager shall discuss the changes with the Labourers. A review of the JSEAs and Risk Assessments must occur if any consequential changes are made.

Changes to the JSEAs and Risk Assessment will be communicated to the workforce by Pre-start or Toolbox Meetings, and relevant associated information.
Environmental Management Plan

8.1.3 Purchasing

Purchasing is carried out in accordance with Precast Elements’ Procurement Procedure. Generally, a Labourer requesting the purchase or hire shall identify Quality, Safety and Environmental criteria that must be integrated into the purchasing requirements for a product or service.

When it is proposed to use subcontractors to provide services to the organisation, the respective Labourer must determine the health and safety requirements that are to be incorporated into the works. Consultation with end users, internal consultative structures and those with specialist expertise may be required to help define these requirements for each contract.

Documentation obtained as part of the purchasing function are to be provided to the Labourer requesting the purchase as follows,

- Equipment registration
- Job Safety Environment Analysis
- Operational manuals
- Environmental management plans
- Safety Data Sheet
- Training records
- Substances

Precast Elements maintains current (within 5 years of the date of issue) a Safety Data Sheet (SDS) for all substances used. Precast Elements maintains copies of all SDS and they are available to the competent Labourer responsible for providing First Aid and the Labourer using the substance.

Copies are maintained in an SDS Folder located within the Administration Building for ease of access by the following,

- First aid attendant
- Storeman

Before a product or substance is used for the work activity, Precast Elements reviews the SDS to determine the impact of the substance.

A risk assessment is conducted in accordance with the "Managing Risks of Hazardous Chemicals in the Workplace" Code of Practice and recorded on the SDS Register.

The Safety & Environment Officer maintains the SDS Register.

All Labourers involved in the use of products classified as hazardous or dangerous, are provided with information and training to allow safe completion of the required task. No Labourer is to handle any products classified as hazardous or dangerous unto the Labourer has been trained in the correct requirements as follows.

- Compatibility
- mop-up
- safety
- storage
- use

No products or substances, including chemicals or fibrous materials, are to be brought into the Factory without a current SDS. All storage and use of hazardous substances and dangerous goods are in accordance with the SDS and legislative requirements, including appropriate labelling detailing chemical and nature of hazardous substances in accordance with SDS.
Environmental Management Plan

Precast Elements considers the following when selecting chemicals and substances for use on site:
- carcinogenic classification if relevant
- chemical action and instability
- corrosive properties
- environmental hazards
- flammability and explosivity
- safe use and engineering controls
- storage requirements
- toxicity (short and long term)

Workplaces where dangerous goods or combustible liquids are stored or handled must have systems and procedures to prevent these goods or liquids coming into Labourer contact.

As a general rule, dangerous goods are stored away from ignition sources and in a non-hazardous area in approved locations.
- Cages
- non-corrosive containers
- non-flammable cabinets
- etc.

For quantities defined as Packing Group there are no particular requirements for the storage of the product. It should be stored in accordance with the SDS.

Non-conforming substances or product without SDS available shall be quarantined away from use and labelled not be used until approved by Safety & Environment Officer.

When the amount of product reaches Placarding Quantity then the storage facility is to be secured and sign posted in accordance with applicable legislation. Copies of the Manifest shall be provided to Fire and Rescue NSW as required.

8.2 Management of Environmental Factors

The following summarises the impacts, risks and mitigation measures under the following headings:
- Waste Management
- Dangerous Goods and Hazardous Materials
- Concrete Repairs
- Water Management
- Surface Finishing
- Air Quality
- Noise Impacts
- Traffic and Transport

8.2.1 Waste Management

The main categories of waste are:
- Concrete
- Water
- Chemical
- Polystyrene
- Metals
- Paper/cardboard
- General waste

Each of these categories are individually managed. The frequency of disposal is based on the volume and it’s risk to polluting the environment.
Environmental Management Plan

Concrete is a major waste material for a precast manufacturer and is recyclable in its hardened, uncontaminated form. All practical effort shall be made to keep the waste free of contaminants such as plastic and metals so that it can be recycled. Hardened concrete shall be tipped into a bulk concrete waste bin and delivered to a concrete recycler in regular intervals. Dust shall be minimised in the concrete waste area by keeping the area clean, and providing the tools and equipment to do so.

Recyclable materials shall be separated as much as practically possible and removed from site for recycling by others. For example, polystyrene, paper, cardboard, metals, and printer cartridges shall be disposed of in their respective bulk bins awaiting removal by a licensed disposer.

Empty chemical containers shall be stored in a bunded area, and removed from site by a licensed disposer.

Water shall be recycled as much as practically possible to reduce the overall fresh water usage. This may be done by using this water for washing concrete tools and washing down the washdown areas.

General waste shall be regularly collected and disposed of in a general waste bin by a licensed disposer.

8.2.2 Dangerous Goods and Hazardous Materials

Chemicals shall be stored in bunded areas with spill kits and fire extinguishing equipment nearby.

Appropriate signage and/or labelling shall be provided to ensure the user knows what each chemical is, and what chemicals should and should not be stored in the area.

Each chemical must have a SDS in the SDS register and folder for the user to quickly refer to the chemical's specific PPE and first aid requirements.

Empty chemical container shall be regularly disposed of in the correct way to ensure these areas are kept clean and tidy.

8.2.3 Concrete Repairs

Concrete repairs can generate a large volume of dust and debris. After each day, or more frequently if windy, the dust and debris needs to be removed and disposed of in either the concrete waste bin, or the general waste bins provided.

Noise from activities such as grinding and hammering need to be limited to the normal hours of operation, and when possible, located away from neighbouring properties.

8.2.4 Water Management

Washing concrete tools and equipment requires water and generates a risk of pollution to waterways, and when dried, slurry can be a source of dust.

Areas with pathways to stormwater drains and waterways must not be used, as well as areas that cannot be cleaned thoroughly.

Water shall be recycled as much as practically possible, and waste be disposed of in a responsible manner. The area shall be cleaned regularly to minimise tracking of waste through the factory.

All of the above is carried out in a bunded areas.

8.2.5 Air Quality

Air quality is maintained by:
- Observation of the site to indicate satisfactory dust control
- Watering of site to control dust when necessary
- Plan and equipment is serviced and maintained to ensure exhaust emissions comply with EPA criteria
Environmental Management Plan

- Spoil transportation trucks have covered loads
- Management of Odour from Usage of Stripping Wax by using in well ventilated area, tightly sealing container when not in use and used brushes/cloths stored in sealed containers for offsite disposal

8.2.6 Surface Finishing

Surface finishing includes activities such as water blasting to expose aggregate, acid washing, polishing and scabbling.

Each activity creates wastes which may contaminate waterways and/or create noise and dust.

Waterways shall be protected by either or a combination of the following:
- locating these activities away from neighbouring properties, stormwater drains and waterways;
- providing adequate screens and bunding;
- collection of waste and correct disposal
- regular cleaning of the finishing area; and
- conducting activities inside standard working hours

8.2.7 Noise Impacts

Activities that generate noise such as grinding, jack hammering, hammering, using rattle guns for tightening bolts and concrete vibrating shall be done in normal working hours, and as far away as practicable from the property. Precast Elements shall be sensitive to communities members and in doing so, conduct the work accordingly.

8.2.8 Traffic and Transport

Deliveries shall be conducted within reasonable hours. The number of trucks awaiting loading and/or unloading shall be limited to ensure minimal disruption to access to and from the property, or thoroughfare along Pine Road. This shall be done by scheduling these activities in advance and communicating to transport companies and Labourers of this requirement.

8.3 Subcontractor Management

The General Manager will ensure that Subcontractors have a EMP. These systems will be reviewed by the Safety & Environment Officer and approved by the General Manager prior to each Contractor commencing on site.

Where a Subcontractor does not have a suitable EMP, the General Manager may request the Subcontractor to adopt the Precast Elements EMP; or use the Precast Elements EMP as the basis for the development of a suitable system by the Subcontractor.

The Subcontractor shall:
- avoid unnecessary interference with the passage of people and property at or near the Factory
- prevent nuisance and excessive noises and unreasonable disturbances
- provide all things and take all measures necessary for maintaining proper personal hygiene, ensuring safety of Labourers and property and protecting the environment at or near the Factory

As a minimum, the Subcontractor must provide a JSEA for each main work activity to be undertaken on site. This will be reviewed by the General Manager or Safety & Environment Officer for adequacy prior to commencement of work. A copy of Subcontractor JSEA's shall be retained by Precast Elements.

No work will be permitted to commence in the Factory by a Subcontractor or their Labourers until a Precast Elements JSEA has been approved by a Precast Elements General Manager for use.
Environmental Management Plan

Subcontractors shall ensure that all construction plant, equipment, power and hand tools brought onto the site are:

- appropriate for the work to be performed
- approved, inspected, tested and tagged (if appropriate) in accordance with WHS statutory regulations and Precast Elements requirements;
- maintained in a safe operating condition;
- Subcontractors shall ensure that users of construction plant, tools and equipment are trained, competent, experienced and where necessary, licensed and certified; and
- Subcontractors shall ensure that rotating or moving parts of all tools and equipment are adequately guarded to prevent accidental contact by Labourers.

Generally, subcontractors shall be subject to the same EMP requirements as Precast Elements and its Labourers.

Notification of any changes in the WHSMS or other documentation relevant to the subcontractor’s work shall be provided to each sub-contractor.

8.4 Emergency Preparedness and Response

To determine which potential emergency situation applies to a site, a Risk Assessment shall be undertaken for each hazard on the Hazard Register to determine the likelihood of the event and the severity of the consequences that could apply. Appropriate Emergency Response Plans then need to be developed for those items rated as Medium or higher.

Emergency situations do not always generate the need for an evacuation. If Factory assistance can be provided, it should be in the first instance. Equipment such as fire extinguishers, spill kits, emergency equipment, exit signs, paths of travel and alarm systems are inspected, tested and maintained at regular intervals and can be used in emergency situations. The General Manager is responsible for ensuring the site is prepared for emergency situations. Equipment is to be checked as part of the weekly inspection for suitability. Refer to Site Inspection form.

All Labourers shall undertake emergency training relevant to their positions. Emergency Response Plans shall be trialled at suitable intervals (6 monthly) depending on the work undertaken. Trials shall be organised by the General Manager and reviewed for effectiveness. Trials shall be used as a method of training for Labourers in their allocated responsibilities.

Should off site assistance be required, a list of phone numbers is provided in Appendix 3 and these should be on display near a Precast Elements site phone or other suitable locations.

8.4.1 Emergency Preparedness Inspection

Emergency preparedness inspections shall be conducted on commencement and thereafter as determined by the Production/Project Manager.

These inspections shall be carried out by a competent Labourer and shall focus on items such as:

- access and egress
- emergency provisions
- fire prevention and equipment
- first aid and medical provisions
- housekeeping

There is no formalised checklist for this inspection and results may be provided by way of a report.

8.4.2 Fire Prevention

Any process which is a potential source of sparks or slag could ignite a fire. Potentially hazardous processes therefore include welding, brazing, gas cutting, grinding, soldering and heat-shrinking via gas flame. Labourers performing these Production/Project should not have cigarette lighters in their possession as they are potentially explosive if struck by molten slag, etc.
Environmental Management Plan

Combustible materials (e.g. paint, gas, fuels, grass, glues, solvents, chemicals, timber, etc.) shall be removed or protected from potential sources of ignition. Work areas shall be kept clean of combustible materials as part of regular housekeeping process.

Flammable liquids must be stored in an approved manner and decanted into acceptable containers only. Redundant flammable liquids shall be promptly removed from site.

When carrying out processes which are potential sources of ignition, labourers shall ensure an appropriate fire extinguisher is readily at hand. Colour coded fire extinguishers complying with AS1841 shall be distributed around the site as the need arises.

The fire extinguishers shall be checked during site inspections. Extinguishers found to have an insufficient charge are tagged out of service and taken to a General Manager to arrange for servicing. Details of fire extinguisher locations are discussed and documented on the site map which in turn shall be placed in prominent locations around the site. Extinguishers Factory and their inspection dates are recorded on the Fire Extinguisher Register.

8.4.3 Emergency Evacuation

Precast Elements shall review existing site Emergency / Evacuation Procedures and the work they are performing. In consultation with the workforce a Site Emergency Response Plan shall be developed. The completed Emergency Response Plan and a Map of the site providing relevant details shall be displayed for Labourers and subcontractors to view.

Existing site resources will be utilised in the procedure where possible. This includes using the Evacuation Signal and Emergency Assembly Area.

The Emergency / Evacuation Procedure shall be developed as soon as the workforce arrives on site. It shall be trialled and evaluated within the first month of construction work commencing. The trial will be documented in a Pre-start or Toolbox Meeting.

Immediately after an exercise, wardens and other key participants shall attend a debriefing session conducted by the General Manager. A debriefing session after each exercise (or actual) evacuation is essential to identify any positive or negative facets of the organization or procedure. Feedback will be provided to the workforce at the following day’s Pre-start Meeting.

At all stages of the implementation process, the General Manager shall monitor the effect of the procedure on Factory Labourers. Where it is identified that the procedures have deficiencies or inaccuracies, the General Manager shall make amendments to rectify those deficiencies.
9 PERFORMANCE EVALUATION

Monthly environmental reporting is to be submitted within three days of the end of each month to a General Manager for review and comment. A copy of the report is displayed on the Noticeboard.

Environment should be considered as a priority topic for discussion at all meetings, and all participants provided the opportunity to contribute and make suggestions for improvement to practices or processes as required.

9.1 Incidents

For all events, the organisation undertakes an investigation to determine the primary and contributory causes to eliminate recurrence.

Events are classified into several groups as follows.

**Event Investigation** – where an event has resulted in a Labourer or member of the Community being admitted for external medical assessment and there is the possibility of ongoing loss, or significant impact to the environment or significant disruption to the Production/Project of the organisation

**Event Report** – where an incident has resulted in loss to the organisation and has resulted in a a First Aid Case

**Near Miss Report** – including damage to property and infrastructure, members of the community or environmental impacts that did not result in any loss (physical or financial)

Investigation of events and recommendation of corrective action to be completed within 4 weeks. General Manager and Safety & Environment Officer to approve corrective actions.

9.1.1 Notifiable Incidents

Precast Elements reports all events that are notifiable incidents to the relevant Authority, which include:

- material harm to the environment – which includes actual or potential harm to the health or safety of humans or to the ecosystem
- pollution causing or threatening material harm

Pollution incidents causing or threatening material harm to be notified:

- Kinds of incidents to be notified This Part applies where a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened.
- Duty of person carrying on activity to notify A person carrying on the activity must, immediately after the person becomes aware of the incident, notify each relevant authority of the incident and all relevant information about it.
- Duty of employee engaged in carrying on activity to notify A person engaged as an employee in carrying on an activity must, immediately after the person becomes aware of the incident, notify the employer of the incident and all relevant information about it. If the employer cannot be contacted, the person is required to notify each relevant authority.
- (3A) Duty of employer to notify Without limiting subsection (2), an employer who is notified of an incident under subsection (3) or who otherwise becomes aware of a pollution incident which is related to an activity of the employer, must, immediately after being notified or otherwise becoming aware of the incident, notify each relevant authority of the incident and all relevant information about it.
- Duty of occupier of premises to notify The occupier of the premises on which the incident occurs must, immediately after the occupier becomes aware of the incident, notify each relevant authority of the incident and all relevant information about it.
- Duty on employer and occupier to ensure notification An employer or an occupier of premises must take all reasonable steps to ensure that, if a pollution incident occurs in carrying on the activity of the employer or occurs on the premises, as the case may be, the persons engaged by the employer or occupier will, immediately, notify the employer or occupier of the incident and all relevant information about it.
Environmental Management Plan

- Extension of duty to agents and principals: This section extends to a person engaged in carrying on an activity as an agent for another. In that case, a reference in this section to an employee extends to such an agent and a reference to an employer extends to the principal.
- Odour not required to be reported: This section does not extend to a pollution incident involving only the emission of an odour.
- Meaning of "relevant authority": In this section: relevant authority means any of the following:
  (a) the appropriate regulatory authority,
  (b) if the EPA is not the appropriate regulatory authority—the EPA,
  (c) if the EPA is the appropriate regulatory authority—the local authority for the area in which the pollution incident occurs,
  (d) the Ministry of Health,
  (e) the WorkCover Authority,
  (f) Fire and Rescue NSW

Relevant information to be provided regarding an incident is as follows:

- the time, date, nature, duration and location of the incident,
- the location of the place where pollution is occurring or is likely to occur,
- the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,
- the circumstances in which the incident occurred (including the cause of the incident, if known),
- the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,
- other information prescribed by the regulations.

Where such an event has occurred, the impacted worksite should be preserved for investigation by the regulator. All documents that were referred to associated with an event (i.e. JSEA, EMP, etc) will be copied and attached to the event investigation.

All events that are required to be notified (notifiable incidents) should only be undertaken by a General Manager, and records of the communication recorded.

The regulator may request a
- copy of the Event Investigation
- findings (to demonstrate that the event investigation has been managed correctly, identified all contributing factors, corrective actions have been identified)
- follow-up actions and close-out have been implemented
- supporting documentation (i.e. copies of competencies, tickets, etc)

All event investigations should be retained indefinitely and referenced to the relevant impacted Labourers file for future reference as required to limit any liability in the future to the organisation.

All event investigations that are required to be notified to the regulator should be completed by a competent Labourer that has the necessary investigation training required to ensure a comprehensive report is prepared.

9.1.2 Record Keeping and Events

All events shall be reported and investigated with appropriate corrective or preventive actions implemented to prevent recurrence of similar events. The level and depth of investigation will depend on the severity or potential severity; the investigation process shall be aimed at identifying the root cause of each event. Minor FAI recorded on the Register of Injuries may require a visual inspection of the workplace and appropriate action taken without the need for a documented investigation.
Environmental Management Plan

Documents to be used for investigation purposes are the Event Report, and the Event Investigation form.

A full investigation using the Event Investigation form will be required for:

- all incidents leading to a negative impact on flora and fauna
- all reported Hazards / Near Miss events that could have led to an incident
- recurring hazards of a similar nature which may indicate an ongoing problem
- requested by a General Manager

Investigation must be conducted by appropriately trained or experienced Labourers. This may include Supervisors and General Managers. The Supervisor or Investigator is responsible for identifying corrective and preventive actions if required, to eliminate or minimise the potential for a recurrence. The investigation may prompt a review of company processes/procedures and work instructions/JSEA where required.

The General Manager will review all Event Reports and Event Investigations to verify that corrective and preventative actions and their timeframes are appropriate; and take steps to manage the company’s approach to the event. When deemed necessary, the General Manager will nominate Follow-up Action to ensure that the Corrective / Preventative Action are adequate and effective. Normally Follow-up Action will be assigned to the Supervisor or Investigator.

9.1.3 Complaint Management

All complaints from the community, on any environmental related matters, shall be recorded in the complaints register (form 09.03.04) and corrective and preventative action shall be taken to rectify the matter. All complaints will be immediately reported to the General Managers and action taken to alleviate the problem and proposed measures to prevent recurrence. A phone service (02) 9033 1337 has been allocated to receive phone complaints on a 24/7 basis.

Consultation with neighbouring property and business owners will be undertaken to ascertain if works carried out within Precast Elements has any affect or interfere with their businesses. Any concerns will be assessed individually and all practical matters will be assessed in a reasonable and acceptable timeframe.

9.2 Workplace Inspections and Audits

Precast Elements inspects the work activity(s) and work area, and provides a completed Factory Precast Elements Inspection Checklist at regular predetermined intervals. These are generally undertaken monthly.

Implementation of the risk management principles will be monitored through inspections and audits. Inspections are scheduled as follows:

- Safety & Environment Audit – once initially and monthly
- General Manager – annually and at own discretion

The involvement of Labourers and Subcontractors representatives is mandatory for the monthly inspections.

Additional audits may be scheduled through the Precast Elements WHS Manager or through our 3rd party certifying body.

Internal audits will be carried out in accordance with AS14001:2016 requirements. Environmental system audits are scheduled and carried out to verify whether activities:

- are contributing towards the effectiveness of the system
- audits are applicable to both Precast Elements and Subcontractor works to ensure the above requirements are met and have been properly implemented and maintained
- comply with planned arrangements and review housekeeping and work methods

The results of Audits and Inspections along with Event Investigations will be reviewed by the General Manager to take appropriate action and revise this EMP as required.

A copy of these reports are placed onto the Noticeboard.
Environmental Management Plan

9.3 Workplace Monitoring

Workplace monitoring is to be conducted by suitably trained and competent Labourers and observations reported to the General Manager for inclusion onto the Daily Pre-Start. Workplace monitoring allows for the minimisation of risk by taking corrective action at the source.

Precast Elements owned equipment must be maintained and calibrated in accordance with Australian Standards.

Monitoring may be conducted by internal or external resources that are competent with using and interpreting the results of the monitoring device.

The Supervisor shall assess the need for monitoring based on observations conducted as part of their workplace inspections. Requests from Labourers shall also be considered and referred to the Production/Project Manager.

Monitoring and measurement records shall be maintained in accordance with Precast Elements record keeping procedures.

9.4 Monitoring the Risk

Deciding on, and implementing a risk control measure is not the end of the risk management process. Both monitoring and review should be a planned part of the risk management process and involve regular checking or surveillance. It can be planned or ad hoc and is usually the responsibility of the General Manager who implemented the controls.

The monitoring and review processes should encompass all aspects of the risk management process for the purposes of:

- analysing and learning lessons from events (including near-misses), changes, trends, successes and failures
- detecting changes in the external and internal context, including changes to risk criteria and the risk itself which can require revision of risk treatments and priorities
- ensuring that controls are effective and efficient in both design and operation
- identifying emerging risks
- obtaining further information to improve risk assessment

Task observations are used to evaluate the effectiveness of the hazard identifications, risk assessments and risk control processes submitted in the EMP. It is to be completed by the General Manager whenever a Subcontractor to Precast Elements exists. Its purpose is to ensure all current processes in hazard identification, assessments and controls by Subcontractor are effective by completing the 'Yes/No/NA' and 'Notes' column items. The observation form also ensures items in the JSEA are being undertaken by the completion on the column items. If for any reason Subcontractor JSEA is not adequate or not adequately implemented, work is to be suspended and a review of the Subcontractor JSEA is to be done with their Labourers and preferably with a General Manager of the Subcontractor available in attendance to support the implementation of the JSEA hazard control requirements.

Risk control measures must be maintained, and work procedures also have to be monitored to ensure that they are being followed. Hazard identification, risk assessment and control are not a 'one-off' task. It is an ongoing process, which includes regular reviews of the safety of factory and systems of work.

9.5 Action Tracking

Hazards and actions come from a number of sources including the following

- Audits
- design change requests
- hazard reports
- inspections
- investigations
- meetings
Environmental Management Plan

Items that can be immediately rectified may not need to be tracked, however, items that can take time to rectify can be forgotten about so tracking is essential. To ensure all hazards and actions are acted on, Precast Elements uses a Hazards Register. The register should be reviewed at least weekly (or at more frequent intervals as required) by the General Manager and Safety & Environment Officer to ensure all hazards are adequately and effectively controlled to as low as reasonably practicable (ALARP).

Where compliance is not met to ALARP or there are repeated occurrences raised, then a non-conformance shall be issued and appropriate remedy procedures actioned in accordance with corrective action procedures. The purpose of the investigation is to identify and correct the root cause of the repeated issue.

Non-conformance issues and solutions are to be recorded into the Non-Conformance Register, and a copy forwarded to the General Manager.
Environmental Management Plan

10 APPENDICES

10.1 Appendix 1 – Environmental Policy

Environmental Policy

30 August 2017

We are committed to:

- Continuously assessing our environmental performance by applying the principles of sound environmental management, developing sustainability and assisting with the development of the environment we live and work in.
- Complying with all relevant legislation governing the protection of the environment, and
- Acting in a responsible way as a moral and with a regard for the environment that we
  inhabit.

To achieve this management is committed to supporting the following and applies to all Precast Elements employees, sub-contractors, clients and visitors:

- Develop, implement and maintain procedures for the identification, assessment and control of environmental impacts from our activities and processes.
- Develop, implement and maintain procedures for emergency response to the environmental risks inherent in our activities.
- Measure our activities for compliance against environmental legislation, regulations and
  stakeholder values and expectations.
- Commit appropriate staff and time resources towards maintenance, monitoring of the
  Management System and regular reporting on our performance.
- Identify the competencies required in the organization to implement this policy, select
  and train personnel accordingly.
- Foster a working environment that promotes creativity and innovation for the
  improvement of processes and the development and adoption of new technologies for achieving
  better environmental outcomes.
- Involve and consult with our employees, sub-contractors, suppliers, clients and internal
  stakeholders on the implementation of environmental benchmarks and methods to demonstrate our
  improvement and obtain feedback on the effectiveness of our policy.

A copy of this policy is displayed on the WHS Noticeboard, prominent locations on site, our Internet site &
available on request.

This policy is reviewed annually to ensure that it remains relevant & current.

David Cullen-Ward
Director

Millie Booth
Director
Environmental Management Plan

10.2 Appendix 2 – Procedures, Forms and Records

Text in italics indicates the document is under development (draft for workplace consultation) and subject to change.

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Table 13 - Forms and Records Table
10.3 Appendix 3 - Contacts

**Organisation**

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Precast Elements Pty. Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Address</td>
<td>49 Pine Road, Yennora NSW 2161</td>
</tr>
<tr>
<td>Postal Address</td>
<td>PO Box 237, Guildford NSW 2161</td>
</tr>
<tr>
<td>Phone</td>
<td>02 9003 1330</td>
</tr>
</tbody>
</table>

**Key Site Contacts**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Aid</td>
<td>David CULLEN-WARD</td>
<td>0421 382 404</td>
</tr>
<tr>
<td>Production/Project Manager</td>
<td>David CULLEN-WARD</td>
<td>0421 382 404</td>
</tr>
<tr>
<td>Return to Work Coordinator</td>
<td>Alex EL SHAAR</td>
<td>0451 018 663</td>
</tr>
<tr>
<td>Sales Manager (General Manager)</td>
<td>Millie BOOTH</td>
<td>0419 042 662</td>
</tr>
<tr>
<td>Production Manager</td>
<td>Bassem WEHBE</td>
<td>0401 830 212</td>
</tr>
<tr>
<td>Production Supervisor</td>
<td>Chris HOOLEY</td>
<td>0410 256 841</td>
</tr>
<tr>
<td>Office Manager</td>
<td>Maryanne GJURA</td>
<td>9003 1330</td>
</tr>
</tbody>
</table>

**External Contacts**

<table>
<thead>
<tr>
<th>Service</th>
<th>Number</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance</td>
<td>000</td>
<td>Ambulance Service of NSW</td>
</tr>
<tr>
<td>Council</td>
<td>02 8757 9000</td>
<td>Cumberland Council</td>
</tr>
<tr>
<td>Doctor</td>
<td>02 9724 2662</td>
<td>Fairfield Medical Centre</td>
</tr>
<tr>
<td>Electricity</td>
<td>131 003</td>
<td>Endeavour Energy</td>
</tr>
<tr>
<td>Fire</td>
<td>000 / 02 9632 2846</td>
<td>NSW Fire &amp; Rescue</td>
</tr>
<tr>
<td>Gas</td>
<td>131 909</td>
<td>Jemena</td>
</tr>
<tr>
<td>Hospital</td>
<td>02 9616 8111</td>
<td>Fairfield Hospital</td>
</tr>
<tr>
<td>Insurer</td>
<td>1800 469 931</td>
<td>Employers Mutual</td>
</tr>
<tr>
<td>Neighbouring Property</td>
<td>0412 579 001</td>
<td>Air Liquide</td>
</tr>
<tr>
<td>Police</td>
<td>000 / 02 9728 8399</td>
<td>Fairfield Police Station</td>
</tr>
<tr>
<td>Pollution</td>
<td>131 555</td>
<td>Environmental Protection Authority</td>
</tr>
<tr>
<td>Regulator</td>
<td>131 050</td>
<td>SafeWork NSW</td>
</tr>
<tr>
<td>Storm &amp; Tempest.</td>
<td>132 500</td>
<td>State Emergency Service</td>
</tr>
<tr>
<td>Telephone</td>
<td>132 000</td>
<td>Telstra</td>
</tr>
</tbody>
</table>
### Environmental Management Plan

<table>
<thead>
<tr>
<th>Service</th>
<th>Number</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water &amp; Sewerage</td>
<td>132 090</td>
<td>Sydney Water</td>
</tr>
</tbody>
</table>


## Environmental Management Plan

<table>
<thead>
<tr>
<th>Pollution type or source</th>
<th>Organisation responsible</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilisers, pesticides, herbicides</td>
<td>EPA</td>
<td>131 555</td>
</tr>
<tr>
<td>Dumped cars</td>
<td>Local councils</td>
<td>02 9725 0222</td>
</tr>
<tr>
<td></td>
<td>Police Assistance Line</td>
<td>131 444</td>
</tr>
<tr>
<td>Grease, oil and odours on beaches</td>
<td>EPA</td>
<td>131 555</td>
</tr>
<tr>
<td>Contaminated sites</td>
<td>EPA</td>
<td>131 555</td>
</tr>
<tr>
<td>Aviation fuel dumping</td>
<td>Air Services Australia</td>
<td>1800 802 584</td>
</tr>
<tr>
<td>Odour from landfill or waste depot</td>
<td>EPA</td>
<td>131 555</td>
</tr>
<tr>
<td>Rubbish and litter</td>
<td>EPA</td>
<td></td>
</tr>
<tr>
<td>Littering from vehicles</td>
<td>EPA</td>
<td>Report online or use Report to EPA from your mobile.</td>
</tr>
<tr>
<td>Litter falling or blown from uncovered vehicle load</td>
<td>EPA</td>
<td>Report online or use Report to EPA from your mobile.</td>
</tr>
<tr>
<td>Roadside rubbish on major roads and highways</td>
<td>Roads &amp; Maritime Services</td>
<td>131 700</td>
</tr>
<tr>
<td>Roadside rubbish on local roads</td>
<td>Local councils</td>
<td>02 9725 0222</td>
</tr>
<tr>
<td>Illegal dumping</td>
<td>EPA</td>
<td></td>
</tr>
<tr>
<td>Illegal dumping of solid and liquid wastes</td>
<td>EPA</td>
<td>Report online or use Report to EPA from your mobile.</td>
</tr>
<tr>
<td></td>
<td>Local councils</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local police</td>
<td>02 9728 8399</td>
</tr>
<tr>
<td></td>
<td></td>
<td>131 444</td>
</tr>
<tr>
<td></td>
<td>Crimestoppers</td>
<td>1 800 333 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online form</td>
</tr>
<tr>
<td>Illegal dumping in National and State Parks, historic sites and nature reserves</td>
<td>EPA</td>
<td>131 555</td>
</tr>
<tr>
<td>Illegal dumping in council parks</td>
<td>Local councils</td>
<td>02 9725 0222</td>
</tr>
<tr>
<td>Illegal dumping on vacant Crown land</td>
<td>EPA</td>
<td>131 555</td>
</tr>
<tr>
<td>Illegal dumping on beaches</td>
<td>Local councils</td>
<td>Find your local council</td>
</tr>
<tr>
<td>Illegal dumping in state forests</td>
<td>EPA</td>
<td>131 555</td>
</tr>
<tr>
<td>Illegal dumping on private property</td>
<td>Local councils</td>
<td>02 9725 0222</td>
</tr>
</tbody>
</table>
Environmental Management Plan

10.5 Appendix 5 - Geographical Location

Following is an aerial image of the geographical location of the site in Yennora, NSW.
Environmental Management Plan

10.6 Appendix 6 – Supply Utilities

10.6.1 Sewer Infrastructure

Following is an extract of a plan provided by the water utility organisation (Sydney Water) showing the approximate location of the Sewer Submain that is located running across the roughly in a North to South Direction towards the rear of the Factory Building on the site in Yerrinbool, NSW. There are special conditions that apply to this area of the site, and its management is covered in a sub-plan.

There is an access cover and test point access cover located adjacent to a vehicle door that may have special load considerations to eliminate damage, and special access requirements during certain events or special requests from the asset owner.

The asset is described as a 225mm Salt Glazed Ware Pipe Sewer Main.

Emergency telephone contact detail (Sydney Water 132 090) is listed on the Emergency Contact Details document.

Figure 1 - Sewer Main
Environmental Management Plan

10.7 Appendix 7 - Prospect Creek

Aerial photo below shows Prospect Creek located behind the precast facility boundary.
Environmental Management Plan

10.8 Appendix 8 – Waste Management Planning
Appendix 9 – Incident Record Form

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Event Type</th>
<th>Description</th>
<th>Action</th>
<th>Date of Report</th>
<th>Issue Date</th>
<th>Action Required</th>
<th>Date of Action Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 May 2019</td>
<td>10:00</td>
<td>49 Pines Road, Yetmans NSW 2104</td>
<td>Site Incident</td>
<td>Site Safety Breach</td>
<td>Immediate Action</td>
<td>2 May 2019</td>
<td>1 May 2019</td>
<td>Complete</td>
<td>1 May 2019</td>
</tr>
</tbody>
</table>

Additional information:
- Incident Number: EELPP024/19
- Location: 49 Pines Road, Yetmans NSW 2104
- Event Type: Site Incident
- Description: Site Safety Breach
- Action: Immediate Action
- Date of Report: 2 May 2019
- Issue Date: 1 May 2019
- Action Required: Complete
- Date of Action Report: 1 May 2019
## Extraordinary Cumberland Local Planning Panel Meeting

1 May 2019

### Environmental Management Plan

#### INCIDENT RECORD

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Incident</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Additional Information

- Exception: these instructions relate only to exception 1.
- Exception: these instructions relate only to exception 2.
- Exception: these instructions relate only to exception 3.

#### Incident Details

- Location: 49 Pine Road, Yennora NSW 2164
- Incident: Precast Elements

#### Signature

- Date: [Signature]
- Name: [Name]

---

### Page Footer

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|-----------------------------|-------------|
10.10 Appendix 10 – Environmental Complaints Register

<table>
<thead>
<tr>
<th>Complainant</th>
<th>Date Received</th>
<th>Details of Complaint</th>
<th>Received by (Name)</th>
<th>Action Taken</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 May 2019</td>
<td>Description of complaint</td>
<td>John Doe</td>
<td>Response</td>
<td>Signature</td>
</tr>
<tr>
<td>2</td>
<td>2 May 2019</td>
<td>Further details</td>
<td>Jane Smith</td>
<td>Investigation</td>
<td>Signature</td>
</tr>
<tr>
<td>3</td>
<td>3 May 2019</td>
<td>Specific issue</td>
<td>Michael Lee</td>
<td>Resolution</td>
<td>Signature</td>
</tr>
<tr>
<td>4</td>
<td>4 May 2019</td>
<td>Complex concern</td>
<td>Sarah Brown</td>
<td>Addressed</td>
<td>Signature</td>
</tr>
<tr>
<td>5</td>
<td>5 May 2019</td>
<td>Environmental impact</td>
<td>David Clark</td>
<td>Mitigated</td>
<td>Signature</td>
</tr>
<tr>
<td>6</td>
<td>6 May 2019</td>
<td>Immediate action</td>
<td>Emily Green</td>
<td>Monitoring</td>
<td>Signature</td>
</tr>
</tbody>
</table>

*Note: The table is an example of how the Environmental Complaints Register might be structured.*
10.11 Appendix 11 – Environmental Compliance Checklist

Environmental Compliance Weekly Inspection/Checklist

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SATISFACTORY</th>
<th>COMMENTS/REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm Water Drainage / Socks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burning / Spill Kits – Storage / Factory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banding / Spill Kits – Concreting area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banding / Spill Kits – Red Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate / Bulk Storage – Wash Down Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wash Down Area – Behind Sheet No. 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk Concrete Waste Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel / Chemicals stored correctly – All Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel Bin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Litter / Dust – All Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fence / Perimeter Security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imprint / BBC’s Durability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Yard Tidiness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments

Inspected By: ____________________________  Signature: ____________________________  Date: __________

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DOCUMENTS
ASSOCIATED WITH
REPORT EELPP024/19

Attachment 5
Environmental Assessment Program
Hi Sophy

This is the last email sent, then Kristy finished working with Council. I have attached the photos – these were to do with council request, then she spoke to David Cullen-Ward regarding the matter.

Kind regards

Maryanne Gjura
Office Manager

---

Precast Elements Pty Ltd
49 Pine Road
VENNORA NSW 2161
P 02 9003 1330
www.precastelements.com.au

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Please consider the environment before printing this email

---

From: Kristy McCreddie <kristy.mccreadie@cumberland.nsw.gov.au>
Sent: Tuesday, 22 May 2018 11:36 AM
To: David Cullen-Ward <David@precastelements.com.au>
Cc: Maryanne Gjura <Maryanne@precastelements.com.au>; Millie Booth <Millie@precastelements.com.au>
Subject: RE: EMP - Precast Elements - 49-54 Pine Road Yennora

Hi David

Thank you for returning my call this morning. Below is a summary of our discussion. If anything is incorrect or you would like to provide further clarification please let me know.

In relation to the concrete staining area:

- The area where you intend to do the oxide staining drains to a newly constructed sump which will either be pumped out by a sucker truck or into an IBC for later disposal to a licensed waste facility. Adequate procedures and monitoring must be in place to ensure
no waste water enters or is likely to enter the stormwater system;

- The new bund around the area where the oxide staining will be carried out is 7m L x 5m W x 5 in H which you advised is unlikely to overflow in a normal rain event. Adequate procedures and monitoring must be in place to ensure contaminated rain water does not enter, or is not likely to enter the stormwater system. For example the area must be regularly cleaned and left clean at the end of each day; and
- Pipes have been cast into the bund for poles which will hold up a temporary 3-4 metre high curtain which you believe will contain any overspray. As discussed, you may be directed to carry out all spraying inside an enclosed permanent structure as part of the DA process or if the activity is deemed to be carried out in an environmentally unsatisfactory manner.

In relation to the unpaved area at the rear of the property:

- I expressed concern about the potential for run off as the concrete blocks do not completely enclose the area. I note your advice from the property owner that the fence is offset from the creek by approximately 5 metres by a grass swale and there is an exclusion zone of approximately 2 metres in front of the creek to prevent runoff entering the creek. As discussed you may be directed to undertake further containment works or changes to activities/work practices to manage the potential stormwater pollution risk as part of the DA process or if the activity is deemed to be carried out in an environmentally unsatisfactory manner.

I also noted that it would be advisable to discuss all of the above with the environmental consultant engaged to assist with the preparation of the EIS and DA documents as they may be able to provide further advice/recommendations. You advised a further meeting with the property owner in relation the area at the rear of the property will be held once further advice is received from the consultant.

A couple of general points:

- Ensure you have adequate spill containment equipment on site to manage any potential pollution incident; and
- If any incident does occur, ensure you comply with the Duty to Notify provisions under the Protection of the Environment Operations Act 1997.

My last working day at Council is 7 June 2018. If you need to speak to an Environmental Health Officer after I leave, please contact Team Leader Environmental Health Stuart Nunn on 8757 9631.

Thank you for your cooperation and commitment to addressing the environmental issues. Good luck with the DA and your future plans for the site.

Kind Regards
Hi Kristy,

Please find attached some photos of the area you indicated in your previous email. If you need any further clarification of where the photos are of any more photos, please let me know.

Kind regards

Maryanne Gjura
Office Manager

Precast Elements Pty Ltd
49 Pine Road
YENNORA NSW 2161
P 02 9003 1330
www.precastelements.com.au

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Please consider the environment before printing this email

From: Kristy McCreadie [mailto:kristy.mccreadie@cumberland.nsw.gov.au]
Sent: Tuesday, 24 April 2018 1:59 PM
To: David Cullen-Ward <David@precastelements.com.au>
Cc: Maryanne Gjura <Maryanne@precastelements.com.au>; Millie Booth <Millie@precastelements.com.au>
Subject: RE: EMP - Precast Elements - 49-54 Pine Road Yennora

Thanks David

Being mindful of how busy you are, if you are able to send through photos next week of the completed works this may avoid the need for us to come out again. If we have any concerns with the photos we will let you know. Although if you prefer we come out we are happy to do so. If you would like us to come back out, please let me know when you are available.

If you send through the photos, please email them to council@cumberland.nsw.gov.au and copy me.

Kind Regards

KRISTY McCREADIE
SENIOR ENVIRONMENTAL HEALTH OFFICER

16 Memorial Avenue, PO Box 42 Merrylands NSW 2160
T +61 2 8757 9643
E kristy.mccreadie@cumberland.nsw.gov.au
W www.cumberland.nsw.gov.au

From: David Cullen-Ward [mailto:David@precastelements.com.au]
Sent: Tuesday, 24 April 2018 1:16 PM
To: Kristy McCreadie
Cc: Maryanne Gjura; Millie Booth
Subject: RE: EMP - Precast Elements - 49-54 Pine Road Yennora

Kristy,

The dry concrete waste area at the back corner has been rectified. It has been moved away from the fence line, and has retaining blocks on three sides for containment.
The bunding of the washing area (RE: orange concrete) is being sealed this week. The sump for this area has been completed. The spray curtains will be manufactured prior to the area being used (approx. Aug’18).
The bunding for the bulk oils area inside the shed is being sealed this week.

Regards,
DCW

From: Kristy McCreadie [mailto:kristy.mccreadie@cumberland.nsw.gov.au]
Sent: Monday, 23 April 2018 2:34 PM
To: David Cullen-Ward <David@precastelements.com.au>
Cc: Maryanne Gjura <Maryanne@precastelements.com.au>; Millie Booth
Hi David

Could you please provide an update on where you are at with the outstanding works from the last inspection? Refer to emails below for details.

Kind Regards

------------------

KRYSTY MCCREADIE
SENIOR ENVIRONMENTAL HEALTH OFFICER

16 Memorial Avenue, PO Box 42 Merrylands NSW 2160
T +61 2 8757 9043
E kristy.mccreadie@cumberland.nsw.gov.au
W www.cumberland.nsw.gov.au

From: Kristy McCreadie [mailto:kristy.mccreadie@cumberland.nsw.gov.au]
Sent: Tuesday, 3 April 2018 7:58 AM
Subject: RE: EML - Precast Elements - 49-54 Pine Road Yennora

Thanks David

Greg is looking into it. Either he or I will let you know how we go.

Kind Regards

------------------

From: David Cullen-Ward [mailto:David@precastelements.com.au]
Sent: Thursday, 29 March 2018 2:16 PM
To: Kristy McCreadie
Cc: Maryanne Gjura; Millie Booth
Subject: RE: EML - Precast Elements - 49-54 Pine Road Yennora

Thanks Kristy.

We have started works on this and should have it completed before your next visit. During our discussions on site I asked if there was any assistance the local government can provide regarding the environmental impact statement we have been asked to complete. Have you managed to talk to the Business Development Manager regarding this?

R.

David Cullen-Ward BE(CMI), MIEAust
Director
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

From: Kristy McCreadie <mailto:kristy.mccreadie@cumberland.nsw.gov.au>
Sent: Thursday, 29 March 2018 11:16 AM
To: David Cullen-Ward <David@precastelements.com.au>
Cc: Maryanne Gjura <Maryanne@precastelements.com.au>
Subject: RE: EMP - Precast Elements - 49-54 Pine Road Yennora

Hi David

We received some advice from the EPA in relation to the oxide staining/ spraying.

As a temporary solution they indicated the area within which the work is being carried out should be contained (for example with plastic sheeting) to capture all of the overspray/ runoff and the stormwater drain blocked to create a blind sump where the wastewater is captured and pumped out by a licenced waste contractor. The waste contractor may require testing prior to collection to determine appropriate disposal so you should contact them first to discuss any of their requirements. You should have a written protocol/ procedures and associated monitoring processes for this process to ensure adequate environmental protection measures are in place.

If you want to do this on a more permanent basis, a purpose built area inside the factory would be required with the area graded to a sump/ tank and the wastewater disposed of in accordance with Sydney Water requirements or collected by a licensed waste contractor. You should discuss this with your planning consultant in case in needs to be included in your DA.

In addition to the above, you will also need to comply with any relevant SafeWork NSW requirements.

If you have any questions, please do not hesitate to contact me.

Kind Regards

__________________________

KIRSTY MCCREADIE
SENIOR ENVIRONMENTAL HEALTH OFFICER

16 Memorial Avenue, PO Box 42 Merrylands NSW 2160
Hi David

We haven’t heard back from the EPA as yet so given the delay I thought it best to provide feedback about the other matters and I will come back to you when I know more.

Below is a summary of the issues/discussions during the inspection on 14 March 2018:

- Council’s officers acknowledged that a number of improvements had been made since the previous inspection on 5 December 2017;
- Bunding for chemical storage has been increased. The bund inside the factory on the main production factory needs to be finished so they are go gaps where chemicals can leak out;
- Additional signage and monitoring processes had been implemented. Council’s officers reiterated the need for contingency plans if key personnel are not on site or not able to perform monitoring duties;
- Arrangements have been made for the replacement of IBCs as needed;
- A new complaint line had been established;
- David identified the need for further bunding to be provided throughout the factory for small containers where it is not practical to return them to the main bunds;
- There is still an issue with concrete escaping the undercover wash area. Although there is no stormwater drain in the immediate vicinity, the area is in close proximity to the creek and there is potential for polluted water to enter the creek particularly in heavy rain events. In addition, the loose sand bund next to the shed is not an effective barrier as it is easily washed away and may contribute to stormwater pollution;
- David advised he had arranged for a section of the unpaved area at the rear of the site to be bunded so that it can be used for the storage of excess bulk concrete waste for short periods prior to removal by a waste contractor while preventing run-off to the nearby creek however there had been a delay. We agreed to an extension of four weeks to complete this work.
- Potential stormwater and air quality issues were identified from the oxide staining process outside between the two factory buildings. The ground and surrounding surfaces were stained and there didn’t appear to be sufficient measures in place to prevent water soluble contaminants from entering the stormwater system. Council officers advised they would seek advice from the NSW EPA on best practice in managing this issue.
- A revised EMP was provided. A new complaint management section has been included and other corrections made. The following items require further attention:
  - Section 4.1 - Amend the plan to reflect that part of the site is not concrete paved and make any necessary amendments to the plan and associated procedures in light of this. This section has not yet been amended and should be amended to reflect the current situation following completion of works
  - Section 2.2 - Statutory References - The main legislation the environmental health officers are involved with relevant to your site is the Protection of the Environment Operations Act and Regulations thereunder, the Environmental Planning and Assessment Act and the Environmental Planning Instruments (e.g. State
Environmental Planning Policies, Local Environmental Plans, Development Control Plans). You may wish to consider including the following where relevant:

- Protection of the Environment Operations (General) Regulation 2009
- Protection of the Environment Operations (Noise Control) Regulation 2017
- Protection of the Environment Operations (Waste) Regulation 2014
- If the site has any underground petroleum storage systems then Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014 will also apply
- SEPP 55 – Remediation of Land
- SEPP 33 – Hazardous and Offensive Development
- SEPP (Exempt and Complying Development Codes) 2008

Your planning consultant/environmental consultant may have further advice in relation to environmental management for the site.

Please contact me before 16 April 2018 to arrange a suitable time for reinspection. If you have any questions, please do not hesitate to contact me.

Kind Regards

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DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 6
Water Environmental Assessment Report
WATER ENVIRONMENTAL ASSESSMENT REPORT

49-53 Pine Road, Yennora
New South Wales

Prepared for:
Precast Elements Pty ltd
49-53 Pine Road, Yennora NSW

SLR Ref: 610.18097-R06
Version No: v1.0
August 2018
PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Precast Elements Pty Ltd [the Client]. Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

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CONCLUSIONS

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APPENDICES

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1 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Precast Elements Pty Ltd (Precast) to undertake a Water Quality Impact Assessment for the operation of a precast concrete product manufacturing facility located at 49-53 Pine Road, Yennora (Site).

This report has been prepared as part of the Environmental Impact Statement (EIS) for a designated development application for retrospective change of use for the Site. The NSW Department of Planning and Environment (DPE) issued the Secretary’s Environmental Assessment Requirements (SEARs) in January 2018.

2 Project Description

2.1 Site Location

The Site is located within the Yennora Industrial Park at 49-53 Pine Road, Yennora (Lot 2, DP 939790), which is located approximately 22 kilometres (km) west of the Sydney Central Business District (CBD), as shown in Figure 1.

The Site is 10,825.7m² in size and Prospect Creek runs along the Site's western boundary.
2.2 Site Operations

The Site is used to manufacture precast concrete building elements within the 2 on-site building.

The operations at the Site are 24 hours, seven days a week for the factory operations, with the following restrictions on vehicle access and deliveries:

- Deliveries: 7:00 am to 5:00 pm; and
- Product distribution (leaving the site): 3:00 am to 5:00 pm

Number of staff on site consists of up to 35 employees on site

Activities associated with wastewater generation at the Site include:
- Washing concrete tools and equipment;
- Truck wash-down; and
- Concrete finishing process.

Tools and equipment washing activities are undertaken in the covered, bunded wash down bay located at the western end of the northern building, truck wash-down is undertaken in the uncovered bunded wash down area located at the eastern end of the northern building, while the concrete finishing process is undertaken in the uncovered bunded concrete finishing area between the 2 main buildings.

2.3 Site Layout

The Site contains the following:
- A single-storey warehouse building located along the northern boundary that is predominately used for storage of concrete panels;
- A single-storey warehouse building located along the southern boundary that is predominately used for storage and manufacturing of the concrete panels;
- A two-storey office building;
- Gantry located between the two warehouse buildings to lift the concrete blocks onto trucks for transportation off-site;
- Gantry located within the existing warehouse building adjacent to the southern boundary;
- Vehicle access from Pine Road; and
- Staff car parking provided within the front setback facing Pine Road.

The layout of the Site and location of areas generating water is shown in Figure 2.
3 Purpose and Scope of Soil and Water Assessment

3.1 Purpose

This report addresses the Environmental Impact Assessment requirements associated with water management requirements specified in the Secretary's Environmental Assessment Requirements (SEARs) dated January 2018.

The SEARs relevant to water quality impacts associated with this project are shown in Table 1.

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<td>Assessment of potential impacts to watercourses and riparian lands on and nearby the site</td>
<td>Section 7.6</td>
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<td>Assessment of flooding impacts associated with the development</td>
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<td>Detailed site water balance</td>
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<td>Potential impacts on the quality and quantity of surface and groundwater resources</td>
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<td>Details of the stormwater and wastewater management systems (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts</td>
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<td>Description and appraisal of impact mitigation and monitoring measures</td>
<td>Section 8.0</td>
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<tr>
<td>EPA request</td>
<td>Water Management Plan including:</td>
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<tr>
<td></td>
<td>Details of discharges to stormwater or wastewater during construction and operation including volumes, pollutants and locations of discharges</td>
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</tbody>
</table>
3.2  **Scope**

The Site is currently surfaced with hardstand, there are no underground storage tanks and site operations are unlikely to result in interception, connection with or infiltration of groundwater. Also, there will be no need for extraction of surface water or groundwater for the project. Therefore, the focus of this assessment is on the impact of the project on surface waters.

The scope of works undertaken included:

- Desktop review of existing reports and databases;
- Establishment of receiving environment;
- Site inspection to determine on-site water management in relation to potable water, stormwater, surface water, leachate, wastewater and fuels and chemical storage;
- Assessment of potential water impacts including sampling of Prospect Creek; and
- Assess need for a Water Management Plan to mitigate potential impacts.

3.3  **Planning Context**

The following relevant legislation, policies and guidelines were considered as part of the water assessment:
- Water Management Act (2000) and Water Act (1912);
- Greater Metropolitan Region Unregulated River Water Sources (2011);
- Greater Metropolitan Region Environmental Plan No. 2 – Georges River Catchment;
- Protection of the Environment Operations Act (1997);
- Managing Urban Stormwater: Soils & Construction (NSW Government, 2004);
- NSW State Rivers and Estuaries Policy, NSW Government 1993;
- State Water Management Outcomes Plan (WM Act, 2000); and
- Holroyd Local Environmental Plan 2013.
- Holroyd Development Control Plan 2013

4. Surrounding Environment

4.1 Climate

A summary of the mean rainfall and temperature statistic for the local area, obtained from the Bureau of Meteorology climate station at Bankstown Airport (Site No. 066137). Data for rainfall and temperature was available from a 50 year period between 1968 and 2018.

The mean annual rainfall for the local area is approximately 871.5mm/year. The mean rainfall ranges from 43.1mm to 102.1mm with the greatest rainfall occurring mainly during the summer/early autumn months (Jan – April) (Figure 3).

The annual mean temperature in the area is 23°C and ranges from 17.3°C in the winter month of July up to 28.4°C in the summer month of January.
4.2 Topography

The site is located at an approximate elevation of 13m Australian Height Datum (AHD). The site is generally flat with the western boundary sloping towards the bank of Prospect Creek which has an approximate elevation of 9m AHD.

4.3 Geology and Soils

In reference to the NSW Department of Industry Resource and Energy: Geoscience Information Portal, the site is found to be located within the Penrith geological area. As per the Geological Map of Penrith (Geological Series Sheet 9029-9129, Scale 1:100000, First Edition, 1986), the site’s geology is characterised by materials from the Quaternary period of Pleistocene epoch with key lithology of medium-grained sand, clay, and silt.1

The site is within the Berkshire Park soil landscapes which typically contains brown and yellow Sodosols (Solosols), brown and yellow Xerosols (yellow and brown Podzolic Soils). The topsoils of the terraces are comprised of brown sandy loams and dark brown loamy sands; while the subsoils of the terraces are comprised of brown clayey sands, yellowish brown sandy clays and yellowish brown nodular clay, with abundant iron and manganese nodules (ferromanganiferous nodules).2

---

Based on the Australian Soil Resource Information System (www.asris.csiro.au) ASS risk map and NSW Government Office of Environment and Heritage’s ASS occurrence map (www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm), there is no reported or known occurrence of ASS in the vicinity of the site.

4.4 **Hydrogeology**

The site is within the Moorebank Hydrogeological Landscape, with an unconfined aquifer type in unconsolidated alluvial sediments and unconfined to semi-confined in fractured rock along structures (bedding, joints, faults). Localised perching of water tables can occur above clay-rich layers during wetter seasons. Hydraulic conductivity is moderate to high (10-30m/day); groundwater salinity is fresh to marginal (0.8-1.5 dS/m); and depth to water table to shallow to intermediate (0-8m) \(^2\).

The groundwater borehole search undertaken on 22 May 2018 by SLR indicated that there are two groundwater wells within a radius of 500m from the site. However, no information/report regarding the status, construction and/or depth of the wells was available.

4.5 **Hydrology**

There are no water bodies evident on the Site however Prospect Creek is located approximately 30 m west of the site and flows in a southerly direction towards the Georges River, which is located approximately 4 km to the south. Georges River ultimately ends up in Botany Bay.

Prospect Creek is located within the Prospect Creek Catchment. Prospect Creek Catchment covers an area of 98km\(^2\), is a sub-catchment of the Georges River Catchment and is located approximately 40km south-west of the Sydney Central Business District. The Prospect Reservoir (water distribution dam) is situated at the top end of the Prospect Creek Catchment. The upper catchment area is heavily urbanised and consists largely of industrial developments including industrial areas in Yennora. The mid to lower catchment area consists primarily of residential and commercial developments.

Prospect Creek, which is approximately 20km in length, is a natural waterway with vegetation on the banks. Vegetation on the banks of Prospect Creek within the vicinity of the Site is largely weed growth.

4.5.1 **Flooding**

Based on the flood mapping provided in the Prospect Creek Floodplain Management Plan Review completed for Fairfield City Council in March 2010, the Site is subject to low risk flooding on the majority of the site and high risk flooding along the creek boundary (Figure 4).
5 Site Inspection

A site visit was performed by Joel Cubol, a Project Consultant in SLR’s Land Quality and Remediation team, on 18 May 2018. The main purpose of the site visit was to observe the manufacturing processes and associated activities undertaken at the Site to identify:

- Site operations that generate water usage, estimated quantities/quality;
- Stormwater management;
- Potential for environmental impact; and
- Quality of Prospect Creek.

SLR made the following observations during the site inspection:

- An equipment wash facility is located at the north-western boundary of the site, occupying approximately 35 m², with four 1-m³ settlement pods (in series), a concrete washout bin, a water pump and a sump pit. The facility is covered and has a small bund across the entrance. Water used in the facility is collected and recycled by pumping out the water from the concrete washout bin into the settlement pods where it is re-used. Occasionally the recycled water is substituted by potable water.

- There is a secured storage room for petrol and diesel attached at the southern building of the site as indicated by the following photograph.
It was also observed that various chemicals (such as water based acrylic curing compound and concrete surface retarder) used for concrete panel manufacturing are being stored at the Site. Solvents, degreasers and cleaning agents, located at the northern building, were also observed during the site walkover. All chemicals are stored in bunded or secured areas with spill skits, appropriate labelling and have a fire extinguisher nearby as indicated by the following photographs.
Stormwater generated on site is collected via grated drains and directed to Council’s main drainage system as indicated by the following photograph.

Building down pipes went either directly to ground or into site stormwater drains as indicated by the following photographs.
The water in Prospect creek was clear, stagnant to flowing, and no evidence of contamination nor erosion/sedimentation observed. The riparian zone was observed to have healthy vegetation as indicated in the following photographs.
The majority of the site was covered with hardstand except for landscaped/grass areas located along the small portion of the southern and eastern boundaries.

The unsealed portion of land at the rear of the site along the western site boundary is being used as a materials laydown and concrete stockpiling location.
5.1 **Surface Water Quality Assessment**

SLR also undertook a water quality assessment of Prospect Creek which included the collection and analysis of 3 surface water samples. Samples were collected upstream of the Site (SW-US), adjacent to the Site (SW-MW) and downstream of the Site (SW-DW). Sampling locations are provided in Figure 5. Samples were collected by a suitably qualified and experienced SLR consultant, placed directly into NATA laboratory supplied containers, kept chilled and delivered to the laboratory under standard chain of custody protocols within the specified holding time for laboratory analysis of the following:

- Total recoverable hydrocarbons (TRH);
- Benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN);
- Polycyclic aromatic hydrocarbons (PAHs);
- Organochlorines and organophosphorus pesticides (OPCP/OPPS); and
- Metals (As, Cd, Cr, Cu, Pb, Ni, Zn and Hg).

A duplicate sample was also collected for quality control and assurance purposes.

In-situ parameters were also collected during the sampling program using a calibrated multi-parameter water meter for pH, redox potential, Total Dissolved Solids (TDS) and dissolved oxygen. A copy of the calibration certificate is provided in Appendix A.

Results of the laboratory analysis have been included in Appendix B. Laboratory analytical results can be summarised as follows:

- Concentrations of TRH, BTEX and OPC/OPPS were below the laboratory limit of reporting (LOR);
- Concentrations of copper, nickel and zinc were detected above the laboratory LOR;
- The concentration of copper in the upstream sample (SE-US) (2 μg/L) exceeds the NEPM (2013) groundwater investigation level (GIL) (1.4 μg/L); and
- The concentration of zinc in ranged from 8 μg/L in the midstream sample (SW-MW) to 17 μg/L in the upstream sample (SW-US) which exceed the NEPM (2013) groundwater investigation level (GIL) (8 μg/L).

Given the relatively low concentrations of copper and zinc and the higher concentrations being detected in the upstream sample (SW-US), there is no evidence resulting from this limited sampling program to suggest that the site is impacting surface water in Prospect Creek.

In-situ results (Table 2) indicate a slightly acidic and relatively freshwater.
Table 2: In-situ Surface Water Results

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Samples collected 18/5/2018

Figure 5: Sampling Locations

[Image of sampling locations]
6 Onsite Water Usage and Generation

6.1 Potable Water

Potable water is currently used to supply internal amenity water, water for the concrete finishing process and water used to top up on-site concrete washing processes. Based on the Site's Sydney Water account, (for industrial property at 49 Pine Rd, Fairfield), the 6 month water usage at the Site between October 2017 and March 2018, was approximately 959KL.

6.2 Wastewater

Wastewater from the Site amenities is currently discharged to the public sewer networks with the exception of process wastewater. Based on the 6 month wastewater charges (Sydney Water account for industrial property at 49 Pine Rd, Fairfield) between October 2017 and March 2018, the site generated approximately 858KL of wastewater that was directed to Council as sewage.

Process wastewater generated at the Site (concrete tool and equipment washing, truck wash down and concrete finishing) is captured, recycled, treated via settlement and reused for concrete tool washing activities.

6.3 Stormwater

Stormwater runoff from roofs and hardstand areas, which is the majority of the Site, either runs directly untreated off-site towards Prospect Creek or towards on-site drains that lead to an off-site Council drainage system. It is noted that the proposed development is for change of use only and therefore there will be no additional generation of stormwater runoff as the roof and hardstand areas remain unchanged.

The following activities undertaken on-site can result in contamination of the stormwater if not managed correctly:

- truck movements (hydrocarbons, sediment); not including previous use
- concrete washing and truck wash down (sediment);
- concrete stockpiling (sediment);
- concrete finishing (solvents);
- waste handling and storage; and
- chemical and fuel storage.

Current key stormwater pollutants of concern are considered to be coarse sediment and suspended solids. Other pollutants of concern associated with vehicle movement and other site activities include hydrocarbons, solvents, gross pollutant and heavy metals.
7 Potential Water Impact and Management Methods

7.1 Potable

The project is unlikely to pose a significant impact to potable water usage on-site with the majority of potable water usage being used for amenities. Potable water usage on the site is estimated at approximately 1918 kl/year and wastewater resulting directly from amenity usage is approximately 1716kl/year, indicating approximately 208kl/year of potable water usage is being used for process water (concrete tool and equipment washing). Truck wash down occurs using water brought to site with the concrete trucks.

7.2 Wastewater

Current operations on the site involve the creation of sediment laden wastewater from concrete tool and equipment washing, concrete finishing and truck wash down (Figure 6). All wastewaters are recycled, treated and re-used on site with no wastewater intentionally leaving the site.

The concrete tool and equipment washing activities are undertaken within a sealed covered area that contains a bund along the front of the facility to minimise run-off from the area. The water used here is collected in a sump where it is then pumped to a series of four settlement pods for treatment via settlement. This water is then recycled and reused in the same process.

The truck wash down area is also bunded to mitigate the movement of sediment off site. Any wastewater generated in this area is pumped to the concrete tool and equipment wash sump pit.

A copy of the Management Procedures for concrete tool and truck wash down areas are provided in Appendix C.

The concrete finishing area is also sealed and bunded. The bunded area contains a 1m³ sump, where potable water is used to wash down the concrete treated with CSE Pro 01-400 (solvent based surface deactivator). A copy of the MSDS for CSE Pro is provided in Appendix D. When CSE Pro is used as per application instruction the resulting wastewater should not contain solvents. Water collected in this sump is transferred to the concrete tool wash sump for treatment and re-use in the concrete tool wash area.

In the event the following is implemented the impacts to waterways from wastewaters should be mitigated:

- management and operation of the bunded wash areas is described, implemented and audited under the site’s Environmental Management Plan;
- bunding adequacy assessment undertaken and findings implemented; and
- management of first flush stormwater collected in the bunded areas during rain events.
Figure 5  Wastewater Use, Treatment and Reuse Schematics

Undercover Washdown Area

Truck Washdown Area

[Diagram of wastewater use, treatment, and reuse schematics]

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SLR
7.3 **Stormwater/Flood Quantity and Quality**

Peak flow rates and runoff volumes from the Site will not be increased as a result of the Project as no additional hardstand or buildings are proposed. As a result, runoff volume of the site generated stormwater has not been determined.

The concrete tool and equipment washdown bunded area is covered minimising the collection of rainwater within this bund area. The other bunded areas are not covered and will collect rainwater during rain events. There are no provisions for the collection of first flush waters during rain events. All rainwaters collected within the bunds are visually assessed for sediment prior to release to site drains.

No assessment of the bund adequacy in relation to containment of the necessary quantity of stormwater has been completed as part of this assessment.

Based on the information provided to SLR by Urbis and Precast for this assessment, there is potential for the stormwater run-off to result in contamination of Prospect Creek due to overflow of bunded areas during rain events. Implementation of the following should be mitigated:

- management and operation of the bunded wash areas is described, implemented and audited under the Site's Environmental Management Plan, this will ensure bunds are kept clean of sediment when not in use;
- bunding adequacy assessment undertaken and findings implemented to ensure bund capacity is adequate; and
- management of first flush stormwater collected in the bunded areas during rain events.

7.4 **Contamination and Spills**

Currently fuels and chemicals are stored within sealed and covered or bunded areas mitigating the potential for resulting contamination of Prospect Creek as a result of a spill on Site. Spill kits are also available near the storage areas and staff has been trained in their use. An assessment of bund adequacy in relation to Australian Standards has not been completed as part of this assessment.

7.5 **Groundwater**

Given the majority of the Site ground coverage is impermeable (with the exception of small landscaping areas), and no fuels and/or chemicals are stored underground, the potential for infiltration of contaminants into the groundwater as a result of this development is deemed negligible.

7.6 **Surface Water**

Based on the findings of the site inspection and limited surface water monitoring program of Prospect Creek completed by SLR, the existing development does not appear to have had any significant impact on the surface waters of Prospect Creek.
8 Conclusions

The water assessment indicates that the development and current management measures will adequately control impacts related to:

- Groundwater;
- Soil contamination; and
- Stormwater run-off peak flow rates and volumes.

In the event the following is completed, stormwater quality and its potential to impact the waters of Prospect Creek should be mitigated:

1. Management and operation of the bunded wash areas is described, implemented and audited under the Site’s Environmental Management Plan, this will ensure bunds are kept clean of sediment when not in use and bunded areas are used appropriately by staff.

2. Undertake a bunding adequacy assessment and implement findings/recommendations of the report to ensure bund capacity and position is adequate.

3. Management of first flush stormwater collected in the bunded areas during rain events.

It is considered that if the above measures are implemented on-site they will adequately manage pollutant loading in the stormwater generated on site in relation to the key pollutant of concern (sediment). Implementation of the site’s Environmental Management Plan, in particular adequate housekeeping of hardstand areas and implementation of spill kits) should also reduce any pollutant loading relating to the other potential pollutants (including gross pollutants, hydrocarbons, solvents).

It should also be noted that given the size of the Site in the context of the catchment, any elevated stormwater pollutant load discharges are unlikely to pose a significant impact to the health of ecosystems within the Prospect River Catchment and other downstream waterways.
RENTALS

Equipment Certification Report – TPS 90FLMV Water Quality Meter

This Water Quality Meter has been performance checked and calibrated as follows:

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Check only

- Redox (ORP) *: Electrode operability test 240mV ± 10%
- Battery Status: 3.71V (min 7.2V)
- Electrical Safety Tag attached (AS/NZS 3760)
- Temperature: 72.3°C
- Electrodes Cleaned and checked

Tag No: 004183
Valid to: 21/11/2018
Date: 17/05/2019
Signed: [signature]

Please check that the following items are received and that all items are clean and decontaminated before return. A minimum $30 cleaning / service / repair charge may be applied to any unclean or damaged items. Items not returned will be billed for at the full replacement cost.

Sent Returned Item
☐ ☐ 90FLMV Unit. Osm check/Battery status: 3.71V
☐ ☐ pH sensor with wetting cap, 5m
☐ ☐ Conductivity/TDS/Temperature K=10 sensor, 5m
☐ ☐ Dissolved oxygen YSI/YSI sensor with wetting cap, 5m
☐ ☐ Redox (ORP) sensor with wetting cap, 5m
☐ ☐ Power supply 240V to 12V DC 200mA
☐ ☐ Instruction Manual
☐ ☐ Quick Guide
☐ ☐ Syringes with storage solution for pH and ORP sensors
☐ ☐ Carry Case
☐ ☐ Check to confirm electrical safety (tag must be valid)

Date: 17/05/2019
Signed: [signature]

TFS Reference: 9503410.0 Return Date: 17/05/2019
Customer Reference: 9503410.0 Return Time:
Equipment ID: 90FLMV Equipment Serial No.
Condition on return:

"We do more than give you great equipment... We give you great solutions!"

Phone: (Free Call) 1300 735 855 Fax (Free Call) 1800 876 123 Email: RentalsAU@ThermoFisher.com

Issue 7 Aug 15 G053

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APPENDIX B

Laboratory Analytical Results
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

ANALYTICAL REPORT

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au.environmental.sydney@sgs.com

#18.0607.00300
18/8/2018

G9
0
18/8/2018


Sample #4 - Asbestos found in approx. 0.5cm x 0.5cm sheet fragment.

Asbestos analysed by approved identifier Yusuf Mullapudin.

Akheenar Beniamen
Chemist

Benjie Lo
Senior Organic/Oil & Gas Chemist

Deep Lhong
Metallurgical Team Leader

Kamal Amir
Senior Chemist

Ly Kim He
Organic Section Head

Navin Sivamuniraman
Vigilance Team Leader

SGS Australia Pty Ltd
AR/9 61.2.096 728

Environment, Health and Safety
Unit 16/33 Maddox St.
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1.416 2 8594 0489
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Page 280
### VOCs in Water (AW433) Tested: 22/8/2019:

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<tr>
<th>PARAMETER</th>
<th>SW-LS</th>
<th>SW-MS</th>
<th>SW-D5</th>
<th>SW-D6</th>
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### Analytical Results

**Volatiles Petroleum Hydrocarbons in Water (AN413)**

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<th>01/21/19</th>
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*Units: *μg/L*
### Analytical Results

**TRH (Total Recoverable Hydrocarbons) in Water (AN401) - Tested: 21/5/2019**

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**Note:** The above table shows the analytical results for TRH (Total Recoverable Hydrocarbons) in water tested on 21/5/2019. The values are provided in micrograms per liter (μg/L) with corresponding limits for different analytical methods.
### Analytical Results

**9Am (Polynuclear Aromatic Hydrocarbons) in Water**

Tested: 21/5/2018

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## Analytical Results

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### OP Pesticides in Water [AN420] Tested: 21/5/2018

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ANALYTICAL RESULTS

SE179342 R0
### Analytical Results

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**Tested: 21/5/2019**

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**Mercury (discharged) R: Water (AN11/3/Partly/AN13/2)**

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**SGS**

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**Cumberland Council**

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**Extraordinary Cumberland Local Planning Panel Meeting**

1 May 2019

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EELPP024/19 – Attachment 6
METHOD SUMMARY

The test is carried out by drying (at either 40°C or 80°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.

Unprocessed water samples are filtered through a 0.45 um membrane filter and solidified with nitric acid similar to APHA 2540B.

A portion of sample is digested with nitric acid to decompose organic matter and hydronitric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis, based on USEPA method 3050G and 3050E.

Mercury by Gold Vapor AAS in Water: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapor is purged by nitrogen into a cold cell with an atomic absorption spectrometer or mercury analyzer. Quantification is made by comparing absorbencies to those of the calibration standards. References APHA 3112B/5050E.

Mercury by Gold Vapor AAS in Soil: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are stabilized by barium chloride solution and acidic. The is elemental mercury. This mercury vapor is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyzer. Quantification is made by comparing absorbencies to those of the calibration standards. References APHA 3112B/5050E.

Determination of elements at trace levels in water by ICP-MS technique, in accordance with USEPA 9070A.

Total Recoverable Hydrocarbons: Determination of hydrocarbons by gas chromatography after a solvent extraction: Baldistin is by flame ionization detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four aliphatic groupings based on the carbon chain length of the compounds: C6-C8, C9-C14, C15-C20 and C22-C26 and in recognition of the NIEP 1999 (2003), >C15-C16 (F2), >C16-C20 (F3) and >C24-C26 (F4). F2 is reported directly and also corrected by subtracting Methanethiol (from VOC method AN335) which is available.

Additionally, the volatile C6-C8 fraction may be determined by a purge and trap technique and GC/MS because of its propriety for volatile trace. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis and silicon gel cleanup of the sample extract. Aliphatic/Aromatic Fraction follows the same method of analysis after fractionation of the solvent extraction solution with differential polarity of the extract solvents.

The GC/MS method is not well suited to the analysis of refined high boiling point materials (i.e. lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phthalates and PAHs if they are present at sufficient levels, dependent on the use of apatite cleanup/derivatization techniques. Reference USEPA 8015B, 8016B.

SVOCs (Selected Volatile Organic Compounds) (SVOCs) including OC, OP, PCP, Herbicides, PAH, Phthalates and Specified Phenols (i.e. in soils, sediments and waters are determined by GC/MS/EC with appropriate solvent extraction process (based on USEPA 3500C and 8270B).

SVOC Compounds: Semi/Non-Volatile Organic Compounds (SVOCs) including OC, OP, PCP, Herbicides, PAH, Phthalates and Specified Phenols in soils, sediments and waters and waters are determined by GC/MS/EC with the appropriate solvent extraction process (based on USEPA 3500C and 8270B).

VOCs and C6-C8 Hydrocarbons by GC-MS PEP: VOCs are volatile organic compounds. This sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a mass spectrometer (MS). Solid samples are initially extracted with methanol while liquid samples are processed directly. References USEPA 3500C, 8270B, 8270D.

Qualitative identification of clay types, arable and coals/coal in bulk samples by polarized light microscopy (PLM) in conjunction with dispersant staining (DS) AS4664 provides the basis for this document. Unequivocal identification of the asbestos minerals present in made by obtaining sufficient diagnostic 'fibres', which provides a reasonable degree of certainty that any staining is a montage of 'fibres'. If positive identification, then 'fibres' are absent, then possible identification as asbestos is not possible. This procedure requires removal of suspect fibres from the sample which cannot be returned.

Fibres material that cannot be unequivocally identified as one of the three asbestos forms, will be reported as unknown mineral fibres (UMF). This fibre detected may or may not be asbestos fibres.

AS4664:2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4. Trace Analysis with DRS. Not a scale/1. Depending upon sample condition and fibre type, the detection limit of this technique has been found to be generally in the range of 1 in 1,000 to 1 in 1,000,000 parts by weight, equivalent to 1 to 0.1 pg/g.
METHOD SUMMARY

The sample can be reported "no asbestos found at the reporting limit of 0.1 µg/kg" (<0.2avourites/1E6) where a 3/4 of this method has been followed, and if

(a) no asbestos fibres have been detected (i.e. no respirable fibres);
(b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1 µg/kg and
(c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

Samples analysed as received.
Solid samples expressed on a dry-weight basis.

Where "Total" analyte groups are reported (for example, Total PMHs, Total OC Polychlorides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as "LOD" being assumed to be zero. The sum of the (Total) LOD of reporting is calculated by summing the individual analyte LODs and dividing by two. For example, where 18 individual analytes are being reported and each has an LOD of 5.1 mg/kg, the "Total" LOD will be 1.65 mg/kg (0.37 mg/kg). Where only 2 analytes are being reported, the "Total" LOD will be the sum of those two LODs.

Some totals may not appear to add up because the total is rounded off after adding the individual LODs.

If reported, measurement uncertainty follows the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SDP, ratios only or grade radioactivity assessment are expressed as backscatter (Bq) per unit of mass or volume or per page as stated on the report. Backscatter is the 60 Co count for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

d. For results reported for samples tested under test methods with codes starting with ARS-SDP, less than (±) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The acceptance detection limits have been calculated in accordance with ISO 11267.

The QC criteria are subject to internal review according to the SGS QA/DACO plan and may be provided on request or alternatively can be found here:

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This report must not be reproduced, except in full.
STATEMENT OF QA/QC PERFORMANCE

<table>
<thead>
<tr>
<th>Client Details</th>
<th>Manager</th>
<th>Address</th>
</tr>
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<tbody>
<tr>
<td>Joel Cubil</td>
<td>Huong Crawford</td>
<td>SGS Alexandria Environmental</td>
</tr>
<tr>
<td>SLR CONSULTING AUSTRALIA PTY LTD</td>
<td></td>
<td>Unit 18, 33 Madow St</td>
</tr>
<tr>
<td>Leop Building, 2 Lincoln Street</td>
<td></td>
<td>Alexandria NSW 2015</td>
</tr>
<tr>
<td>PO Box 175 NSW, LANE COVE 1530</td>
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<tr>
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<td>02 9427 8200</td>
<td>+61 2 9354 0460</td>
</tr>
<tr>
<td>Facsimile</td>
<td>Email</td>
<td>Email</td>
</tr>
<tr>
<td>+61 2 9354 0461</td>
<td><a href="mailto:slr@slrconsulting.com">slr@slrconsulting.com</a></td>
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<td><a href="mailto:su.admin@mental.sydney">su.admin@mental.sydney</a>@sgs.com</td>
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<td><a href="mailto:su.admin@mental.sydney">su.admin@mental.sydney</a>@sgs.com</td>
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All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chair of Custody document and was supplied by the Client. This QA/QC Statement must be read in conjunction with the referenced Analytical Report. The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

- **Elevated**
  - Total Hydrocarbons (LtoA, LtoB, LtoA/B, LtoB/B, AtoB, AtoB/B) by GC/MS
  - 1.0ppm

- **Below Limit**
  - Total Chlorinated Hydrocarbons (LtoA, LtoB, LtoA/B, LtoB/B, AtoB, AtoB/B) by GC/MS

Sample classification

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<th>Sample Classification</th>
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<td>Sample container provider</td>
<td>SGS</td>
<td>Yes</td>
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<td>Samples received in correct containers</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Date documentation received</td>
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<td>Sample temperature upon receipt</td>
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<td>Turnaround time requested</td>
<td>Standard</td>
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<tr>
<td>Environment, Health and Safety</td>
<td>Unit 18, 33 Madow St</td>
<td>Alexandria NSW 2015</td>
</tr>
<tr>
<td>PO Box 6432 Source Public</td>
<td>Australia</td>
<td>+61 2 9354 0460</td>
</tr>
<tr>
<td><a href="http://www.sgs.com.au">www.sgs.com.au</a></td>
<td></td>
<td></td>
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</table>
# HOLDING TIME SUMMARY

SGS holding time criteria are shown from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref. CUM/LS/ENV/361). Soil sample guidelines are derived from NERM Schedule B(1) (Guideline on Laboratory Analysis of Potentially Contaminated Soils). Water sample guidelines are derived from "AS(222) S647.1-96 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition (2005).

Holding and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and shall be considered valid.

Holding and analysis dates are shown in Green when within suggested criteria or in Red with an appended dagger symbol (‡) when criteria suggests exclusion. If the sample date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

### Usable Petroleum Hydrocarbons in Water

<table>
<thead>
<tr>
<th>Schedule Name</th>
<th>Sample No.</th>
<th>Code</th>
<th>Sample Date</th>
<th>Analysed Date</th>
<th>Extraction Date</th>
<th>Refract. Date</th>
<th>Analysis Date</th>
<th>Analysed Date</th>
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<tr>
<td>ENS/24</td>
<td>ENS178604.32</td>
<td>LN13</td>
<td>18 May 2018</td>
<td>02 May 2018</td>
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## Surrogates

### SE179342 R0

**Extraordinary Cumberland Local Planning Panel Meeting**

**1 May 2019**

**Attachment 6**

### Sample Results

#### Test Results for Soil

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample Name</th>
<th>Sample Number</th>
<th>Units</th>
<th>Criteria</th>
<th>Recovery %</th>
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</thead>
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<tr>
<td>Test Name 1</td>
<td>Test 1</td>
<td>E01</td>
<td>%</td>
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<td>100</td>
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<tr>
<td>Test Name 2</td>
<td>Test 2</td>
<td>E02</td>
<td>%</td>
<td>0.00</td>
<td>100</td>
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<tr>
<td>Test Name 3</td>
<td>Test 3</td>
<td>E03</td>
<td>%</td>
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<tr>
<td>Test Name 4</td>
<td>Test 4</td>
<td>E04</td>
<td>%</td>
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#### Test Results for Water

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<thead>
<tr>
<th>Parameter</th>
<th>Sample Name</th>
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<th>Units</th>
<th>Criteria</th>
<th>Recovery %</th>
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</thead>
<tbody>
<tr>
<td>Test Name 1</td>
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### Additional Notes

- All sample surrogates were recoverable for the specified methods.
- Criteria met for all tests.
- Recovery rates exceed the minimum required.
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<tr>
<th>Parameter</th>
<th>Sample Name</th>
<th>Sample Number</th>
<th>Units</th>
<th>Criteria</th>
<th>Recovery %</th>
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<tbody>
<tr>
<td><strong>PAH (Perylene Aromatic Hydrocarbons) in Water</strong> (continued)</td>
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<td>4-ethylphenyl (Surrogates)</td>
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<tr>
<td>SGS</td>
<td>SE179342009</td>
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<td>DAPR</td>
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<td>48 - 100%</td>
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<td>4-tert-eicosyl (Surrogates)</td>
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### Volatile Petroleum Hydrocarbons in Water

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### 4,4-Disulphoalkane (g/m³)

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### 4,4-Dibenzene (g/m³)

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### 4,4-Di-thiophane (g/m³)

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### Method Blanks

#### Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

**SGS**

**SE179342 R0**

#### Memory (Absorbed) in Water

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#### Memory in Soil

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#### DOC Pesticides in Soil

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#### DOC Possibilities in Water

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**EELPP024/19 – Attachment 6**
## METHOD BLANKS

**SE179342 R0**

<table>
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<td>EEC (Parent)</td>
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**Note:** LOQ values are given in µg L⁻¹ for Linuron, EDC (Parent), EEC (Parent), EEC (Stearate), EEC (Fatty Acid), EEC (Pentafluoro), EEC (Octafluoro), and EEC (Decafluoro).
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<tr>
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<tr>
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**Total Recoverable Elements in Soil/Soil Matrix, by QPES:**

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**Total Recoverable Elements in Water (QPES):**

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**SGS**

**METHOD BLANKS**

**SE179342 R0**

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**Extraordinary Cumberland Local Planning Panel Meeting**

**1 May 2019**

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**Method: ME-468**

**Attachment 6**

---

**Sample Number** | **Parameter** | **Units** | **LOQ** | **Result**
---|---|---|---|---
LE142623.31 | TRH (Total Recoverable Hydrocarbons) in Water (measured) | | | |
LE142623.31 | VODC in Soil | | | |
LE142623.31 | VODC in Water | | | |
LE142623.31 | Volatile Petroleum Hydrocarbons in Soil | | | |
LE142623.31 | Volatile Petroleum Hydrocarbons in Water | | | |
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### DUPLICATES

#### SE179342 R0

**Description**

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: **RPD = |Original - Duplicate| / Original x 100%**. The RPD is compared against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a box calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: **MAD = [0.5 x SDL] + LR**.

#### DUPLICATE DETAILS

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#### ATTACHMENT 6

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**Table 1:**

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**Figure:**

Graphical representation of duplicate data, showing relative percentage differences.

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**Table 2:**

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**Figure:**

Graphical representation of duplicate data, showing relative percentage differences.

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**Table 3:**

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**Figure:**

Graphical representation of duplicate data, showing relative percentage differences.
### OP Positions in Soil (continued)

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### OP Parameters in Soil (continued)

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<tr>
<td>PCA</td>
<td>mpy</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
<td>PCA</td>
<td>mpy</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
<td>PCA</td>
<td>mpy</td>
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<td>0.3</td>
<td>0.3</td>
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</tr>
<tr>
<td>PCA</td>
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<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
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<td>mpy</td>
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<td>0.3</td>
<td>0.3</td>
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</table>

### OP Parameters in Soil (continued)

<table>
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<th>Original</th>
<th>Duplicate</th>
<th>Criteria</th>
<th>%</th>
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<tr>
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<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
<td>PCA</td>
<td>mpy</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
<td>PCA</td>
<td>mpy</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
<td>PCA</td>
<td>mpy</td>
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<td>0.3</td>
<td>0.3</td>
<td>30</td>
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<tr>
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<td>mpy</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
<td>PCA</td>
<td>mpy</td>
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<td>0.3</td>
<td>0.3</td>
<td>30</td>
</tr>
</tbody>
</table>
### DUPLICATES

**SE179342 R0**

Duplicates are estimated as Relative Percentage Difference (RPD) using the formula: RPD = |Original - Duplicate| / Average x 100 /

Where the Maximum Allowable Difference is a number larger than 200 bids displayed as 300.

RPD is shown in Green when within suggested criteria or Red with an asterisk suggests identifier when outside suggested criteria. Refer to the Tableau sections at the end of this report for failure reasons.

### NHM (Polynuclear Aromatic) | Hydrocarbons in Water

<table>
<thead>
<tr>
<th>Original</th>
<th>Duplicate</th>
<th>Units</th>
<th>LDR</th>
<th>Original</th>
<th>Duplicate</th>
<th>Criteria %</th>
<th>RPD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>naphthene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Acenaphthene</td>
<td>acenathene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Phenanthrene</td>
<td>phenathrene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Fluoranthene</td>
<td>fluorathene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Pyrene</td>
<td>pyrene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Benzo(a)anthracene</td>
<td>benzo(a)anthracene</td>
<td>g/L</td>
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<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
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<td>benzo(a)pyrene</td>
<td>g/L</td>
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<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Benzo(b)fluoranthene</td>
<td>benzo(b)fluoranthene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Benzo(k)fluoranthene</td>
<td>benzo(k)fluoranthene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyrene</td>
<td>indeno(1,2,3-cd)pyrene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Dibenzo(ghi)perylene</td>
<td>dibenzo(ghi)perylene</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Total PAH</td>
<td>total PAH</td>
<td>g/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
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</tbody>
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### NHM (Polynuclear Aromatic) | Hydrocarbons in Soil

<table>
<thead>
<tr>
<th>Original</th>
<th>Duplicate</th>
<th>Units</th>
<th>LDR</th>
<th>Original</th>
<th>Duplicate</th>
<th>Criteria %</th>
<th>RPD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acenaphthene</td>
<td>acenathene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Phenanthrene</td>
<td>phenathrene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Fluoranthene</td>
<td>fluorathene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Pyrene</td>
<td>pyrene</td>
<td>mg/kg</td>
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<td>0.1</td>
<td>0.1</td>
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<td>9</td>
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<tr>
<td>Benz(a)anthracene</td>
<td>benzo(a)anthracene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Benz(a)pyrene</td>
<td>benzo(a)pyrene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Benz(b)fluoranthene</td>
<td>benzo(b)fluoranthene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
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<tr>
<td>Benz(k)fluoranthene</td>
<td>benzo(k)fluoranthene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyrene</td>
<td>indeno(1,2,3-cd)pyrene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Dibenzo(ghi)perylene</td>
<td>dibenzo(ghi)perylene</td>
<td>mg/kg</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>300</td>
<td>9</td>
</tr>
<tr>
<td>Total PAH</td>
<td>total PAH</td>
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<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
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</table>
### Total Recreant Elements in Soil/Weeds/Plants/Soils/Bases by LCPEES (continued)

<table>
<thead>
<tr>
<th>Element</th>
<th>Mean</th>
<th>SD</th>
<th>+/- Mean</th>
<th>RSD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic, As</td>
<td>0.03</td>
<td>0.01</td>
<td>0.07</td>
<td>22</td>
</tr>
<tr>
<td>Cadmium, Cd</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>12</td>
</tr>
<tr>
<td>Chromium, Cr</td>
<td>0.02</td>
<td>0.01</td>
<td>0.03</td>
<td>14</td>
</tr>
<tr>
<td>Copper, Cu</td>
<td>0.03</td>
<td>0.01</td>
<td>0.05</td>
<td>16</td>
</tr>
<tr>
<td>Lead, Pb</td>
<td>0.02</td>
<td>0.01</td>
<td>0.03</td>
<td>15</td>
</tr>
<tr>
<td>Zinc, Zn</td>
<td>0.03</td>
<td>0.01</td>
<td>0.05</td>
<td>16</td>
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</tbody>
</table>

### Trace Metals (Crossed) in Water by DCP/GIN

<table>
<thead>
<tr>
<th>Element</th>
<th>Mean</th>
<th>SD</th>
<th>+/- Mean</th>
<th>RSD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic, As</td>
<td>0.03</td>
<td>0.01</td>
<td>0.07</td>
<td>22</td>
</tr>
<tr>
<td>Cadmium, Cd</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>12</td>
</tr>
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<td>0.02</td>
<td>0.01</td>
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<td>14</td>
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<td>0.03</td>
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</tr>
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<td>0.02</td>
<td>0.01</td>
<td>0.03</td>
<td>15</td>
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<tr>
<td>Zinc, Zn</td>
<td>0.03</td>
<td>0.01</td>
<td>0.05</td>
<td>16</td>
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</tbody>
</table>

**Footnote:** Refer to the footnotes section at the end of the document for additional information.
## DUPLICATES

### SE179342 R0

The following table presents data on various parameters related to soil and water quality. The data includes Original and Duplicate values measured in different units. The methods used for measurement are indicated, along with the criteria and RPD %. The table is divided into sections for different types of substances or elements, such as Metals in Soil, Asbestos in Water, etc.

### Metals in Soil

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Original</th>
<th>Duplicate</th>
<th>Criteria</th>
<th>RPD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIM 0-Cu</td>
<td>mg/L</td>
<td>455</td>
<td>460</td>
<td>5</td>
<td>205</td>
</tr>
<tr>
<td>TIM 0-Cu</td>
<td>mg/L</td>
<td>860</td>
<td>860</td>
<td>5</td>
<td>203</td>
</tr>
<tr>
<td>TIM 0-Fs</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
</tr>
<tr>
<td>TIM 0-Cu</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
</tr>
<tr>
<td>IM 0-Cu</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
</tr>
<tr>
<td>IM 0-Cu</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
</tr>
<tr>
<td>IM 0-Cu</td>
<td>mg/L</td>
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<td>83</td>
<td>3</td>
<td>207</td>
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</table>

### Metals in Water

<table>
<thead>
<tr>
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<th>Units</th>
<th>Original</th>
<th>Duplicate</th>
<th>Criteria</th>
<th>RPD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>455</td>
<td>460</td>
<td>5</td>
<td>205</td>
</tr>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>860</td>
<td>860</td>
<td>5</td>
<td>203</td>
</tr>
<tr>
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<td>mg/L</td>
<td>80</td>
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<td>3</td>
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<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
</tr>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
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</table>

### Asbestos in Water

<table>
<thead>
<tr>
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<th>Original</th>
<th>Duplicate</th>
<th>Criteria</th>
<th>RPD %</th>
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</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>455</td>
<td>460</td>
<td>5</td>
<td>205</td>
</tr>
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<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
</tr>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
<td>207</td>
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</table>

### Asbestos in Soil

<table>
<thead>
<tr>
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<th>Duplicate</th>
<th>Criteria</th>
<th>RPD %</th>
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</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>455</td>
<td>460</td>
<td>5</td>
<td>205</td>
</tr>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>860</td>
<td>860</td>
<td>5</td>
<td>203</td>
</tr>
<tr>
<td>Asbestos</td>
<td>mg/L</td>
<td>80</td>
<td>83</td>
<td>3</td>
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<tr>
<td>Asbestos</td>
<td>mg/L</td>
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<tr>
<td>Asbestos</td>
<td>mg/L</td>
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### Veinite Petroleum hydrocarbons in Soil

<table>
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<th>Duplicate</th>
<th>Criteria</th>
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</thead>
<tbody>
<tr>
<td>TIM 0-Cu</td>
<td>455</td>
<td>460</td>
<td>5</td>
<td>205</td>
</tr>
<tr>
<td>TIM 0-Cu</td>
<td>860</td>
<td>860</td>
<td>5</td>
<td>203</td>
</tr>
<tr>
<td>TIM 0-Fs</td>
<td>80</td>
<td>83</td>
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<td>207</td>
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<tr>
<td>IM 0-Cu</td>
<td>80</td>
<td>83</td>
<td>3</td>
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</tr>
<tr>
<td>IM 0-Cu</td>
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<td>83</td>
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<td>207</td>
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</tbody>
</table>

The table continues with similar data for other substances and elements, providing a comprehensive overview of the analytical results.
### Volatile Potassium Hydroxylamine in Soil (continued)

<table>
<thead>
<tr>
<th>Sample</th>
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<th>Parameter</th>
<th>Unit</th>
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<th>Original</th>
<th>Duplicate</th>
<th>Column C%</th>
<th>RPD %</th>
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<tbody>
<tr>
<td>EELPP/24/19</td>
<td>1 May 2019</td>
<td>Residue</td>
<td>mg/g</td>
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<td>&lt; 1</td>
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<tr>
<td>EELPP/24/19</td>
<td>1 May 2019</td>
<td>Residue</td>
<td>mg/g</td>
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<td>0.4</td>
<td>0.3</td>
<td>30</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

### Volatile Potassium Hydroxylamine in Water

<table>
<thead>
<tr>
<th>Sample</th>
<th>Date/Time</th>
<th>Parameter</th>
<th>Unit</th>
<th>LN</th>
<th>Original</th>
<th>Duplicate</th>
<th>Column C%</th>
<th>RPD %</th>
</tr>
</thead>
<tbody>
<tr>
<td>EELPP/24/19</td>
<td>1 May 2019</td>
<td>Residue</td>
<td>mg/l</td>
<td>0.5</td>
<td>0.6</td>
<td>0.3</td>
<td>30</td>
<td>&lt; 1</td>
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<td>LCR</td>
<td>Result</td>
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<td>--------</td>
<td>----------</td>
<td></td>
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</tr>
<tr>
<td>Nitrate</td>
<td>mg/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Nitrite</td>
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<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfates</td>
<td>mg/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphates</td>
<td>mg/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkalinity</td>
<td>mg/L</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td>μS/cm</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td></td>
<td>6.5</td>
<td>6.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All results are within the expected range.
### Laboratory Control Samples

**Method:** MI (AU) EPN/9342

#### Table 1: Total Recoverable Elements in Waste (Mass% by ICP-OES)

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Parameter</th>
<th>Units</th>
<th>LOR</th>
<th>Result</th>
<th>Expected</th>
<th>Criteria</th>
<th>Recovery</th>
</tr>
</thead>
</table>
| 1562605022    | As       | mg/kg | 5.0 | 5.0    | 4.5      | 5.0      | 100.0%
| 1562605022    | Cd       | mg/kg | 0.5 | 0.5    | 0.4      | 0.6      | 100.0%
| 1562605022    | Cu       | mg/kg | 0.5 | 0.5    | 0.4      | 0.6      | 100.0%
| 1562605022    | Cr        | mg/kg | 0.5 | 0.5    | 0.4      | 0.6      | 100.0%
| 1562605022    | Mn       | mg/kg | 0.5 | 0.5    | 0.4      | 0.6      | 100.0%
| 1562605022    | Ni       | mg/kg | 0.5 | 0.5    | 0.4      | 0.6      | 100.0%
| 1562605022    | Zn       | mg/kg | 0.5 | 0.5    | 0.4      | 0.6      | 100.0%

#### Table 2: Trace Elements (Classified in Waste by ICP-OES)

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Parameter</th>
<th>Units</th>
<th>LOR</th>
<th>Result</th>
<th>Expected</th>
<th>Criteria</th>
<th>Recovery</th>
</tr>
</thead>
</table>
| 1562605022    | As       | pg/L  | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Cd       | pg/L  | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Cu       | pg/L  | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Cr        | pg/L  | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Mn       | pg/L  | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Ni       | pg/L  | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Zn       | pg/L  | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%

#### Table 3: Inorganic Nitrogenous Compounds in Waste

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Parameter</th>
<th>Units</th>
<th>LOR</th>
<th>Result</th>
<th>Expected</th>
<th>Criteria</th>
<th>Recovery</th>
</tr>
</thead>
</table>
| 1562605022    | Function  |         | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Function  |         | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%
| 1562605022    | Function  |         | 0.1 | 0.1    | 0.0      | 0.1      | 100.0%

---

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### Laboratory Control Samples

**SE179342 R0**

Laboratory Control Samples (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan [Ref. MP-ALUS-QA/QC-D02]. For more information refer to the beginning of the corresponding page of this report.

Recovery is shown in **Green** when within suggested criteria; **Red** with an unsatisfactory flagged when outside suggested criteria.

#### VCOs in Soil (continued)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>LOQ</th>
<th>Result</th>
<th>Expected</th>
<th>Criteria %</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staining Compound</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monocrotaline</td>
<td>ppm</td>
<td>0.2</td>
<td>4.6</td>
<td>5.0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Azinphos</td>
<td>ppm</td>
<td>0.8</td>
<td>2.1</td>
<td>2.5</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Sulfathiazole</td>
<td>ppm</td>
<td>0.2</td>
<td>4.7</td>
<td>5.0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Captan</td>
<td>ppm</td>
<td>0.6</td>
<td>9.5</td>
<td>10.0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Dichlorvos</td>
<td>ppm</td>
<td>0.6</td>
<td>2.3</td>
<td>2.5</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Dinocap</td>
<td>ppm</td>
<td>0.8</td>
<td>7.4</td>
<td>8.0</td>
<td>100</td>
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#### VCOs in Water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>LOQ</th>
<th>Result</th>
<th>Expected</th>
<th>Criteria %</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staining Compound</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.6</td>
<td>0.8</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Azinphos</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chlorobenzene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>n-Propylbenzene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Isoamylbenzene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Sulfathiazole</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

#### Volatile Organic Hydrocarbons in Soil

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>LOQ</th>
<th>Result</th>
<th>Expected</th>
<th>Criteria %</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staining Compound</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dichlorvos</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Dichlorvos</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

#### Volatile Organics Hydrocarbons in Water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>LOQ</th>
<th>Result</th>
<th>Expected</th>
<th>Criteria %</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staining Compound</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dichlorvos</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Dichlorvos</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>ppm</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
### Matrix Spikes

**SE179342 R0**

#### Mercury (observed) in Water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Lower</th>
<th>Result</th>
<th>Original Spike</th>
<th>Necessary %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total DMM/DM</td>
<td>mg/L</td>
<td>1.47</td>
<td>&lt;0.5</td>
<td>&gt;2</td>
<td>&gt;2</td>
</tr>
</tbody>
</table>

#### Method: ME (AUS) ENV/44021.

### COD Samples in Soil

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Lower</th>
<th>Result</th>
<th>Original Spike</th>
<th>Necessary %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total DMM/DM</td>
<td>mg/L</td>
<td>1.47</td>
<td>&lt;0.5</td>
<td>&gt;2</td>
<td>&gt;2</td>
</tr>
</tbody>
</table>

#### Method: ME (AUS) ENV/44021.
### MATRIX SPIKES

#### SE179342 R0

**Method:** WE (AO) [ENV/9432]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Lower</th>
<th>Upper</th>
<th>Result</th>
<th>Origin</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antracene</td>
<td>mg/kg</td>
<td>0.51</td>
<td>0.64</td>
<td>0.39</td>
<td>0.39</td>
<td>0.91</td>
</tr>
<tr>
<td>Acenaphthene</td>
<td>mg/kg</td>
<td>0.34</td>
<td>0.45</td>
<td>0.25</td>
<td>0.25</td>
<td>0.52</td>
</tr>
<tr>
<td>Phenanthrene</td>
<td>mg/kg</td>
<td>0.12</td>
<td>0.19</td>
<td>0.1</td>
<td>0.1</td>
<td>0.68</td>
</tr>
<tr>
<td>Benzo(a)anthracene</td>
<td>mg/kg</td>
<td>0.08</td>
<td>0.13</td>
<td>0.05</td>
<td>0.05</td>
<td>0.63</td>
</tr>
<tr>
<td>Chrysene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Benzo(b)fluoranthene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Benzo(k)fluoranthene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Benzo(g,h,i)perylene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyrene</td>
<td>mg/kg</td>
<td>0.02</td>
<td>0.05</td>
<td>0.01</td>
<td>0.01</td>
<td>100</td>
</tr>
</tbody>
</table>

**Total Reconcilable Elements in SU/Water/Soil/Materials by ICP/MS:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Lower</th>
<th>Upper</th>
<th>Result</th>
<th>Origin</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic As</td>
<td>mg/kg</td>
<td>0.03</td>
<td>0.06</td>
<td>0.03</td>
<td>0.03</td>
<td>100</td>
</tr>
<tr>
<td>Cadmium</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Chromium</td>
<td>mg/kg</td>
<td>0.08</td>
<td>0.13</td>
<td>0.05</td>
<td>0.05</td>
<td>0.63</td>
</tr>
<tr>
<td>Copper</td>
<td>mg/kg</td>
<td>0.01</td>
<td>0.05</td>
<td>0.01</td>
<td>0.01</td>
<td>100</td>
</tr>
<tr>
<td>Nickel</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Zinc</td>
<td>mg/kg</td>
<td>0.03</td>
<td>0.06</td>
<td>0.03</td>
<td>0.03</td>
<td>100</td>
</tr>
</tbody>
</table>

**Trim (Total Methylated Hydrocarbons in SU):**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Lower</th>
<th>Upper</th>
<th>Result</th>
<th>Origin</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trimethylbenzene</td>
<td>mg/kg</td>
<td>0.03</td>
<td>0.06</td>
<td>0.03</td>
<td>0.03</td>
<td>100</td>
</tr>
<tr>
<td>Toluene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Methanol</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Ethanol</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Diethylamine</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>mg/kg</td>
<td>0.01</td>
<td>0.05</td>
<td>0.01</td>
<td>0.01</td>
<td>100</td>
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</tbody>
</table>

**Other Analytes:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Lower</th>
<th>Upper</th>
<th>Result</th>
<th>Origin</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Toluene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Ethanol</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Diethylamine</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

**Total:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Lower</th>
<th>Upper</th>
<th>Result</th>
<th>Origin</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Toluene</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Ethanol</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Diethylamine</td>
<td>mg/kg</td>
<td>0</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

---

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### MATRIX SPIKES

### SE179342 R0

Matrix Spike (MS) results are evaluated on the percentage recovery of an expected result, typically the concentration of analyte spiked into a field subsample during the sample preservation stage. The original sample is spiked before the sub-sample is created to determine the percentage recovery. The column applied to the results is established in the SGS QA/QC plan (Ref. MP4A8-ENV/94/483). For more information refer to the footnotes in the concluding stage of handwritten notes.

**Recovery is shown in italics where within suggested criteria or field with an appended source identifier (when outside suggested criteria). Refer to the footnote section at the end of this presentation material.**

<table>
<thead>
<tr>
<th>VOC in Water</th>
<th>Method: NEA (W) ENV/94/483</th>
<th>Units</th>
<th>LCL</th>
<th>ORG</th>
<th>Spike</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QC Sample</strong></td>
<td><strong>Sample Number</strong></td>
<td><strong>Parameter</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06-120-300</td>
<td>06-120-300</td>
<td><strong>Toluene</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>43.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Ethylbenzene</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>15.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Styrene</strong></td>
<td>μg/L</td>
<td>1</td>
<td>&lt;1</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Isopropylbenzene</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>41.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Propionaldehyde</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>15.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Acetone</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>41.60</td>
</tr>
</tbody>
</table>

### Volatile Organic Hydrocarbons in Soil

<table>
<thead>
<tr>
<th>VOC in Soil</th>
<th>Method: NEA (W) ENV/94/483</th>
<th>Units</th>
<th>LCL</th>
<th>ORG</th>
<th>Spike</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QC Sample</strong></td>
<td><strong>Sample Number</strong></td>
<td><strong>Parameter</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06-120-300</td>
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<td><strong>Toluene</strong></td>
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<td></td>
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<td>0.00</td>
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<td></td>
<td></td>
<td><strong>Acetone</strong></td>
<td>μg/g</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>41.60</td>
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</tbody>
</table>

### Volatile Petroleum Hydrocarbons in Water

<table>
<thead>
<tr>
<th>VOC in Water</th>
<th>Method: NEA (W) ENV/94/483</th>
<th>Units</th>
<th>LCL</th>
<th>ORG</th>
<th>Spike</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QC Sample</strong></td>
<td><strong>Sample Number</strong></td>
<td><strong>Parameter</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06-120-300</td>
<td>06-120-300</td>
<td><strong>Toluene</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>43.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Ethylbenzene</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>15.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Styrene</strong></td>
<td>μg/L</td>
<td>1</td>
<td>&lt;1</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Isopropylbenzene</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>41.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Propionaldehyde</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>15.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Acetone</strong></td>
<td>μg/L</td>
<td>0.5</td>
<td>&lt;0.5</td>
<td>41.60</td>
</tr>
</tbody>
</table>

**Footnotes:**
- For more information, refer to the footnotes in the concluding stage of this presentation material.
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

MATRIX SPIKE DUPLICATES

Relative Percent Difference (RPD) using the formula:

\[ \text{RPD} = \left| \frac{\text{Original Result} - \text{Duplicate Result}}{\text{Original Result}} \right| \times 100 / \text{Mean} \]

The original result is the analyte concentration of the matrix spike. The duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Minimum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limit of Reporting (LR) using the formula:

\[ \text{MAD} = 6.05 \times \text{SDL} / \text{Mean} + \text{LR} \]

Where the Maximum Allowable Difference evaluates to a number larger than 20%, it is displayed as 20%.

RPD is shown in grey when within suggested criteria, or red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of the transport for failure reasons.
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

SGS

FOOTNOTES

SE179342 R0

Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

SGS

FOOTNOTES

SE179342 R0

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here:

EELPP024/19
Attachment 6
Page 316

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APPENDIX C

Concrete Waste Procedure
APPENDIX D

CSE Pro MSDS
is with a high-pressure water-jet. It is also possible to brush the panels and then to subsequently wash them.

Cleaning of the moulds

Mould aids of release agents are neither recommended nor necessary, as they can reduce the abrasion-resistance of the BEA-coating. If CSE Pro is used economically, sweeping the moulds with a scraper will clean them. It can be helpful to wait for 20–30 minutes after the demoulding/stripping of the panel, because within that time the most residue on the mould has dried out and has become dry enough to be removed from the mould surface very easily. In special cases RSE-Reiniger (RSE-Cleaner) can be used. RSE-Reiniger should also be used to clean rollers or spraying equipment (do not use water).

If CSE Pro is applied appropriately and competently (thin coating), no traces of the active ingredients of the CSE Pro can be found in the washing water. The active ingredients are completely used up during the reaction with the concrete.

Coverage

Depending on the absorbency of the mould-surface, 1 kg for approx. 10–15 sqm.

Packaging

20 kg in Gal. Part, 220 kg in drums.

Storage

Shed in sealed container and in a cool and ventilated room. Can be stored for approx. 12 months in original container. Open containers should be closed again immediately after use.
**Product Description**

CSE Pro (Formerly HEBALANAL BEA) is a solvent-based (free of toluene or other aromatic hydrocarbons) surface deactivator for the production of exposed aggregate concrete surfaces in all exposure depths, from micro-exposure to the coarsest exposed aggregate concrete. CSE Pro functions reliably even under the most difficult application circumstances.

**Fields of Application**

CSE Pro can be used for all concrete surfaces with the highest requirements in every respect, above all for complicated elements with horizontal or vertical, smooth, structured or angular moulds, commonly known as architectural concrete, where other products often fail. For example, precast walls, panels, small decorative concrete units, driveways, etc.

**Advantages in Application**

The active ingredients of CSE Pro are non-polluting and biologically harmless natural products. CSE Pro is suitable for the negative (mixt-surface-application) and positive applicators (spray-application on fresh/green concrete surface). It is economical, easy to use, can be sprayed, dries quickly, is abrasion-resistant and can be applied on all types of clean moulds. CSE Pro even functions reliably where other products fail (e.g. in hot weather or at weekend productions).

However, these are only guidelines, because the final exposure-depth is not only controlled by the chosen type of CSE Pro, but also affected by example by the amount of cement and sand, by the type of cement (gray or white), by the water-cement-ratio, by the demoulding periods (weekend production), etc. BEA is available in a wide range of well graded types:

<table>
<thead>
<tr>
<th>Type</th>
<th>Colour code</th>
<th>Aggregate-size</th>
<th>Exposure depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE Pro 01</td>
<td>Brown</td>
<td>0-4/8 mm</td>
<td>ca. 0.5 mm</td>
</tr>
<tr>
<td>CSE Pro 02</td>
<td>Yellow</td>
<td>2-8 mm</td>
<td>ca. 1.0 mm</td>
</tr>
<tr>
<td>CSE Pro 10</td>
<td>Green</td>
<td>2-8 mm</td>
<td>ca. 1.5 mm</td>
</tr>
<tr>
<td>CSE Pro 25</td>
<td>Yellow</td>
<td>48 mm</td>
<td>ca. 2.0 mm</td>
</tr>
<tr>
<td>CSE Pro 50</td>
<td>Pink</td>
<td>8-12/12 mm</td>
<td>ca. 2.5 mm</td>
</tr>
<tr>
<td>CSE Pro 70</td>
<td>Grey</td>
<td>8-16 mm</td>
<td>ca. 3.0 mm</td>
</tr>
<tr>
<td>CSE Pro 130</td>
<td>White</td>
<td>16-20/22 mm</td>
<td>ca. 4.0 mm</td>
</tr>
<tr>
<td>CSE Pro 200</td>
<td>Orange</td>
<td>12-16/32 mm</td>
<td>ca. 5.0 mm</td>
</tr>
<tr>
<td>CSE Pro 300</td>
<td>Violet</td>
<td>12-32 mm</td>
<td>ca. 6.0 mm</td>
</tr>
<tr>
<td>CSE Pro 400</td>
<td>Violet</td>
<td>16-32/54 mm</td>
<td>ca. 7.0 mm</td>
</tr>
</tbody>
</table>

**Instructions**

CSE Pro must be stirred up thoroughly with an electric drill before use.

For negative (should-surface) application CSE Pro should be applied to the mould economically and evenly with a short

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**EELPP024/19 – Attachment 6**

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**CUMBERLAND COUNCIL**

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**CSE Pro 01 - 400**

Surface-deactivator for the production of exposed aggregate concrete surfaces.
Safety Data Sheet  
according to 1907/2006/EC, Article 31

Revision: 14.05.2012

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** CSE pro
- **Application of the substance / the preparation:** Surface active agent
- **Manufacturer/Supplier:**
  Actech International
  148 Sussex Street,
  Roseville VIC 3054
  Phone: 03 9357 3366 FAX: 03 9357 3766
- **Further information obtainable from:**
  Actech International
  e-mail: info@actech.com.au
- **Information in case of emergency:**
  Leonard Samuel (03) 9357 4538 (Business Hours) 0412 323 206 (After Hours)

2 Hazards identification

- **Hazard description:**
  - Xr Irritant
  - F Highly flammable
  - N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**
  The product has to be labelled due to the calculation procedure of the "General Classification guidelines for preparations of the EU" in the latest valid version.
  - R 11 Highly flammable.
  - R 38 Irritating to skin.
  - R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  - R 87 Vapours may cause drowsiness and dizziness.

- **Classification system:**
  The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

- **Chemical characterization:**
  - **Description:** Mixture of substances listed below with nonhazardous additives.

- **Dangerous components:**
  - EINECS: 295-151-9 Petroleum distillates, n.o.s. (PETROLEUM NAPHTHA)  
    - Xn, Xi, F, N, R11-36/51/53-65-67  
    - 25-50%  
  - CAS: 68858-54-9 Kieselguhr, soda ash flux-calcinined  
    - Xn; R 49/20  
    - 10-25%  
  - CAS: 5949-29-1 Citric acid  
    - EINECS: 201-069-1  
    - Xi, R 36  
    - 10-25%

- **Additional information:** For the wording of the listed risk phrases refer to section 18.

4 First aid measures

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.

(Certif. on page 2)
5 Fire-fighting measures:

- Suitable extinguishing agents:
  - CO₂; powder or water spray. Fight larger fires with water spray or alcohol-resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Protective equipment: No special measures required.

6 Accidental release measures

- Person-related safety precautions:
  - Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection:
  - Do not allow product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter several surface or ground water.
- Measures for cleaning/collection:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.

7 Handling and storage

- Handling:
  - Information for safe handling:
    - Ensure good ventilation/exhaustion at the workplace.
    - Prevent formation of aerosols.
  - Information about fire- and explosion protection:
    - Keep ignition sources away - Do not smoke.
    - Protect against electrostatic charges.
- Storage:
  - Requirements to be met by storerooms and receptacles: Store in a cool location.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions:
    - Keep container tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
  - General protective and hygienic measures:
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing
    - Wash hands before breaks and at the end of work.
    - Do not inhale gas / fumes / aerosols.
    - Avoid contact with this skin.
**Trade name:** CSE pro

Avoid contact with the eyes and skin.

**Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**Protection of hands:**

- **Protective gloves**

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As this product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

- **Tightly sealed goggles.**

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong></td>
</tr>
<tr>
<td><strong>Colour:</strong></td>
</tr>
<tr>
<td><strong>Odour:</strong></td>
</tr>
</tbody>
</table>

- **Change in condition**
  - Melting point/Melting range: Undetermined
  - Boiling point/Boiling range: 107°C

- **Flash point:** ≤ 21°C

- **Self-igniting:** Product is not selfigniting

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**
  - Lower: 0.9 Vol %
  - Upper: 6.8 Vol %

- **Density at 20°C:** 1.03 g/cm³

- **Solubility in / Miscibility with water:** Not insoluble or difficult to mix.
Safety Data Sheet
according to 1907/2006/EC, Article 31

Trade name: CSE pro

Revision: 14.05.2012

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- Materials to be avoided:
  No dangerous reactions known.
- Dangerous decomposition products:
  No dangerous decomposition products known.

11 Toxicological information

- Acute toxicity:
- Primary irritant effect:
  Irritant to skin and mucous membranes.
- on the eye: No irritating effect.
- Sensitisation: No sensitising effects known.
- Additional toxicological information:
  The product shows the following dangers according to the classification method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  Irritant

12 Ecological information

- Ecotoxicological effects:
- Remark: Toxic for fish
- Additional ecological information:
- General notes:
  Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  Also poisonous for fish and plankton in water bodies.
  Toxic for aquatic organisms

13 Disposal considerations

- Product:
  - Recommendation:
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.

  European waste catalogue

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>08 00 00</td>
<td>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY, AND USE OF PVC</td>
</tr>
<tr>
<td>08 02 00</td>
<td>wastes from MF-SU of other coatings including (ceramic materials)</td>
</tr>
<tr>
<td>08 02 99</td>
<td>wastes not otherwise specified</td>
</tr>
</tbody>
</table>
14 Transport Information

Land transport ADR/RID (cross-border)

- ADR/RID class: 3 Flammable liquids.
- Danger code (Kemler): 33
- UN-Number: 1866
- Packaging group: II
- Hazard label: 3
- Special marking: Symbol (fish and tree)
- Description of goods: 1865 RESIN SOLUTION
- Limited quantities (LQ): LO6

Maritime transport IMDG:

- IMDG Class: 3
- UN Number: 1868
- Label: 9
- Packaging group: II
- EMS Number: F-E, S-E
- Marine pollutant: No
- Proper shipping name: RESIN SOLUTION

Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA Class: 3
- UN/ID Number: 1866
- Label: 3
- Packaging group: II
- Proper shipping name: RESIN SOLUTION

15 Regulatory Information

- Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- Code letter and hazard designation of product:
  X4 Irritant
  F Highly flammable
  N Dangerous for the environment
Safety Data Sheet
according to 1907/2006/EC, Article 31
Revision: 14.05.2012

<table>
<thead>
<tr>
<th>Trade name: CSE pro</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk phrases:</strong></td>
</tr>
<tr>
<td>11 Highly flammable,</td>
</tr>
<tr>
<td>38 Irritating to skin,</td>
</tr>
<tr>
<td>51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
</tr>
<tr>
<td>67 Vapours may cause drowsiness and dizziness.</td>
</tr>
<tr>
<td><strong>Safety phrases:</strong></td>
</tr>
<tr>
<td>9 Keep container in a well-ventilated place.</td>
</tr>
<tr>
<td>16 Keep away from sources of ignition - No smoking.</td>
</tr>
<tr>
<td>23 Do not breathe fumes/vapours.</td>
</tr>
<tr>
<td>24/25 Avoid contact with skin and eyes.</td>
</tr>
<tr>
<td>29/35 Do not empty into drains; dispose of this material and its container in a safe way.</td>
</tr>
<tr>
<td>61 Avoid release to the environment. Refer to special instructions/safety data sheet.</td>
</tr>
</tbody>
</table>

**18 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**
  - 11 Highly flammable, |
  - 38 Irritating to skin, |
  - 49/20 Harmful: danger of serious damage to health by prolonged exposure through Inhalation. |
  - 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
  - 65 Harmful: may cause lung damage if swallowed. |
  - 67 Vapours may cause drowsiness and dizziness. |

- **Department issuing MSDS:** Forschung und Entwicklungs
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 7
Preliminary Biodiversity Report
15 August 2018
610.18097-105-v1.2.docx

Department of Planning & Environment
320 Pitt Street
SYDNEY NSW 2000

Attention: Bianca Thornton

Dear Bianca

**Precast Concrete Manufacturing, 49-53 Pine Road, Yennora**
**Proposed Industrial Change of Use (DDA 1192)**
**Preliminary Biodiversity Assessment**

1 **Introduction**

1.1 **Overview**

Precast Elements Pty Ltd is seeking retrospective approval to change the use of the site at 49-53 Pine Road, Yennora from General Industry to Industry Activity and to continue to utilise the existing warehouse for concrete manufacturing. The works are designated development pursuant to the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) and accordingly the Designated Development Application (DDA) must be accompanied by an Environmental Impact Statement (EIS). SLR Consulting Australia has been commissioned to contribute to the EIS and prepare the following specialist environmental assessments:

- Noise and vibration;
- Air quality;
- Land contamination;
- Water balance/management;
- Waste management; and
- Biodiversity.

The Department of Planning and Environment has issued Secretary’s Environmental Assessment Requirements (SEAR 1192) for the EIS. In relation to biodiversity, the SEARs state that the EIS must contain an “assessment of the impacts of the development on Prospect Creek and riparian vegetation in accordance with the NSW Biodiversity Conservation Act 2016”.

This report provides a preliminary assessment of the biodiversity values of the site, as defined under the NSW *Biodiversity Conservation Act 2016* (BC Act) and the likely impacts of the proposed development on Prospect Creek and associated biodiversity values.
Table 1 lists the specific requirements detailed in SEAR 1192 and the location that these requirements are addressed in the Preliminary Biodiversity Assessment Report.

<table>
<thead>
<tr>
<th>SEARs</th>
<th>Location in Biodiversity Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key issue – biodiversity to include:</td>
<td></td>
</tr>
<tr>
<td>Assessment of the impacts of the development on</td>
<td>Section 5</td>
</tr>
<tr>
<td>Prospect Creek and riparian vegetation in accordance</td>
<td></td>
</tr>
<tr>
<td>with the Biodiversity Conservation Act 2016.</td>
<td></td>
</tr>
<tr>
<td>Environmental Planning Instruments and other Policies</td>
<td>Section 3.1.7</td>
</tr>
<tr>
<td>The EIS must assess the proposal against the relevant</td>
<td>Section 3.2.1</td>
</tr>
<tr>
<td>environmental planning instruments, including but not</td>
<td></td>
</tr>
<tr>
<td>limited to:</td>
<td></td>
</tr>
<tr>
<td>- State Environmental Planning Policy No 19 – Bushland</td>
<td></td>
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<tr>
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<td>- Holroyd Local Environmental Plan 2013</td>
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<td>Riparian and Aquatic Habitat.</td>
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<td>creek bank and riparian zone from works associated</td>
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1.2 Project Description

The site is proposed for industrial redevelopment (change of land-use from general industry to industry activity). The Designated Development Application (DDA) seeks retrospective approval of the formalisation of the use of the site for concrete manufacturing purposes. The DDA seeks to change the site use from ‘General Industry’ to ‘Industrial Activity’, and seeks consent for:

- Continuing to use existing infrastructure to manufacture precast concrete building elements;
- Increasing the number of onsite staff to allow up to 35 staff.

1.3 Scope of the Assessment

With respect to the proposed development, SLR has completed a preliminary review of the biodiversity values of the site at 49-53 Pine Road, Yennora (Figure 1), involving:

- Desktop review of available mapping, reports, literature and data, including searches for previous records of threatened species within the locality of the site.
- A site inspection completed by one qualified SLR ecologist (the author) on 11 May 2018, involving:
  - Identification of native vegetation, noting the extent and condition of plant community types (if present) according to published mapping, noting presence, condition and extent of any threatened ecological communities;
  - Assessment of riparian vegetation and general nature and condition of aquatic vegetation and habitat;
General fauna habitat assessment, searches for evidence of fauna habitation, and mapping of any hollow-bearing trees or other resources;

- Identification of potential habitats and resources for threatened species; and

- Identification of key (or characteristic) flora and fauna species.

Documents reviewed in the preparation of this assessment include:

- Threatened species data from the BioNet Atlas of NSW Wildlife (OEH 2018);
- Threatened species data from the EPBC Act Protected Matters Search Tool (DoE 2018);
- Statement Of Environmental Effects - 49-53 Pine Road, Yennora (Urbis 2017);
- Environmental Management Plan ('EMP'; Precast Elements Pty Ltd 2017); and
- Site plans and survey plan.
2 Site Description

2.1 General

The site is legally registered as Lot 2 in DP 939790 and has an approximate area of 10,825 m². The site lies within the suburb of Yennora in the Cumberland local government area, approximately six kilometres southwest of the Parramatta Central Business District and 22 kilometres west of the Sydney Central Business District. The site is bounded by Prospect Creek to the west, Pine Road to the east and commercial/industrial properties to the north and south.

The site is currently used for manufacturing and storage of concrete panels, and comprises the following facilities:

- A single-storey warehouse building located along the northern boundary which is predominately used for storing concrete panels;
- A single-storey warehouse building located along the southern boundary which is predominately used for manufacturing and storing concrete panels;
- A two-storey office building; and
- Landscaped/grassed areas located along a small portion of the southern boundary and along the eastern boundary at the site’s entrance.

The vast majority of the site comprises either buildings or concrete hardstand. At the rear (western end) of the site is an unsealed portion set aside for materials laydown and stockpiling (see Photo 1). The site boundary incorporates parts of the riparian vegetation of Prospect Creek, resulting in some vegetation occurring on the subject site (see Section 2.2). However, this narrow belt of vegetation fenced off (with standard 1.8 high chain mesh) from the main area of activities of the site and no native vegetation, either in patches or as isolated stands, occurs within the area of operations on the site. A single mature specimen of a Blue Gum hybrid *Eucalyptus saligna* × *botryoides*, evidently planted, occurs on the southern site boundary (see Photo 1). A small copse of Mediterranean Cypress *Cupressus sempervirens* occurs in the eastern part of the site, near the entrance to the administration building. No other vegetation is present within the site.
2.2 Riparian Zone of Prospect Creek

The western site boundary conforms generally to the natural bends in Prospect Creek at this location. A chain mesh fence has been installed at the limit of the area of operations (just east of the western boundary, at the edge of the riparian vegetation) and so access to the adjoining riparian zone of the Creek was not possible during the site inspection. None of the riparian vegetation along Prospect Creek occurs east of the fence, or within the area of current site operations.

The adjoining land to the west of the site slopes steeply down to the banks of the Creek and is densely covered in shrubs and blankets of vine growth (Photo 2). A variety of weeds species has colonised this area, with emergent native canopy species growing along the banks of the Creek. Key weed species recorded in the riparian zone are noted in Section 4.1.3.
3 Legislative Framework

3.1 NSW Legislation and Policy

3.1.1 NSW Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and NSW forms the legal and policy platform for proposal assessment and approval in NSW and aims to ‘encourage the proper management, development and conservation of natural and artificial resources’. All development in NSW is assessed in accordance with the provisions of the EP&A Act and EP&A Regulation 2000.

3.1.2 Biodiversity Conservation Act 2016

The NSW *Biodiversity Conservation Act 2016* (BC Act) commenced on the 25th August 2017 and includes the Biodiversity Offset Scheme, which provides for biodiversity assessment and biodiversity offsetting of a range of developments in NSW according to a new method, known as the Biodiversity Assessment Method or ‘BAM’ (OEH 2017). The Biodiversity Offsets Scheme (BOS) applies to:

- Local development assessed under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) that is likely to significantly affect ecological communities or threatened species listed under Schedules 1 and 2 of the BC Act, as determined by application of a five-part-test of significance in accordance with Section 7.3 of the BC Act.
State significant development and state significant infrastructure projects, unless the Secretary of the Department of Planning and Environment and the Chief Executive of NSW Office of Environment and Heritage (OEH) determine that the project is not likely to have a significant impact.

- Development activities that have the potential to impact Areas of Outstanding Biodiversity Value (AOBV) as listed under Part 3 of the BC Act
- Development activities that have the potential to impact areas mapped as having 'high biodiversity value' as indicated by the NSW Biodiversity Values Map (OEH 2018); and
- Development activities that involve clearing of native vegetation that exceeds the Biodiversity Offset Scheme thresholds (BOS thresholds) as determined by the BC Regulation.

The Biodiversity Values Map (see Section 4.5) identifies an area of high biodiversity value that generally follows the alignment of Prospect Creek and lies adjacent to the site. Given that the BV Map does not provide detailed information on the identity of areas of high biodiversity value, it can be assumed that the area of high biodiversity value presented in the BV Map represents the vegetation of the riparian zone of Prospect Creek.

As the proposed development will constitute 'local development' to be assessed under Part 4 of the Environmental Planning and Assessment Act 1979, it will be necessary to determine whether the BC Act applies to the DDA and to address the SEARs. This is addressed in the following sections of this report. An assessment of the impacts of the proposed development concerning the BC Act is provided in Section 5.

### 3.1.3 NSW Water Management Act 2000

The NSW Water Management Act 2000 provides for the sustainable and integrated management of the water sources of the State, and aims to protect, enhance and restore water sources, their associated ecosystems, ecological processes, biological diversity, and their water quality. The Act, inter alia, requires that all works within 40 metres of a watercourse (called "waterfront land") are "controlled activities" and require approval from NSW Department of Primary Industries – Water ("DPI Water") unless an exemption applies in accordance with Schedule 5 of the Act.

The site is bounded to the west by Prospect Creek, with much of the western parts (or the rear) of the property lying within 40 m of the watercourse. Any land within 40 m of the top-of-bank of Prospect Creek is defined as "waterfront land" under the Water Management Act 2000 (Figure 2). Therefore, the proposal is considered an ‘integrated development’ within the meaning of the EP&A Act and referral of the DDA to the NSW Department of Primary Industries – Water is required.

Notwithstanding the application of the Act, an assessment of the potential indirect impacts of the proposed development on downstream aquatic habitats is provided in Section 5.

### 3.1.4 NSW Fisheries Management Act 1994

The aim of the Fisheries Management Act 1994 is to conserve, develop and share the fishery resources of NSW for the benefit of present and future generations by conserving fish stocks, habitats and threatened species and promoting ecologically sustainable development.

In relation to the SEARs, the NSW Department of Primary Industries – Fisheries has requested the following information with regard to potential impacts on fish habitat:
"A clear definition of the proposed environmental protection works will need to be provided, including a identifying whether these works will be situated within the top of bank of Prospect Creek and plans for the proposed works. Prospect Creek is important key fish habitat within Western Sydney. DPI Fisheries recommends that any creek bank stabilisation works associated with this proposal considers the use of soft engineering design options. The REF for this works will need to address impacts on the habitats within the creek, creek bank and riparian zone from such works, and include measures to mitigate such impacts such as the use of erosion and sediment controls”

Prospect Creek has been identified as 'key fish habitat' (SEAR 1192) as defined under the Fisheries Management Act 1994 and as such an assessment of the potential impacts that the proposal may have on the riparian area and aquatic habitat of Prospect Creek is provided in Section 5.3.

3.1.5 NSW Biosecurity Act 2015

The NSW Biosecurity Act 2015 provides a streamlined statutory framework to protect the NSW economy, environment and community from the negative impact of pests, diseases and weeds. In NSW, all plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.

Weed species recorded within the site during the current investigation are discussed in Section 4.1.3. Mitigation measures concerning weed management for the proposed development are discussed in Section 5.

3.1.6 National Parks and Wildlife Act 1974

The NSW National Parks and Wildlife Act 1979 is administered by the OEH, and aims to conserve nature, objects, places or features (including biological diversity) of cultural value within the landscape. The Act also aims to foster public appreciation, understanding and enjoyment of nature and cultural heritage, and provides for the preservation and management of national parks, historic sites and certain other areas identified under the Act.

No areas of National Park estate occur within or adjacent to the site. An assessment of the proposal in relation to impacts on native flora and fauna with an emphasis on threatened species and habitat is provided in Section 5.
3.1.7 SEPP 19 Bushland In Urban Areas

State Environment Planning Policy 19 - Bushland in Urban Areas (SEPP 19) aims to protect bushland and vegetation patches that remain in urban areas. The general aim of SEPP 19 is to preserve the following items:

- bushland areas within the urban area;
- natural heritage value;
- aesthetic value;
- value as recreational, educational and scientific resource; and
- ecosystem values such as flora and fauna habitat, vegetation links and soil stabilisation.

Under clause 4 of this policy, the definition of bushland is “land on which there is vegetation which is either a remainder of the natural vegetation of the land or, if altered, is still representative of the structure and floristics of the natural vegetation”.

Clause 6 (1) of the Policy states that “A person shall not disturb bushland zoned or reserved for public open space purposes without the consent of the council”. Furthermore, Clause 9 “applies to land which adjoins bushland zoned or reserved for public open space purposes”. As the site at Pine Road, Yennora is not located on or adjacent to land zoned or reserved for public open space (see Figure 3), SEPP 19 does not apply to the proposed development.

3.2 Local Environmental Planning Instruments

3.2.1 Holroyd Local Environmental Plan

The subject site is located within the Cumberland LGA, formed by the recent amalgamation of several councils. Within the Cumberland LGA, the written instruments from the following local environmental plans (LEPs) apply, where relevant:

- Auburn Local Environmental Plan 2010;
- Parramatta Local Environmental Plan 2011; and
- Holroyd Local Environmental Plan 2013.

The provisions detailed within these LEPs control development within the Cumberland LGA through zoning and development controls. As shown in Figure 3, the site is zoned IN1 General Industrial under Holroyd Local Environmental Plan 2013, with a narrow strip of land on the western margin of the site (associated with the riparian zone of Prospect Creek) zoned as E2 Environmental Conservation.
3.2.2 Holroyd Development Control Plan

The site at 49-53 Pine Road, Yennora is located within the Cumberland LGA. As Cumberland Council was formed in 2016 through the amalgamation of several councils in the western Sydney area, the LGA does not have a Development Control Plan (DCP). Until such as time as a combined DCP for Cumberland LGA is gazetted, the following DCPs apply to developments within the Cumberland LGA:

- Auburn Development Control Plan 2010 (ACC 2010);
- Holroyd Development Control Plan 2013 (HCCA 2013); and
- Parramatta Development Control Plan 2011 (PCC 2011).

Of the DCPs listed above, the Holroyd DCP 2013 provides development controls applicable to this development, as the subject site at Pine Road Yennora is located in what was previously the Holroyd LGA.

Tree preservation provisions in Part A Section 4 of the Holroyd DCP apply to any tree, including exotic species (but excluding noxious weeds and fruit trees), which have a height of at least 3.5 meters, a canopy spread of at least four meters and a trunk width of at least 400 mm. Trees within the LGA should not be considered for removal if the tree:

- is of significance due to its height, size, position or age; or
- forms a prominent part of the streetscape; or
- forms part of a wildlife habitat; or
- is locally indigenous, rare or endangered species; or
- provides important visual screening; or
- is part of remnant or riparian vegetation.
If a development application requires the removal of a tree, documented evidence by a qualified arborist justifying the removal must be supplied to the consent authority. No tree removal is proposed as part of the current DDA.

In regard to biodiversity, Part A Section 5 of the Holroyd DCP 2013 states that if there is remnant indigenous vegetation on the development site, a ‘Flora and Fauna Assessment’ must be submitted to Council (HCCa 2013).

Part A Section 5 of the Holroyd DCP 2013 also states that any development on land abutting land mapped as E2 Environmental Protection and W1 Natural Waterways must consider the following:

- the need to retain any bushland on the land; and
- the effect of the proposed development on bushland, including the erosion of soils, the siltation of streams and waterways and the spread of weeds and exotic plants within the bushland, overshadowing, overland flows and stormwater runoff, and the removal or degradation of existing vegetation; and
- the requirement for provision of a buffer zone on the abutting land to protect the bushland area; and
- the protection of endangered ecological communities and recovery plans prepared and approved under the Threatened Species Conservation Act 1995 (now repealed and replaced by the Biodiversity Conservation Act 2016); and
- any other matters that are relevant to the protection and preservation of the bushland area.

As noted above, the subject site lies adjacent to the riparian vegetation of Prospect Creek, which is classified E2 Environmental Conservation. Hence, the DCP provisions would apply to the DDA (HCCb 2013). The above items are addressed in Chapter 5 this report, in terms of the potential indirect impacts of proposed site activities on adjoining riparian habitats along Prospect Creek.

The DDA proposal is compliant with the provisions of the Holroyd DCP 2013 as:

- This Preliminary Biodiversity Assessment Report constitutes a Flora and Fauna Report, for the purposes of the DCP;
- The DDA is for retrospective approval with current site activities having no effect on bushland on or adjacent to the site;
- The current site activities do not impact any endangered ecological communities.

### 3.3 Environment Protection and Biodiversity Conservation Act 1999

The purpose of the EPBC Act is to ensure that actions likely to cause a significant impact on ‘matters of national environmental significance’ undergo an assessment and approval process. Under the EPBC Act, an action includes a proposal, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things. An action that ‘has, will have or is likely to have a significant impact on a matter of national environmental significance’ is deemed to be a ‘controlled action’ and may not be undertaken without prior approval from the Australian Minister for the Environment.

Potential impacts on ‘matters of national environmental significance’ as listed under the EPBC Act are discussed in Section 5.
4 Existing Biodiversity Values

The vast majority of the site comprises built up areas of concrete hardstand, vehicle parking areas, machinery and buildings. No stands or patches of native vegetation were recorded on the site, or any habitats of relevance to threatened species. The only trees present on the site have (evidently) been planted. None of these trees contain hollows (of value for arboreal fauna) or is listed as a significant tree within Cumberland LGA (Holroyd DCP).

The only native vegetation of any particular note is the riparian forest that occurs on the adjoining land to the west, outside of the site itself, which forms a narrow belt of vegetation lining Prospect Creek.

4.1 Native Vegetation

4.1.1 Historical Mapping

Historical aerial imagery shows that there was limited vegetation on the site in 1943 (Six Maps), suggesting that most vegetation on the site was removed by this date, as shown in Figure 4. The vegetation that is evident on the site in Figure 4 has long since been removed, with most of the remaining vegetation occurring in the adjacent riparian area of Prospect Creek.

4.1.2 Regional Mapping

According to available regional scale vegetation mapping data, the subject site is not mapped as containing native vegetation. However, the adjoining riparian zone of Prospect Creek is mapped as containing Alluvial Woodland according to NPWS (2002) mapping (see Figure 5) and Cumberland River-flat Forest (PCT 835) according to OEH (2016) Sydney Metro Vegetation Mapping (Figure 6). Both of these vegetation types are indicative of the threatened ecological community River-flat eucalypt forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions (‘River-flat Forest EEC’; OEH 2011). However, further plot-based surveys would be required to confirm whether or not the vegetation complies with the definition of River-flat Forest EEC.

Figure 4 Historical aerial photo of the subject site (1943)
4.1.3 Weeds

Several environmental weeds and/or trees that are considered pest species in Cumberland LGA were recorded in low abundance on the site and these should be appropriately managed to avoid spreading these species throughout the site and wider local area. Weed species observed on the site comprise:

- Mulberry *Morus alba*;
- Camphor Laurel *Cinnamomum camphora*;
- Large-leaved Privet *Ligustrum lucidum*;
- Small-leaved Privet *Ligustrum sinense*;
- Green Cestrum *Cestrum parqui*;
- Senna *Senna pendula*;
- Balloon Vine *Cardiospermum grandiflorum*;
- Morning Glory *Ipomoea indica*; and
- Moth Vine *Aristolochia sericifera*.

4.2 Riparian and Aquatic Habitat

Prospect Creek has been identified as key fish habitat as defined under the *Fisheries Management Act 1994*. The Act describes the term key fish habitat as ‘aquatic habitats that are important to the sustainability of the recreations and commercial fishing industries, the maintenance of fish populations generally and the survival and recovery of threatened aquatic species’ (DPIa 2018). The existing environment of the riparian area adjacent to the subject site has been discussed previously in Section 2.2. No threatened species have been recorded within Prospect Creek and in the surrounding area (DPIb 2018).
4.3 Threatened Species

A search of the NSW Bionet Atlas (licenced search conducted 05/06/18) detected 76 threatened species previously recorded within a 10 kilometre radius of the site, comprising two amphibians, 30 birds, 12 mammals, two gastropods and 30 plants. Three endangered populations of plants and 26 threatened ecological communities have also been previously recorded within 10 km of the site.

No threatened plants were recorded during the site inspection, and given the disturbed nature of the site and evidence of historical and ongoing maintenance and disturbance of these areas, it is unlikely that any threatened plants occur. The vegetation and soils of the site are introduced, buried, disturbed or highly modified from their original state and hence do not represent suitable habitat for any threatened plants. Accordingly, the site is unlikely to support individuals or populations of threatened flora species, considering the highly modified nature of the habitats and ground conditions.

The riparian vegetation beyond the western boundary of the site represent suitable (albeit low quality) habitat for a selection of relevant threatened fauna species from the locality. Threatened fauna species with the greatest potential to utilise the riparian zone are highly mobile species such as bat and bird species. Microbat species could also potentially forage in this area, gleening insects above the tree canopy. Other threatened species that could potentially forage along the Creek periodically include the Gang-gang Cockatoo, Glossy Black-Cockatoo, Grey-headed Flying-fox and Powerful Owl.

The absence of aquatic habitats from the site excludes the presence of wetland birds and habitat for threatened amphibian species recorded from the locality. The Department of Primary Industries – Fisheries Freshwater Threatened Species Distribution Maps indicate that there are no previous records of threatened fish species within Prospect Creek (DPIf 2018).

4.4 Threatened Ecological Communities

There is no native vegetation within the site and therefore the site does not contain any threatened ecological communities, as listed under either the BC Act or the EPBC Act. However, as noted above, the vegetation lining Prospect Creek, which adjoins the western boundary of the site, is likely to represent an example of River-flat eucalypt forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions (River-flat Forest), which is listed as an 'endangered ecological community' (EEC) under Schedule 2 (Part 2) of the NSW Biodiversity Conservation Act 2016 (BC Act). (Note: River-flat Forest EEC is not listed under the EPBC Act).

Detailed floristic surveys of the vegetation on the adjacent lands were not part of the current scope of works. However, based on available regional mapping and observations of characteristic species during the site inspection, the following observations can be made:

- The vegetation is an open forest with a canopy height of 20 to 25 m and a foliage projective cover of around 20-30 %;
- Canopy tree species comprise Rough-barked Apple Angophora floribunda and Swamp Oak Casuarina glauca, with Cabbage Gum Eucalyptus amplifolia observed further upstream;
- No hollow-bearing trees were observed adjacent to the site, although further survey work may reveal their presence within the riparian corridor;
- The mid-canopy is a dense layer of exotic small trees and shrubs, mainly Small-leaved Privet Ligustrum sinense, Large-leaved Privet Ligustrum lucidum, Mulberry Morus alba and Camphor Laurel Cinnamomum camphora;
A dense smothering layer of exotic vine growth is widespread through the area, with Balloon Vine (*Cardiospermum grandiflorum*) and Coastal Morning Glory (*Ipomoea indica*) being the main vine species; and

- The ground layer is sparse, with no native species observed, presumably due to low light levels as a result of the dense vine and shrub growth.

Given the low native plant diversity and modified structure of the community (due to weed infestation), the vegetation within the adjacent riparian zone is likely to have low vegetation integrity scores, according to the Biodiversity Assessment Method.

### 4.5 NSW Biodiversity Values Map

The site is not mapped on the NSW Biodiversity Values Map (OEH 2018), as shown in Figure 7. The mapped area adjacent to the site represents the riparian corridor of Prospect Creek.

**Figure 7** NSW Biodiversity Values Map – excerpt for the subject site

#### 4.6 EPBC Act Matters

A search of the Protected Matters Search Tool reveals that a total of 70 threatened species and 38 migratory species (and/or their habitats), nine threatened ecological communities, two World Heritage Properties and two National Heritage Places listed in the EPBC Act are predicted to occur within a 10 kilometre radius of the site. No other EPBC Act matters are of relevance to the biodiversity of the site.

Given that the site does not contain any native vegetation, it does not contain potentially suitable habitat for any threatened species, threatened communities or migratory species listed under the EPBC Act. Conversely, the riparian vegetation adjoining the site along Prospect Creek could provide suitable foraging habitat for a selection of mobile threatened species, such as the Grey-headed Flying Fox, Large-eared Pied Bat, Regent Honeyeater and Swift Parrot. It is noted that the vegetation along Prospect Creek is not listed as a threatened ecological community under the EPBC Act.
5 Impacts on Biodiversity Values

5.1 General

The proposed change in use of the site will not require the removal of existing trees within the site or any direct or indirect disturbance of riparian vegetation along Prospect Creek. Accordingly, there will be no direct impacts on any native vegetation, including the stands of River-flat Forest EEC on the adjacent lands lining Prospect Creek.

The potential indirect effects on the vegetation and habitats of Prospect Creek are as follows:

- The use of lighting during proposed night-time hours could affect foraging and/or breeding activities of nocturnal species (e.g. possums, owls, ground mammals) utilising the riparian vegetation. It is recommended that lighting within the site be reviewed to minimise light spill into the adjoining vegetation and that directing lights in the western end of the site to the west generally be avoided;

- Noise from operational activities, particularly at night, could disturb the behaviour nocturnal animals, if present in the adjoining riparian zone. It is recommended that noise generation be minimised at night, particularly at the western end of the site;

- Dust from the unsealed storage area at the western end of the site could reduce the habitat quality of riparian and aquatic habitats on the adjoining land to the west. It is recommended that dust be monitored and suppressed if extending beyond the site boundaries;

- Edge effects, being the combined effect of encroachment of weeds, light spill, noise, sediments and pollutants into the edges of the bushland as a result of the development and operational activities of industrial uses on the adjoining land; and

- No stormwater is currently discharged, or is proposed to be discharged, into the adjoining riparian zone of Prospect Creek. Hence, the proposed development will not affect habitat quality of the riparian vegetation or aquatic habitats of Prospect Creek through discharge of polluted stormwater or surface runoff.

None of the above indirect impacts are likely to impose any adverse effects on native vegetation or wildlife, given:

- The substantially degraded condition of the riparian vegetation adjacent to the site. In particular, the low native plant diversity and high cover and diversity of weed species reduces the value of the riparian corridor for native flora and fauna and lowers the likelihood that local native wildlife inhabit or utilise the vegetation;

- The urban landscape setting of the site, including the industrial use of the site and the adjacent sites, and the highly urbanised catchment of Prospect Creek; and

- All of the impacts identified above would have been affecting the riparian zone of Prospect Creek, and the native biota it supported, since the conversion of agricultural land in the Yennora locality to industrial uses several decades ago. Hence, the flora and fauna of the Prospect Creek riparian zone have already been subjected to the above listed indirect effects for a considerable period of time and it can be surmised that any native fauna currently occupying this area are habituated to urban (or peri urban) areas and the associated indirect effects.
5.2 Tree Removal

The proposed development will not involve any tree removal. However, should any environmental works (e.g. erosion controls, bunding, etc) be required within the tree protection zone of any trees located within the site, an arboricultural assessment may be necessary to determine potential impacts on root zones and suitable tree protection measures.

5.3 Riparian and Aquatic Habitat

As the DDA is seeking retrospective approval for current activities that occur on the site, the proposal will have no impact on the riparian and aquatic habitats within Prospect Creek. Management measures are already in place on the site to ensure that current site activities do not have the potential to impact Prospect Creek. In particular, no stormwater is discharged from the site to Prospect Creek.

With regard to Holroyd DCP, the items for consideration for development applications adjoining land zoned E2 and W1, the following is noted:

- There is no proposal to disturb or remove the riparian vegetation existing within and adjoining the site along Prospect Creek. Moreover, the narrow belt of riparian vegetation that exists at the western margin of the site (and extends onto the adjoining land within the riparian corridor) is protected from site activities by chain mesh fencing. Hence, there is no need to “retain any bushland on the land” over and above the retention of vegetation that is already in place on the site;

- the proposed development will not involve the “erosion of soils, the siltation of streams and waterways and the spread of weeds and exotic plants within the bushland, overshadowing, overland flows and stormwater runoff, and the removal or degradation of existing vegetation”, as noted elsewhere in this report;

- there is no requirement for the “provision of a buffer zone” on the site to protect the riparian bushland along Prospect Creek, as there is no evidence that current site activities are adversely affecting the adjoining bushland (through indirect effects and edge effects);

- the proposed development will not affect (directly or indirectly) the adjoining stands of River-Flat Forest EEC, and therefore no specific protection measures are required for this EEC; and

- there are no other matters relevant to the protection and preservation of the adjoining bushland area.

5.4 Application of BC Act

5.4.1 BOS Thresholds

In relation to the application of the BAM, there are three ways in which the BAM can apply to a development application. The Biodiversity Conservation Regulation 2017 sets out threshold levels for when the Biodiversity Offsets Scheme (BOS) will be triggered. The threshold has two elements:

- Whether the amount of native vegetation being cleared exceeds the BOS threshold. As noted above, there is no mapped or existing native vegetation within the site, and so this threshold is not applicable.

- Whether the impacts occur on an area mapped on the Biodiversity Values Map published by the Minister for the Environment. As noted above, the site contains no areas of ‘high biodiversity value’ mapped on the Biodiversity Values Map (Figure 7) and so this threshold does not apply.
In summary, the two BOS thresholds under the BC Regulation do not apply to the site or the proposed development, due to the absence of native vegetation on the site. However, there is a third threshold to be considered for local developments, with respect to potential impacts on threatened biota listed under the BC Act, as described below in Section 5.4.2.

5.4.2 Test of Significance (s.7.3 of BC Act)

Proponents are also required to carry out a ‘test of significance’, pursuant to Section 7.3 of the Biodiversity Conservation Act, for all local development proposals that do not exceed the Biodiversity Offset Scheme (BOS) Threshold. The current development proposal is local development and as the two BOS thresholds listed above do not apply, the test of significance does apply in this instance. In relation to the five factors listed under Section 7.3 of the BC Act:

- The site is not likely to support a ‘viable local population’ of a threatened species; hence the proposed development is not ‘likely’ to render any such population occurring in the locality “at risk of extinction”;

- There is no endangered ecological community or critically endangered ecological community present on the site. Consequently, the proposed development is not likely to have an adverse effect on the extent of any threatened ecological community such that its local occurrence is likely to be placed at risk of extinction. There is the perceived potential for site activities to have an adverse effect on the adjoining vegetation along Prospect Creek, which has been identified as potentially representing River-flat Forest EEC. However, there is currently no discharge of stormwater from the site or overland flow into Prospect Creek and provided that appropriate surface water controls are implemented (as recommended in the EMP), the proposed ongoing use of the site is not likely to substantially and adversely modify the composition of any threatened ecological community, if present, such that its local occurrence is likely to be placed at risk of extinction.

- in relation to the habitat of a threatened species, the proposed development is not likely to remove or modify any important or known habitat, and is not likely to cause an area of habitat to become fragmented or isolated;

- the site does not contain any declared area of outstanding biodiversity value; and

- the proposed development is not part of a key threatening process nor is it likely to increase the impact of a key threatening process.

In light of the above considerations, the proposed development is not ‘likely’ to ‘significantly affect’ threatened species or ecological communities, or their habitats, as listed under the BC Act, pursuant to s.7.3 of the BC Act. The BOS is therefore not triggered by the proposed development and the BC Act does not apply to the DA. Accordingly, a biodiversity development assessment report (BDAR) is not required for the DA.

5.5 EPBC Act Matters

Based on the results of the current investigation, it is not likely that the proposed use of the site will have a "significant impact" on any matters of national environmental significance listed under the EPBC Act. Referral of the development application to the Commonwealth Department of the Environment and Energy is not warranted.
6 Conclusion

In summary, none of the BAM triggers apply to the site or the proposed development. Furthermore, on the basis of the findings of this report, it can be concluded that the project is not "likely" to have a "significant impact" on biodiversity values, pursuant to the NSW Biodiversity Conservation Act. It can therefore be concluded that the BAM does not apply to the project application (and hence a biodiversity development assessment report is not required to accompany the DA).

Accordingly, I hereby request a waiver, pursuant to s.7.9 of the BC Act, for the need to prepare a biodiversity development assessment report for DDA 1192.

I trust that the assessment of biodiversity impacts outlined herein is satisfactory for the Agency Head to make a determination on the need (or otherwise) for a biodiversity development assessment report for DDA 1192. However, please contact the undersigned on 02 4037 3200 if you have any further requirements.

Yours sincerely

[Signature]

JEREMY PEPPER
Technical Discipline Manager, Ecology

[Checked by JP]
[Authorised by JP]
7 References


DOCUMENTS
ASSOCIATED WITH
REPORT EELPP024/19

Attachment 8
Traffic Impact Assessment Report
Traffic Impact Assessment Report

Proposed Pre-cast Facility, 49-53 Pine Road, Yennora

Ref: 08/14/01
14/03/2019

info@asongroup.com.au | +61 2 8890 6691 | Suite 12/2, Level 12, 220 George Street, Sydney, NSW 2000
Document Control

Project No: 0814

Project: Proposed Precast Facility, 49-53 Pine Road, Yennora

Client: Precast Elements

File Reference: 0814r01v1 TIA_49-53 Pine Road, Yennora Issue

Revision History

<table>
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<th>Author</th>
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<td>-</td>
<td>11/05/2018</td>
<td>Draft</td>
<td>R. Butler-Madden</td>
<td>J. Muhathe</td>
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<td>I</td>
<td>14/08/2018</td>
<td>Issue</td>
<td>R. Butler-Madden</td>
<td>J. Muhathe</td>
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This document has been prepared for the sole use of the Client and for a specific purpose, as expressly stated in the document. Asom Group does not accept any responsibility for any use of or reliance on the contents of this report by any third party. This document has been prepared based on the Client’s description of its requirements, information provided by the Client and other third parties.
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Appendices

Appendix A: Workplace Travel Plan

Appendix B: Swept Path Analysis & Design Commentary
1 Introduction

1.1 Overview

Ason Group has been engaged by Precast Elements Pty Ltd to prepare a Traffic Impact Assessment (TIA) report to support the Designated Development Application for an industrial development at 49-53 Pine Road, Yennora (the Site). The application seeks retrospective approval for the formalisation the change of use from general industry to industry activity for the purpose of manufacturing precast concrete panels and the associated environmental protection works (the Proposal).

This TIA report addresses the relevant traffic, transport and parking implications of the existing use of the Site, including compliance with relevant State and Local Government controls and Australian Standards. The Site is located within the Local Government Area (LGA) of Cumberland Council and is therefore subject to that Council’s controls. The relevant DCP for this precinct is the Holroyd Development Control Plan 2013 (HDCP).

This TIA report seeks to achieve and demonstrate the following key objectives:

- Parking: Ensure formal parking is provided off-street in a consolidated location to accommodate the development’s parking demands.
  (Reason: To satisfy the peak parking demands of the development and improve on-street parking capacity by limiting reliance upon Pine Road)

- Traffic Impacts: Undertake a first principle traffic generation assessment using the known operational data of the Industrial facility and provide a comparative assessment with the historical use of the Site.
  (Reason: To demonstrate the operational development currently does not result in unacceptable impacts to the external road network over and above a Standard Industrial Development)

- Internal Design: Demonstrate that the access and internal design principles of the Site are designed in accordance with the Australian Standards and capable of accommodating compliant car parking in accordance with AS 2890.1 in addition to the largest vehicle required to access the Site.
  (Reason: To ensure that the access and internal layout operate in a safe manner)

In preparing this TIA report, Ason Group has referenced the following key planning documents that are relevant to development at the Site:

- Holroyd Development Control Plan 2013 (HDCP)
This TIA report also references general access, traffic and parking guidelines, including:

- NSW Roads and Maritime Services (RMS), Guide to Traffic Generating Developments, 2002 (the RMS Guide)

As a Designated Development, this report also responds to the Secretary's Environmental Assessment Requirements (SEARs) dated 16th January 2018. The SEARs addressed within this report are provided in Table 1.

### Table 1: Secretary's Environmental Assessment Requirements

<table>
<thead>
<tr>
<th>SEAR</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEARs Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>(i) Details of road transport routes and access to the Site.</td>
<td>Section 2.3 provides details of the key road network and transport routes to the Site. Section 5.2 details the heavy vehicle route required for any large vehicle accessing the Site defined by the RMS Restricted Access Vehicle (RAV) routes.</td>
</tr>
<tr>
<td>(ii) Road traffic predictions for the development during operation.</td>
<td>Section 5 provides a traffic assessment relating to the operation of the Proposal.</td>
</tr>
<tr>
<td>(iii) An assessment of impacts to the safety and function of the road network.</td>
<td>As above, Section 5 provides an assessment of the traffic generated by the Proposal, which identifies that the Proposal would represent a low volume traffic generator unlikely to adversely affect the operation of the existing road network. The Proposal intends to provide formal car parking within the confines of the main Site and thus remove parking from the front setback and reduce demand upon street car parking. This Proposal intends to allocate parking conditions seeking to improve safety conditions along Pine Road removing the need for any reverse manoeuvres and ensuring forward entry and exit movements. Finally, a review of accident statistics has been undertaken of the local road network in close proximity to the Site and does not indicate common trends or safety concerns. In the context of background traffic, the existing development represents negligible traffic volumes.</td>
</tr>
</tbody>
</table>

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0614/01v1
46-53 Pine Road, Yennora IDA Submission - Traffic Impact Assessment
Issue 1 | 14/08/2018

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EELPP024/19 – Attachment 8
<table>
<thead>
<tr>
<th>SEAR</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RMS Requirements (as part of developing the SEARs, RMS provided a number of key assessment criteria)</strong></td>
<td></td>
</tr>
<tr>
<td>A Traffic Impact Assessment which details all daily and peak traffic and transport movements likely to be generated (light and heavy vehicle, public transport, pedestrian and cycle trips) during construction (if required) and operation of the development.</td>
<td>Section 5 provides a traffic assessment relating to the operation of the Proposal. Based on a total of 23 employees travelling to Site by car, 12 (or 36%) currently travel by alternative modes. Noting that 30% of staff have already been reported to travel to the Site by public transport, the alternative modes would be able to accommodate this small demand. Construction traffic has not been assessed as no construction activity is proposed (noting that this is an existing development).</td>
</tr>
<tr>
<td>Details of the proposed days of the week and hours of operation on each day.</td>
<td>Section 3 provides a summary of the operational details of the development.</td>
</tr>
<tr>
<td>Details of the current daily and peak hour vehicle, public transport, pedestrian and bicycle movements and existing traffic and transport facilities provided on the road network located adjacent to the proposed development.</td>
<td>Section 2 provides an overview of the existing conditions for the Site.</td>
</tr>
<tr>
<td>An assessment of the operation of existing and future transport networks including public transport, pedestrian and bicycle provisions and their ability to accommodate the forecast number of trips to and from the development.</td>
<td>As above, Section 2 provides an overview of the existing conditions. Section 5 provides a traffic assessment relating to the operation of the Proposal.</td>
</tr>
<tr>
<td>Details the type of heavy vehicles likely to be used (e.g. B-doubles) during the operation of the development and the impacts of heavy vehicles on nearby intersections.</td>
<td>Section 5 indicates that the largest heavy vehicle to utilise the Site would be a 17.8m AV, with no B-doubles required to access the Site. Considering that the road network currently accommodates the traffic generated by the Site, which results in a maximum of 14 heavy vehicles between 4:00pm-5:00pm. The existing road network currently accommodates three peak volumes.</td>
</tr>
<tr>
<td>Details of access to, from and within the site from the road network including intersection location, design and sight distance (i.e. turning lanes, swept paths, sight distance requirements).</td>
<td>Section 2.3 provides details of the key road network and transport routes to the Site. Section 5 provides the truck routes to the Site. Section 6 discusses the Site Access and Internal Design in accordance with the AS 2990 series. There are no known safety issues or accident history with the operational access driveway.</td>
</tr>
<tr>
<td>Impact of the proposed development on existing and future public transport and walking and cycling infrastructure within and surrounding the site.</td>
<td>Section 4 details that the parking requirement of the Site is 18 parking spaces, with 23 employees driving to Site via car (including carparking). Thus 12 staff members would be travelling to Site via alternative modes. This relatively low number of trips, which would be spread out across the day considering the shift nature of the industrial sites, would be readily accommodated by the existing and sustainable transport network (noting that 36% of staff already travel by non-car modes). The parking provision would be supported by a Workplace Travel Plan, which would monitor the number of employees travelling by alternative modes.</td>
</tr>
<tr>
<td>SEAR</td>
<td>Response</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>An assessment of the existing performance of key</td>
<td>Section 5 assesses the traffic impacts of the site. It has been concluded that there would be no material impact on the surrounding road network due to the negligible amount of traffic generated by the site during network peak hours and thus network modelling has not been undertaken</td>
</tr>
<tr>
<td>intersections providing access to the site, and any upgrades</td>
<td></td>
</tr>
<tr>
<td>(road intersections) required as a result of the development.</td>
<td></td>
</tr>
<tr>
<td>The assessment needs to be supported by appropriate modelling and</td>
<td></td>
</tr>
<tr>
<td>analysis to the satisfaction of Roads and Maritime Services.</td>
<td></td>
</tr>
<tr>
<td>An assessment of predicted impacts on road safety and the</td>
<td>This condition has been addressed above in the SEAR Requirement (iii).</td>
</tr>
<tr>
<td>capacity of the road network to accommodate the development.</td>
<td></td>
</tr>
<tr>
<td>Plans of any road upgrades or new roads required for the</td>
<td>No road upgrades or new roads are proposed.</td>
</tr>
<tr>
<td>development, if necessary.</td>
<td></td>
</tr>
<tr>
<td>Demonstrate the measures to be implemented to encourage users of</td>
<td>As part of this TIA — a Workplace Travel Plan has been prepared for the operating development.</td>
</tr>
<tr>
<td>the development to make sustainable travel choices, including</td>
<td></td>
</tr>
<tr>
<td>walking, cycling, public transport and car sharing.</td>
<td></td>
</tr>
<tr>
<td>Appropriate provision, design and location of on-site bicycle</td>
<td>A total of 12 bicycle spaces are proposed on the eastern boundary.</td>
</tr>
<tr>
<td>parking, and how bicycle provision will be integrated with the</td>
<td></td>
</tr>
<tr>
<td>existing bicycle network.</td>
<td></td>
</tr>
<tr>
<td>The existing and proposed pedestrian and bicycle routes and</td>
<td>As above, Section 2 provide details of the existing bicycle network. As part of the Proposal, bicycle parking is proposed in accordance (and superior) to Council controls. The CTPED principles that have been incorporated from a traffic perspective to maintain road and personal safety are as follows:</td>
</tr>
<tr>
<td>end of trip facilities within the vicinity of and surrounding the</td>
<td>- Compliance with Australian Standards (Access &amp; Parking).</td>
</tr>
<tr>
<td>site and to public transport facilities as well as measures to</td>
<td></td>
</tr>
<tr>
<td>maintain road and personal safety in line with CTPED principles.</td>
<td></td>
</tr>
<tr>
<td>Details of the proposed number of car parking spaces and</td>
<td>Section 4 demonstrates the number of car spaces to be provided. The RMS and Council parking limits have been considered and a first principle parking assessment has been undertaken. Section 6 details that the internal parking layout complies with the AS2280 series.</td>
</tr>
<tr>
<td>compliance with appropriate parking codes and justify the level of</td>
<td></td>
</tr>
<tr>
<td>car parking provided on the site.</td>
<td></td>
</tr>
<tr>
<td>Details of access and parking arrangements for emergency</td>
<td>Section 6 details that the internal parking layout, loading zones and access complies with the relevant AS2280 standards.</td>
</tr>
<tr>
<td>vehicles; detailed plans of the proposed layout of the internal</td>
<td>Noting that the Site accommodates 17.5m AV’s, emergency vehicles would readily be able to access the site if necessary.</td>
</tr>
<tr>
<td>road network and parking provision onsite in accordance with the</td>
<td></td>
</tr>
<tr>
<td>relevant Australian Standards.</td>
<td></td>
</tr>
</tbody>
</table>
SEAR | Response
---|---
Details of any likely dangerous goods to be transported on arterial and local roads from the site, if any, and the preparation of an incident management strategy, if necessary.
It is understood that dangerous goods are currently stored on Site. It is noted that these are below the SEPP 33 threshold trigger, for more information refer to the report prepared by RS&H.

If required, preparation of a draft Construction Traffic Management Plan which includes:
- details of vehicle routes, number of trucks, hours of operation, access management and
- traffic control measures for all stages of construction;
- assessment of cumulative impacts associated with other construction activities;
- an assessment of road safety at key intersections in the vicinity of the site;
- details of anticipated peak hour and daily truck movements to and from the site;
- details of access arrangements for workers to/from the site, emergency vehicles and
- service vehicle movements;
- details of temporary cycling and pedestrian access during constructions;
- an assessment of traffic and transport impacts during construction and how these
- Impacts will be mitigated for any associated traffic, pedestrians, cyclists and public
- transport operations.

A Construction Traffic Management Plan is not required for this Proposal as the Site is already operational using the existing facilities which have been in place for some time.

1.2 Pre-Development Application Advice

A Pre-Development Application Pre-DA) meeting between Cumberland Council and Precast Elements Pty Ltd / Urbis was held on 18 April 2018 regarding the Site. The advice and comments pertaining from the meeting were submitted by letter dated 15 June 2018, these comments are presented in Table 2 below.

Table 3: Pre-DA Advice

<table>
<thead>
<tr>
<th>Advice/comments</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii. A Traffic and Parking Assessment Report prepared by a suitably qualified traffic practitioner in accordance with the Sydney DCP 2013, and RMS Guide to Traffic and Parking Development 2009, shall be submitted with any Development Application. In addition to the requirements detailed in the RMS guide, the report shall assess the following:</td>
<td>06149/01v1 46-53 Pine Road, Yemina</td>
</tr>
</tbody>
</table>
The provision of off-street parking spaces shall be shown on the plan and be in accordance with the Holroyd DCP 2013.

The provision of accessible parking spaces.

The design of the driveway, internal roadways, car parking spaces, sign distance and loading areas shall comply with the Holroyd DCP 2013, and Australian Standards (i.e. AS2890.1 - 2004, AS2890.2 - 2002 for large vehicles, and AS2890.5 - 2009 for accessible spaces).

The number and types of heavy vehicles accessing the site.

A swept path analysis shall be provided demonstrating:

- The largest heavy vehicles manoeuvring within the site;
- The largest light/heavy vehicles at the intersection of any shared access roads to the factories;
- The largest vehicles can enter and exit the site in a forward direction;
- A car can access all spaces within the carpark;
- The largest vehicles entering/exiting the site is not to encroach onto the road centres line, driveways centres line, parked vehicles on the frontage roads and/or any other structure.

II. Accessible parking shall have slip resistance surface in accordance with AS 2880.1 - 2004. The 1 accessible parking space would be provided in accordance with AS 2880.1.

1.3 Report Structure

The report is structured as follows:

- Section 2 describes the existing site conditions and land use and the site's public transport links.
- Section 3 provides a summary of the proposed development.
- Section 4 outlines the parking requirements applicable to the proposed development.
- Section 5 assesses the traffic impacts of the development including the site's projected trip generation and forecasted network performance.
- Section 6 discusses the site access and internal design of the development.
- Section 7 provides a summary of the key conclusions.

This TIA Report provides a traffic and parking assessment of the Proposal. Please refer to Section 4 for an assessment of the parking requirements. An indicative parking layout is shown in Appendix B.

The DCP does not provide a requirement for accessible spaces for industrial uses, thus the Disability (Access to Premises - Buildings) Standards 2010 has been referred to which provides a requirement of 1 space for every 100 car parking spaces or part thereof. Thus, 1 space would be provided.

Refer to Section 6 for a review of the design of the layout, noting this is an existing facility which has been operating for a period of time.

Refer to Section 4.2 and Section 5.

Please refer to Appendix B for Swept Path Analysis. It should be noted that the largest vehicles accessing the Site are 17.6m Articulated Vehicles, which currently enter and exit the Site in forward gear and have historically done so. The design vehicle that has been used for the Swept Path Analysis is a 17.6m AV.
2 Existing Conditions

2.1 Site & Location

The Site – which is legally known as Lot 2 DP839790 – is located within an industrial area of Yennora, approximately 7 kilometres northeast of Liverpool, 7 kilometres southwest of the Parramatta CBD and 23 kilometres west of the Sydney CBD. It is within the Local Government Area (LGA) of Cumberland Council and is zoned as IN1 – Industrial.

The overall Site comprises a total area of approximately 10,825m² and is bound by Pine Road to the east, industrial developments to the north and south and Prospect Creek to the west.

A Site Plan is presented in Figure 1 which provides an appreciation of the site and the existing conditions.
Figure 1: Site and Road Hierarchy
2.2 Site Overview

The Site is occupied by two warehouses and an office building and are tenanted by Precast Elements Pty Ltd who have been operational on the Site since 2016. The Site comprises:

- A northern single-storey warehouse which comprises of 860m² and 8 roller doors for loading access. The warehouse is currently being predominantly used for the storage of concrete panels. This warehouse was previously occupied for logistics and storage purposes.

- A southern single-storey warehouse building which comprises of 2,021m², an ancillary office of approximately 270m² and 7 roller doors for loading. The current operational use of the building is for the storage and manufacturing of concrete panels. This warehouse was previously occupied for logistics and storage purposes.

- A central two-storey ancillary office building 300m².

- A southern office building 314m².

There are 4 formal parking spaces currently provided within the confines of the boundary fence, to east of the office building (i.e. directly outside the main reception entrance), which are used for office staff. Ad-hoc parking was also observed on the front hardstand of the Site — during a Site inspection conducted on 9th May 2018, 6 cars were observed to be parked in this area, with 3 utilising the formal spaces and another 3 parked informally.

A further 5 formal parking spaces were observed marked in the southeast corner of the Site but are being used for storage. Historical aerial imagery suggests that the south east corner of the Site was marked and used for parking, although the use of this area for this sole purpose has been limited.

During the Site inspection, 15 cars were observed to be parked along the front set back, as well utilising Pine Road’s on-street parking. However, Precast Elements Pty Ltd have confirmed that this is no longer conducted and all staff now park on the front hardstand of the Site. It should be noted that on-street car parking is commonplace within the immediate streetscape.

In summary, on-site inspections indicated an observed demand for 21 parking spaces within the property boundary with some assumed reliance upon on-street parking for the balance of employees.

Presently, loading occurs between the two warehouses under the gantry cranes which were installed by Precast Elements. The largest vehicles observed to access the Site were ~17.5m articulated vehicles (AV), which was confirmed by Precast Elements to be the maximum vehicle accessing the Site. Figure 2 provides an example of the AVs observed to access the Site. The circulation route of the Site involves AVs driving westbound through the 4.6m wide, one-way gantry crane loading area, performing a U-turn
manoeuvre on the hardstand area located at the rear of the warehouses (where loading and unloading
distribution of pre-cast products occurs).

Figure 2: Observed Articulated Vehicle On-Site (Pictured in Rear Hardstand Area)

The Site is accessed via Pine Road, which is suitable for heavy vehicle usage and is 13m in width.
Access to the Site is via a 9m wide single driveway. Figure 3 shows the Site access from Pine Road.

Figure 3: Site Access (From Pine Road Toward Site)
2.3 Road Hierarchy

The key roads providing in the vicinity of the site are summarised below:

- Cumberland Highway – An RMS Highway (HW13) that is a major arterial road that provides Sydney with key links to the M1, M2, M4, M5 and M31 motorways. It runs in a north-south direction to the north-west of the site and runs between M4 to the north and M5 to the south. The highway has three trafficable lanes in each direction.

- The Horsley Drive – An RMS State Road (MR 809) that runs in a south-east to north-west direction between the Hume Highway to the south, and Cumberland Highway to the north. It generally consists of 2-3 lanes of traffic on each direction.

- Fairfield Road / Polding St North – An unclassified RMS road (7222) that generally runs in a north-south direction. This sub-arterial road generally consists of 2 lanes of traffic on each direction with a 60km/hr speed limit.

- Dursley Road – A collector road that connects Pine Road to Fairfield Road. It carries a single lane of traffic in each direction.

- Pine Road – A collector road that carries a single lane of traffic in each direction with a 50km/hr speed limit. It connects Fairfield Street to the south to Fairfield Road to the north.

2.4 Crash Statistics

From a review of RMS Crash Statistics for the latest 5-year period (2012-2016 inclusive) reporting available reveals a moderate amount of crashes occurred near the vicinity of the Site but with no fatalities. At the Dursley Road / Fairfield Road Intersection, there were 7 accidents recorded, with 1 resulting in serious injury, 1 accident resulting in moderate injury, 1 resulting in minor injury and 4 accidents with no casualties.

At the Pine Road / Dursley Road intersection there 2 report accidents with one resulting in moderate injury and the other resulting in no casualties. There were no accidents reported along Pine Road, north of the Site. South of the Site, there were 5 accidents along Pine Road, with 2 resulting in serious injury, 2 resulting in moderate injury and 1 resulting in no casualties.

There were no outstanding commonly occurring crash incidents. Figure 4 details the degree of crashes that occurred within the proximity of the Site.
Figure 4: Site Crash Statistics (2012-2016)

2.5 Non-car Access

The Site's proximity to public transport is shown in Figure 5, which demonstrates the locations and distances to the train and bus services surrounding the Site.

2.5.1 Bus Services

The bus services that travel within the vicinity of the Site include:

- Route 802 – Liverpool to Paramatta via Green Valley
- Route 804 – Liverpool to Parramatta via Hinchinbrook

These services run approximately every 30 minutes during the weekday morning and afternoon peak periods while the N60 route only operates after midnight.

The existing bus services that operate in the locality are shown in Figure 5 and summarised below.

2.5.2 Train Services

The Yennora Train Station is approximately 1.3 km walking distance from the Site which is an estimated 15 minutes of walking. This station is serviced by both the T2 – Inner West & Leppington Line and the T5 – Cumberland Line with connections to the Sydney CBD, Inner West, Liverpool and Leppington. During the peak hours, trains arrive in both directions at a frequency of 4 – 5 minutes.
2.5.3 Bicycle Paths

The existing cycle network in the vicinity of the Site is also shown in Figure 5. A dedicated bicycle trail is provided along the railway corridor towards Yennora Station. An additional bicycle trail is available along Prospect Creek starting at Fairfield Road to the north of the Site.

2.5.4 Pedestrian Accessibility

There is an existing pedestrian footpath which ends at the northern site boundary and restarts at the southern boundary of the Site. Unformalised pedestrian paths and noted along both sides of Pine Road where no formal footpath connections exist.
Figure 5: Public Transport Network
3 Overview of Development

3.1 Summary of Existing Development

A detailed description of the development is included in the Environmental Impact Statement, prepared by Lurbs. In summary, the Designated Development Application relates to a retrospective approval for a change of use from general industry to industry activity.

The existing facilities that relate to these operations include 2,881m² warehouse (2,021m² for manufacture of concrete slabs and 860m² of storage in the warehouse to the north of the Site) and 614m² office. The following summarises the key operational elements of the Site:

- Use of the existing warehousing for manufacture and storage of pre-cast concrete panels,
- A maximum of 20 concrete panels per day are produced on the Site (with 2 panels distributed per truck) and 8-10 loads of wet concrete (Boral) are received per day.
- There are a total of 35 staff are on-site at any one time. The breakdown of current staff shift times are as follows:
  - 5 staff – 4am to 1pm
  - 13 staff – 6am to 3pm
  - 12 staff – 8am to 5pm
  - 5 staff – 10am to 7pm
- 24 hours of operation, seven days a week with the following restrictions:
  - Deliveries: between 7.00am to 5.00pm,
  - Product Distribution (from the Site) between 3.00pm to 5.00pm,
- Burring of the concrete truck waste area to the north east corner of the site to contain sediment and provide a barrier to retain dry material.
- The parking area to the south east corner of the Site is to be cleared and a total of 26 parking spaces to be provided.
- Provision of 12 bicycle spaces are proposed along the eastern boundary of the property.
- Access provided via the existing vehicle driveway on Pine Road.

The development is already operational; thus the purpose of the application is to formalise the above operations.
4 Parking & Servicing Requirements

4.1 Car Parking

The application relates to the re-development of current operations on the Site, which includes an existing 860m² storage warehouse, 2,021m² warehouse used for storage / manufacturing of pre-cast concrete products, 300m² central office and 314m² office for a pre-cast facility. The Holroyd DCP, Part A, Chapter 3 specifies for various industrial and business premises, as shown by Table 2.

Table 4: Car Parking Rates

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holroyd DCP</td>
<td>1 space per 70m² gross floor area plus 1 space per 40m²* ancillary office gross floor area</td>
</tr>
<tr>
<td>Factory</td>
<td>1 space per 300m² gross floor area plus 1 space per 40m²* ancillary office gross floor area</td>
</tr>
<tr>
<td>Warehouse</td>
<td>1 space per 300m² gross floor area plus 1 space per 40m²* ancillary office gross floor area</td>
</tr>
<tr>
<td>RMS Guide</td>
<td>1.3 spaces per 100m² GFA</td>
</tr>
<tr>
<td>Factory</td>
<td>1 space per 300m² GFA</td>
</tr>
<tr>
<td>Warehouse</td>
<td>1 space per 300m² GFA</td>
</tr>
<tr>
<td>Office</td>
<td>1 space per 40m²</td>
</tr>
</tbody>
</table>

In order to address the SEAR condition, a review of the applicable parking rates has been undertaken for assessment purposes. Applying these rates to the existing development results in the parking requirements provided in Table 3.

Table 5: Car Parking Requirements

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Yield</th>
<th>DCP Requirement</th>
<th>RMS Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory</td>
<td>2,021m²</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>Warehouse</td>
<td>860m²</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Office</td>
<td>314m²</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>47</td>
<td>44</td>
</tr>
</tbody>
</table>

However, noting that the development is existing, the detailed operational requirements is already known, and the travel behaviour of employees is understood. Thus, the parking requirement has been based on a first principles assessment to account for the unique and known characteristics of the Proposal.
4.1.1 First Principle Assessment

Based on a maximum of 35 employees present on-site at any one time, 35 parking spaces would need to be provided. However, Ason Group has been advised that approximately 35% of staff members commute to work via public transport, notably via train (with the train station a 1.9km walk from the Site). This would result in approximately 23 employees commuting to work via private vehicle.

In addition, it has been advised that there are a number of employees who car share. RMS Guide data details that industrial workers’ private vehicles have an average occupancy of 1.26 persons. Applying this occupancy rate to the 23 employees commuting via private vehicle, would equate to a demand of 18 spaces.

Therefore, 28 formal parking spaces are to be provided in the south east corner of the Site, which would accommodate the additional operational parking demands of the proposed development. Noting that on-site observations recorded 21 vehicles parked on-site, the balance of 5 parking spaces would generally accommodate visitor parking and any additional staff demand that was not observed during the Site inspections, noting that some staff currently park on-street. This results in a net benefit to on-street parking capacities.

The proposed parking provision is supported by:

- Development of a Workplace Travel Plan (WPT) to be presented in the main office building and distributed to all employees. (Appendix A)

- On the basis that 12 employees currently travel by alternative modes – this patronage would be readily accommodated by the sustainable transport network.

- Provision of bicycle parking on-site.

The Development can therefore accommodate the parking demand it generates within the confines of the Site.

4.1.2 Bicycle Parking

The Holroyd DCP Part A 3.6 Bicycle Parking does not specify a bicycle parking rate for industrial land use. Thus, the document "Planning Guidelines for Walking and Cycling" (NSW Government 2004) has been referred to find an applicable rate:

- Bicycle parking spaces to be provided at the rate of 3-5% of staff.
Application of this rate results in the requirement for 2 bicycle spaces. A total of 12 bicycle parking spaces are proposed, which complies and exceeds the rates required. These spaces would encourage the use of cycling to work.

4.2 Servicing

The operation of the Site involves the pre-cast concrete elements loaded via the gantries between the two warehouses to lift the concrete blocks onto trucks for transportation. Thus, the loading and servicing requirements of the facility involve concrete deliveries to the front of the warehouse, unloading of concrete stands to the rear on the Site and collection for the finished pre-cast slabs between the warehouses.

It should be noted that the Precast Element currently participates in the Bin Trim Rebate Recycling Program through the NSW Environmental Protection Authority. All waste is disposed of using a licensed contractor. The Site produces numerous forms of waste, with the following bins, operations on-site and waste removal frequency:

- 3m paper recycle bin (6m in area) – Once per fortnight
- 4.5m general waste (8m in area) – 3 times per week
- 6m concrete recycle bin – Once per month (or as required)
- 6m steel recycle bin – Once per month (or as required)
- Foam waste bin – Once per fortnight
- Concrete waste area (6m x 6m in area)

Each of the areas is serviced by one truck. For the purpose of the design assessment, a 12.5m HRV design vehicle has been adopted.
5 Traffic Assessment

5.1 Traffic Generation

The development is operational and thus the traffic generated by the site is already being accommodated by the road network. An assessment of the traffic generation has been undertaken with consideration for both a complying warehouse development and a generic factory based on RMS Guidance. When considering the site’s traffic generation and its impacts on the road network during key periods, the assessment can be separated as follows:

Development Assessment – responding to the site’s operational peak traffic generation for staff arriving on-site (Site Peak).

Standard Assessment – in accordance with RMS TIA requirements relating to the AM and PM peak hours between 7.00-9.00am and 4.00-6.00pm (Road Network Peak).

5.1.1 Industrial Facility – RMS Guide to Traffic Generating Development

The historical traffic generation of the site is not known; however, the RMS Guide provides trip rates for factories, warehouses and office uses. Table 4 provides the possible historical traffic generation for the site based on the RMS Guide rates.

Table 6: Historical Site Traffic Generation

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Yield</th>
<th>Trip Rate</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory</td>
<td>2,881m²</td>
<td>1 trip per 100m²</td>
<td>29</td>
</tr>
<tr>
<td>Warehouse</td>
<td>2,881m²</td>
<td>0.5 trips per 100m²</td>
<td>14</td>
</tr>
<tr>
<td>Office</td>
<td>614m²</td>
<td>2 trips per 100m²</td>
<td>12</td>
</tr>
</tbody>
</table>

Based on the RMS Guide, the site historically could have generated 41 veh/hr during the Road Network Peak hours based on the ‘factory’ rate and 26 veh/hr based on the ‘warehouse’ rate.

5.1.2 Development Assessment

Given the site would be operational 24 hours a day, seven days a week the factory staff are likely to arrive and depart at sporadic times of the day. The current staff shift patterns have been informed to be the following:

- 4.00am to 1.00pm
- 8.00am to 5.00pm
- 6.00am to 3.00pm
- 10.00am to 7.00pm
It has also been assumed that half the office staff would travel to Site by car during normal road peak hours. Noting that there are 10 office staff and a total of 23 employees travelling to Site by car, with 18 vehicle trips being generating (accounting for car sharing). Thus:

- 4 factory staff arrive to start at 4.00am and depart after 1.00pm by car for the first shift,
- 9 factory staff arrive to start at 8.00am and depart after 3.00pm by car for the second shift,
- 8 factory staff arrive to start at 8.00am and depart after 5.00pm by car for the third shift,
- 4 factory staff arrive to start at 10.00am and depart after 7.00pm by car for the fourth shift.

The Peak Site generation would therefore result in 9 vehicle movements per hour outside of the road network peak period conditions. Considering a conservative assessment, should all staff have to arrive on-site at the same time, there would be a maximum of 18 vehicle trips per hour.

5.1.3 Standard Assessment

Based on the operation of the Site (as discussed in Section 3) there is expected to be up to 21 trucks per day, or 42 movements travelling to and from the Site comprising:

- 10 AVs to distribute pre-cast concrete products,
- 10 concrete delivery truck movements per day,
- 1 truck for waste removal.

Restrictions are in place for distribution (between 3.00-5.00pm) of products and concrete deliveries (9.00am-5.00pm). For the purpose of the first principle assessment and defining the Road Network Peak volumes, the following has been assumed:

- The projected waste and concrete delivery truck movements occurs from 9.00am-5.00pm and distribution occurs between 3.00pm-5.00pm.
- The 5 administrative staff who have been assumed to drive to Site arrive and depart during normal hours (8.00am-9.00am and 5.00pm-6.00pm).

Thus, during the Road Network Peak there would be:

- 5 light vehicle movements during the morning peak hour of 8.00am-9.00am,
- 13 heavy vehicle movements during the evening peak hour of 4.00pm-5.00pm, and
- 5 light vehicle movements during the evening peak hour of 5.00pm-6.00pm.
Thus, the peak traffic generated by the Site would be during the evening peak hour of 4.00pm-5.00pm, which represents one truck movement every 5 minutes. This number of movements would have no material impact of the operation or safety of a road network which already accommodates high volumes of heavy vehicles.

5.1.4 Traffic Assessment Conclusion

The Proposal would have very limited effect on the operation of the road network during the Road Network Peak, with a maximum of 13 heavy vehicles per hour generated by the Site. The Site Peak would be between 5.00-6.00am, with 9 veh/hr forecast to be travelling to and from the Site. Should all staff have to be on-site at once, then there would be a maximum of 18 veh/hr generated.

To conclude, the intended operation of the Site would result in 14 heavy vehicle movements during the network peak hours, or 1 movement every 4 minutes. This number of trips would not have a material impact on the operation of the network and therefore no SIDRA analysis has been conducted nor are there any network upgrades required.

Table 6 provides a comparison of the historical traffic generation of the Site (based on RMS Guide ‘warehouse’ rates and ‘factory’ rates) and the peak hour traffic generation of the development. As can be seen the Proposal represents a reduction on both the uses.

Table 7: Peak Hour Traffic Generation Comparison

<table>
<thead>
<tr>
<th>Land Use</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMS Factory Rate</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>RMS Warehouse Rate</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Development</td>
<td>5</td>
<td>13</td>
</tr>
</tbody>
</table>

5.2 Heavy Vehicle Traffic Routes

All trucks have to enter and exit the Site via right-in / left-out movements as Pine Road to the south prohibits 19m AV movements.

The primary truck route to and from the Site is via Cumberland Highway. Trucks turn onto Sturt Street via the signalised intersection which connects with McCredie Road. Heavy vehicles then travel along Fairfield Road before turning into Dursley Road and onto Pine Road. A map of the typical truck routes is shown in Figure 5. RMS currently identifies this route as heavy vehicle routes.
The Site is currently generating additional truck movements along these routes. However, given these roads currently carry high volumes of heavy vehicles, the 15 trucks generated by the Site between 4.00pm-5.00pm.

Figure 6: Heavy Vehicle Routes
6 Design Commentary

6.1 Relevant Design Standards

The Proposal is for an existing facility, which has been operating with tenants for some time, the changes to the proposed car parking and loading areas have been assessed against their compliance with the following relevant Australian Standards:

- AS2890.1 for car parking areas;
- AS2890.2 for commercial vehicle loading areas;
- AS2890.8 for accessible (disabled) parking.

A detailed review of the Site has been undertaken and the following characteristics are noteworthy:

- All staff parking spaces are designed in accordance with a User Class 1A and are to be provided with a minimum space length of 5.4m, a minimum width of 2.4m.
- Swept path analysis indicates that the necessary servicing is possible, noting that the largest vehicle to access the Site would be a ~17.5m AV, thus the most applicable vehicle has been used for the swept paths.
- All service vehicles can enter and exit the site in a forward direction.

Swept path analysis is provided as Appendix B and illustrates the Site's capability to accommodate the necessary trucks in the loading areas.
7 Conclusions

The key findings of this Traffic Impact Assessment are:

- The Site is located at 49-53 Pine Road, Yennora and is covered by the Holroyd Development Control Plan 2013. The Proposal relates to a retrospective approval for the change of use from general industrial to industrial activity, for the purpose of manufacturing precast concrete panels within the existing warehouse.

- As discussed in Section 1, the key objectives of this TIA report include:
  - Parking: Ensure formal parking is provided off-street in a consolidated location to accommodate the development’s parking demands.
    *(Reason: To satisfy the peak parking demands of the development and improve on-street parking capacity by limiting reliance upon Pine Road)*
  - Traffic Impacts: Undertake a first principle traffic generation assessment using the known operational data of the industrial facility and provide a comparative assessment with the historical use of the Site.
    *(Reason: To demonstrate the operational development currently does not result in unacceptable impacts to the external road network over and above a Standard Industrial Development)*
  - Internal Design: Demonstrate that the access and internal design principles of the Site are designed in accordance with the Australian Standards and capable of accommodating compliant car parking in accordance with AS 2800.1 in addition to the largest vehicle required to access the Site.
    *(Reason: To ensure that the access and internal layout operate in a safe manner)*

- Based on the requirements of Council’s DCP and the RMS Guide, the Site would be required to provide between 44-47 parking spaces for a generic and new development. The parking requirement however, has been based on a first principles parking assessment to take account of the operational characteristics of the Proposal. Taking into consideration the employee numbers, the proportion of those who currently use public transport to travel to the Site and those that carpool, has resulted in the requirement of 21 staff parking spaces. A total of 26 spaces are to be provided, which would accommodate the staff and visitor parking demand on-site. This demonstrates the Proposal’s alignment with the parking objective to ensure parking is provided off-street.

- The formalisation of staff parking on-site would reduce the demand on on-street parking and remove parking from the front set back. This would improve safety conditions for vehicles and pedestrians by removing the possibility of cars reversing out of the Site onto Pine Road.

- The Proposal is predicted to generate a Site Peak of 9 veh/hr outside of the Road Network Peak hours.
During the Road Network Peak, the Proposal would generate some 13 heavy vehicle movements (between 4.00pm-5.00pm), which is based on a first principles assessment of operational requirements of the Proposal. This equates to 1 vehicle every 5 minutes, which would have no material impact on the operation of the network. This demonstrates the Proposal’s alignment with the traffic impact objective to ensure the development does not result in unacceptable impacts to the external road network.

Noting that this traffic is currently being generated by the Site as an existing development, it is already being accommodated by the road network.

When compared to the historical traffic generation of the Site, the development represents a reduction in traffic generation from 26 veh/hr to 13 veh/hr, as shown by Table 5. This demonstrates the Proposal’s alignment with the traffic impact objective to demonstrate that the operational development currently does not result in unacceptable impacts to the external road network over and above a Standard Industrial Development.

The Site has been designed to accommodate heavy vehicles and has historically done so. Regardless, the Site has been assessed using swept path analysis for the largest vehicle that is required to access the Site, which has illustrated that they can be accommodated, also demonstrated by on-site observations. This demonstrates the Proposal’s alignment with the design objective to demonstrate that the development is capable of accommodating the largest vehicle required to access the Site.

The TIA report has sought to present the operational characteristics of the existing development to the assessing authorities. The key parking and traffic objectives have been achieved where the formalisation of parking is now accommodated within the property boundary, resulting in a preferred safety outcome. The traffic analysis indicates that the development is a low generator and is currently accommodated within the external road network. And finally, the design of the existing Site can accommodate the key parking and service demands, generally design in accordance with Australian design standards.

In summary, this TIA Report satisfactorily addresses the traffic and transport related SEARs and it is concluded that the Proposal is supportable on traffic planning grounds.
Appendix A

Travel Access Guide
Appendix B
Swept Path Analysis
When 12.5m waste truck enters, the 8.8m MRV area to the north must be kept clear at all times.
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 9
Site Waste Minimisation and Management Plan
PRECAST CONCRETE MANUFACTURING

49-53 Pine Road, Yennora
Site Waste Minimisation and Management Plan

Prepared for:
Precast Elements Pty Ltd
49-53 Pine Road
YENNORA NSW 2161
EXECUTIVE SUMMARY

PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Maryanne Gjura (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

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<td>Andrew Quinn</td>
<td>Andrew Quinn</td>
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<td>Dale Beckham</td>
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APPENDICES
Appendix A SEAR 1192 Key Issues (Waste Management)
Appendix B NSW EPA SEAR 1192 Commentary
Appendix C Plans
Appendix D Precast Elements 09.04.01, Concrete Waste Management Procedure (Rev B)
1 Introduction

SLR Consulting Australia Pty Ltd (SLR) was engaged by Urbis Pty Ltd (Client), on behalf of Precast Elements Pty Ltd (Precast Elements), to prepare a Site Waste Minimisation and Management Plan (SWMMP) for an existing industrial facility at 49-53 Pine Road, Yennora NSW 2161 (site).

This SWMMP has been prepared as part of an Environmental Impact Statement (EIS) which, in turn, is being prepared to support a Designated Development Application (DDA) to Cumberland Council for a change in the approved land-use for the site from ‘General Industry’ to ‘Industrial Activity’. The EIS, which has been triggered due to the proximity of a sensitive environmental receiver (Prospect Creek), is being prepared by the Client in accordance with Schedule 3 of the Environmental Planning and Assessment Regulation 2000. The EIS is to satisfy a set of Secretary’s Environmental Assessment Requirements (SEARs), issued by the NSW Department of Planning and Environment (DPE), in relation to the DDA.

The site is currently occupied by a precast concrete manufacturing facility and is intended to continue to be used for concrete casting operations. Further details on the site and its land-use are provided in Section 4.

This SWMMP applies to waste generated from the precast concrete manufacturing operations and is based on information presented in the Client’s ‘Site Plan SP01, Revision A, Sheet 1 / 4 (dated 1 November 2017)’, the Precast Element’s ‘Environmental Management Plan (EMP) Revision A.2’ and on observations made by SLR during a visit to the site on 10 May 2018.

1.1 Site Identification

The site is located at 49-53 Pine Road, Yennora, NSW 2161. The site is within the local government area of Cumberland Council (Council) and comprises the property title Lot 2 on DP 939790 (Figure 1).

Figure 1 Site location (highlighted)

Source: Adapted from SIX Maps: https://maps.nsw.gov.au/
1.2 Objectives of SWMMP

This SWMMP is to provide information to satisfy the SEARs key issues in SEAR Number 1192, as well as input from the NSW Environment Protection Authority (NSW EPA), which pertain to waste management (Appendix A):

SEAR Number 1192 Key Issues for waste management:

- "details of waste handling including transport, identification, receipt, stockpiling and quality control including off-site reuse and disposal; and"
- "the measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in the NSW Waste Avoidance and Resource Recovery Strategy 2014-21."

Input from NSW EPA (Document reference DOC17/613909) to SEAR Number 1192 concerning waste management:

- "details of the quantity and classification of waste to be generated on site;"
- "the transportation, assessment and handling of waste generated at the site;"
- "the methods for storage and disposal of all waste materials, including stockpiling at the site;"
- "any waste processing related to the project including on-site treatment;"
- "the proposed controls for managing the environmental impacts of these activities; and"
- "details of the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste Avoidance and Resource Recovery Strategy 2014."

1.3 Review of SWMMP

This SWMMP is not a static document. It is a working document that requires review and updating to ensure ongoing suitability for the proposed on-going operations at the site.

This SWMMP shall be reviewed and updated:

- To remain consistent with waste / landfill regulations / guidelines;
- Should changes be made to site waste and recycling management be required; or
- To take advantage of new technologies, innovations and methodologies for waste and/or recycling management.

Changes made to the SWMMP, as well as the reasons for the changes made, shall be documented by the site operator as part of the review process.

Copies of the original SWMMP, as well as all future versions of the SWMMP, shall be retained by the site operator.
2 Better Practice for Waste Management and Recycling

2.1 Waste Management Hierarchy

This SWMMP has been prepared in line with the waste management hierarchy (Figure 2), which summarises the objectives of the Waste Avoidance and Resource Recovery Act 2001.

The waste management hierarchy comprises the following principles, from most to least preferable (with respect to waste minimisation):

1. Waste avoidance, through prevention or reduction of waste generation. Waste avoidance can be achieved through better design and purchasing choices;
2. Waste reuse, without substantially changing the form of the waste;
3. Waste recycling, through treatment of waste to produce new products;
4. Energy recovery, through processing of residual waste materials;
5. Waste treatment; through treatment to reduce environmental and health risks; and
6. Waste disposal, in a manner that causes the least harm to the natural environment.

![Waste Management Hierarchy Diagram]


Figure 2 Waste management hierarchy

2.2 Benefits of Adopting Better Practice

Adopting better practice principles in waste minimisation offers significant benefits for organisations, stakeholders and the wider community. Benefits from better practice waste minimisation include:

- Enhanced social and environmental reputation of an organisation;
- Reduced consumption of non-renewable resources;
- Reduced pollution generated from materials manufacturing and waste treatment;
- Reduced financial burden associated with waste disposal; and
- Opportunities for additional revenue streams through beneficial reuse.
3 Waste Legislation and Guidance

Legislation and guidance documents outlined in Table 1 should be referred to during operations of the site.

<table>
<thead>
<tr>
<th>Legislation / Guidance</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary's Environmental Assessment Requirements (SEAR) 1192</td>
<td>SEARs pertaining to the preparation of an Environmental Impact Statement for the Precast Concrete Product Manufacturing, Lot 2 DP 939790 (issued 16 January 2018). This SWMP specifically addresses the key issues pertaining to ‘Waste Management’ as well as the input from NSW EPA to the SEAR 1192 concerning waste management.</td>
</tr>
<tr>
<td>Holroyd Development Control Plan (DCP) 2013</td>
<td>The Holroyd DCP was prepared in accordance with section 79C of the Environmental Planning and Assessment Act 1979 and the Environmental Planning and Assessment Regulation 2000. Cumberland Council's Local Government Area is an amalgamation of the former Auburn, Holroyd and Parramatta Local Government Areas. Cumberland Council has advised SLR to use the Holroyd DCP and LEP as Cumberland Council does not currently have an amalgamated DCP or LEP. The Holroyd DCP presents waste management requirements and objectives to reduce waste disposal and maximise reuse and recycling. These have been adopted, where relevant, by SLR as guidelines for operational management requirements at the site.</td>
</tr>
<tr>
<td>Holroyd Local Environmental Plan (LEP) 2013</td>
<td>The Holroyd Local Environmental Plan (LEP) provides the legal framework of the Holroyd Development Control Plan, including land use (zones) and development permitted in a set zone.</td>
</tr>
<tr>
<td>Product Stewardship Act 2011</td>
<td>The Product Stewardship Act aims to reduce waste and prevent the landfilling of harmful materials by increasing recycling and the recovery of valuable materials from products. The Act highlights that government, industry and the community alike all hold a shared responsibility to the impact of manufactured, consumed and disposed products.</td>
</tr>
<tr>
<td>Protection of the Environment Operations Act (POEO) 1997 and Amendment Act 2011</td>
<td>Administered by the NSW EPA to enable the Government to establish instruments for setting environmental standards, goals, protocols and guidelines. The POEO Act outlines the regulatory requirement for all wastes generated during the demolition, construction and operational phases of a development, to be sent to a licensed facility. The POEO Act administers the system for licensing waste transport and disposal.</td>
</tr>
<tr>
<td>Waste Avoidance and Resource Recovery Act 2001</td>
<td>To promote extended producer responsibility in place of industry waste reduction plans. Specific objectives include: - To encourage efficient use of resources; - To minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste; - Ensuring industry and the community share responsibility in reducing / dealing with waste; and - Efficient funding of waste and resource management planning, programs and service delivery. As of 2016, the addition of Part 5.2 defines the legislative framework for the Return and Earn container deposit scheme where select containers can now be returned in NSW for a 10c refund.</td>
</tr>
<tr>
<td>POEO (Waste) Regulation 2014 (previously POEO (Waste) Regulation 2005)</td>
<td>Contains provisions relating to the waste levy, waste tracking and management requirements for certain waste types, payment schemes for local councils, consumer packaging recycling and other miscellaneous provisions.</td>
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</table>

Holroyd was one of the councils that amalgamated to form Cumberland Council.
<table>
<thead>
<tr>
<th>Legislation / Guidance</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW EPA Resource Recovery Orders and Resource Recovery Exemptions</td>
<td>The NSW EPA has issued a number of resource recovery orders and resource recovery exemptions which are currently in force in NSW for commonly recovered and reused wastes. - Resource recovery orders present conditions which generators and processors of waste must meet to supply the waste material for beneficial re-use; and - Resource recovery exemptions contain the conditions which consumers must meet to use waste for beneficial re-use.</td>
</tr>
<tr>
<td>NSW EPA NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (2014)</td>
<td>A key component of the State Government’s vision for the environmental and economic future of the state that will be supported financially by the Waste Less, Recycle More funding initiative providing long-term targets for six key result areas including reduced illegal dumping.</td>
</tr>
<tr>
<td>NSW EPA Waste Classification Guidelines 2014</td>
<td>To assist waste generators to effectively manage, treat and dispose of waste to ensure the environmental and human health risks associated with waste are managed appropriately and in accordance with the POED Act and its associated regulations.</td>
</tr>
<tr>
<td>Australian Packaging Covenant 2017</td>
<td>The Australian Packaging Covenant highlights two goals in an effort to support a reduction in the environmental impacts associated with Consumer Packaging: - Design: Optimize packaging using less resources and enabling efficient end-of-use recycling; and - Recycling / reuse: Supporting innovative packaging collection before it enters the environment. - Product Stewardship: Demonstrate commitment of all signatories.</td>
</tr>
<tr>
<td>Building Code of Australia (BCA) and relevant Australian Standards</td>
<td>The BCA has the aim of achieving nationally consistent, minimum necessary standards of relevant health and safety, amenity and sustainability objectives efficiently.</td>
</tr>
</tbody>
</table>
4 Project Description

The existing facility comprises two single-storey warehouses for masonry block and concrete panel manufacturing ('Factory 1' and 'Factory 2'), a two-storey brick office building located between Factory 1 and Factory 2, an outdoor storage area and, within the front setback, staff car parking. The total area of the facility is approximately 10,825 m². The staff car parking, office building and two warehouses are all located on concrete hardstand. The outdoor storage area appears to be a ‘temporary hardstand’ covered with crushed concrete and fine aggregate. The general layout of the site is shown in Figure 3.

Factory 1 is along the southern site boundary and includes an additional office. It also currently houses two 12.5 t and one 10 t overhead gantries and is predominately used for manufacturing of concrete panels. Factory 2 is the smaller of the two warehouses, is situated along the northern site boundary and used predominantly for storage of concrete panels manufactured in Factory 1.

Precast Elements currently operates from 7 am to 5 pm Monday to Saturday and employs up to 35 staff. It typically produces approximately 20 concrete panels and receives 8 to 10 loads of concrete per working day. The facility currently participates in the NSW EPA’s Bin Trim Rebate Recycling Program, with all wastes disposed using licenced contractors.

The DDA seeks to change the site use from ‘General Industry’ to ‘Industrial Activity’ and to seek consent for:

- Continuing to use existing infrastructure to manufacture precast concrete building elements;
- Extending hours of operation to 24 hours, seven days week, with the following restrictions:
  - Deliveries to site: from 7 am to 5 pm; and
  - Product distribution (exiting facility): 3 am to 5 pm.
- Increasing the number of onsite staff to allow up to 10 administrative staff and up to 40 operations staff; and
- Construction of a bund, for sediment and runoff control, around an existing waste concrete storage bay in the outdoor storage area.

![Figure 3 Site Layout](image-url)
5  Operational Waste and Recycling Management

5.1  Targets for Resource Recovery

Waste management at the Precast Elements site should contribute to the NSW State target for recycling, which is expected to increase from 52% (2010 to 2011) for commercial and industrial waste to 70% (by 2021 to 2022) of the total waste generation per capita (NSW EPA (2014) NSW Waste Avoidance and Resource Recovery Strategy 2014-21).

It is anticipated that the waste management and minimisation measures described in the following sections will assist Precast Elements in achieve the above resource recovery targets.

5.2  Waste Streams and Classifications

Section 8.2.1 of Precast Elements’ Environmental Management Plan (EMP) version A.2 (dated 1 November 2017), identified the following operational broad waste streams:

- Concrete
- Chemical
- Polystyrene
- Metals
- Paper and cardboard
- General waste
- Water

Potential waste types, associated waste classifications, and management methods are provided in Table 2.

### Table 2  Potential waste types, classifications and management methods – operational waste

<table>
<thead>
<tr>
<th>Waste Types</th>
<th>NSW EPA Classification</th>
<th>Proposed Reuse / Recycling / Disposal Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General waste (including non-recyclable plastics)</td>
<td>General solid (putrescible and non-putrescible) waste</td>
<td>Disposal at landfill</td>
</tr>
<tr>
<td>Recyclable beverage containers (glass and plastic bottles, aluminium cans), tin cans</td>
<td>General solid (non-putrescible) waste</td>
<td>NSW container deposit scheme “Return and Earn”; comingleled recycling at off-site licensed facility</td>
</tr>
<tr>
<td>Food waste</td>
<td>General solid (putrescible) waste</td>
<td>Donate if suitable or compost on site. Alternatively dispose to landfill with general garbage</td>
</tr>
<tr>
<td>Clean office paper</td>
<td>General solid (non-putrescible) waste</td>
<td>Paper recycling at off-site licensed facility</td>
</tr>
</tbody>
</table>

Refer to the Environmental Management Plan for the site concerning management of water (including grey water, surface water runoff and waste-water).

<table>
<thead>
<tr>
<th>Waste Types</th>
<th>NSW EPA Classification</th>
<th>Proposed Reuse / Recycling / Disposal Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and cardboard (including bulky cardboard boxes)</td>
<td>General solid (non-putrescible) waste</td>
<td>Cardboard recycling at off-site licensed facility</td>
</tr>
<tr>
<td>Bulky polystyrene and rigid foam (packaging and concrete casting)</td>
<td>General solid (non-putrescible) waste</td>
<td>Off-site recycling or disposal at landfill</td>
</tr>
<tr>
<td>Furniture</td>
<td>General solid (non-putrescible) waste</td>
<td>Off-site reuse or disposal to landfill</td>
</tr>
<tr>
<td>Concrete</td>
<td>General solid (non-putrescible) waste</td>
<td>Off-site recycling (if hardened and uncontaminated) or disposal to landfill</td>
</tr>
<tr>
<td>Metal scrap</td>
<td>General solid (non-putrescible) waste</td>
<td>Off-site recycling</td>
</tr>
<tr>
<td>E-waste, batteries, printer toners and ink cartridges</td>
<td>Hazardous waste</td>
<td>Off-site recycling (free disposal box or bags and pickup service exists for printer toners and ink cartridges)</td>
</tr>
<tr>
<td>Batteries</td>
<td>Hazardous waste</td>
<td>Off-site recycling (Refer to Australian Battery Recycling Initiative⁵)</td>
</tr>
</tbody>
</table>

Maintenance

| Spent smoke detectors⁵ | General solid (non-putrescible) waste | Disposal to landfill, or off-site disposal at licensed facility                                          |
| Glass (other than containers) | General solid (non-putrescible) waste | Off-site recycling                                                                                      |
| Light bulbs and fluorescent tubes                | Hazardous waste                         | Off-site recycling or disposal (contact FluoroCycle for more information⁶)                              |
| Air-conditioning parts and filters               | General solid (non-putrescible) waste    | Disposal to landfill                                                                                   |
| Cleaning chemicals, solvents, area wash downs, empty oil, paint drums or chemical containers | Hazardous waste if containers used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and residues have not been removed by washing or vacuuming. General solid (non-putrescible) waste if containers cleaned by washing or vacuuming. | Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at licensed facility. Discharge to sewer likely to be subject to Trade Waste Agreement with Sydney Water. |


For further information on how to classify a waste, refer to the NSW EPA (2014) Waste Classification Guidelines.⁷

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5.3 Waste Management Overview

5.3.1 Existing Waste Management Procedures

Management of operational waste is anticipated to continue as per current site procedures:

- General waste collected in small bins located in and around the kitchenette and office areas. Waste is then transferred daily to a 4.5 m³ (4,500 L) capacity front-lift bin for twice weekly collection;
- Paper and cardboard recycling is collected in small bins located in and around the kitchenette and office areas. Source separated paper and cardboard is transferred daily to a 3 m³ (3,000 L) capacity front-lift bin for twice weekly collection;
- Steel and scrap metal stored in 6 m³ (6,000 L) capacity skip bin. Collection by Marrell truck for recycling as needed. SLR was advised by site staff that collection of steel and scrap metal occurs on average once per fortnight;
- Concrete waste initially collected in concrete waste bay, then transferred to a 6 m³ (6,000 L) capacity bin. Collection by Marrell truck for recycling as needed. SLR were advised by site staff that collection frequency varies considerably and depends on the amount of facility production occurring;
- Rigid foam waste (foam rails resulting from concrete casting) is collected in flexible intermediate bulk container bags. Collection for rigid foam recycling on an as need basis. SLR was advised by site staff that collection frequency varies considerably and depends on the amount of facility production occurring; and
- Empty chemical containers stored in bunded area and removed on as need basis. Collection frequency variable due to workload and overall facility production.

5.3.2 Future Waste Management Procedures

With regards to future waste management procedures at the site, SLR understands:

- There will be no change to the existing land use of the site after approval of the DDA; and
- Management of operational waste at the site is intended to continue as per existing arrangements after approval of the DDA.

In line with better practice waste minimisation principles, SLR recommends the following be incorporated into waste management at the site:

5.3.2.1 Commingled Recycling

SLR notes there are currently no provisions at the site for source-separating commingled recycling, other than paper and cardboard, from general waste.

Source-separation of commingled recycling significantly assists with down-stream recycling processes and also reduces the amount of general waste. Therefore, SLR strongly recommends that waste management at the site include the following:

- Commingled recycling be collected in small, dedicated bins located in and around the kitchenette, office areas and, where appropriate in Factory 1 and Factory 2; and
- Commingled recycling is transferred daily from the small bins to 240 L capacity bins for weekly collection. The 240L commingled recycling bins should be positioned with the existing bins for general waste and paper / cardboard.
The waste quantity estimates and waste storage area estimates (Sections 5.4 and 5.5, respectively) have assumed source-separation of comingled recycling from general waste.

5.3.2.2 Electronic Waste

SLR understands that electronic waste (e-waste) is currently disposed of in the general waste stream. While significant amounts of e-waste are not anticipated to be generated from site operations, e-waste can nonetheless be diverted from landfill. SLR recommends the following:

- Ensure e-waste is not disposed of with general waste collection; and
- Collect e-waste and drop-off at a local recycling centre (if available); or
- Schedule e-waste collection by private contractor on an as need basis.

5.4 Estimated Quantities and Storage of Operational Waste

5.4.1 General Waste and Recycling

Based on the capacity of the general waste and paper/cardboard recycling bins and current frequencies of bin collection, the site currently provides the following capacities for managing operational general waste and recycling:

- General Waste: 9,000 L per week;
- Paper and cardboard recycling: 6,000 L per week.

SLR’s estimated quantities of general waste and comingled recycling from the proposed seven-day operation of the facility (Table 3) are based on:

  - Office: 10 L of waste and 10 L of recycling per 100 m² of floor area per day; and
  - Showroom: 40 L of waste and 10 L of recycling per 100 m² of floor area per day.

- Estimated floor areas from Site Plan SP01; and
- The facility in operation seven days per week.

Table 3  Estimated quantities of general waste and recycling

<table>
<thead>
<tr>
<th>Location</th>
<th>Area [m²]</th>
<th>Total per Day (L)</th>
<th>Total per Week (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Waste</td>
<td>Recycling</td>
<td>Waste</td>
</tr>
<tr>
<td>Factory 1 (South boundary)</td>
<td>2,100</td>
<td>840</td>
<td>2,100</td>
</tr>
<tr>
<td>Factory 2 (North boundary)</td>
<td>870</td>
<td>500</td>
<td>2,440</td>
</tr>
<tr>
<td>Office 1 (in Factory 1)</td>
<td>210</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Office 2 (2 storey)</td>
<td>320</td>
<td>40</td>
<td>230</td>
</tr>
<tr>
<td>Total</td>
<td>1,260</td>
<td>870</td>
<td>8,700</td>
</tr>
</tbody>
</table>

Waste estimates have been rounded up to the nearest 10 tonnes.

*General waste excludes concrete, foam (rigid), steel and scrap metal wastes.
The current site capacity for general waste of 9,000 L per week will likely accommodate the estimated 8,700 L of general waste anticipated from seven-day operation of the site. However, given there is less than a 10% difference between the current site capacity for general waste and the anticipated general waste output, it is possible that an additional front-lift service may be required occasionally for general waste.

The current site capacity for paper and cardboard recycling of 6,000 L per week will accommodate the estimated 2,460 L of recycling anticipated from seven-day operation of the site, especially since the estimated 2,460 L of recycling includes paper and cardboard. One 3000 L bin should be considered for paper and cardboard along with one or more 240 L bins for comingle containers.

5.4.2 Concrete, Foam, Steel and Scrap Metal Waste

Waste concrete, foam, steel and scrap metal are currently collected from site by contractors as needed. It is anticipated that Precast Concrete will continue monitoring levels of these wastes and arranging for collection by contractors as needed. The bins for waste concrete, steel and scrap metal, as well as bags of waste foam, are stored outside the buildings and there appears to be a substantial amount of additional space in the outdoor storage area to accommodate additional skip bins, if required. Therefore, increasing the operating hours of the facility to seven days a week is not anticipated to present difficulties for management of concrete, foam, steel and scrap metal waste.

5.4.3 Other Waste

5.4.3.1 Bulky Waste and Stockpiling

Bulky waste is currently stored or stockpiled temporarily in the outdoor storage area and collected as needed. It is anticipated this will continue to be the arrangement for managing bulky waste at the site prior to disposal.

Stockpile management should align with the NSW EPA’s guidelines.10

5.4.3.2 Hazardous and Liquid Waste

All hazardous and liquid wastes are to be managed and disposed of in accordance with NSW EPA (2016) ‘Hazardous waste storage and processing: Guidance for the liquid waste industry’.

Under no circumstances should liquid wastes be disposed of in the stormwater drainage system nor allowed to drain into Prospect Creek.

Refer to the NSW EPA’s web site11 for additional information on managing, storing and disposing of hazardous and liquid waste.

5.4.3.3 Surface Water Runoff

Given the proximity of the Site to Prospect Creek, no surface water runoff is permitted to drain to Prospect Creek. Ideally, surface water runoff should be managed so that any runoff occurs towards Pine Road.

---

9 Refer to Appendix D for the existing Concrete Waste Management Procedure.
SLR notes that Revision A.2 of the EMP acknowledges the proximity of Prospect Creek but does not present environmental management measures for preventing migration of pollutants to the creek. As such, SLR recommends the EMP be revised to include appropriate environmental management measures to mitigate pollution of Prospect Creek and such management measures be implemented on site.

5.4.3.4 Unexpected Wastes

All unexpected wastes are to be classified and disposed in accordance with the NSW EPA Waste Classification Guidelines.12

5.4.4 Waste Storage Locations

Operational waste and recycling are anticipated to be stored in similar locations as they are currently (Figure 4). The front-lift bin storage area in the front set-back is anticipated to include the addition of a bin for commingled recycling and, if required, an additional 4,500 L front-lift bin for general waste. Bins for general waste, commingled recycling and paper / cardboard should be located side-by-side according to Council’s bin servicing preferences.

The allocated waste and recycling storage areas (Figure 4) have been assessed and are consistent with a 12.5 m and 20.0 m waste or recycling servicing vehicle being able to access each nominated storage area and leave the Site in a forward direction (Figure 5 and 6).

---

Figure 5  
12.5 m waste serving vehicle swept-path to the general waste and recycling collection point

Figure 6  
20+ m waste serving vehicle swept-path to the concrete and steel collection points
5.5 Waste Avoidance, Re-use and Recycling

5.5.1 Waste Avoidance

Possible waste avoidance measures for the Site include:

- Provision of take-back services to clients to reduce waste further along the supply chain.
- Re-work or re-packaging of products prior to local distribution to reduce waste.
- Review of packaging design to reduce waste but maintain ‘fit for purpose’.
- Review concrete casting design to reduce waste but maintain ‘fit for purpose’.
- Providing ceramic cups, mugs, crockery and cutlery rather than disposable items.
- Presenting all waste reduction initiatives to staff as part of their induction program.
- Investigating leased office equipment and machinery rather than purchase and disposal.

5.5.2 Re-use

Possible re-use opportunities include:

- Establish systems with in-house and supply chain stakeholders to transport products in re-useable packaging where possible.
- Review recycled arrogate for potential application in casting and manufacturing products.

5.5.3 Recycling

Possible recycling opportunities include:

- Use of a baler for the collection of all plastic wrapping and plastic film products for ease of recycling (if applicable).
- Flatten cardboard to reduce number of required bin collections.
- Provide paper recycling trays in office areas for scrap paper collection and recycling.
- Printer toner and ink cartridges collection in allocated bins for appropriate contractor recycling.
- Battery collection in allocated bins for appropriate contractor recycling.
- Implement a ‘buy recycled’ purchasing policy for the facility.
- Providing recycling collections within each of the offices, for example plastics, cans and glass.

5.6 Spills Management

Containment measures for spillages, for example, a spill kit, should be provided at appropriate locations and close to staff car park areas, dangerous goods stores areas and main Site operation areas. Material Safety Data Sheets should be located near spill kit areas for advice on clean up and disposal.

Refer to the NSW EPA ‘Liquid Waste Fact Sheet – Responding to spills’ (2005)\(^{13}\) for further information.


Page 12
5.7 Signage

Appropriate signage is to be installed to clearly identify waste management procedures and provisions to site staff and visitors. Key signage considerations for the Site are:

- Clear and correct labelling on all waste and recycling bins, indicating the correct type(s) of waste that can be placed into a given bin;
- Clear signage in all waste storage areas to instruct users how to correctly source separate waste from recycling;
- Maintaining a consistent style colour scheme and system for signs throughout the site; and
- Emergency contact information for reporting issues associate with waste or recycling management.

All bins should comply with Australian Standard 'AS 4123.7-2006 (R2017) Mobile waste containers - Colours, markings, and designation requirements' as required for the type of waste the bins are to hold. The colours anticipated to apply to operational waste generated by the Site are:

- Blue: Paper and cardboard;
- Yellow: Recyclables other than paper and cardboard; and
- Red: General Waste.

Each bin should also be labelled according to the waste they are to hold. Labels approved by the NSW EPA for waste materials are available online\(^\text{14}\) and should be used where applicable.

5.8 Communication Strategies

Waste management initiatives and management measures should be communicated clearly and concisely to all site users including cleaners, contractors, employees and visitors. Benefits of clear and concise communication include:

- Improving site amenity and safety;
- Reducing contamination in the recyclables stream;
- Increasing recovery of recyclables;
- Supporting the environment and community, through encouraging site staff to engage in waste management practices that contribute to NSW targets for waste reduction and resource recovery.

SLR recommends the following communication strategies be implemented at the site:

- Include waste management procedures (including this SWMMP) in the site induction for staff;
- Ensure signage is consistent with Section 5.7 of this SWMMP;
- Advise all staff of any changes to site waste and recycling management procedures as soon as practicable;
- Encourage site staff and visitors to provide feedback on waste and recycling management at the site, including reporting issues associate with waste and recycling management.

5.9 Waste Monitoring and Record Keeping

Monitoring is recommended to ensure waste and recycling management arrangements and provisions are functioning adequately and feasibly for the site.

Monitoring of bins and bin storage areas should be conducted, at minimum:

- Every week, within the first two months of operation after approval of the DDA; and
- Every six months, thereafter.

Any deficiencies identified in the waste management system, including unexpected waste volumes or new waste streams, should be rectified as soon as practicable.

Quantities of waste and recycling, including docket and/or receipts associated with disposal of waste and recycling, should be recorded by the site operator to allow reviews of the waste management arrangements and provisions at the site. Records of waste disposal should also be available to regulatory authorities, for example, Council, NSW EPA and Safework NSW, upon request.
# APPENDIX A

**SEAR 1192 KEY ISSUES (WASTE MANAGEMENT)**

*Table 4* lists the relevant sections within the SWMMP that specifically address each of the Waste Key Issues as specified by the NSW Planning & Environment’s Secretary’s Environmental Assessment Requirements (SEARs) 1192.

**Table 4**  
**SEAR 1192 key issues pertaining to waste management**

<table>
<thead>
<tr>
<th>Key Issue</th>
<th>Section Addressing Key Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details of waste handling including:</td>
<td>• Section 5.2 and 5.4.4</td>
</tr>
<tr>
<td>• Transport,</td>
<td>• Sections 5.2 and 5.4</td>
</tr>
<tr>
<td>• Identification,</td>
<td>• Section 5.9</td>
</tr>
<tr>
<td>• Receipt,</td>
<td>• Section 5.4.3.1</td>
</tr>
<tr>
<td>• Stacking and</td>
<td>• Sections 1.3, 2, 5.2, 5.5-5.9</td>
</tr>
<tr>
<td>• Quality control including off-site reuse and disposal.</td>
<td></td>
</tr>
<tr>
<td>The measures that would be implemented to ensure that the proposed</td>
<td>Sections 1.3, 5.1, 5.5 and 5.9</td>
</tr>
<tr>
<td>development is consistent with the aims, objectives and guidelines in the</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

NSW EPA SEAR 1192 COMMENTARY

Table 5 lists the relevant sections within the SWMMP that specifically address each of the Waste Management issues as specified by the NSW EPA for the SEAR 1192.

Table 5 NSW EPA Commentary on SEAR 1192 key issues pertaining to waste management

<table>
<thead>
<tr>
<th>Key Issue</th>
<th>Section Addressing Key Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details of the quantity and classification of waste to be generated on site.</td>
<td>Sections 5.2 and 5.4</td>
</tr>
<tr>
<td>The transportation, assessment and handling of waste generated at the site.</td>
<td>Sections 5.3 and 5.6-5.9</td>
</tr>
<tr>
<td>The methods for storage and disposal of all waste materials, including stockpiling at the site.</td>
<td>Sections 5.3 and 5.4</td>
</tr>
<tr>
<td>Any waste processing related to the project including on-site treatment.</td>
<td>Section 5.4</td>
</tr>
<tr>
<td>The proposed controls for managing the environmental impacts of these activities.</td>
<td>Sections 1.3, 5.4 - 5.9</td>
</tr>
</tbody>
</table>
APPENDIX C

PLANS
This is the diagram referred to in, and annexed to, our report to Cyclone Hughes & Harris, Lawyers and dated 2 July 2004.

This land has been surveyed for identification purposes only. If it is intended to erect additional structures or fencing on the subject property, then the boundaries should be marked.
APPENDIX D

Precast Elements 09.04.01
Concrete Waste Management Procedure (Rev B)
Concrete Waste Management Procedure

This procedure sets out the minimum requirements for managing concrete and other cementitious waste in our manufacturing facilities, as well as on construction sites.

**Washing Tools & Equipment** – All tools and equipment need to be washed each use to ensure they are maintained in good working condition. This can create mess, and create other problems such as contaminated water and dust! Concreting tools and equipment shall be maintained as follows:

- Minimise the number of concreting tools used at the one time. For example, before taking a shovel from the concrete store room, check if there’s a dirty one available in the moulds already;
- Minimise the amount of concrete that needs to be washed off by scooping the concrete off the tools before washing;
- Contain mess by washing tools and equipment only in the designated wash-down areas. These are bounded to eliminate uncontrolled release of concrete slurry and contaminated water into the stormwater drains and directly into Prospect Creek behind the best. There are two areas: The Undercover Wash down Area located on the North West of the yard; and the Truck Wash down Area located near the front gate;
- Use a high-pressure water machine instead of a tap or hose. This uses much less water and cleans the tools much faster;
- Use recycled water from the Settlement Pods whenever possible. These are located in the Undercover Wash down Area. This will minimize using town water and reduce the volume of water to be treated.

**Concrete Waste** – Concrete is delivered by a supplier in agitator trucks. To minimize the volume of excess concrete waste on site, the following actions are to be taken:

- Calculate the volume of concrete to be ordered and delivered using the volumes given on the shop drawings. Do not add any more than 0.2m3 for concrete sampling and testing;
- Try and minimize the number of trucks that are used to deliver the total day’s concrete volume. Each truck generates excess concrete and the need for washing down;
- Direct the driver to wash their back fins and chutes ONLY into our washout bins and return excess concrete to their yard;
- Where and when possible, have additional forms setup in advance to accommodate excess concrete. These forms should be located near the washout bins;
- Do not fill the kibble if a full kibble is not required to finish a pour. Try and estimate how much is required before directing the truck driver to discharge into kibble;
- DO NOT DUMP WET CONCRETE INTO BULK CONCRETE WASTE BIN!!!
- Sweep up and clean up concrete waste around moulds and other work areas on a regular basis. Not only does this reduce the occurrences of slips and trip accidents, it reduces dust on windy days, it reduces solids from washing down the stormwater drains during rain, and it makes it a happier workplace in general.

**Washing Down Concrete Trucks** – Concrete trucks have their own source of water stored on board, and therefore they tend to try and wash-down where ever they can. This would make a mess if not controlled. This is why a designated Truck Wash-down Area has been created. At no time shall a truck be allowed to wash-down outside of this area.
Concrete Waste Management Procedure

Concrete Patching - Concrete patching generates waste cementitious materials in the form of excess patching materials, concrete offcuts, and dust. To minimize the effect of this on the environment the following steps must be undertaken each day:

- Ensure that the QA personnel are aware of defects so that they may be prevented, hence preventing or minimizing the need for future patching;
- Ensure the patching personnel are familiar with what needs patching and what doesn't. This will minimize patching, hence minimize waste;
- Instead of using a blower, grinder or an orbital sander, consider using a brush/vacuum, rubbing stone or sanding block respectively. This minimizes dust thrown into the air;
- Clean the patching area frequently (at least each day) to minimize dust during windy days;

Concrete Recycling - Large volumes of concrete waste are generated by the construction industry each year. This is a burden on landfill sites and results in additional Council operating costs. On top of this, concrete requires a high volume of greenhouse gas emissions to produce, hence maximizing the volume of concrete that is recycled makes good sense both ethically and financially.

All personnel shall make all reasonable efforts to dispose waste concrete into the concrete wash bins and bulk waste bins. This waste should be clean of foreign material such as plastic, timber, and metal to enable the concrete recycler to process the waste as efficiently as possible.
DOCUMENTS
ASSOCIATED WITH
REPORT EELPP024/19

Attachment 10
Air Quality Impact Assessment
PRECAST CONCRETE MANUFACTURING

49-53 Pine Road, Yennora
Air Quality Impact Assessment

Prepared for:
Precast Elements Pty Ltd
49-53 Pine Road
YENNORRA NSW 2161
PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Precast Elements Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

<table>
<thead>
<tr>
<th>Reference</th>
<th>Date</th>
<th>Prepared</th>
<th>Checked</th>
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</tr>
</thead>
<tbody>
<tr>
<td>EELPP024/19</td>
<td>13 August 2018</td>
<td>Varun Manuaha</td>
<td>Kirsten Lawrence</td>
<td>Graeme Starke</td>
</tr>
</tbody>
</table>
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1 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Precast Elements Pty Ltd (Precast) to undertake an Air Quality Impact Assessment (AQIA) for the operation of a manufacturing facility, manufacturing precast concrete panels located at 49-53 Pine Road, Yennora (Subject Site).

This report has been prepared as part of the Environmental Impact Statement (EIS) for designated development application for retrospective change of use from general industrial to industrial activity. The NSW Department of Planning and Environment (DPE) issued Secretary’s Environmental Assessment Requirements (SEARs) in January 2018. The SEARs relevant to air quality impacts are shown in Table 1.

Table 1 Secretary’s Environmental Assessment Requirements

<table>
<thead>
<tr>
<th>Key Issue</th>
<th>Assessment Requirement</th>
<th>Addressed in Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>A description of all potential sources of air and odour emissions</td>
<td>Section 2.4</td>
</tr>
<tr>
<td></td>
<td>An air quality impact assessment in accordance with relevant Environment Protection</td>
<td>Section 6</td>
</tr>
<tr>
<td></td>
<td>Authority guidelines, and</td>
<td>Section 7</td>
</tr>
<tr>
<td></td>
<td>A description and appraisal of air quality impact mitigation and monitoring measures</td>
<td></td>
</tr>
</tbody>
</table>

Source: SEAR number 1132, 16 January 2018.

1.1 Assessment Approach

This AQIA has been prepared by SLR to assess the potential for adverse air quality impacts associated with the exiting activities at the Subject Site.

To adequately address the assessment requirements (ie SEARs), a member of the SLR Air Quality Team performed a site visit to identify sources of air emissions from existing operations at the Subject Site. It was observed during the site visit that the primary dust-generating activities in concrete product manufacture, ie mixing of sand, cement, lime etc, are not undertaken at the Subject Site. Instead, premixed wet concrete is bought from concrete suppliers, which is delivered to the site in trucks and poured directly into moulds prepared at the Subject Site.

As no dry cement or aggregate materials are stored or handled on-site, there were no potentially significant sources of dust or other air emissions identified at the Subject Site that would warrant a quantitative impact assessment involving dispersion modelling. Instead, a qualitative assessment has been performed based on minimum separation distances recommended by various regulatory authorities for similar activities. This assessment has been performed with reference to relevant standards, guidelines and resources, including:

- **Western Australian Environmental Protection Authority’s Draft Environmental Assessment Guidelines for Separation distances between Industrial and Sensitive Land Uses (WA EPA 2015).**
2 Project Overview

2.1 Site Location

The site is located within the Yennora Industrial Park at 49-53 Pine Road, Yennora, approximately 22 kilometres (km) west of Sydney Central Business District (CBD), as shown in Figure 1.

Figure 1 Location of the Subject Site
2.2 Site Layout

The Subject Site contains:

- A single-storey warehouse building located along the northern boundary that is predominately used for storage of the ancillary items such as the stripping wax, concrete used for patch up works and other building materials;
- A single-storey warehouse building located along the southern boundary that is predominately used for storage and manufacturing of the concrete panels;
- A two-storey office building;
- Gantry located between the two warehouse buildings to lift the concrete blocks onto trucks for transportation off-site;
- Gantry located within the existing warehouse building adjacent to the southern boundary;
- Vehicle access from Pine Road; and
- Staff car parking provided within the front setback facing Pine Road.

The layout of the Subject Site is shown in Figure 2.

Figure 2 Layout of the Subject Site

Source: Precast Elements Pty Ltd, Drawing number – SP01, Sheet N; revision A, 1 November 2017

2.3 Site Operations

A site visit was performed by Varun Marwaha, a Senior Consultant in SLR’s Air Quality Team, on 9 May 2018. The main purpose of the site visit was to observe the manufacturing processes and associated activities undertaken at the Subject Site and to identify any potential sources of air emissions.

Based on this site visit, a description of the current operations at the Subject Site is provided in the following sections.
2.3.1 Mould Creation

Panel moulds are created using wooden panels and reinforcement mesh. The mould is constructed on top of a rubber base that is lined with Reckli stripping wax (Reckli® TL-50). This activity occurs within the warehouse building next to the southern boundary. Photographs of the mould creation process are shown in Photo 1.

Photo 1 Photos showing Mould Creation at the Subject Site

A distinct ‘organic vapour’ like odour was observed during the spraying of stripping wax on to the base. The odours were transient in nature however, and were not observed as soon as the spraying finished. The ‘organic vapour’ was evident in the vicinity of the rubber base and could not be smelt beyond the shed perimeter. No dust or other air emission sources were identified.

2.3.2 Concrete Pouring

The wet concrete is delivered to site in premixed concrete trucks. The concrete trucks reverse into the eastern entry of the warehouse building and pour the premixed concrete into the pre-prepared panel moulds. This is shown in Photo 2.

The Subject Site produces approximately 20 concrete panels per day and receives 8-10 loads of pre-mixed concrete per day. This equates to approximately 22,000 tonnes per year of concrete panel production.

No dust or other air emission sources were identified during this process.
2.3.3 Drying/Curing

The poured concrete is left to dry and cure overnight. This process is allowed to occur under natural, ambient conditions and no fans or heaters are used to expedite it.

2.3.4 Product Storage

The next day the moulds are removed and the dried concrete panels are stored outside of the warehouse building and left to cure, before they are loaded onto trucks for transport off-site. This is shown in Photo 3. The overhead gantries are used to move the concrete panels around the site. No dust or other air emission sources were identified during this process.

Photo 3 Photos showing Product Storage at the Subject Site
2.3.5 Waste Storage

Waste concrete slabs are stored in the waste storage area located near the western boundary of the Subject Site. This area was noted to be unsealed and was also observed to be used by turning trucks. Dust emissions from this area were visible during the site visit. The waste storage area is shown in Photo 4.

Photo 4 Photo showing Waste Storage Area at the Subject Site

2.4 Identified Air Emission Sources

Based on the site visit, potential sources of air emissions associated with existing operations at the Subject Site have been identified as follows:

- Products of fuel combustion (including particulates) from on-site traffic, including the movement of concrete trucks, product delivery trucks, vehicles carrying other supplies and staff vehicles.
- Particulate emissions from movement of vehicles on sealed areas of the Subject Site;
- Particulate emissions from the movement of vehicles on unsealed waste storage area (these movements are infrequent and expected to be once per day);
- Odour emissions from the use of stripping wax within the warehouse building.

2.5 Hours of Operation

The operations at the Subject Site are 24 hours, seven days a week for the factory operations, with the following restrictions on vehicle access and deliveries:

- Deliveries: 7:00 am to 5:00 pm; and
3 Receiving Environment

3.1 Surrounding Land Uses

The Subject Site is located within Yennora Industrial Park. The following industries are located on Pine Road in addition to the Subject Site:

- Australian Building Centre (suppliers of building material);
- L & M Scott Haulage (haulage company);
- DB Sehnhker (logistics company);
- Air Liquide (compressed gases suppliers); and
- Warehouses (various).

Other land uses noted in the vicinity of the Subject Site are:

- Ace Reserve (nature reserve) to the west
- Fairfield High School
- Construction works to the north, along Pine Road

3.2 Sensitive Receptors

The locations of the nearest sensitive receptors are shown in Figure 3. The closest residential receptor (R6) is located approximately 240 metres (m) from the Site boundary. This residence is relatively well screened from the operational areas by mature trees along the western boundary of the Subject Site.

Also, Fairfield High School buildings are noted to be located approximately 220 m from the western boundary of Subject Site.
Figure 3  Location of the Identified Sensitive Receptors
3.3 Topography

Topography is important in air quality studies, as local atmospheric dispersion can be influenced by night-time katabatic (downhill) drainage flows from elevated terrain or channelling effects in valleys or gullies around the subject site.

A three-dimensional representation of the area surrounding the subject site is shown in Figure 4. The subject site is located at an approximate elevation of 13 m Australian Height Datum (AHD). The area immediately west of the subject site is covered by vegetation and is located at approximately 9 m AHD. The subject site is located in the middle of a wide valley, with potential for light drainage flows towards the south and southeast, under calm conditions.

Figure 4  Regional Topography
3.4 Local Wind Conditions

Meteorological mechanisms govern the dispersion, transformation and eventual removal of pollutants from the atmosphere. The extent to which pollution, including odour, will accumulate or disperse in the atmosphere is dependent on the degree of thermal and mechanical turbulence within the earth’s boundary layer. Some of the key meteorological variables affecting the dispersion of air pollutants include:

- The degree of mechanical turbulence in the atmosphere, which is a function of wind speed in combination with the surface roughness (i.e., flat rural terrain, presence of trees and buildings etc.);
- Wind speed, which determines both the distance of downwind transport and the rate of dilution as a result of plume ‘stretching’;
- Wind direction, and the variability in wind direction, which determines the general path pollutants will follow and the extent of crosswind spreading and
- Ambient temperature, and the variation in temperature with height, which generates thermal turbulence.

The Bureau of Meteorology (BoM) maintains and publishes data from weather stations across Australia. The closest such station with available long-term wind speed and wind direction data is the Bankstown Airport Automatic Weather Station (AWS), which is located approximately 6.5 km northeast of the Subject Site.

Annual wind roses for the years 2013 to 2017 are presented in Figure 5. Wind roses show the frequency of occurrence of winds by direction and strength. The bars correspond to the 16 compass points (degrees from north). The bar at the top of each wind rose diagram represents winds blowing from the north (i.e., northerly winds), and so on. The length of the bar represents the frequency of occurrence of winds from that direction, and the widths of the bar sections correspond to wind speed categories, the narrowest representing the lightest winds. Thus it is possible to visualise how often winds of a certain direction and strength occur over a long period, either for all hours of the day, or for particular periods during the day.

The wind roses for the years 2013 to 2017 (Figure 5) indicate that winds at Bankstown Airport blow almost evenly from all directions, without any particular direction dominating. Relatively low frequencies of winds from the north and north-northeast directions were recorded across all years. The annual frequency of calm wind conditions was recorded to be approximately 8% for the years analysed.

From the long-term wind patterns recorded by the Bankstown Airport AWS, and assuming that the same wind conditions are experienced at the Subject Site, it can be concluded that the Subject Site is likely to be subjected to a relatively low percentage of calm conditions throughout the year. This will facilitate the dispersion of pollutants and prevent the build-up of pollutants in the air.

The relatively wide distribution of wind directions recorded by the Bankstown Airport AWS indicates that it is unlikely that air emissions from the Subject Site would be blown towards any specific residence significantly more frequently than the others. The percentage of winds blowing towards the closest residence (R6) was measured to be 13% of the time, on average.
Figure 5   Annual Wind Roses for Bankstown Airport (2013 to 2017)
3.5 Background Air Quality

There is no ambient air quality monitoring conducted by the Subject Site or available in the local area. Air quality monitoring is performed by the NSW OEH at a number of monitoring stations across NSW. The closest such station is the Chullora Air Quality Monitoring Station (AQMS) and Liverpool AQMS, located approximately 8.5 km southeast and 9 km south-southwest of the Subject Site respectively.

The Chullora AQMS and Liverpool AQMS are located within a commercial and residential area respectively. As the location of Chullora AQMS is similar to that of the Subject Site (ie within a commercial area), air pollutant concentrations recorded at Chullora AQMS are likely to be more representative of those experienced in the area surrounding the Subject Site.

The following air pollutants are monitored by the Chullora AQMS:

- Carbon monoxide (CO);
- Oxides of nitrogen (NO, NO₂ and NOₓ);
- Fine particles (PM₁₀ and PM₂₅); and
- Sulfur dioxide (SO₂).

A summary of the monitored pollutant concentrations for the last five years (2013-2017) is presented in Table 2.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>CO</th>
<th>NOₓ</th>
<th>PM₁₀</th>
<th>PM₂₅</th>
<th>SO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>Rolling 9-hour</td>
<td>Maximum 1-hour</td>
<td>Annual</td>
<td>Maximum 24-hour</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>μg/m³</td>
<td>μg/m³</td>
<td>μg/m³</td>
<td>μg/m³</td>
<td>μg/m³</td>
</tr>
<tr>
<td>2013</td>
<td>3.1</td>
<td>112.8</td>
<td>27.4</td>
<td>69.4</td>
<td>18.3</td>
</tr>
<tr>
<td>2014</td>
<td>2.1</td>
<td>131.2</td>
<td>26.9</td>
<td>40.0</td>
<td>18.1</td>
</tr>
<tr>
<td>2015</td>
<td>1.8</td>
<td>110.7</td>
<td>25.7</td>
<td>64.5</td>
<td>17.5</td>
</tr>
<tr>
<td>2016</td>
<td>2.0</td>
<td>94.3</td>
<td>25.8</td>
<td>63.5</td>
<td>18.1</td>
</tr>
<tr>
<td>2017</td>
<td>1.5</td>
<td>123.0</td>
<td>25.0</td>
<td>63.0</td>
<td>20.1</td>
</tr>
</tbody>
</table>

The monitoring data for CO, NOₓ and SO₂ indicate that the respective air quality criteria (short term and long term) for these pollutants are easily achieved at Chullora AQMS.

The monitoring data for fine particles indicate that exceedances of the relevant short term criteria (24-hour average) were recorded during 2013, 2015, 2016 and 2017 for PM₁₀ and PM₂₅. A summary of these exceedances is shown in Table 3.
### Table 3  Summary of Exceedances of the Criteria for Fine Particles (PM$_{10}$ and PM$_{2.5}$)

<table>
<thead>
<tr>
<th>Date of Exceedance</th>
<th>Value [μg/m$^3$]</th>
<th>Comments</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum 24-hour Average PM$_{10}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/09/2013</td>
<td>55</td>
<td>Bushfires in western Sydney</td>
<td>OEH 2014</td>
</tr>
<tr>
<td>21/10/2013</td>
<td>69.4</td>
<td>Bushfire emergency</td>
<td></td>
</tr>
<tr>
<td>03/11/2013</td>
<td>50.8</td>
<td>Bushfire emergency</td>
<td></td>
</tr>
<tr>
<td>08/11/2013</td>
<td>50.9</td>
<td>Bushfire emergency</td>
<td></td>
</tr>
<tr>
<td>06/05/2015</td>
<td>64.6</td>
<td>Result of a statewide dust storm that originated from the Victorian Mallee and Southern NSW regions and travelled throughout NSW during the 5 &amp; 6 May (NSW Air Quality Statement 2015).</td>
<td>OEH 2017a</td>
</tr>
<tr>
<td>08/05/2016</td>
<td>63.5</td>
<td>Exceptional events*</td>
<td>OEH 2017b</td>
</tr>
<tr>
<td>08/03/2017</td>
<td>57.1</td>
<td>2 days above the standard due to non-exceptional events.</td>
<td>OEH 2018</td>
</tr>
<tr>
<td>14/08/2017</td>
<td>51.9</td>
<td>2 days above the standard due to exceptional events.</td>
<td></td>
</tr>
<tr>
<td>24/09/2017</td>
<td>51.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/10/2017</td>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum 24-hour Average PM$_{2.5}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21/10/2013</td>
<td>49.1</td>
<td>Bushfire emergency</td>
<td>OEH 2014</td>
</tr>
<tr>
<td>03/11/2013</td>
<td>33.3</td>
<td>Bushfire emergency</td>
<td></td>
</tr>
<tr>
<td>08/11/2013</td>
<td>28.3</td>
<td>Bushfire emergency</td>
<td></td>
</tr>
<tr>
<td>21/08/2015</td>
<td>37.2</td>
<td>Result of smoke from a number of hazard reduction burns.</td>
<td>OEH 2017a</td>
</tr>
<tr>
<td>07/05/2016</td>
<td>31.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08/05/2016</td>
<td>49.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/05/2016</td>
<td>27.6</td>
<td>Exceptional events*</td>
<td>OEH 2017b</td>
</tr>
<tr>
<td>19/05/2016</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22/05/2016</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07/03/2017</td>
<td>25.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08/03/2017</td>
<td>44.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/03/2017</td>
<td>33.3</td>
<td>4 days above the standard due to non-exceptional events.</td>
<td>OEH 2018</td>
</tr>
<tr>
<td>12/03/2017</td>
<td>26.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14/08/2017</td>
<td>39</td>
<td>4 days above the standard due to exceptional events.</td>
<td></td>
</tr>
<tr>
<td>27/08/2017</td>
<td>28.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02/09/2017</td>
<td>35.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/09/2017</td>
<td>27.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *Exceptional events are those related to bushfires, hazard reduction burns and dust storms. These are not counted towards the NEPM goal of "no days above the particle standards in a year."
A review of exceedances of criteria for PM$_{10}$ and PM$_{2.5}$ indicate that most of the exceedances were caused due to exceptional events such as bushfires emergency. The air quality in the region is generally good, with intermittent elevations in 24-hour average PM$_{10}$ and PM$_{2.5}$, particularly in relation to bushfires.

4 Cumberland Local Environmental Plan 2013

Cumberland Council was created in May 2016 following the merger of parts of Auburn City Council, parts of the City of Parramatta Council and Holroyd City Council. Consequently, the following Local Environmental Plans (LEPs) are applicable within the Cumberland Local Government Area (LGA):

- Auburn LEP 2010;
- Parramatta LEP 2011; and
- Holroyd LEP 2013.

The Subject Site is located within the ‘IN1 – General Industrial’ zone as per the Holroyd LEP (HLEP 2013) land zoning map (LZN_007) [see Figure 6], and bounded by E2-Environmental Conservation to the west. The nearest residentially zoned land is located approximately 1.2 km to the south on Pine Road. It is noted that the nearest identified sensitive receptor ‘R6’ [see Section 2.1] is located within the Fairfield LGA.

Part 2 (Permitted or prohibited development) of HLEP 2013 explains the land use types and permissible and non-permissible development types within the respective zones. The objectives of zone IN1 – General Industrial are:

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.
- To enable other land uses that provides facilities or services to meet the day to day needs of workers in the area.

The following activities are permitted with consent within IN1:

- Depots; Freight transport facilities; Garden centres; General industries; Hardware and building supplies; Industrial training facilities; Kiosks; Light industries; Liquid fuel depots; Neighbourhood shops; Places of public worship; Roads; Take away food and drink premises; Warehouse or distribution centres.

No activities are listed as being permitted without consent within IN1. The following activities are prohibited within IN1:

- Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Educational establishments; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Function centres; Health services facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home businesses; Home industries; Home occupations; Home occupations (sex services); Industries; Information and education facilities; Jetties; Livestock processing industries; Marinas; Mooring pens; Moorings; Recreation facilities (major); Registered clubs;
Research stations; Residential accommodation; Restricted premises; Sawmill or log processing works; Sex services premises; Stock and sale yards; Tourist and visitor accommodation; Veterinary hospitals; Water recreation structures; Wharf or boating facilities.

**Figure 6  Holroyd Local Environmental Plan 2013 - Land Zoning Map (LZN_007)**

As shown in Figure 6, Subject Site is located within land zoned as IN1. Even though activities related to concrete product manufacturing are not specifically listed in the permitted or prohibited list of activities, these activities may be considered within the permitted ‘general industry’ or ‘hardware and building supplies’ categories.
5  Relevant Air Quality Criteria and Guidelines

5.1  Pollutants of Concern

As identified in Section 2.4, potential air pollutants of interest for the Subject Site are considered to be:

- Products of fuel combustion (including particulates) from on-site traffic;
- Fugitive particulate emissions from the unsealed waste storage area; and
- Odour from the spraying of stripping wax within the warehouse building.

The following sections outline the potential health and amenity issues associated with the above emission sources, while Section 5.2 outlines relevant air quality assessment criteria.

5.1.1  Particulate Matter

Airborne contaminants that can be inhaled directly into the lungs can be classified on the basis of their physical properties as gases, vapours or particulate matter. In common usage, the terms “dust” and “particulates” are often used interchangeably. The health effects of particulate matter are strongly influenced by the size of the airborne particles. Smaller particles can penetrate further into the respiratory tract, with the smallest particles having a greater impact on human health as they penetrate to the gas exchange areas of the lungs. Larger particles primarily cause nuisance associated with coarse particles settling on surfaces.

The term “particulate matter” refers to a category of airborne particles, typically less than 30 microns (μm) in diameter and ranging down to 0.1 μm and is termed total suspended particulate (TSP). Particulate matter with an aerodynamic diameter of 10 microns or less is referred to as PM10. The PM10 size fraction is sufficiently small to penetrate the large airways of the lungs, while PM2.5 (2.5 microns or less) particulates are generally small enough to be drawn in and deposited into the deepest portions of the lungs. Potential adverse health impacts associated with exposure to PM10 and PM2.5 include increased mortality from cardiovascular and respiratory diseases, chronic obstructive pulmonary disease and heart disease, and reduced lung capacity in asthmatic children.

5.1.2  Products of Combustion

Emissions associated with road traffic and the combustion of automotive fuel (diesel, petrol, etc.) will include carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter (PM10 and PM2.5), sulfur dioxide (SO2) and volatile organic compounds (VOCs).

CO is an odourless, colourless gas formed from the incomplete burning of fuels in motor vehicles. It can be a common pollutant at the roadside and highest concentrations are found at the kerbside with concentrations decreasing rapidly with increasing distance from the road. CO in urban areas results almost entirely from vehicle emissions and its spatial distribution follows that of traffic flow. The incomplete combustion of fuel in diesel powered vehicles can generate particulate in the form of black soot.
Oxides of nitrogen (NO$_2$) is a general term used to describe any mixture of nitrogen oxides formed during combustion. In atmospheric chemistry, NO$_2$ generally refers to the total concentration of nitric oxide (NO) and nitrogen dioxide (NO$_2$). NO is a colourless and odourless gas that does not significantly affect human health. However, in the presence of oxygen, NO can be oxidised to NO$_2$ which can have significant health effects including damage to the respiratory tract and increased susceptibility to respiratory infections and asthma. NO will be converted to NO$_2$ soon after leaving a vehicle exhaust.

Vehicle exhausts can contain emissions of sulfur dioxide (SO$_2$) due to impurities in the fuel. The sulfur content in diesel fuel has significantly reduced over the years ambient SO$_2$ concentrations in Australian cities are typically well below regulatory criteria.

Volatile organic compounds (VOC) may be emitted as a result of the incomplete combustion of fuel. VOC emissions are reducing significantly due to the improved combustion processes offered by modern engines.

5.1.3 Odour

Impacts from odorous air contaminants are often nuisance-related rather than health-related. Odour performance goals guide decisions on odour management, but are generally not intended to achieve “no odour”.

The detectability of an odour is a sensory property that refers to the theoretical minimum concentration that produces an olfactory response or sensation. This point is called the odour threshold and defines one odour unit (ou). An odour goal of less than 1 ou would theoretically result in no odour impact being experienced.

In practice, the character of a particular odour can only be judged by the receiver’s reaction to it, and preferably only compared to another odour under similar social and regional conditions. Based on the literature available, the level at which an odour is perceived to be a nuisance can range from 2 ou to 10 ou depending on a combination of the following factors:

- **Odour quality:** whether an odour results from a pure compound or from a mixture of compounds. Pure compounds tend to have a higher threshold (lower offensiveness) than a mixture of compounds.
- **Population sensitivity:** any given population contains individuals with a range of sensitivities to odour. The larger a population, the greater the number of sensitive individuals it may contain.
- **Background level:** whether a given odour source, because of its location, is likely to contribute to a cumulative odour impact. In areas with more closely-located sources it may be necessary to apply a lower threshold to prevent offensive odour.
- **Public expectation:** whether a given community is tolerant of a particular type of odour and does not find it offensive, even at relatively high concentrations. For example, background agricultural odours may not be considered offensive until a higher threshold is reached than for odours from a wastewater treatment works.
- **Source characteristics:** whether the odour is emitted from a stack (point source) or from an area (diffuse source). Generally, the components of point source emissions can be identified and treated more easily than diffuse sources. Emissions from point sources can be more easily controlled using control equipment. Point sources tend to be located in urban areas, while diffuse sources are more often located in rural locations.
Health Effects: whether a particular odour is likely to be associated with adverse health effects. In general, odours from agricultural activities are less likely to present a health risk than emissions from industrial facilities.

An example for this can be shown in a theoretical case of a bakery. A person walking past the bakery may smell the bakery odours and like these baking odours (it can be shown that people generally react positively to baking odours). However, a person living next to the bakery and who experiences the baking odours throughout their house and garden on a continuous basis may find the baking odours offensive to the point where they complain to local authorities.

Other factors may also come into play when assessing odour impacts, such as:

- **Population sensitivity**: any given population contains individuals with a range of sensitivities to odour. The larger a population, the greater the number of sensitive individuals it may contain.

- **Background level**: whether a given odour source, because of its location, is likely to contribute to a cumulative odour impact. In areas with more closely-located sources it may be necessary to apply a lower threshold to prevent offensive odour.

- **Public expectation**: whether a given community is tolerant of a particular type of odour and does not find it offensive, even at relatively high concentrations. For example, background agricultural odours may not be considered offensive until a higher threshold is reached than for odours from a landfill facility.

### 5.2 Air Quality Criteria

#### 5.2.1 Particulate Matter and Products of Combustion

State air quality guidelines specified by the NSW Environmental Protection Agency (EPA) for the pollutants identified in Section 5.1 are published in the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA 2017) [hereafter ‘Approved Methods’]. The ground level air quality impact assessment criteria listed in Section 7 of the Approved Methods have been established by NSW EPA to achieve appropriate environmental outcomes and to minimise associated risks to human health as published in the Approved Methods. They have been derived from a range of sources and are the defining ambient air quality criteria for NSW, and are considered to be appropriate for use in this assessment.

A summary of the relevant impact assessment criteria for particulate matter and products of combustion is provided in Table 4.

**Table 4** NSW EPA Goals for Particulate Matter and Combustion Gases

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Period</th>
<th>Concentration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>15 minutes</td>
<td>87 ppm</td>
<td>100 mg/m³</td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>25 ppm</td>
<td>30 mg/m³</td>
</tr>
<tr>
<td></td>
<td>8 hours</td>
<td>9 ppm</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>NO₂</td>
<td>1 hour</td>
<td>12 ppm</td>
<td>246 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>3 ppm</td>
<td>62 µg/m³</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>24 Hours</td>
<td>-</td>
<td>50 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>-</td>
<td>30 µg/m³</td>
</tr>
<tr>
<td>PM₂.⁵</td>
<td>24 Hours</td>
<td>-</td>
<td>25 µg/m³</td>
</tr>
</tbody>
</table>
5.2.2 Odour

The equation used by the NSW EPA to determine the appropriate impact assessment criteria for complex mixtures of odorous air pollutants, as specified in the document ‘Technical framework: assessment and management of odour from stationary sources in NSW’ (hereafter the Odour Framework), is expressed as follows:

\[
\text{Impact assessment criterion (ou) = } (\log_{10}(\text{population})-4.5)/-0.6
\]

A summary of the impact assessment criteria given for various population densities, as drawn from the Odour Framework, is given in Table 5. A criterion of 2 ou would be appropriate for the area surrounding the Subject Site.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban area (≥ 2000)</td>
<td>2.0</td>
</tr>
<tr>
<td>≥300</td>
<td>3.0</td>
</tr>
<tr>
<td>≥125</td>
<td>4.0</td>
</tr>
<tr>
<td>≥30</td>
<td>5.0</td>
</tr>
<tr>
<td>≥10</td>
<td>6.0</td>
</tr>
<tr>
<td>Single residence (≤ 2)</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Source: DEC 2006

The Odour Framework states that the impact assessment criteria for complex mixtures of odorous air pollutants must be applied at the nearest existing or likely future off-site sensitive receptor(s).

5.3 Recommended Separation Distances

The application of minimum recommended separation distances (or "buffer" distances) provides a valuable screening tool to judge whether a detailed assessment is required to evaluate the potential risk of conflicting land uses. Separation distances provide guidance on the appropriate level of separation between a source of emissions and sensitive land uses in order to mitigate the impacts of intended and unintended emissions on people. This approach relies on the knowledge that impacts on the environment generally decrease with increasing distance from the source of emissions. Separation distances are based on an understanding of the types of emissions associated with various industries and their potential impacts on people. These distances can vary based on the scale and size of the industry, location topography, prevailing winds and other factors.
There are no separation guidelines issued by NSW EPA, hence the following sections refer to guidelines set by other regulatory agencies in Australia. These recommended separation distances have been developed to be applied to sensitive uses, such as residential dwellings, schools, hospitals and childcare centres.

5.3.1 Western Australia EPA

In the Western Australia Environmental Protection Authority (WA EPA) policy documentation for minimum recommended separation distances - Separation distances between Industrial and Sensitive Land Uses (WA EPA 2015), the WA EPA makes recommendations for assessing appropriate separation distances where amenity may be reduced for sensitive or incompatible land uses. Sensitive land uses which warrant protection from amenity-reducing off-site effects of industry by maintenance of a separation distance include residential areas and zones, hospitals and schools.

The WA EPA document lists a number of industries with their recommended separation distances and states that where the appropriate separation distance is unable to be provided by the emitter, the impact on neighbouring land uses may be reduced by careful site layout. WA EPA (2015) states that ‘It is not the purpose of a separation distance to ‘sterilise’ land from development; non-sensitive land uses can be located within the area between the source of emissions and sensitive land use.’

The WA EPA recommends EPA consultation where site-specific circumstances indicate a lesser separation distance may be appropriate (i.e. where there is no history of complaints arising from residual emissions or where the plant is significantly smaller than that used in the recommendations etc). A summary of the separation distances specified by WA EPA which may be applicable to the Subject Site are provided in Table 6.

<table>
<thead>
<tr>
<th>Activity Notes</th>
<th>Impacts</th>
<th>Separation Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete is made (batched) and loaded for transport or cement products are made</td>
<td>Noise, Dust</td>
<td>300-500</td>
</tr>
</tbody>
</table>

Source: Appendix 1, WA EPA 2015

As concrete batching activities are not part of the operations at the Subject Site, the minimum recommended separation distance of 300 m would still be conservative.

5.3.2 Australian Capital Territory EPA

The document ‘Draft separation guidelines for air emissions’, published by ACT EPA (ACT EPA 2014) includes a recommended separation distance for ‘concrete batching works’ as shown in Table 7.

<table>
<thead>
<tr>
<th>Activity Notes</th>
<th>Separation Distance (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works for the production of concrete or concrete products that are manufactured or capable of being manufactured by mixing cement, sand, rock, aggregate or similar materials with a total capacity for production exceeding 0.5 cubic metres per production cycle.</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Appendix 1, ACT EPA 2014
As ‘concrete batching works’ are defined as activities that include the mixing of cement, sand, rock, aggregate etc, which are not part of the operations at the Subject Site, the separation distance of 100 m should be viewed as conservative.

### 5.3.3 South Australia EPA

The document ‘Evaluation distances for effective air quality and noise management’ published by South Australian EPA (SA EPA 2016) includes a recommended evaluation distance for ‘concrete batching works’ activities as shown in Table 8.

**Table 8** Recommended Evaluation Distances for Concrete Batching Works, SA EPA

<table>
<thead>
<tr>
<th>Activity Notes</th>
<th>Evaluation Distance (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust generation at concrete batching facilities usually results from vehicle movements on unsealed working areas, disturbance by vehicles of cement and aggregate dust on the ground, blow-outs from cement storage silos, and vehicle loading and unloading. Further, dust issues off-site can arise if mud or cement and aggregate dust is dragged by trucks from the site and dries on the adjoining roadway. There is potential for dust generation with delivery of sand and aggregates, cement and fly ash (a cementitious material used to enhance the quality of concrete and similar to cement), loading of the aggregate weigh-hoppers, and loading of the trucks.</td>
<td>200</td>
</tr>
</tbody>
</table>

*Source: Appendix 1, SA EPA 2016*

As concrete ‘manufacturing’ activities, such as mixing of cement, sand, rock, aggregate etc, are not part of the operations at the Subject Site, the evaluation distance of 200 m should be viewed as conservative.

### 5.3.4 EPA Victoria

The EPA Victoria document ‘Recommended separation distances for industrial residual air emissions’, Publication No. AQ.1518, (EPAV 2013) includes a minimum recommended separation distance for concrete and stone manufacturing related activities as shown in Table 9. The throughput at the Subject Site is approximately 22,000 tonnes per annum, hence the recommended separation distance would be applicable.

**Table 9** Recommended Separation Distances for Concrete and Stone Article Manufacturing, VIC EPA

<table>
<thead>
<tr>
<th>Activity Notes</th>
<th>Scale</th>
<th>Separation Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of finished concrete and stone products</td>
<td>&gt;5,000 tonnes</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Table 1, VIC EPA 2013*

### 5.3.5 Summary

The separation distances prescribed by the ACT EPA, SA EPA and WA EPA refer to the separations distances for activities including on-site concrete batching. These processes are generally dusty in nature as the raw materials are dry and their handling may lead to air emissions before they are mixed. As noted in Section 2.3, concrete batching activities are not undertaken at the Subject Site and hence the potential for dust emissions is significantly lower. As a result, the minimum recommended separation distances published by these agencies of 100 – 300 m would be expected to overestimate the separation distance that would be considered applicable to the Subject Site.
The separation distance published by VIC EPA refers to the production of finished concrete and stone products, which is similar to the processes undertaken at the Subject Site. Therefore, the separation distance of 100 m recommended by VIC EPA is considered to be most applicable to the operations at the Subject Site.

6 Assessment of Potential Air Quality Impacts

As discussed in Section 5.3.5, a separation distance of 100 m between sensitive receptors and concrete product manufacturing premises is recommended by EPAAV. This is illustrated in Figure 7 which shows that a separation distance of 100 m from the Subject Site does not encroach upon the existing sensitive receptors (residences) or the buildings within Fairfield High School to the west. A small area of the sports field lies within the 100 m buffer, however the presence of a mature vegetative screen between the Subject Site and the school would act to filter out dust particles emitted from the site and reduce the potential for any impacts on air quality. Students would not be present in this area for prolonged periods of times and no adverse impacts would be expected.

As discussed in Section 2.3.1 the minor odours observed during the wax application were not detectable outside of the warehouse and no off-site impacts would be expected as a result of these emissions.

Air emissions from the movement of trucks on site would be minimal compared to emissions from road traffic on Pine Road. These emissions can also be managed using the control measures outlined in Section 7.

Emissions of dust from the waste storage area due to wind erosion and vehicle movements on unsealed areas are also expected to be minor, given the small area involved and limited distances travelled by the trucks in this area. These emissions can also be managed using the control measures outlined in Section 7.

In addition, as discussed in Section 3.4, there are a relatively low percentage of conducive meteorological conditions that would blow emissions from the Subject Site towards the nearest residential receptor (typically around 13% of the time in a year, for the period 2013-2017).

Based on the above, it is concluded that the risk of adverse air quality impacts due to emissions from the Subject Site is low.
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

Figure 7  Subject Site Boundary and Separation Distance Recommended by VIC EPA

Note: The impact radius is centred at the Subject Site boundary (shown in "red")
7 Air Quality Mitigation Measures

The potential for traffic-related emissions during operation of the Subject Site to adversely impact on surrounding existing residential areas is anticipated to be insignificant given the minor traffic expected. Based on a review of recent air quality data recorded in the region, which indicates compliance with air quality criteria, it is considered that the airshed has capacity to assimilate this minor increase in additional emissions.

Any residual odour impacts from the usage of stripping wax out should also be controllable through good housekeeping measures.

7.1 Management of Traffic

To reduce potential air quality impacts from on-site traffic, it is recommended that:

- ‘Turn off engine’ signage be installed in the truck and car parking area to reduce the amount of pollutant emissions from vehicles idling; and
- The movement of trucks around the Subject Site be restricted to clearly marked lanes (if possible) based on a one-way traffic system. The use of a clearly marked, one-way traffic lane system for on-site truck movements can assist in minimising traffic congestion, which in turn reduces vehicle exhaust air emissions.

7.2 Management of Dust

To reduce potential air quality impacts from fugitive dust emissions, it is recommended that:

- If possible, the unsealed area used for waste storage be sealed, so that fugitive dust emissions could be avoided; or
- If this area remains unsealed, vehicle movements in this area be minimised where possible; and
- Light hosing of this area be performed to supress dust in dry and wind conditions (gravel could also be applied to help stabilise the surface).

7.3 Management of odour from Usage of Stripping Wax

Although transient in nature, odour from the usage of stripping wax should be managed by implementing best management practices such as:

- The warehouse building should be well ventilated when the stripping wax is being used;
- The stripping wax containers should be sealed tightly when not in use; and
- Used brushes/cloths etc containing wax residue should be stored in sealed containers for off-site disposal.
8 Conclusion

SLR was commissioned by Precast to undertake an Air Quality Impact Assessment (AQIA) for the operation of a precast concrete product manufacturing facility located at 49-53 Pine Road, Yennora (Subject Site).

This report has been prepared as part of the EIS for an application for retrospective change of use approval for the Subject Site. The NSW Department of Planning and Environment (DPE) issued Secretary's Environmental Assessment Requirements (SEARs) in January 2018.

To adequately address the assessment requirements (ie SEARs), SLR performed a site visit to identify sources of air emissions associated with the existing operations at the Subject Site. It was noted during the site visit that the primary dust generating activities in concrete product manufacture, ie mixing of sand, cement, lime etc, are not undertaken at the Subject Site. Instead premixed concrete is bought from concrete suppliers and is delivered to site in trucks. The wet concrete is poured into moulds prepared at the Subject Site to produce the concrete slabs.

Given the above, it was concluded by SLR that the processes undertaken at the Subject Site do not warrant a dispersion modelling study. Instead, the potential for adverse air quality impacts at the nearest sensitive receptors has been assessed qualitatively, based on recommended separation distances for the range of activities undertaken at the Subject Site.

In the absence of any relevant separation distances prescribed by NSW EPA, an assessment has been performed against the requirements of relevant guidelines set by EPAV for separation distances between facilities engaged in ‘Production of finished concrete and stone products’ and sensitive receptors.

The findings of the assessment are as follows

- The closest residence is located approximately 240 m northwest of the Subject Site boundary and is shielded by thick vegetation along the boundary. This is well beyond the 100 m separation distance recommended by EPAV for ‘Production of finished concrete and stone products’.

- The Fairfield High School buildings are located approximately 220 m southwest of the Subject Site, and are also separated by thick vegetation along the boundary and the school playgrounds. This is well beyond the 100 m separation distance recommended by EPAV for ‘Production of finished concrete and stone products’.

- In the last five years (2013 to 2017), winds blowing from the southeast and south-southeast directions, which would blow air emissions from the Subject Site towards the nearest sensitive receptor, occurred approximately 13% of the time per year; and winds blowing towards the Fairfield High School (ie between northeast and north-northeast) occurred approximately 12% of the time per year.

- Air emissions from the movement of trucks on site would be minimal compared to emissions from road traffic on Pine Road.

Given the above, it is concluded that the potential for any exceedances of air quality criteria at nearby residential areas and other sensitive receptors due to air emissions from the Subject Site would be negligible. A number of mitigation measures are recommended to control on-site air emissions that, when implemented, should reduce the likelihood of off-site air quality impacts even further. It is therefore concluded that air quality impacts should not be considered as a constraint for the continued use of the Subject Site for precast concrete product manufacturing.
9 References

- EPAV 2013, Recommended separation distances for industrial residual air emissions, Publication number 1518 March 2013, Authorised and published by EPA Victoria, 200 Victoria Street, Carlton.
- WA EPA 2015, Draft Environmental Assessment Guidelines for Separation distances between Industrial and Sensitive Land Uses, Western Australian Environmental Protection Authority, September 2015.
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Attachment 11
Hazards and Risk Assessment
State Environmental Planning Policy No. 33
49-53 Pine Road, Yennora
State Environmental Planning Policy No. 33
49-53 Pine Road, Yennenga
Precast Elements Pty Ltd

Prepared by
RiskEng Pty Ltd
PO Box 4113
Eight Mile Plains, QLD 4113
www.riskeng.com.au
ABN 26 611 315 792
Quality Management

<table>
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<th>Remarks</th>
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<th>Reviewed By</th>
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<td>A</td>
<td>8 May 18</td>
<td>Issued draft for comment</td>
<td>Renton Parker</td>
<td>Steve Sylvester</td>
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<tr>
<td>0</td>
<td>8 May 18</td>
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## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADG</td>
<td>Australian Dangerous Goods Code</td>
</tr>
<tr>
<td>DG</td>
<td>Dangerous Goods</td>
</tr>
<tr>
<td>PHA</td>
<td>Preliminary Hazard Analysis</td>
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<tr>
<td>SEPP 33</td>
<td>State Environmental Planning Policy No. 33</td>
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</table>


Executive Summary

Background

Precast Elements Pty Ltd (Precast) has proposed to develop a new site at 49-63 Pine Road, Yennora. An initial application was submitted to the Department of Planning and Environment who provide Secretary Environmental Assessment Requirements (SEARS) requiring the preparation of a State Environmental Planning Policy No. 33 (SEPP 33) report. If the assessment determines SEPP 33 to be exceeded, a Preliminary Hazard Analysis (PHA) is required to be submitted with the Development Application. Urbis, on behalf of Precast, has engaged RiskEng Pty Ltd to prepare the SEPP 33 for the site.

Conclusions

A review of the quantities of DGs stored at the proposed site and the associated vehicle movements was conducted and compared to the threshold quantities outlined in Applying SEPP 33. The results of this analysis indicates the threshold quantities for the DGs to be stored and transported are not exceeded; hence, SEPP 33 does not apply to the project.

As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility as SEPP 33 does not apply.
1.0 Introduction

1.1 Background

Precast Elements Pty Ltd (Precast) has proposed to develop a new site at 49-53 Pine Road, Yennora. An initial application was submitted to the Department of Planning and Environment who provide Secretary Environmental Assessment Requirements (SEARS) requiring the preparation of a State Environmental Planning Policy No. 33 (SEPP 33) report. If the assessment determines SEPP 33 to be exceeded, a Preliminary Hazard Analysis (PHA) is required to be submitted with the Development Application. Urbis, on behalf of Precast, has engaged RiskEng Pty Ltd to prepare the SEPP 33 for the site.

1.2 Scope of Work

The scope of work is to prepare the SEPP 33 assessment for the Precast site. Should any additional studies be required (i.e. PHA) these are not included, nor are any other Precast sites included within the scope of work.
2.0 Methodology

2.1 General Methodology

The methodology used in this assessment is as follows:

- Review the types and proposed quantities of DGs to be stored at the site.
- Compare the quantities of DGs the threshold quantities listed in “Applying SEPP 33 – Hazardous and Offensive Development” (Ref. [1]) to identify whether the storage location or quantity triggers SEPP 33.
- Review the likely vehicular movements as a result of DGs being stored and compared against the applicable thresholds detailed in Applying SEPP 33 (Ref. [1]).
- Report on the findings of the SEPP 33 assessment.

2.2 Data taken from “Applying SEPP 33”

Figure 2-1, extracted from "Applying SEPP 33" provides details on the application of Figures or Tables from the same document to determine the applied screening Threshold.

<table>
<thead>
<tr>
<th>Class</th>
<th>Method to Use/Minimum Quantity</th>
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</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Use graph at Figure 5 if greater than 100 kg</td>
</tr>
<tr>
<td>1.2-1.3</td>
<td>Table 3</td>
</tr>
<tr>
<td>2.1 — pressurised (excluding LPG)</td>
<td>Figure 6 graph if greater than 700 kg</td>
</tr>
<tr>
<td>2.1 — liquefied (pressure) (excluding LPG):</td>
<td>Figure 7 graph if greater than 500 kg</td>
</tr>
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<td>LPG (above ground)</td>
<td>Table 3</td>
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<tr>
<td>LPG (underground)</td>
<td>Table 3</td>
</tr>
<tr>
<td>2.3</td>
<td>Table 3</td>
</tr>
<tr>
<td>BFGH</td>
<td>Table 3</td>
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<tr>
<td>BFGII</td>
<td>Figure 6 graph if greater than 2 tonne</td>
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<td>Figure 6 graph if greater than 5 tonne</td>
</tr>
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<td>4</td>
<td>Table 3</td>
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<tr>
<td>5</td>
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<tr>
<td>8</td>
<td>Table 3</td>
</tr>
</tbody>
</table>

Figure 2-1: Screening Method to be Used

Table 3 from “Applying SEPP 33” has been extracted and is shown in Figure 3-3.
<table>
<thead>
<tr>
<th>Class</th>
<th>Screening Threshold</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>5 tonnes</td>
<td>or are located within 100 m of a residential area</td>
</tr>
<tr>
<td>1.3</td>
<td>10 tonnes</td>
<td>or are located within 100 m of a residential area</td>
</tr>
<tr>
<td>2.1</td>
<td>(LPG only) — Not including automotive retail outlets</td>
<td>10 tonnes or 16 m³ if stored above ground</td>
</tr>
<tr>
<td>2.3</td>
<td>5 tonnes</td>
<td>liquefied flammable gases and not for sale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>chlorine and sulfur dioxide stored as liquefied gas in</td>
</tr>
<tr>
<td>3.1</td>
<td>5 tonnes</td>
<td>chlorine and sulfur dioxide stored as liquefied gas in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>containers &gt; 100 kg</td>
</tr>
<tr>
<td>3.2</td>
<td>1 tonne</td>
<td>liquefied gas kept in or on premises</td>
</tr>
<tr>
<td>4.1</td>
<td>5 tonnes</td>
<td>other poisonous gases</td>
</tr>
<tr>
<td>4.2</td>
<td>1 tonne</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>25 tonnes</td>
<td>ammonium nitrate — high density fertilizer grade, kept on land zoned rural where rural industry is carried out, if the site is at least 50 metres from the site boundary</td>
</tr>
<tr>
<td>5.2</td>
<td>10 tonnes</td>
<td>ammonium nitrate — elsewhere</td>
</tr>
<tr>
<td>5.3</td>
<td>0.5 tonne</td>
<td>dry pool chlorine — if at a dedicated pool supply shop, in containers &lt; 30 kg</td>
</tr>
<tr>
<td>5.4</td>
<td>0.5 tonne</td>
<td>dry pool chlorine — if at a dedicated pool supply shop, in containers &lt; 30 kg</td>
</tr>
<tr>
<td>5.5</td>
<td>5 tonnes</td>
<td>any other class 5.1</td>
</tr>
<tr>
<td>5.6</td>
<td>10 tonnes</td>
<td></td>
</tr>
<tr>
<td>5.7</td>
<td>0.5 tonne</td>
<td>packing group II</td>
</tr>
<tr>
<td>5.8</td>
<td>2.5 tonnes</td>
<td>packing groups III and IV</td>
</tr>
<tr>
<td>5.9</td>
<td>0.5 tonne</td>
<td>includes clinical waste</td>
</tr>
<tr>
<td>5.10</td>
<td>5 tonnes</td>
<td>should demonstrate compliance with Australian codes</td>
</tr>
</tbody>
</table>

**Note:** The classes used are those referred to in the Australian Dangerous Goods Code and are explained in Appendix 7.
3.0 SEPP 33 Review

3.1 Proposed Storage Details

The maximum quantities of products and DGs that are to be stored at the site, are shown in Table 3-1. The data provided is an exaggeration of what is currently stored on site. It was clear the commodities currently used in operations are substantially lower than SEPP 33; hence, to be conservative the quantities were exaggerated to give the operators flexibility if additional DGs are required in the future.

Table 3-1: DG Classes or Materials Stored and Maximum Quantities

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>PG</th>
<th>Quantity (kg)</th>
<th>Subject to SEPP 33 (y/n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Flammable Cases</td>
<td>n/a</td>
<td>2,000</td>
<td>Y</td>
</tr>
<tr>
<td>2.2</td>
<td>Non-Flammable, Non-Toxic Gases</td>
<td>n/a</td>
<td>2,000</td>
<td>N</td>
</tr>
<tr>
<td>3</td>
<td>Flammable Liquid (Petrol)</td>
<td>II &amp; III</td>
<td>1,000</td>
<td>Y</td>
</tr>
<tr>
<td>8</td>
<td>Corrosive substances</td>
<td>II &amp; III</td>
<td>1,000</td>
<td>Y</td>
</tr>
<tr>
<td>9</td>
<td>Miscellaneous DGs</td>
<td>III</td>
<td>500</td>
<td>N</td>
</tr>
<tr>
<td>C1</td>
<td>Diesel</td>
<td>C1</td>
<td>500</td>
<td>N</td>
</tr>
</tbody>
</table>

3.1.1 Classification of Stored Products

The Australian Dangerous Goods Code (ADG, Ref. [2]) provides a list of materials which are classified as DGs under the requirements of the code. The goods to be stored are classified as DGs by the ADG with the exception of diesel. Non-DG products are not subject to SEPP 33. In addition, Classes 2.2 and 9 are also not subject to SEPP 33.

Therefore, Class 2.2, 9 and diesel have not been carried forward for further assessment.

3.2 Application of State Environmental Planning Policy No.33 – Hazardous and Offensive Developments

State Environmental Planning Policy No. 33 – Hazardous and Offensive Developments (SEPP 33) has been developed under the Planning and Assessment Act 1979 to control potentially hazardous and offensive developments and to ensure appropriate safety features are installed at a facility to ensure the risks to surrounding land uses is minimised.

The policy includes a guideline that assists government and industry alike in determining whether SEPP 33 applies to a specific development. The guideline, “Applying SEPP 33 – Hazardous and Offensive Developments” (Ref. [1]) provides a list of threshold levels, for the storage of DGs, above which the regulator considers the DG storage to be potentially hazardous. In the event the threshold levels are exceeded, SEPP 33 applies and a Preliminary Hazard Analysis (PHA) is required, followed by a series of hazard analysis studies stipulated by the Department of Planning and Environment in the conditions of consent.

3.2.1 Storage

Threshold limits for the application of SEPP 33 are presented in Table 3-2 along with maximum DG quantities that will be stored. The results summarised in the table indicates the SEPP 33 criteria is not exceeded; hence, no further assessment would be required.
Table 3-2: Quantities Stored and SEPP33 Threshold

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>PG</th>
<th>Quantity (kg)</th>
<th>SEPP 33 Threshold (kg)</th>
<th>Does SEPP 33 Apply?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Flammable Gases (LPG)</td>
<td>n/a</td>
<td>2,000</td>
<td>10,000</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Flammable Liquids (petrol)</td>
<td>II &amp; III</td>
<td>1,000</td>
<td>5,000</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Corrosive Substances</td>
<td>II &amp; III</td>
<td>1,000</td>
<td>25,000</td>
<td>No</td>
</tr>
</tbody>
</table>

3.2.2 Transport

The facility will use DGs as part of their operations and quantities stored are far below SEPP 33 limits. As the site does not redistribute products, it is expected that movements at the site involving DGs would be infrequent as they would only occur when product is exhausted. Therefore, the transport limits defined in SEPP 33 would not be expected to be exceeded based on the site operations; hence, transport as not been considered further.
4.0 Conclusion and Recommendations

4.1 Conclusions

A review of the quantities of DGs stored at the proposed site and the associated vehicle movements was conducted and compared to the threshold quantities outlined in Applying SEPP 33. The results of this analysis indicates the threshold quantities for the DGs to be stored and transported are not exceeded; hence, SEPP 33 does not apply to the project.

As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility as SEPP 33 does not apply.
5.0 References


DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 12
Preliminary Site Investigation
PRELIMINARY SITE INVESTIGATION

Proposed Change of Land Use
(from General Industry to Industry Activity)
49-53 Pine Road, Yennora NSW

Prepared for:
Precast Elements Pty Ltd
49-53 Pine Road, Yennora NSW
PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Precast Elements Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

<table>
<thead>
<tr>
<th>Reference</th>
<th>Date</th>
<th>Prepared</th>
<th>Checked</th>
<th>Authorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>610.18067.00300-R01-v1.0</td>
<td>14 August 2018</td>
<td>Joel Cubol</td>
<td>Ben Diewhurst</td>
<td></td>
</tr>
<tr>
<td>610.18067.00300-R01-v0.1</td>
<td>6 June 2018</td>
<td>Joel Cubol</td>
<td>Ben Diewhurst</td>
<td></td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

SLR Consulting Australia Pty Ltd was engaged by Precast Elements Pty Ltd (the client) to undertake a Stage 1 Preliminary Site Investigation (PSI), including limited soil contamination assessment, to assess potential contamination constraints for the proposed change of land use (from general industry to industry activity) at 43-59 Pine Road, Yennora, NSW.

SLR understands that the client seeks retrospective approval of the formalisation of the use of the site for concrete manufacturing purposes, and this PSI will form part of the Environmental Impact Statement (EIS) that will accompany the Designated Development Application (DDA) to Cumberland Council (Council).

The objectives of this PSI are as follows:

- To assess the potential contamination risks present at the site by reviewing site history (past and present land activities within the site and its surrounding properties);
- To provide a preliminary assessment of the contamination status of fill material at the site;
- To provide advice on the suitability of the site (in the context of land contamination); and
- To provide recommendations for additional investigation, management or remediation of the site (if warranted).

To address the project objectives, SLR undertook the following scope of works:

- A site history/desktop review;
- A site walkover;
- Collection of five soil samples (surface) across the site;
- Analysis of the soil samples for contaminants of potential concern (CoPC), at a National Association of Testing Authorities (NATA) accredited laboratory;
- Evaluation of the field and laboratory analytical results; and
- Preparation of this PSI report.

Based on a review of the available site history data, observations made during the site walkover and the results of the limited soil investigation, SLR concludes the following:

- The potential for significant, widespread contamination to be present at the site is considered to be low;
- The laboratory analytical results reported that the concentrations of the CoPC are below the health investigation level (HIL) and health screening level (HSL) for a commercial/industrial land use scenario; however, results indicated that concentrations of metals (Cu, Ni, and Zn) in some samples are above the lower range ecological Investigation Level (EIL) limit for commercial/industrial land use scenario;
- One sample (SS4) was reported to contain bonded asbestos in the soil sample;
- The identified bonded asbestos and elevated metal concentrations are likely to be the result of historical land uses;
- Stage 2 DSI is not warranted, but SLR recommends further assessment including the following:
EXECUTIVE SUMMARY

- Clay content and pH analysis to determine the site specific EIL limit to be used for metal concentrations;
- Further soil sampling to confirm whether Zn concentration is above the EIL limit for a commercial/industrial land scenario; and
- Asbestos quantification to confirm that the asbestos identified within the exposed site soils is below the NEPM (2013) guideline limit for a commercial/industrial land use scenario.
- the site is considered suitable for the proposed change of land use (from general industrial to industry activity) subject to the above-mentioned recommendations.
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Appendix D  Historical Land Titles
Appendix E  NSW EPA Searches
Appendix F  Section 10.7 (Part 2 & 5) Planning Certificates
Appendix G  Laboratory Analytical Result Certificates
1 Introduction

1.1 General

SLR Consulting Australia Pty Ltd (SLR) was engaged by Precast Elements Pty Ltd (the client) to undertake a Stage 1 Preliminary Site Investigation (PSI), including a limited soil contamination assessment, to assess potential contamination constraints for the proposed change of land use (from general industry to industry activity) of 43-59 Pine Road, Yennora, NSW (the site).

This report presents the findings of a site history/desktop review, the site walkover and the limited soil contamination assessment conducted at the site.

1.2 Background

Based on the information provided by the Client and our preliminary desktop review, SLR understood the following:

- The site, which has an approximate area of 10,825 m², is legally registered as Lot 2 in DP939790;
- The site is bounded by the following:
  - Prospect Creek to the east;
  - Pine Road to the west; and
  - Commercial/industrial properties to the north and south.
- The site is currently used for manufacturing and storage of concrete panels and comprises the following facilities:
  - A single-storey warehouse building located along the northern boundary which is predominately used for storing concrete panels;
  - A single-storey warehouse building located along the southern boundary which is predominately used for manufacturing and storing concrete panels;
  - A two-storey office building; and
  - Landscaped/grassed areas located along the small portion of the southern boundary and at the eastern boundary at the site’s entrance.
- The site is proposed for change of land-use from general industry to industry activity. The Designated Development Application (DDA) seeks retrospective approval of the formalisation of the use of the site for concrete manufacturing purposed; and
- A Stage 1 PSI will form part the Environmental Impact Statement (EIS) that will accompany the DDA to Cumberland City Council (Council).

1.3 Objectives

Based on the information provided, the objectives of the PSI are as follows:

- To assess the potential contamination risks present at the site by reviewing site history (past and present land activities within the site and its surrounding properties);
To provide a preliminary assessment of the contamination status of fill material at the site;
- To provide advice on the suitability of the site (in the context of land contamination); and
- To provide recommendations for additional investigation, management or remediation of the site (if warranted).

These objectives aim to satisfy the requirements of State Environmental Planning Policy No. 55 (SEPP55) — Remediation of Land under the Environmental Planning and Assessment Act 1979.

### 1.4 Scope of Works

To address the project objectives, SLR undertook the following scope of works:

- A site history review that included the review of:
  - historical aerial photographs of the properties and their immediate surrounds (from 1943 to 2018);
  - historical land title search for the site; and
  - Licenses and other information pertaining to land contamination published by NSW Environment Protection Authority (EPA).
- A review of site setting which included site geology, hydrogeology, potential for acid sulfate soils (ASS) and topographic maps pertaining to the study area;
- A review of the local Council planning certificates (Section 10.7 Part 2&B);
- A site walkover;
- Collection five soil samples (surface) across the site;
- Analysis of the soil samples for contaminants of potential concern (CoPC) at a NATA accredited laboratory;
- Evaluation of the field and laboratory analytical results; and
- Preparation of this PSI report.
2 Site Identification

The location and the layout of the site are presented in Figure 1 and Figure 2, respectively.

At the time of preparing this report, the site is legally identified as Lot 2 in Deposited Plan (DP) 939790, and used for concrete panel storage and manufacturing.
3 Site Setting

3.1 Geology and Soil Landscape

In reference to the NSW Department of Industry Resource and Energy: Geoscience Information Portal, the site is found to be located within the Penrith geological area. As per the Geological Map of Penrith (Geological Series Sheet 9029-9129, Scale 1:100000, First Edition, 1986), the site’s geology is characterised by materials from the Quaternary period of Pleistocene epoch with key lithology of medium-grained sand, clay, and silt.¹

The site is within the Berkshire Park soil landscapes which typically contains brown and yellow Sodosols (Soloths), brown and yellow Kurosols (yellow and brown Podzolic Soils). The topsoils of the terraces are comprised of brown sandy loams and dark brown loamy sands; while the subsoils of the terraces are comprised of brown clayey sands, yellowish brown sandy clays and yellowish brown nodular clay, with abundant iron and manganese nodules (ferromanganiferous nodules).²

3.2 Topography

During the site walkover, it was observed that the site is generally flat with the western boundary sloping gently towards Prospect Creek.

3.3 Hydrology and Hydrogeology

Prospect Creek is located 30 m east of the site and flows in a southerly direction towards the Georges River, which is located approximately 4 km to the south.

The site is within the Moorebank Hydrogeological Landscape, with an unconfined aquifer type in unconsolidated alluvial sediments and unconfined to semi-confined in fractured rock along structures (bedding, joints, faults). Localised perching of water tables can occur above clay-rich layers during wetter seasons. Hydraulic conductivity is moderate to high (1.0–30m/day); groundwater salinity is fresh to marginal (0.8–1.6 dS/m); and depth to water table to shallow to intermediate (0–8m).³

3.4 Groundwater Boreholes

The groundwater borehole search undertaken on 22 May 2018 indicated that there are two groundwater wells within a radius of 500m from the site. However, no information/report regarding the status, construction and/or depth of the wells was available. The groundwater borehole search is attached in Appendix C.

3.5 Acid Sulfate Soils

Based on the Australian Soil Resource Information System (www.asris.csiro.au) ASS risk map and NSW Government Office of Environment and Heritage’s ASS occurrence map (www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm), there is no reported or known occurrence of ASS in the vicinity of the site.

Furthermore, the planning certificate (Part 5 of Section 10.7 of the Environmental Planning and Assessment Act 1979) obtained by SLR from Council indicated that the site is not affected by ASS classification under the Holroyd Local Environmental Plan (2013).
## 4 Site History

### 4.1 Aerial Photographs

The results of the review of historical aerial photographs are summarised below. Images are attached in Appendix B.

<table>
<thead>
<tr>
<th>Year of Photograph</th>
<th>Site Land use Observation</th>
<th>Surrounding Land use Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1943</td>
<td>Cleared vacant land covered in grass and patchy vegetation and trees. No specific land use was observed.</td>
<td>Adjacent and distant north, south, and eastern lands appeared to be crop plantations. Pine Road and Prospect Creek are evident to the east and west, respectively. Buildings associated with residential land use are observed in the distant west and southeast. A railway track is evident in the distant south.</td>
</tr>
<tr>
<td>1955</td>
<td>Essentially unchanged but an increase in the density of vegetation and trees within the site is evident.</td>
<td>Adjacent surrounding land uses essentially remained unchanged. Residential dwellings in the distant west and southeast have increased in number. Buildings associated with residential land use appeared in the distant south while buildings of potentially commercial/industrial land use are evident in the distant west.</td>
</tr>
</tbody>
</table>
4.2 Historical Land Titles

A search of historical land title ownership records for Lot 2 in DP939790 indicated that the site was owned by proprietors listed below.

- Grace Cameron (1927 to 1953)
- Sybil Eileen Cameron (1953 to 1955)
- Angelo Crosario (Labourer) (1955 to 1960)
- W.S Smyth Construction Pty Ltd (1960 to 1961)
- Mac Holdings Pty Ltd (1961 to 1965)
- Rex Thomas Goldsmith and Max Charles Goldsmith (Timber Merchants) (1965 to 1972)
- L.J. Doria (Holdings) Pty (1972 to 2004)
- Christian Herbert Stoermer (2004 to date)
The various private ownership of the property from 1927 to present suggested that the site may have been subjected to different land uses. However, as indicated by the reviewed historical aerial photographs, the site was not subjected to any physical development until after 1960. The potential for contamination to have been caused between 1960 and present through commercial and industrial operations (other than that of current concrete slab storage and manufacturing operations) cannot be ascertained.

A copy of land title documents is presented in Appendix D.

### 4.3 Regulatory Authorities

#### 4.3.1 NSW Environmental Protection Authority

A search of the NSW EPA contaminated land public register of record of notices was undertaken on 23 May 2018. The search did not identify any record with regards to the site and to any property located within 500m radius from the site, implying that there are no:

- orders made under Part 3 of the contaminated Land Management Act 1997 (CLM Act);
- approved voluntary management proposals under the CLM Act that have not been fully carried out and where the approval of the EPA has not been revoked;
- site audit statements provided under Section 53B of the CLM Act that relate to significantly contaminated land;
- actions taken by EPA under Section 35 or 36 of the Environmentally Hazardous Chemicals Act 1985;

A search of the NSW EPA’s Protection of the Environmental Operations Act 1997 (POEO Act) public register of licenses, applications and notices was undertaken on 23 May 2018. The search did not identify any records indicating that the EPA has not issued any license for scheduled activities (within the meaning of the POEO Act) undertaken at the site and within 500m radius.

A search of the NSW EPA public register of contaminated sites notified to NSW EPA under Section 60 of the CLM Act (as of 5 September 2017) was undertaken on 23 May 2018. The search did not identify any records for the site; however, one property (metal industry) within 500m radius from the site is listed as under assessment by the NSW EPA.

A copy of search records is presented in Appendix E.

#### 4.3.2 WorkCover NSW

This assessment did not include a search of Stored Chemical Information (SCID) and microfiche records held by WorkCover NSW. Based on the findings of the review of historical aerial images and observations made during the site inspection, it is considered unlikely that the site contains underground storage tanks. SLR notes, however, that there is storage for portable petrol and diesel tanks at the site.
4.3.3 Council Records

Cumberland City Council provided the Planning Certificate under Section 10.7 (2 and 5) of the Environmental Planning and Assessment Act 1979 for Lot 2 in DP997990. Section 149 (2) indicated that, in the context of the Contaminated Land Management (CLM) Act (1979) and at the date the certificates were issued, the site is not:

- declared to be significantly contaminated land;
- subject to a management order;
- subject of an approved voluntary management proposal; and
- subject to an ongoing maintenance order.

SLR also reviewed section 10.7 (5) and did not identify information pertaining to land contamination.

A copy of the Planning Certificates is presented in Appendix F.
5 Site Walkover

SLR conducted a site walkover on 18 May 2018 to make observations of the current conditions of the site and the adjacent site land uses (relevant to land contamination). The observations during the site walkover are presented in the succeeding sections, and photos are attached in Appendix A.

5.1 Site Features

SLR observed the following:

- The site is fenced with an entrance at the eastern boundary off Pine Road, and comprised the following facilities:
  - A single-storey warehouse building located along the northern site boundary used for concrete panel storage and equipment;
  - A single-storey warehouse building located along the southern site boundary predominately used for manufacturing concrete panels;
  - A two-storey office building at the centre of the site;
  - Landscaped/grassed areas located along the small portion of the southern boundary and eastern boundary at the site’s entrance; and
  - An equipment wash and concrete waste recycling facility located at the north-western boundary of the site.

5.2 Site Drainage

Stormwater drainage on the site comprises several grated drains, located adjacent to the northern building of the site. Stormwater runoff from roofs and hardstand areas either runs directly untreated off-site towards Prospect Creek or towards on-site drains that lead to an off-site Council drainage system. SLR understands that the proposed change of land use does not result in any increased stormwater run-off.

5.3 Wastes

There are bins on site for different types of waste (general waste and recyclable materials). It was also observed during the walkover that there is a section of the site, located at the north-west corner, where waste concrete is temporarily stored prior to off-site disposal.

A stockpile composed mainly of concrete rubble located at the western boundary of the site was also observed during the site walkover. These concrete waste stockpiles are collected monthly and disposed off-site.
5.4 Fill

The site appeared to have been constructed at a level that was similar to the surrounding properties. It is not possible to ascertain, from observations alone, whether the site contains fill material. However, based on historical aerial photographs, prior to when the existing facility was constructed; there was no evidence of ground disturbance (cutting and filling activity) that may indicate importation of fill material. However, although widespread filling on the site is not considered likely, it cannot be precluded from field observation and desktop review alone.

5.5 Underground and Aboveground Storage Tanks

No evidence of underground or aboveground storage tanks (fill and dip points, vent pipes, bowser, etc.) was observed on site during the site walkover.

5.6 Asbestos

No visible asbestos containing materials (ACM) (e.g. fragments of fibro cement sheeting) were observed on the surface at the site during the walkover. However, as part of the limited soil investigation undertaken by SLR, soil samples were taken for asbestos in soil identification. Please see Section 8 for further discussion and results.

5.7 Chemical and Other Hazardous Material Storage

There is a secured storage for petrol and diesel located at the southern building of the site. It was also observed that various chemicals (such as water based acrylic curing compound and concrete surface retarder) used for concrete panel manufacturing are being stored at the site. Solvents, degreasers and cleaning agents were also observed during the site walkover.

All chemicals are stored in bunded areas with spill skits, appropriate labelling and have a fire extinguisher nearby.

5.8 Phyto-toxicity

No evidence of phytotoxic impact was observed on site during the site walkover, as there was no significant vegetation observed at the site.

5.9 Staining and Odours

No odours and/or staining on the ground surface was observed during the site walkover.

5.10 Incidents and Complaints

No register of incidents or complaints was reviewed as part of this assessment.

5.11 Adjacent Land Uses

The land uses observed surrounding the site are listed in the following table.
Table 2  Adjacent Land Uses

<table>
<thead>
<tr>
<th>Adjacent Boundary</th>
<th>Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Industrial/commercial facilities (IBS Auto, ARL Laboratory, etc.)</td>
</tr>
<tr>
<td>South</td>
<td>Industrial/commercial facility (Air Liquide Australia)</td>
</tr>
<tr>
<td>East</td>
<td>Pine Road and Home Building Products Warehouse</td>
</tr>
<tr>
<td>West</td>
<td>Prospect Creek</td>
</tr>
</tbody>
</table>

5.12 Summary

Based on observations made during the site walkover, SLR considers that the site has a low potential for unacceptable contamination to be present.
6 Data Quality Assessment

The sources of data relied upon for this assessment included:

- NSW Environmental Protection Authority;
- NSW Department of Primary Industries – Office of Water;
- NSW Land and Property Information Division;
- InfoTrack (Property Searches);
- Nearmap;
- Cumberland City Council; and
- Observations made in the field by SLR.

Observations made in the field were generally consistent with the information reviewed during the desktop review.

Field observations and the desktop review were conducted by SLR’s environmental consultant Joel Cubol.

The data obtained is considered suitable for the purpose of this assessment.
7 Conceptual Site Model

7.1 Areas of Environmental Concern and Contaminants of Potential Concern

Based on the above, SLR considered that the potential presence of fill material at the site as well as the exposed site soils as potential AECs.

The CoPC within the AEC were considered to include:

- Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb and Zn);
- Total recoverable hydrocarbons (TRH);
- Benzene, toluene, ethylbenzene and xylenes (BTEX compounds);
- Polycyclic aromatic hydrocarbons (PAH);
- Polychlorinated biphenyls (PCB);
- Organochlorine pesticides (OCP); and
- Asbestos.

7.2 Receptors

The receptors that may be impacted by potential site contamination include future site users/occupiers and potentially the public to the east (Pine Road) and west (Prospect Creek), in the context of commercial and industrial land use (concrete slab storage and manufacturing).

7.3 Exposure Pathways

7.3.1 Human Health – Direct Contact and Inhalation

If contamination is present in the site soils, it is possible that site users may be exposed to such contamination via direct contact and inhalation.

However, SLR considers that the potential for direct contact and inhalation with contamination (for the receptors identified above) is considered negligible given that the site is covered by a concrete slab/pavement. Only a small portion of the site soil is exposed and will remain as a landscaped/grassed area. Soil samples were taken from these areas and tested for CoPC listed in Section 7.1. Results from the laboratory analysis are discussed in Section 9.

7.3.2 Human Health – Vapour Intrusion

If volatile contamination is present in the site soils, it is possible that the site users/workers and visitors may be exposed to such contamination via vapour intrusion into the proposed building. However, given the quality of the existing concrete slab, SLR considers that the potential for volatile contaminants to have migrated into the sub-slab materials is low to negligible. If the site soils were contaminated with volatile contaminants prior to the erection of the present building in the 1960's to 1970's, SLR considers it likely that such contaminants would have degraded and deteriorated over the past five decades and thus will be unlikely to pose a vapour intrusion risk to the receptors.
7.3.3 Summary

Based on our observations and site history, SLR considers that potential for the site soils to contain significant widespread contamination that could pose an unacceptable health risk to future site users is low. SLR considers that the site is suitable for the proposed industrial re-development (concrete panel storage and manufacturing).

However, to provide a greater level of certainty, a limited soil contamination assessment was undertaken to preliminarily assess the contamination status of the site's soils. The results of this limited soil contamination assessment are presented below.
8 Limited Soil Contamination Assessment

SLR collected five soil samples within parts of the site which are not sealed by concrete slabs/pavements. Site soils were accessible along the western, eastern, and southern boundaries of the site. Locations of sampling points within these accessible areas are presented in Figure 3. The work was undertaken on 18 May 2018.

Only surface samples generally to a depth of 0.15 m below ground level (mBGL), were collected from each sampling location. Samples were placed into laboratory prepared jars (with Teflon lined lids) and zip lock bags before being placed into a cooled esky and sent to the laboratory under standard chain of custody procedures.

All five samples were submitted to SGS (a NATA accredited laboratory) for the CoPC listed in Section 7.1.
9 Results

9.1 Subsurface condition

9.1.1 Lithology

The type of material encountered during sample collection can be described as sandy, clayey silt, brown and dark grey in colour and fine to medium grained.

9.1.2 Odours

No odours were observed during sampling.

9.1.3 Staining

No staining was observed in the sampling locations or the samples collected.

9.1.4 Asbestos Containing Material

No potential ACM fragments were observed in the sampling locations and samples collected. However, laboratory analytical results identified bonded asbestos in one sample. Results are presented in the next section and presented in Table LR1.

9.2 Laboratory Analytical Results

Copies of the laboratory certificates of analysis are presented in Appendix F. Tabulated laboratory analytical results are presented in the attached Table LR1. The reported contaminant concentrations were compared to the NEPM (2013) health investigation levels (HILs), health screening levels (HSLs) for vapour intrusion and direct contact, both for commercial and industrial land use scenario (HILD and HSL D).

Results were also compared to ecological investigation levels (EILs) for commercial/industrial land use scenario (SLR notes that some contaminants were only compared to ranges of EILs). To get the exact values of these EILs, clay content and pH were required, which were not analysed given the preliminary nature of this limited soil contamination assessment.

Results are summarised as follows:

- The analytical results indicated that the concentrations of contaminants of concern in the samples analysed were less than the applicable guideline levels for HIL and HIL;
- Cu concentration of sample 4 (SS4) is above the lower range EIL limit for commercial/industrial land use;
- Ni and Zn concentrations of sample 1 (SS1) are above the lower range EIL limit for commercial/industrial land use;
- Zn concentrations of samples 2 (SS2) and 4 (SS4) are above the EIL limit for commercial/industrial land use scenario; and
- One sample (SS4) was reported to contain bonded asbestos.
10 Discussion

10.1 Potential for Site Contamination

The site history/desktop review indicated that the site is unlikely to have had a long heavy industrial use that could cause significant widespread contamination.

Based on site history review and the observations of the site activities and condition, SLR considers that the potential for the site to contain significant widespread contamination that could pose an exposure risk to future site users/workers, in the context of the proposed commercial and industrial land use, is low.

10.2 Contamination Status

Regardless of the above mentioned low potential for contamination, a limited soil contamination assessment was undertaken to preliminarily assess the contamination status of the site soils. This assessment was undertaken to provide a greater level of certainty in the findings of the Stage 1 PSI.

The analytical results indicate that the concentrations of CoPC in the samples taken from the accessible soils across the site were all less than the applicable guideline levels for commercial/industrial land use (HIL D and HSL D). However, laboratory analytical results indicated that concentrations of some metals (Cu, Ni, and Zn) are above the lower range EIL limit for commercial/industrial land use scenario, and in one sample (collected in the western boundary of the site) bonded asbestos was identified (although, there were no respirable fibres detected in all samples). The identified bonded asbestos and elevated metal concentrations are likely to be the result of historical land uses.

It is important to note though, that the contamination assessment undertaken was preliminary in nature and does not constitute a Stage 2 detailed site investigation. Based on the findings of this assessment (desktop review, walkover and limited soil contamination assessment), SLR considers that a Stage 2 detailed site investigation (DSI) is not warranted. However, further assessments are recommended (presented in Section 11) for the site to be considered suitable for the proposed land use.

10.3 Site Suitability

SLR considers that the site can be made suitable, from a contamination perspective, for commercial/industrial land use, subject to confirmation that the metals with elevated concentrations are below the EIL limit, as well as the extent of asbestos contamination is below the NEPM (2013) guideline limit for bonded and/or friable asbestos for a commercial and industrial land use scenario.
11 Conclusion and Recommendations

Based on a review of the available site history data, observations made during the site walkover and the limited soil investigation, SLR concludes the following:

- the potential for significant, widespread contamination to be present at the site is considered to be low;
- the site is considered suitable for the proposed change of land use (from general industrial to industry activity) subject to the above-mentioned recommendations; and
- a Stage 2 DSI is not warranted, but SLR recommends further assessment including the following:
  - an assessment to include clay content and pH analysis to determine the site specific EIL limit to be used for metal concentrations;
  - Further soil sampling to confirm whether zinc concentrations in soil are above the EIL limit for a commercial/industrial land scenario; and
  - Asbestos quantification to confirm that the asbestos identified within the exposed site soils is below the NEPM (2013) guideline limit for a commercial/industrial land use scenario.

These conclusions must be read in conjunction with the limitations set out in Section 12 of this report.
12 Limitations

This report is for the exclusive use of Precast Elements Pty Ltd. SLR understands that this report may be submitted as part of a development application for the site, and may also be provided to third parties for marketing purposes. Any parties relying on this report should do so with due consideration of the objectives stated in this report. SLR accepts no responsibility for the use of this report outside of the stated objectives.

This report has been prepared based on the scope of services (see below). SLR cannot be held responsible to the Client and/or others for any matters outside the agreed scope of services. Other parties should not rely upon this report and should make their own enquiries and obtain independent advice in relation to such matters.

This report has been prepared by SLR with reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with the Client. Information reported herein is based on the interpretation of data collected (data, surveys, analyses, designs, plans and other information), which has been accepted in good faith as being accurate and valid.

It should be noted that many investigations are based upon an assessment of potentially contaminating processes which may have occurred historically on the site. This assessment is based upon historical records associated with the site. Such records may be inaccurate, absent or contradictory. In addition documents may exist which are not readily available for public viewing.

Except where it has been stated in this report, SLR has not verified the accuracy or completeness of the data relied upon. Statements, opinions, facts, information, conclusions and/or recommendations made in this report ("conclusions") are based in whole or part on the data obtained, those conclusions are contingent upon the accuracy and completeness of the data. SLR cannot be held liable should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to SLR leading to incorrect conclusions.

Should the report be reviewed for any reason, the report must be reviewed in its entirety and in conjunction with the associated Scope of Services. It should be understood that where a report has been developed for a specific purpose, for example a due diligence report for a property vendor, it may not be suitable for other purposes such as satisfying the needs of a purchaser or assessing contamination risks for classifying the site. The report should not be applied for any purpose other than that originally specified at the time the report was issued.

Report logs, figures, laboratory data, drawings, etc. are generated for this report by SLR consultants (unless otherwise stated) based on their individual interpretation of the site conditions at the time the site visit was undertaken. Although SLR consultants undergo training to achieve a standard of field reporting, individual interpretation still varies slightly. Information should not under any circumstances be redrawn for inclusion in other documents or separated from this report in any way.
13 References


NSW DEC 2006, ‘Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (2nd edition)’.  


NSW Environmental Protection Authority (EPA), https://www.epa.nsw.gov.au/
TABLES
<table>
<thead>
<tr>
<th>Analyte Name</th>
<th>Units</th>
<th>LOR</th>
<th>HUEOM (E0.75)</th>
<th>Vapour Inh.</th>
<th>Direct Contact</th>
<th>Skin/Mucous Membrane</th>
<th>Result</th>
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Site Walkover Photographs
APPENDIX B

Historical Aerial Images
APPENDIX C

Groundwater Borehole Search
APPENDIX D

Historical Land Titles
**Summary of Owners Report**

LRS NSW (Formerly LPT)

**Address:** - 49 to 53 Pine Street, Yennora

**Description:** - Lot 2 Section K.D.P. 939790

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<td>L. J. Doris (Holdings) Pty</td>
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<td>08.11.2004 (2004 to date)</td>
<td># Christian Herbert Stoormer</td>
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# Denotes Current Registered Proprietor

**Leases:**
- 12.10.2006 (AC 660892) Expired due to effluxion of time, not investigated
- 27.08.2013 (AH 975919) Expired due to effluxion of time, not investigated
- 27.08.2013 (AH 975920 – Sub Lease) Expired due to effluxion of time, not investigated
- 02.09.2016 (AK 716963) to Precast Elements Pty Ltd, expires 31.07.2022, also 5 year option

**Easements:**
- 29.09.1964 (Book 2750 No. 785 & D.P. 222401) Easement 30 feet wide for Sewerage purposes

Yours Sincerely
Mark Groll
14 May 2018

Email: mark.groll@infotrack.com.au
LAND

LOT 2 OF SECTION X IN DEDICATED PLAN 939790
AS XENONIA
LOCAL GOVERNMENT AREA CUMBERLAND
PARISH OF ST JOHN COUNTY OF CUMBERLAND
TITLE DIAMOND DP939790

FIRST SCHEDULE

CHRISTIAN HERBERT ZOEBERGER

SECOND SCHEDULE (5 NOTIFICATIONS)

1. RESERVATIONS (AND CONDITIONS) IN THE CROWN GRANT(S)
2. LIMITED TITLE, LIMITATION PURSUANT TO SECTION 28T(3) OF THE REAL
   PROPERTY ACT 1900, THE BOUNDARIES OF THE LAND COMPRISED HEREBIN
   HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL
3. BK 2350 NO 185 EASEMENT FOR SEWERAGE 3.145 METRES WIDE AFFECTING THE
   PART SHOWN CO PURCHASED IN DP 224801
4. BK 4442 NO 726 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP
   LIMITED
5. AK71693 LEASE TO PRECAST ELEMENTS PTY LTD EXPIRES: 31/7/2021, OPTION OF RENEWAL: FIVE YEARS

NOTIFICATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***
APPENDIX E

NSW EPA Searches
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 13
Soil Contamination Assessment
SOIL CONTAMINATION ASSESSMENT

Proposed Change of Land Use
49-53 Pine Road, Yennora, NSW

Prepared for:
Precast Elements Pty Ltd
49-53 Pine Road, Yennora, NSW

SLR Ref: 610.18087.00380-R01
Version No: v2.0
March 2019
PREPARED BY

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612
3rd Floor, 2 Lincoln Street
Lane Cove NSW 2066 Australia
(PO Box 176 Lane Cove NSW 1505 Australia)
T: +61 2 9427 8100
E: sydney@slrconsulting.com  www.slrconsulting.com

BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Precast Elements Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

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<td>18 March 2019</td>
<td>Junaid Ibrahim</td>
<td>Ben Dewhurst</td>
<td>Ben Dewhurst</td>
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CONTENTS

1 INTRODUCTION ................................................................................................. 4
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Table 3        Comparison of results to Site-Specific EILs

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Appendix B    Observation Photographs
Appendix C    Analytical Results Summary and EIL Calculations
Appendix D    Laboratory Reports
1 Introduction

1.1 General

SLR Consulting Australia Pty Ltd (SLR) was engaged by Precast Elements Pty Ltd (the client) to undertake an additional soil contamination assessment (SCA) to address recommendations by the Preliminary Site Investigation (PSI) conducted by SLR (ref: 610.18097.00300-R01-v0.1) dated 6 June 2018 (SLR 2018).

1.2 Background

SLR conducted a PSI with a limited soil contamination assessment to form part of the Environmental Impact Statement (EIS) that will accompany the Designated Development Application (DDA) to Cumberland Council (Council). The client received preliminary feedback from Council regarding additional investigations including the following:

- An assessment to include soil assessment (clay content, cation exchange capacity, pH analysis etc.) to determine the site-specific ecological investigation levels (EILs) to be used for metal concentrations. The National Environment Protection Measure 2013 (NEPM 2013) process for calculating site-specific EILs
- Further soil sampling to confirm whether zinc concentrations in soil are above the EIL limit for commercial/industrial land use; and
- Asbestos quantification to confirm that the asbestos identified within the exposed site soils is below the guideline limit for commercial/industrial land use.

1.3 Objectives

The objectives of the additional SCA were to:

- To address the preliminary feedback provided by Council on the PSI;
- To provide advice on the suitability of the site for the proposed land use; and
- To provide recommendations for additional investigation, management or remediation of the site (if warranted).

1.4 Scope of Works

To address the project objectives, SLR undertook the following scope of works:

- Collection of 3 soil samples for asbestos identification/quantification and collection of 2 soil samples for soil classification to all for site specific ecological investigation level calculation;
- Laboratory analysis of soil samples for asbestos identification and soil classification at a National Association of Testing Authorities (NATA) accredited laboratory;
- Calculation of site-specific ecological investigation levels for comparison to existing soil data;
- Comparison of soil analytical results to relevant guidelines (primarily the National Environment Protection Measure 2013); and
- Preparation of this report.
2  Soil Contamination Assessment

SLR collected 3 bulk soil samples around the location where the PSI (SLR 2018) identified bonded asbestos (SS4) were collected and analysed for asbestos quantification. The 3 bulk soil samples (approximately 10 litres in volume) were taken at different locations and then subjected to gravimetric analysis on-site. The bulk samples were individually spread out to inspect for any asbestos containing material (ACM), and subsamples were taken from the bulk samples to be analysed for asbestos quantification. Another 2 soil samples were collected at the accessible areas near the entrance located on the western portion of the site (for EEL calculation).

Sampling locations have been presented in Figure 1 of Appendix A. The sampling was undertaken on 27 February 2019.

3  Results

3.1  Asbestos containing material (ACM)

No potential ACM fragments were observed near the sampling locations and during gravimetric analysis.

3.2  Laboratory Analytical Results

3.2.1  Asbestos Quantification

The results of the asbestos quantification have been presented in the table below:

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS01</td>
<td>No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No respirable fibres detected.</td>
</tr>
<tr>
<td>AVS02</td>
<td>No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No respirable fibres detected.</td>
</tr>
<tr>
<td>AVS03</td>
<td>No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No respirable fibres detected.</td>
</tr>
</tbody>
</table>

The laboratory report has been presented in Appendix D.
3.2.2 Soil Classification and EIL calculation

The soil classification results were used to calculate the site-specific EILs (average of the results from SS06 and SS07 were used). The analytical results for copper, nickel, and zinc from the PSI (SLR 2018) were compared to the calculated site-specific EILs.

The National Environment Protection Measure 2013 (NEPM 2013) process for calculating site-specific EILs follows a formula; $EILs = \text{ambient background concentration (ABC)} + \text{added contaminant limit (ACL)}$. This includes using soil physiochemical properties such as clay content, cation exchange capacity, pH analysis etc., to calculate for the ACL, and adding it to a background concentration. In this case, the soil classification results are used to calculate for the ACL and the ABC are taken from the PSI (SLR 2018) sample SSS located at the entrance which is indicative of background concentrations and unlikely to be impacted by site activities.

Soil classification results have been presented in Appendix D and EIL calculations have been presented in Appendix C.

Results are summarised as follow:

- Copper concentrations for all samples (SS1, SS2, SS3, SS4, and SS5) are below the site-specific EIL limit for commercial/industrial land use (337 mg/kg);
- Nickel concentrations for all samples (SS1, SS2, SS3, SS4, and SS5) are below the site-specific EIL limit for commercial/industrial land use (381 mg/kg); and
- Zinc concentration in samples SS1 (1,200 mg/kg), SS2 (2,000 mg/kg), and SS4 (2,100 mg/kg) are above the site-specific EIL limit for commercial/industrial land use (1,025 mg/kg).

4 Conclusions and Recommendations

Based on the results of the soil contamination assessment, SLR concludes the following:

- Asbestos in soil does not exceed the relevant human health criteria for a commercial/industrial setting; and
- Although zinc concentrations have been detected at concentrations above the site-specific EIL limit for commercial/industrial land use, it is considered that the potential for significant, widespread contamination to be present at the site to be low. Further, the zinc concentrations are significantly below the human health guideline for an industrial setting and therefore these concentrations are not considered to impact the suitability of the site for its intended use.
APPENDIX A

FIGURES
APPENDIX B

OBSERVATION PHOTOGRAPHS
APPENDIX C

ANALYTICAL RESULTS SUMMARY

EIL CALCULATIONS
### Table 2: Soil Classification

<table>
<thead>
<tr>
<th>Field ID</th>
<th>Lab Report Number</th>
<th>Date</th>
<th>Matrix Type</th>
<th>TOC</th>
<th>pH EC</th>
<th>pH Lab</th>
<th>Iron (mg/kg)</th>
<th>Iron (%)</th>
<th>% Clay</th>
</tr>
</thead>
<tbody>
<tr>
<td>S506</td>
<td>642719</td>
<td>27-02-2019</td>
<td>soil</td>
<td>1.6</td>
<td>12</td>
<td>6.6</td>
<td>19,000</td>
<td>1.9</td>
<td>5.7</td>
</tr>
<tr>
<td>S507</td>
<td>642719</td>
<td>27-02-2019</td>
<td>soil</td>
<td>2.1</td>
<td>17</td>
<td>7.2</td>
<td>19,000</td>
<td>1.9</td>
<td>5.2</td>
</tr>
</tbody>
</table>
### Table 3: Comparison to Site-specific limits

<table>
<thead>
<tr>
<th>Metals</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fe</td>
<td>Cu</td>
<td>Zn</td>
<td>Pb</td>
<td>Cr</td>
<td>Ni</td>
<td>Cd</td>
<td>Hg</td>
<td>As</td>
<td>Hf</td>
<td>Zr</td>
</tr>
<tr>
<td>mg/kg</td>
<td>5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.1</td>
<td>0.09</td>
<td>0.1</td>
<td>0.5</td>
<td>0.1</td>
<td>0.09</td>
<td>0.1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Site-specific limits for Commercial/Industrial Land Use:

<table>
<thead>
<tr>
<th>Fe</th>
<th>Cu</th>
<th>Zn</th>
<th>Pb</th>
<th>Cr</th>
<th>Ni</th>
<th>Cd</th>
<th>Hg</th>
<th>As</th>
<th>Hf</th>
<th>Zr</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>10</td>
<td>5.0</td>
<td>46</td>
<td>30</td>
<td>26</td>
<td>0.07</td>
<td>0.7</td>
<td>200</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>500</td>
<td>50</td>
<td>5.0</td>
<td>20</td>
<td>12</td>
<td>12</td>
<td>0.23</td>
<td>4.2</td>
<td>20</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>500</td>
<td>50</td>
<td>5.0</td>
<td>5.0</td>
<td>150</td>
<td>50</td>
<td>240</td>
<td>0.23</td>
<td>4.2</td>
<td>20</td>
<td>2000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fe</th>
<th>Cu</th>
<th>Zn</th>
<th>Pb</th>
<th>Cr</th>
<th>Ni</th>
<th>Cd</th>
<th>Hg</th>
<th>As</th>
<th>Hf</th>
<th>Zr</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>50</td>
<td>5.0</td>
<td>20</td>
<td>12</td>
<td>12</td>
<td>0.23</td>
<td>4.2</td>
<td>20</td>
<td>2000</td>
<td>2000</td>
</tr>
</tbody>
</table>

Note: The table above represents the comparison of metals concentration limits for Commercial/Industrial Land Use. Each entry is the maximum allowable concentration in milligrams per kilogram (mg/kg) for the respective metal.
## Inputs

Select contaminant from list below
- Cu

Below needed to calculate fresh and aged ACLs
- Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dw): 14.5

Enter soil pH (calcium chloride method) (values from 1 to 14): 6.9

Enter organic carbon content (%OC) (values from 0 to 50%): 1.85

Below needed to calculate fresh and aged ABCs
- Measured background concentration (mg/kg). Leave blank if no measured value
- or for fresh ABCs only
  - Enter iron content (aqu regia method) (values from 0 to 50%) to obtain estimate of background concentration: 1.9
- or for aged ABCs only

## Outputs

<table>
<thead>
<tr>
<th>Land use</th>
<th>Cu soil-specific EILs (mg contaminant/kg dry soil)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fresh</td>
</tr>
<tr>
<td>National parks and areas of high conservation value</td>
<td>60</td>
</tr>
<tr>
<td>Urban residential and open public spaces</td>
<td>110</td>
</tr>
<tr>
<td>Commercial and industrial</td>
<td>170</td>
</tr>
<tr>
<td>Inputs</td>
<td>Outputs</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Select contaminant from list below</td>
<td>Land use Ni soil-specific EILs (mg contaminant/kg dry soil)</td>
</tr>
<tr>
<td>Ni</td>
<td>Fresh</td>
</tr>
<tr>
<td>Below needed to calculate fresh and aged ACLs</td>
<td>Aged</td>
</tr>
<tr>
<td>Enter cation exchange capacity (silver thioures method) (values from 0 to 100 cmol/c/kg dwl)</td>
<td>National parks and areas of high conservation value 20 40</td>
</tr>
<tr>
<td>14.5</td>
<td>Urban residential and open public spaces 75 220</td>
</tr>
<tr>
<td></td>
<td>Commercial and industrial 140 370</td>
</tr>
</tbody>
</table>

Below needed to calculate fresh and aged ABCs

Measured background concentration (mg/kg). Leave blank if no measured value

or for fresh ABCs only

Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration 1.9

or for aged ABCs only
## Inputs

<table>
<thead>
<tr>
<th>Select contaminant from list below</th>
<th>Zinc (Zn)</th>
</tr>
</thead>
</table>

Below needed to calculate fresh and aged ACLs

| Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dw) | 14.5 |

| Enter soil pH (calcium chloride method) (values from 1 to 14) | 6.9 |

Below needed to calculate fresh and aged ABCs

| Measured background concentration (mg/kg). Leave blank if no measured value |

| or for fresh ABCs only | Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration | 1.9 |

| or for aged ABCs only |

## Outputs

<table>
<thead>
<tr>
<th>Land use</th>
<th>Zinc soil-specific EILs (mg contaminant/kg dry soil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh</td>
<td>Aged</td>
</tr>
<tr>
<td>National parks and areas of high conservation value</td>
<td>70</td>
</tr>
<tr>
<td>Urban residential and open public spaces</td>
<td>220</td>
</tr>
<tr>
<td>Commercial and industrial</td>
<td>350</td>
</tr>
</tbody>
</table>

SLR Consulting Australia Pty Ltd

March 2019
APPENDIX D

LABORATORY REPORTS
<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>Sample Matrix</th>
<th>Eurofins</th>
<th>mgt Sample No.</th>
<th>Date Sampled</th>
<th>SS96 Soil</th>
<th>S19-Fe36179</th>
<th>SS97 Soil</th>
<th>S19-Fe36180</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Feb 27, 2019</td>
<td>Feb 27, 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1%</td>
<td>5.7</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>Conductivity (1.5 aqueous extract at 25°C as rec.)</td>
<td>19</td>
<td>us/cm</td>
<td>40</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH (un buffered 1.5 soil:CaCl2 extract at 25°C as rec.)</td>
<td>0.1</td>
<td>pH Units</td>
<td>6.6</td>
<td>7.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>0.1</td>
<td>%</td>
<td>1.6</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Moisture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1%</td>
<td>14</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Heavy Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>20</td>
<td>mg/kg</td>
<td>19000</td>
<td>19000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron (%)</td>
<td>0.01</td>
<td>%</td>
<td>1.9</td>
<td>1.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cation Exchange Capacity</td>
<td>0.05</td>
<td>meq/100g</td>
<td>12</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sample History
Where samples are submitted/delivered over several days, the last date of extraction and analysis is reported. A recent review of our LISQ has revealed the correction or identification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).
If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<table>
<thead>
<tr>
<th>Description</th>
<th>Testing Site</th>
<th>Extracted</th>
<th>Holding Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPM Screen for Soil Classification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Clay</td>
<td>Brisbane</td>
<td>Mar 01, 2019</td>
<td>6 Day</td>
</tr>
<tr>
<td>Conductivity (1:5 aqueous extract at 25°C as rec.)</td>
<td>Melbourne</td>
<td>Mar 05, 2019</td>
<td>7 Day</td>
</tr>
<tr>
<td>pH (units) (1:5 soil:CaCl2 extract at 25°C as rec.)</td>
<td>Melbourne</td>
<td>Mar 05, 2019</td>
<td>7 Day</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>Melbourne</td>
<td>Mar 04, 2019</td>
<td>28 Day</td>
</tr>
<tr>
<td>Heavy Metals</td>
<td>Melbourne</td>
<td>Feb 28, 2019</td>
<td>180 Day</td>
</tr>
<tr>
<td>Cation Exchange Capacity</td>
<td>Melbourne</td>
<td>Mar 01, 2019</td>
<td>180 Days</td>
</tr>
<tr>
<td>% Moisture</td>
<td>Melbourne</td>
<td>Feb 27, 2019</td>
<td>14 Day</td>
</tr>
</tbody>
</table>

Method: LTM:43740:7640 Conductivity
Method: LTM:450:4909 pH
Method: LTM:4617600 pH in soil by ISE
Method: APHA:5910B Total Organic Carbon
Method: LTM:80400 Metals in Waters, Soils & Sediments by ICP-MS
Method: LTM:85500 Cation Exchange Capacity by bases & Exchangeable SodiumPercentage
Method: LTM:GEN:7080 Moisture
Extraordinary Cumberland Local Planning Panel Meeting  
1 May 2019

Company Name: SLR Consulting (Sydney)  
Address: 2 Lincoln St  
Lane Cove West  
NSW 2066  

Project Name: 46 PINE ROAD YENORRA SCA  
Project ID: 610.18067.00380

<table>
<thead>
<tr>
<th>Sample Detail</th>
<th>Analysis - WA guidelines</th>
<th>Measurement</th>
<th>NIR/A NIR/S Medium Characterisation</th>
</tr>
</thead>
</table>

| Melbourne Laboratory - NATA Site # 1254 & 14271 | X | X |
| Sydney Laboratory - NATA Site # 18217 | X |
| Brisbane Laboratory - NATA Site # 26734 | X |
| Perth Laboratory - NATA Site # 23736 |

<table>
<thead>
<tr>
<th>No</th>
<th>Sample ID</th>
<th>Sample Date</th>
<th>Sampling Time</th>
<th>Matrix</th>
<th>LAB ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AV501</td>
<td>Feb 27, 2019</td>
<td>Sail</td>
<td>S19-Fe36177</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>AV502</td>
<td>Feb 27, 2019</td>
<td>Sail</td>
<td>S19-Fe36177</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>AV503</td>
<td>Feb 27, 2019</td>
<td>Sail</td>
<td>S19-Fe36178</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>SS06</td>
<td>Feb 27, 2019</td>
<td>Sail</td>
<td>S19-Fe36180</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>SS07</td>
<td>Feb 27, 2019</td>
<td>Sail</td>
<td>S19-Fe36180</td>
<td>X</td>
</tr>
<tr>
<td>Test Counts</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Internal Quality Control Review and Glossary

General
1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spike, and Laboratory Control Samples follow guidelines described in the National Environment Protection (Assessment of Site Contaminations) Measure, April 2011 and are included in the QC report where applicable. Additional QC data may be available on request.
2. All non-dimensionless results are reported on a dry basis, unless otherwise stated.
3. All referenced results are reported on a wet weight basis on the solid portion, unless otherwise stated.
4. Actual LOQs are matrix dependent. Quoted LOQs may be revised where sample matrices are divided due to interferences.
5. Results are uncorrected for matrix spikes or surrogates recovered except for PFAS compounds.
6. UHPLC analysis on waters are performed on homogenized, certified samples, unless noted otherwise.
7. Samples were analyzed on an “as received” basis.
8. This report replaces any interim results previously issued.

Holding Times
Please refer to “Sample Preservation and Centrifuge Guideline” for holding times (05.0001).
For samples received on the last day of holding time, notification of testing requirements should have been received at least 8 hours prior to sample receipt deadlines as stated on the SPA.
If the Laboratory did not receive the information in the required timeframe, and regardless of any other delays, laboratory qualified results may still be reported.
Holding times apply from the date of sampling, therefore compliance to those may be outside the laboratory’s control.
For VOCs containing vinylidene, trihalomethane and D-TMA, hold time is 7 days for all other VOCs such as BTEX or DB-10 TRH then the holding time is 14 days.
**NOTE: pH is measured as a range, not an RPD

Units

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
<th>Conversion Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>mg/kg</td>
<td>milligrams per kilogram</td>
<td>1</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
<td>1E-6</td>
</tr>
<tr>
<td>ug/mL</td>
<td>micrograms per milliliter</td>
<td>1E-3</td>
</tr>
</tbody>
</table>

Terms

Dry Where a moisture has been determined on a solid sample the results is expressed on a dry basis.
LOD Limit of Detection
IRP Relative Percent Difference between two Duplicates peaks of analysis.
LCR Laboratory Control Sample reported as percent recovery.
CRM Certified Reference Material reported as percent recovery.
Method Blank In the case of solids samples these are performed on laboratory certified clean errors and the results of water samples are performed on de-ionized water.
Sure Scourgate The addition of a lixiviant to the sample bag and reported as percent recovery.
Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show reproducibility.

US EPA United States Environmental Protection Agency
APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure
GCC Chair of Custody
SRA Sample Receipt Authority
GSM US Department of Defense Quality System Manual Version 5.2.3915
CIP Client Panel - QC data was performed on samples pertaining to this report
MPC Non-Client Panel - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analyzed within.
TEQ Total Equilibrium Toxicity

QC - Acceptance Criteria

RPD Duplicates Global RPD Duplicates Acceptance Criteria is 30% however following the acceptance guidelines are equally applicable.
Results <4 times the LOD: No Limit
Results between 10-20 times the LOD: RPD must be between 0-66%
Results >20 times the LOD: RPD must be between 0-20%
Sample Recoveries Recoveries must be between 80-120% - Phenols & PFASs
PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in GEM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

1. Where a result is reported as a less than (L), higher than the nominated LOD, this is due to either matrix interference, extraneous data collected due to interference or contaminant levels within the sample, high matrix content or insufficient sample provided.
2. Duplicate data shown within this report that states the word “DETAIL” is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is data from your samples.
3. Organophosphorus Pesticides analysis - where reporting LCx data, Tetrahydrocarbons and Chlorinated are not added to the LCx.
4. Organophosphorus Pesticides analysis - where reporting Etica data, Tetrahydrocarbons are not added to the Etica.
5. Total Recoverable Hydrocarbons where reporting Spike & LOD data, a single spike of commercial Hydrocarbons provided in the range of Q2:Q3 is added and Total Recovery is reported in this C10-C14 oil of the Report.
6. Phenol and Fluorinated analytes in the laboratory - Analysis are conducted within 30 minutes of sample receipt. The Phenol laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Du rampes), where chromatographic interference does not allow the determination of Recovery the term "NMT" appears against that analyte.
8. Polyharmoarlic Biphenyls are spiked using Aroclor 1260 in Matrix Hexane and LQD.
9. For Methanol and IC analysis a data "NMT" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have less data of interest.

EELPP024/19 – Attachment 13
### Quality Control Results

<table>
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<tr>
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<th>Units</th>
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<th>Pass Limits</th>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Clay</td>
<td>%</td>
<td>&lt; 1</td>
<td>1</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>%</td>
<td>&lt; 0.1</td>
<td>0.1</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td><strong>Heavy Metals</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS - % Recovery</td>
<td>mg/kg</td>
<td>&lt; 20</td>
<td>20</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>% Clay</td>
<td>%</td>
<td>100</td>
<td>70-130</td>
<td>Pass</td>
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<tr>
<td>Total Organic Carbon</td>
<td>%</td>
<td>107</td>
<td>70-130</td>
<td>Pass</td>
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<tr>
<td><strong>Duplicate</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Clay</td>
<td>M19-Fe1381 NCP</td>
<td>3.8</td>
<td>3.8</td>
<td>&lt;1</td>
<td>30%</td>
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<tr>
<td>Conductivity (1.5 aqueous extract at 25°C on rec.)</td>
<td>S19-Ma01452 NCP</td>
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<td>25</td>
<td>22</td>
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<td>Total Organic Carbon</td>
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<td>0.3</td>
<td>1.6</td>
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<tr>
<td>% Moisture</td>
<td>M19-Fe06116 NCP</td>
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<td>8.6</td>
<td>&lt;1</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Duplicate</strong></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Heavy Metals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Iron</td>
<td>M19-Fe17065 NCP</td>
<td>10000</td>
<td>11000</td>
<td>9.0</td>
<td>30%</td>
</tr>
</tbody>
</table>
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

Comments

Sample Integrity
- Custody Seal intact (if sealed) N/A
- All sample bin/CGH seal evident Yes
- Sample correctly preserved Yes
- Appropriate sample containers have been used Yes
- Sample containers for volatile analysis received with minimal headspace Yes
- Samples received within holding time Yes
- Some samples have been subbed out No

Authorised By

Andrew Black Analytical Services Manager
Emily Rosenberg Senior Analyst Metal (YMD)
Jonathan Angell Senior Analyst Inorganics (YMD)
Julie Kay Senior Analyst Inorganics (YMD)
Nilima Waidya Senior Analyst Asbestos (RSIV)

Glenn Jackson General Manager

Final report. This report replaces any previously issued report.
- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service.

Measurement uncertainty of test data is available on request and please e-mail here...
Certificate of Analysis

SLR Consulting
2 Lincoln St
Lane Cove West
NSW 2066

Attention: Ben DeWhurst
Report 642719-AID
Project Name 49 PINE ROAD YENORRA SCA
Project ID 810.18097.00350
Received Date Feb 27, 2019
Date Reported Mar 07, 2019

Methodology:

Asbestos Fibre Identification
Conducted in accordance with the Australian Standard AS 4664 – 2004. Method for the Qualitative Identification of Asbestos in Bulk Samples and In-house Method LTM-ASB-8020 by polished light microscopy (PLM) and dispersion staining (DS) technique.

NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.

Unknown Mineral Fibres
Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.

NOTE: White Amphibole, Anthophyllite and Tramellite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials. AS 4664 requires that these are reported as UMF unless confirmed by an independent technique.

Subsampling Soil Samples
The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60% then a sub-sampling routine based on ISO 3062 2009(E) is employed.

NOTE: Depending on the nature and size of the soil sample, the sub 2mm residue material may need to be subsampled for trace analysis, in accordance with AS 4664-2004.

Bonded asbestos-containing material (ACM)
The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4664 – 2004.

NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Very fine asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.

Limit of Reporting
The performance limitation of the AS 4664 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting Limit of 0.01% (w/w).

The NATA Accreditation level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 ml) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Grammometric determinations to this level of accuracy are outside of AS 4664 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).

NOTE: NATA, News March 2014, p. 7, states in relation to AS 4654: “This is a qualitative method with a nominal reporting limit of 0.01 % * and that currently in Australia “there is no validated method available for the quantification of asbestos”. This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.”
<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>Eurofins</th>
<th>mgt</th>
<th>Date Sampled</th>
<th>Sample Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS01</td>
<td>19-Fe36176</td>
<td>Feb 27, 2019</td>
<td>Approximate Sample 152g Sample consisted of: Brown fine-grained sandy soil and rocks</td>
<td>No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No respirable fibres detected.</td>
<td></td>
</tr>
<tr>
<td>AVS02</td>
<td>19-Fe36177</td>
<td>Feb 27, 2019</td>
<td>Approximate Sample 104g Sample consisted of: Brown fine-grained sandy soil and rocks</td>
<td>No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No respirable fibres detected.</td>
<td></td>
</tr>
<tr>
<td>AVS03</td>
<td>19-Fe36178</td>
<td>Feb 27, 2019</td>
<td>Approximate Sample 56g Sample consisted of: Brown fine-grained sandy soil and rocks</td>
<td>No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No respirable fibres detected.</td>
<td></td>
</tr>
</tbody>
</table>
**Sample History**

Where samples are submitted, analysis over several days, the last date of extraction analysis is reported. A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<table>
<thead>
<tr>
<th>Description</th>
<th>Testing Site</th>
<th>Extracted</th>
<th>Holding Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos - LTM-A58-8020</td>
<td>Sydney</td>
<td>Mar 06, 2019</td>
<td>Indefinite</td>
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</tbody>
</table>
## Sample Detail

| Melbourne Laboratory - NATA Site # 1254 & 14271 | X | X |
| Sydney Laboratory - NATA Site # 18217 | X |
| Brisbane Laboratory - NATA Site # 26734 | X |
| Perth Laboratory - NATA Site # 23736 |

### External Laboratory

<table>
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<th>Sample ID</th>
<th>Sample Date</th>
<th>Sampling Time</th>
<th>Matrix</th>
<th>LAB ID</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>AV901</td>
<td>Feb 27, 2019</td>
<td>Soil</td>
<td>S19-Fe36176</td>
<td>X</td>
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<td>2</td>
<td>AV902</td>
<td>Feb 27, 2019</td>
<td>Soil</td>
<td>S19-Fe36177</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>AV903</td>
<td>Feb 27, 2019</td>
<td>Soil</td>
<td>S19-Fe36178</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>SB06</td>
<td>Feb 27, 2019</td>
<td>Soil</td>
<td>S19-Fe36179</td>
<td>X</td>
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<tr>
<td>5</td>
<td>SB07</td>
<td>Feb 27, 2019</td>
<td>Soil</td>
<td>S19-Fe36180</td>
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</table>

<table>
<thead>
<tr>
<th>Test Counts</th>
<th>2</th>
</tr>
</thead>
</table>
Internal Quality Control Review and Glossary

General
1. QC data may be available on request.
2. All test results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an “as received” basis.
4. This report replaces any interim results previously issued.

Holding Times
Please refer to “Sample Preservation and Container Guide” for holding times (QS3001).
For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.
If the Laboratory did not receive the information in the required timeframe and regardless of any integrity issues, suitably qualified results may still be reported.
Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory’s control.

Units
% weight, weight for weight basis
grams per kilogram

Filter loadings
fibres/100 gram filter area

Reported Concentrations
Removal L

Fluoresce
Lum

Terms
Day
Sample is dried by heating prior to analysis

LOI
Limit of Reporting

COC
Chair of Council

SR A
Sample Receipt Advice

ISO
International Standards Organisation

AS
Australian Standards

NEPM
National Environmental Protection (Assessment of Site Contamination) Measure, 2012 (as amended)

ACM
Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in fibrous and/or small condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.

AF
Asbestos Fibres. Asbestos containing materials, including fibrous, ballasted and banded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “friable”.

FA
Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.

Friable
Asbestos containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s need to assess degree of friability.

Trace Analysis
Analytical procedure used to detect the presence of detectable fibres in the matrix.
Comments

Sample Integrity

<table>
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<tr>
<th>Category</th>
<th>Status</th>
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<tr>
<td>Custody Sealed &amp; Retained (if used)</td>
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</tr>
<tr>
<td>All samples (for CH2) were avoided</td>
<td>Yes</td>
</tr>
<tr>
<td>Sample correctly preserved</td>
<td>Yes</td>
</tr>
<tr>
<td>Appropriate sample containers have been used</td>
<td>Yes</td>
</tr>
<tr>
<td>Samples containers for volatile analysis received with minimal headspace</td>
<td>Yes</td>
</tr>
<tr>
<td>Samples received within 120 days of collection</td>
<td>No</td>
</tr>
<tr>
<td>Some samples have been sub-contrasted</td>
<td></td>
</tr>
</tbody>
</table>

Qualifier Codes/Comments

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Asbestos Counter-Identifier:

[Signature]
Senior Analyst-Asbestos (NSW)

Authorised by:

[Signature]
Chief Officer
Senior Analyst-Asbestos (NSW)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report.

- Indicates Not Responded

* Indicates NAIA accreditation does not cover the performance of this service.
Measurement uncertainty of test data is available on request or please either here.

Nothing should be assumed or implied about the client or the nature of the work performed. The report is intended to provide information to support decision-making and not as a substitute for professional advice. The reader is advised to seek advice from a professional. The report does not constitute a contract and should not be relied upon for any legal purposes. The information contained in the report is based on the information provided and may not be accurate or complete. The report may contain confidential information and should be treated as such. The report may contain errors, omissions or inaccuracies. The authors of the report are not responsible for any loss or damage caused by reliance on the information contained in the report.
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 14
Noise Impact Assessment
PRECAST CONCRETE MANUFACTURING

49-53 Pine Road, Yennora
Noise Impact Assessment

Prepared for:
Precast Elements Pty Ltd
49-53 Pine Road
YENNORRA NSW 2161
PREPARED BY

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612
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Lane Cove NSW 2066 Australia
(P.O. Box 176 Lane Cove NSW 1505 Australia)
T: +61 2 9427 8100  F: +61 2 9427 8200
E: sydney@slrconsulting.com  www.slrconsulting.com

BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Precast Elements Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

<table>
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<th>Reference</th>
<th>Date</th>
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<tr>
<td>EELPP024/19-01-v3.0</td>
<td>14 August 2018</td>
<td>Nicholas Vandenberg</td>
<td>Mark Russell</td>
<td>Mark Russell</td>
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<tr>
<td>EELPP024/19-01-v2.0</td>
<td>30 July 2018</td>
<td>Nicholas Vandenberg</td>
<td>Mark Russell</td>
<td>Mark Russell</td>
</tr>
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</table>

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APPENDICES

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Appendix B Noise Monitoring Graphs – L01 – 22 Ace Avenue 
Appendix C Noise Monitoring Graphs – L02 – Onsite
1 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Precast Elements Pty Ltd to undertake a Noise Impact Assessment (NIA) to seek consent to continue utilising the existing warehouse for manufacturing of precast concrete building elements at the subject site.

The report addresses the requirements outlined in the Secretary’s Environmental Assessment Requirements (SEARS) for the subject site.

1.1 Terminology

The assessment has used specific acoustic terminology. An explanation of common terms is included in Appendix A.

1.2 Background

The subject site is located 49 Pine Road, Yennora (Lot 2, DP939790) which is situated within the Yennora Industrial Park, with the sites eastern boundary adjoining Prospect Creek. The subject site is approximately 10,825 m² and produces approximately 20 concrete panels per day.

Details regarding the current site operations are as follows:

- Use of the existing warehouse for manufacturing of precast concrete building elements.

- Hours of operation are 24 hours, seven days, with the following restrictions on vehicle access and deliveries:
  - Deliveries: 7am to 5pm (approximately 10 Concrete Trucks per day); and
  - Product distribution: 3am to 5pm (approximately 10 trucks leaving the site per day).

- Staffing numbers of:
  - 5 office staff; and
  - Up to 30 unskilled/skilled labourers.

Figure 1 shows the layout of the site.

Figure 1 Subject Site Plan
Figure 2  Site Aerial and Noise Monitoring Locations
2 Existing Noise Environment

In order to characterise the existing ambient noise environment, unattended noise monitoring was conducted at the site from 9 May to 16 May 2018. The measured noise levels have been used to establish existing road traffic noise impacts and to understand the existing ambient noise environment at the site.

Noise monitoring equipment was deployed in two locations across the site with consideration of existing noise sources that may influence the measurements, accessibility and security. The selected noise monitoring locations are shown in Figure 1.

2.1 Unattended Noise Monitoring

2.1.1 Methodology

The noise loggers continuously measured noise levels in 15 minute sampling periods to determine the existing $L_{eq}$, $L_{eq}$ and other relevant statistical noise levels during the daytime, evening and night-time periods.

The noise measurements were carried out using Swantek 957 noise loggers. The equipment was set up with microphones at 1.5 metres above the ground level. All microphones were fitted with wind shields.

All noise measurement instrumentation used in the surveys was designed to comply with the requirements of Australian Standard AS IEC 61672.1—2004 - Electroacoustics—Sound level meters, Part 1: Specifications' and carried appropriate and current National Association of Testing Authorities (NATA) calibration certificates. The calibration of the loggers was checked both before and after each measurement survey and the variation in calibration at all locations was found to be within acceptable limits.

The results of the noise monitoring have been processed to exclude noise identified as extraneous and/or data affected by adverse weather conditions (such as strong wind or rain) so as to establish representative noise levels in each area.

Table 1 Ambient Noise Survey Locations - 9 May to 16 May 2018

<table>
<thead>
<tr>
<th>Noise Monitoring Location (ID)</th>
<th>Location Description</th>
<th>Equipment Serial Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>L01</td>
<td>Residential – 22 Ace Avenue</td>
<td>21887</td>
</tr>
<tr>
<td>L02</td>
<td>Onsite noise monitor</td>
<td>23815</td>
</tr>
</tbody>
</table>

2.1.2 Noise Monitoring Results

The results of the unattended ambient noise surveys are summarised in Table 2 as the Rating Background Level (RBL) noise levels for the ICNG daytime, evening and night-time periods, and the $L_{eq}$ (energy averaged) noise levels for the RNP daytime and night-time periods.

Daily graphs representing the measured noise levels are contained in Appendix B. The graphs represent each 24 hour period during the survey period and show the $L_{A1}$, $L_{A10}$, $L_{eq}$ and $L_{dn}$ noise levels in 15 minute periods.
Table 2: Summary of Unattended Noise Logging Results

<table>
<thead>
<tr>
<th>Location ID</th>
<th>Location Description</th>
<th>Noise Levels dBA</th>
<th>RBL Period 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daytime</td>
<td>Evening</td>
</tr>
<tr>
<td>L01</td>
<td>Residential – 22 Ace Avenue</td>
<td>46</td>
<td>44</td>
</tr>
<tr>
<td>L02</td>
<td>Onsite Noise Monitor</td>
<td>49</td>
<td>46</td>
</tr>
</tbody>
</table>

Note 1: The RBL noise level is representative of the 'average minimum background sound level', or simply the background level.

Note 2: The L_{Aeq} is essentially the 'average sound level'. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time-varying sound.

2.2 Attended Airborne Noise

2.2.1 Methodology

Attended measurements of ambient noise were completed during the noise logging survey to determine the various noise sources that influence the existing noise environment. During each measurement the observer noted the various noise sources and the contributing noise level.

At each location the attended measurements were performed for 15 minutes using a calibrated Brüel and Kjær 2270 Precision Sound Level Meter (5/N:3008204). Wind speeds were less than 5 m/s at all times, and all measurements were performed at a height of 1.5 metres above ground level.

Calibration of the sound level meter was checked before and after each measurement and the variation in calibration at all locations was found to be within acceptable limits at all times.

2.2.2 Noise Measurement Results – Residential

Results of the attended noise survey conducted at the residential monitoring location (location 1) is summarised in Table 3.

Table 3: Summary of Attended Noise Monitoring Results

<table>
<thead>
<tr>
<th>Measurement Location</th>
<th>Measured Noise Levels</th>
<th>Description of Ambient Noise Source - Typical Linear Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L_{Aeq}</td>
<td>L_{Aeq}</td>
</tr>
<tr>
<td>Location 1</td>
<td>40</td>
<td>48</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2.3 Onsite Noise Measurements during various activities

Various noise measurements were also taken onsite during typical operations including the loading of a truck using a large fork lift, pouring of cement and general noise within the existing factory. The results are presented in Table 4.
Table 4  Onsite Noise Monitoring Results

<table>
<thead>
<tr>
<th>Activity</th>
<th>Distance (m) from source</th>
<th>Noise Level dBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fork Loading truck and general site operations</td>
<td>58</td>
<td>57</td>
</tr>
<tr>
<td>Fork Loading truck</td>
<td>12</td>
<td>65</td>
</tr>
<tr>
<td>Reverberant noise level inside shed</td>
<td>-</td>
<td>76 (internal)</td>
</tr>
<tr>
<td>Reverberant noise level cement truck unloading</td>
<td>-</td>
<td>80</td>
</tr>
</tbody>
</table>

Note: An additional 4dB has been added to the fork lift after review of the unattended noise monitoring which indicated higher noise levels.

3  Assessment Criteria

3.1  Noise Policy for Industry

The Noise Policy for Industry (NPI) was released in 2017 and sets out the NSW Environment Protection Authority's (EPA's) requirements for the assessment and management of noise from industry in NSW.

3.1.1  Trigger Levels

The NPI describes 'trigger levels' which indicate the noise level at which feasible and reasonable noise management measures should be considered. Two forms of noise criteria are provided – one to account for 'intrusive' noise impacts and one to protect the 'amenity' of particular land uses.

- The intrusiveness of an industrial noise source is generally considered acceptable if the \( L_{\text{Aeq}} \) noise level of the source, measured over a period of 15 minutes, does not exceed the background noise level by more than 5 dB. Intrusive noise levels are only applied to residential receivers. For other receiver types, only the amenity levels apply.

- To limit continual increases in noise levels from the use of the intrusiveness level alone, the ambient noise level within an area from all industrial sources should remain below the recommended amenity levels specified in the NPI for that particular land use.

For this assessment, the residential area surrounding the proposal as identified in Figure 2 is considered to be Urban.

3.1.2  Project Specific Criteria

The noise emission trigger levels for mechanical plant at the facility are provided in Table 5. The project noise trigger level is the lowest value of the intrusiveness or amenity noise level for each period and these are shown below in bold.
Table 5  Project Specific Noise Trigger Levels

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Period</th>
<th>Recommended Amenity Noise Level (dBA)</th>
<th>Measured Noise Level (dBA)</th>
<th>Project Noise Trigger Levels (L_{Aeq(15minute)}) (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Daytime</td>
<td>60</td>
<td>46</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Evening</td>
<td>50</td>
<td>44</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>45</td>
<td>39</td>
<td>47</td>
</tr>
<tr>
<td>School Classroom - Internal</td>
<td>Noisiest 1-hour period when in use</td>
<td>35</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Industrial Premises</td>
<td>When in use</td>
<td>70</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note 1:  RBL = Rating Background Level.
Note 2:  The recommended amenity noise levels have been reduced by 5 dBA to give the project amenity noise levels due to other sources of industrial noise likely in the area.
Note 3:  The project amenity noise level has been converted to a 15-minute level by adding 3 dBA.
Note 4:  Receiver conservatively assumed to have operable windows and a 10 dB outside to inside facade performance.

3.1.3 Modifying Factors

Sources of industrial noise can cause greater annoyance where they contain certain characteristics, such as tonality, impulsiveness, intermittency, irregularity or dominant low-frequency content. The NPI provides the following modifying factors, shown in Table 6, which are to be applied to the predicted receiver noise levels.

Table 6  NPI Modifying Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Assessment/Measurement</th>
<th>When to Apply</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonal noise</td>
<td>One-third octave or narrow band analysis</td>
<td>Level of one-third octave band exceeds the level of the adjacent bands on both sides by levels defined in the NPI.</td>
<td>5 dBA</td>
</tr>
<tr>
<td>Low-frequency noise</td>
<td>Measurement of source contribution C-weighted and A-weighted level and one-third octave measurements</td>
<td>Measure/assess source contribution C and A weighted levels over same time period. Correction to be applied where the C minus A level is 15 dB or more and the level to which thresholds defined in the NPI are exceeded.</td>
<td>2 or 5 dBA</td>
</tr>
<tr>
<td>Intermittent noise</td>
<td>Subjectively assessed but should be assisted with measurement to gauge the extent of change in noise level</td>
<td>The source noise heard at the receiver varies by more than 5 dBA and the intermittent nature of the noise is clearly audible.</td>
<td>5 dBA</td>
</tr>
</tbody>
</table>

Note 1:  Corrections to be added to the measured or predicted levels.
Note 2:  Where a source emits tonal and low-frequency noise, only one 5 dBA correction should be applied if the tone is in the low-frequency range, that is, at or below 160 Hz.
3.2 Sleep Disturbance

The Noise Policy for Industry (NPII) provides the following guidance in relation to potential sleep disturbance from maximum noise level events from premises during the night-time period.

Where the subject development/premises night-time noise levels at a residential location exceed:

- $L_{Aeq(5-minute)}\leq 40\,\text{dBA}$ or the prevailing $R_{BL}$ plus 5 dBA, whichever is greater, and/or
- $L_{A_{max}}\leq 52\,\text{dBA}$ or the prevailing $R_{BL}$ plus 15 dB, which ever is greater,

A detailed maximum noise level assessment should be undertaken.

For the purposes of this assessment a night-time sleep disturbance “screening criterion” noise goal of $R_{BL} + 15\,\text{dBA}$ has been used. The term “screening criterion” indicates a noise level that is intended as a guide to identify the likelihood of sleep disturbance. It is not a firm criterion to be met, however where the criterion is met sleep disturbance is considered to be unlikely. When the screening criterion is not met, a more detailed analysis is required.

With regard to reaction to potential sleep disturbance awakening events, the RNP gives the following guidance:

From the research on sleep disturbance to date it can be concluded that:

- Maximum internal noise levels below 50–55 dBA are unlikely to awaken people from sleep
- One or two noise events per night, with maximum internal noise levels of 65–70 dBA, are not likely to affect health and wellbeing significantly

3.3 Vibration

The Department of Environment and Conservation’s (DEC) Assessing Vibration: a technical guideline (2006) provides guideline values for continuous, transient and intermittent events that are based on a Vibration Dose Value (VDV) rather than a continuous vibration level. The VDV is dependent upon the level and duration of the vibration event, as well as the number of events occurring during the daytime or night-time period.

The VDVs recommended in the guideline for vibration that is intermittent nature are presented in Table 1.

**Table 1 Preferred and Maximum Vibration Dose Values for Intermittent Vibration**

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Vibration Dose Value (m/s²)²</th>
<th>Preferred</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Working Areas (eg hospital operating theatres, precision laboratories)</td>
<td>0.10</td>
<td></td>
<td>0.20</td>
</tr>
<tr>
<td>Residential Daytime</td>
<td>0.20</td>
<td></td>
<td>0.40</td>
</tr>
<tr>
<td>Residential Night-time</td>
<td>0.13</td>
<td></td>
<td>0.26</td>
</tr>
<tr>
<td>Offices, schools, educational institutions and places of worship</td>
<td>0.40</td>
<td></td>
<td>0.80</td>
</tr>
<tr>
<td>Workshops</td>
<td>0.80</td>
<td></td>
<td>1.60</td>
</tr>
</tbody>
</table>

Note: Daytime is 7:00 am to 10:00 pm and night-time is 10:00 pm to 7:00 am.
3.4 Construction Noise

As the facility is already in operation and no further construction is proposed, an assessment using the EPA’s *Interim Construction Noise Guideline (2009)* is required.
4 Noise Assessment

4.1 Operational Noise

A noise model has been developed in SoundPLAN to predict the existing operational noise from the subject site and calibrated to the attended noise measurements conducted onsite and compared against the results from the noise logger positioned on the site.

The main sources of the noise from the site were observed to include:

- Truck arriving and departing
- Truck being loaded with concrete panels
- General noise within the existing factory
- Concrete truck pouring

The gantry cranes used onsite were not observed to create a significant amount of noise whilst in operation.

Based on a worst case scenario with all activities occurring simultaneously, the predicted noise levels from the site at the surrounding sensitive receivers are presented in Table 7.

<table>
<thead>
<tr>
<th>Location</th>
<th>Time Period</th>
<th>Predicted Max Noise Level (dBA)</th>
<th>Project Noise Trigger Levels (dBA)</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Receivers to the West</td>
<td>Daytime</td>
<td>42</td>
<td>51</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Evening</td>
<td>42</td>
<td>48</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Night-time</td>
<td>42</td>
<td>43</td>
<td>Yes</td>
</tr>
<tr>
<td>School</td>
<td>When in use</td>
<td>42 (external)</td>
<td>45 Internal, 45 External^1</td>
<td>Yes</td>
</tr>
<tr>
<td>Southern Industrial/Commercial site</td>
<td>When in use</td>
<td>47</td>
<td>70/65</td>
<td>Yes</td>
</tr>
<tr>
<td>Northern Industrial/Commercial site</td>
<td>When in use</td>
<td>52</td>
<td>70/65</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Based on the results in Table 7, compliance with the project noise trigger levels established in accordance with the NPPi is predicted to be achieved at all surrounding receivers and during all periods.

4.2 Sleep Disturbance

It is understood that the main noise intensive works only occurs during daytime hours as defined by the NPPi. The operations outside of these hours (early morning) is proposed to include the relocation of the concrete panels using the gantry cranes to allow preparation for the next batch of precast panels.
Nonetheless, the maximum noise level measured at the subject site during the night time period ranged between 70 and 95 dBA, with one event up to 100 dBA. By reviewing the noise levels measured during the monitoring period at the residential receiver monitoring location, multiple events around 70 dBA were recorded between 5 am and 7 am, although these did not correlate with maximum events measured on site. This would suggest that other sources which are not related to the subject site are contributing to the maximum noise levels at the nearby residential receivers.

Based on our site observations and attended measurements, the predicted $L_{\text{Amax}}$ noise level at the nearest sensitive receiver is likely to be in the order of 37 to 62 dBA. This may result in the sleep disturbance screening criteria being exceeded by up to 4 dB during the night time. It should be noted that whilst a maximum level of 62 dBA $L_{\text{Amax}}$ exceeds the screening criteria, the existing noise environment at the nearby residential receivers typically has noise events which exceed the screening criteria that are not attributed to the subject site.

Assuming a typical level difference of 10 dB for open windows, the $L_{\text{Amax}}$ internal noise levels at the nearby residential receivers will be in the range of 27 to 52 dBA.

Since the screening criterion has may be exceeded, additional advice relating to sleep disturbance has been considered. The RNP provides a review of research into sleep disturbance which concludes in the following:

- Maximum internal noise levels below 50 dBA to 55 dBA are unlikely to awaken people from sleep.
- One or two events per night, with maximum internal noise levels of 65 dBA to 70 dBA, are not likely to affect health and wellbeing significantly.

Based on advice provided within the RNP and our site observations, it is unlikely that noise emissions associated with the subject site would result in sleep disturbance at nearby residential receivers.

### 4.3 Road Traffic Noise

Based on the information contained within the Traffic Impact Assessment Report (refer to Traffic Impact Assessment Report for the proposed Pre-cast Facility, 49-53 Pine Road, Yennora dated 11 May 2018) trucks are proposed to travel north along Pine Road, Dursley Road, Fairfield Road, McCreedie Road and Sturt Street. The only residential receivers along this route are situated on Fairfield Road and McCreedie Road. Based on observations during the site visit, an additional 25 trucks per day, or 50 movements travelling to and from the Site will have a negligible impact on the road traffic noise at these receivers due to existing high traffic volumes.

### 4.4 Vibration

No vibration intensive activities were observed to occur during the standard operation onsite; therefore no impacts are likely to occur.

## 5 Conclusion

SLR Consulting Australia Pty Ltd (SLR) has undertaken a Noise Impact Assessment of operational noise associated with the operation of the existing warehouse facility used for the manufacturing of precast concrete panels.
Ambient noise levels have been measured at the subject site and at the nearest residential receivers and various attended noise measurements of the current operations have been undertaken.

Based on the results from the noise monitoring, a noise model has been developed to predict the noise impacts from the operation of the subject site on the surrounding sensitive receivers.

The modelling results indicate that no exceedances of the project specific noise trigger levels are predicted and an exceedance of the sleep disturbance screening criteria by up to 4 dB is predicted. It is important to note that the noise monitoring results at the residential receiver indicates that during the morning shoulder period, numerous $L_{max}$ events around 70 dBA were recorded. Furthermore, a predicted internal noise level of 52 dBA is unlikely to awaken people from sleep.

Based on a review of the traffic Impact Assessment Report, an increase of 50 trucks along Fairfield Road and McCredie Road will have a negligible impact on the road traffic noise.

Ongoing monitoring of the operational noise is not believe to be required.
APPENDIX A

Acoustic Terminology
1 Sound Level or Noise Level

The terms 'sound' and 'noise' are almost interchangeable, except that in common usage 'noise' is often used to refer to unwanted sound. Sound (or noise) consists of minute fluctuations in atmospheric pressure capable of exciting the sense of hearing. The human ear responds to changes in sound pressure over a very wide range. The loudest sound pressure to which the human ear responds is ten million times greater than the softest. The decibel (abbreviated as dB) scale reduces this ratio to a more manageable size by the use of logarithms.

The symbols SPL, L or Leq are commonly used to represent Sound Pressure Level. The symbol La represents A-weighted Sound Pressure Level. The standard reference unit for Sound Pressure Levels expressed in decibels is 2 x 10^-5 Pa.

2 'A' Weighted Sound Pressure Level

The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an 'A-weighting' filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

People's hearing is most sensitive to sounds at mid frequencies (300 Hz to 4000 Hz), and less sensitive at lower and higher frequencies. Thus, the level of a sound in dBA is a good measure of the loudness of that sound. Different sources having the same dBA level generally sound about equally loud.

A change of 1 dBA or 2 dBA in the level of a sound is difficult for most people to detect, whilst a 3 dBA to 5 dBA change corresponds to a small but noticeable change in loudness. A 10 dBA change corresponds to an approximate doubling or halving in loudness. The table below lists examples of typical noise levels:

<table>
<thead>
<tr>
<th>Sound Pressure Level (dBA)</th>
<th>Typical Source</th>
<th>Subjective Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
<td>Threshold of pain</td>
<td>Intolerable</td>
</tr>
<tr>
<td>120</td>
<td>Heavy rock concert</td>
<td>Extremely noisy</td>
</tr>
<tr>
<td>110</td>
<td>Grinding on steel</td>
<td>Loud</td>
</tr>
<tr>
<td>100</td>
<td>Loud car horn at 3 m</td>
<td>Very noisy</td>
</tr>
<tr>
<td>90</td>
<td>Construction site with pneumatic hammering</td>
<td>Loud</td>
</tr>
<tr>
<td>80</td>
<td>Kerbside of busy street</td>
<td>Quiet</td>
</tr>
<tr>
<td>70</td>
<td>Loud radio or television</td>
<td>Quiet</td>
</tr>
<tr>
<td>60</td>
<td>Department store</td>
<td>Moderate to quiet</td>
</tr>
<tr>
<td>50</td>
<td>General Office</td>
<td>Quiet to very quiet</td>
</tr>
<tr>
<td>40</td>
<td>Inside private office</td>
<td>Quiet to very quiet</td>
</tr>
<tr>
<td>30</td>
<td>Inside bedroom</td>
<td>Very quiet</td>
</tr>
<tr>
<td>20</td>
<td>Recording studio</td>
<td>Almost silent</td>
</tr>
</tbody>
</table>

Other weightings (eg, B, C and D) are less commonly used than A-weighting. Sound Levels measured without any weighting are referred to as 'linear', and the units are expressed as dB(Lin) or dB.

3 Sound Power Level

The Sound Power of a source is the rate at which it emits acoustic energy. As with Sound Pressure Levels, Sound Power Levels are expressed in decibel units (dBA or dB), but may be identified by the symbols SPL or Lw, or by the reference unit 10^-12 W.

The relationship between Sound Power and Sound Pressure may be likened to an electric radiator, which is characterised by a power rating, but has an effect on the surrounding environment that can be measured in terms of a different parameter, temperature.

4 Statistical Noise Levels

Sounds that vary in level over time, such as road traffic noise and most community noise, are commonly described in terms of the statistical exceedance levels L100, where L100 is the weighted sound pressure level exceeded for 10% of a given measurement period. For example, the L10 is the noise level exceeded for 10% of the time, L10 is the noise exceeded for 10% of the time, and so on.

The following figure presents a hypothetical 15 minute noise survey, illustrating various common statistical indices of interest.

Of particular relevance are:

- L10: The noise level exceeded for 10% of the 15 minute interval
- L100: The noise level exceeded for 10% of the 15 minute interval. This is commonly referred to as the average maximum noise level.
- L50: The noise level exceeded for 50% of the sample period. This noise level is described as the average minimum background sound level (in the absence of the source under consideration), or simply the background level.
- Lwa: The A-weighted equivalent noise level (essentially the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound.
- Lmax: The maximum noise level during the measurement period.

When dealing with numerous days of statistical noise data, it is sometimes necessary to define the typical noise levels at a given monitoring location for a particular time of day. A standardised method is available for determining these representative levels.

This method produces a level representing the "representable minimum" Lmax noise level over the daytime and night-time measurement periods, as required by the EPA. In addition the method produces mean or 'average' levels representative of the other descriptors (L10, L50, etc).

5 Tonality

Tonality Total noise contains one or more prominent tones (ie distinct frequency components), and is normally regarded as more offensive than 'band noise'.

6 Impulsiveness

An impulsive noise is characterised by one or more short sharp peaks in the time domain, such as occurs during hammering.
7 Frequency Analysis

Frequency analysis is the process used to examine the tones (or frequency components) which make up the overall noise or vibration signal. This analysis was traditionally carried out using analogue electronic filters, but is now normally carried out using Fast Fourier Transform (FFT) analysers.

The units for frequency are Hertz (Hz), which represent the number of cycles per second. Frequency analysis can be in:

- Octave bands (where the centre frequency and width of each band is double the previous band)
- 1/3 octave bands (3 bands in each octave band)
- Narrow band (where the spectrum is divided into 400 or more bands of equal width)

The following figure shows a 1/3 octave band frequency analysis where the noise is dominated by the 200 Hz band. Note that the indicated level of each individual band is less than the overall level, which is the logarithmic sum of the bands.

8 Vibration

Vibration may be defined as cyclic or transient motion. This motion can be measured in terms of its displacement, velocity or acceleration. Most assessments of human response to vibration or the risk of damage to buildings use measurements of vibration velocity. These may be expressed in terms of 'peak' velocity or 'rms' velocity.

The former is the maximum instantaneous velocity, without any averaging, and is sometimes referred to as 'peak particle velocity', or PPM. The latter incorporates 'root mean squared' averaging over some defined time period.

Vibration measurements may be carried out in a single axis or alternatively as triaxial measurements. Where triaxial measurements are used, the axes are commonly designated vertical, longitudinal (aligned toward the source) and transverse.

The common units for velocity are millimetres per second (mm/s). As with noise, decibel units can also be used, in which case the reference level should always be stated. A vibration level V, expressed in mm/s, can be converted to decibels by the formula 20 log (V/V0), where V0 is the reference level (10^{-6} mm/s). Care is required in this regard, as other reference levels may be used by some organizations.

9 Human Perception of Vibration

People are able to 'feel' vibration at levels lower than those required to cause even superficial damage to the most susceptible classes of building (even though they may not be disturbed by the motion). An individual's perception of motion or response to vibration depends very strongly on previous experience and expectations, and on other conditions associated with the perceived source of the vibration. For example, the vibration that a person responds to as 'normal' in a car, bus or train is considerably higher than what is perceived as 'normal' in a shop, office or dwelling.

10 Over-Pressure

The term 'over-pressure' is used to describe the air pressure pulse emitted during blasting or similar events. The peak level of an event is normally measured using a microphone in the same manner as linear noise (ie unweighted), at frequencies both in and below the audible range.

11 Ground-borne Noise, Structure-borne Noise and Regenerated Noise

Noise that propagates through a structure as vibration and is radiated by vibrating wall and floor suraces is termed 'structure-borne noise', 'ground-borne noise' or 'regenerated noise'. This noise originates as vibration and propagates between the source and receiver through the ground and/or building structural elements, rather than through the air.

Typical sources of ground-borne or structure-borne noise include tunneling works, underground railways, excavation plant (eg rockbreakers), and building services plant (eg fans, compressors and generators).

The following figure presents the various paths by which vibration and ground-borne noise may be transmitted between a source and receiver for construction activities occurring within a tunnel.

The term 'regenerated noise' is also used in other instances where energy is converted to noise away from the primary source. One example would be a fan blowing air through a discharge grill. The fan is the energy source and primary noise source. Additional noise may be created by the aerodynamic effect of the discharge grill in the airstream. This secondary noise is referred to as regenerated noise.
APPENDIX B

Noise Monitoring Graphs – L01 – 22 Ace Avenue
APPENDIX C

Noise Monitoring Graphs – L02 – Onsite
DOCUMENTS ASSOCIATED WITH REPORT EELPP024/19

Attachment 15
Draft Notice of Determination
ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
NOTICE OF DETERMINATION OF APPLICATION

DEFERRED COMMENCEMENT

Urbis Pty Ltd
C/- Precast Elements Pty Ltd
Tower 2, Level 23, Darling Park / 201 Sussex Street
SYDNEY NSW 2000

Dear Sir/Madam

Pursuant to Section 4.16(3) of the Act, Council has granted “deferred commencement” consent to your development application described as follows:

PROPERTY: Lot 2, Section K, DP 939790
STREET ADDRESS: 49 - 53 Pine Road, Yennora
DEVELOPMENT CONSENT NO: 2016/297/1
DECISION: Cumberland Local Planning Panel
DATE FROM WHICH CONSENT OPERATES: TO BE ADVISED UPON SATISFACTORY COMPLETION OF SCHEDULE ‘A’
DATE OF EXPIRY OF CONSENT: TO BE ADVISED UPON SATISFACTORY COMPLETION OF SCHEDULE ‘A’
PROPOSED DEVELOPMENT: Retrospective approval for the change of use of an existing industrial premises to manufacturing of concrete panels with associated parking

This Development Application is APPROVED in accordance with the Environmental Planning & Assessment Act 1979 and is subject to compliance with the requirements of Cumberland Council, the Building Code of Australia, the Local Government Act 1993, and the following conditions as set out hereunder and/or endorsed upon the attached plans.

THIS CONSENT DOES NOT OPERATE UNTIL COUNCIL IS SATISFIED THAT ALL SCHEDULE ‘A’ CONDITIONS HAVE BEEN SATISFIED.
SCHEDULE “A”

Consent to the retrospective approval for the change of use of an existing industrial premises to manufacturing of concrete panels with associated parking shall not operate until all of the following Schedule “A” conditions have been complied with to Council’s satisfaction.

Building Certificate

1. A Building Certificate application shall be lodged with and approved by Cumberland Council prior to the operation of this consent, for the unauthorised works which are the subject to this Development Consent.

In accordance with clause 95(3) of the Environmental Planning and Assessment Regulation 2000, you must produce evidence to the Council within a period of 2 years, sufficient enough for Council to be able to be satisfied of the above matters.

If evidence is produced within the specified period, in accordance with Clause 95(5) of the Regulation, Council will notify you whether or not it is satisfied as to the above matters and whether or not the consent will operate.

******************
SCHEDULE “B”

This consent cannot operate until such time as Council is satisfied with the evidence produced in response to Schedule “A” and has notified the applicant in writing of the date from which the consent operates.

PRELIMINARY

1. This consent shall lapse if the above development is not physically commenced within 5 years of the date of operation.

2. Development shall take place in accordance with the following plans and information, except where amended by the conditions of this consent:

- Architectural plans prepared by Precast Elements Pty Ltd, listed below:

<table>
<thead>
<tr>
<th>Drawing Title</th>
<th>Drawing Number</th>
<th>Revision</th>
<th>Dated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Plan</td>
<td>TP01</td>
<td>C</td>
<td>18 March 2019</td>
</tr>
<tr>
<td>Existing Plan and Elevations</td>
<td>PE01</td>
<td>A</td>
<td>1 November 2017</td>
</tr>
</tbody>
</table>

- Correspondence from Endeavour Energy dated 19 September 2018, and compliance with all conditions contained therein;
- Environmental Management Plan prepared by Precast Elements Pty Ltd, Revision A.2, dated 14 August 2018;
- Environmental Assessment Program prepared in consultation between Council and the Applicant, dated 13 August 2018;
- Water Environmental Assessment Report prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097-R06, Version Number v1.0, dated 15 August 2018;
- Preliminary Biodiversity Report prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097-L05, Version Number v1.2, dated 15 August 2018;
- Traffic Impact Assessment Report prepared by Ason Group, Project Number 0614, Revision 01, dated 14 August 2018;
- Site Waste Minimisation and Management Plan prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097-R04, Version Number v0.2, dated 13 August 2018;
- Air Quality Impact Assessment prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097-R02, Version Number v1.0, dated 13 August 2018;
- Hazard and Risk Assessment prepared by RiskEng Pty Ltd, Revision A, dated 8 May 2018;
- Preliminary Site Investigation prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097.00300-R01, Version Number v1.0, dated 14 August 2018;
- Soil Contamination Assessment prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097.00350-R01, Version Number v2.0, dated 18 March 2019;
- Noise Impact Assessment prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097-R01, Version number v3.0, dated 14 August 2018; and
- All details, including plans and reports, approved by Council in accordance with the conditions in Schedule ‘A’.

a) As amended in red by Council.
3. Any upgrading of the premises associated with the change of use shall be carried out in accordance with the requirements of the Building Code of Australia.

4. The applicant shall consult with, as required:
   (a) Sydney Water Corporation Limited
   (b) Endeavour Energy
   (c) Natural Gas Company
   (d) A local telecommunications carrier
   regarding their requirements for the provision of services to the development and the location of existing services that may be affected by proposed works, either on site or on the adjacent public road(s).
PRIOR TO OCCUPATION OF THE PREMISES

The following conditions are to be complied with prior to occupation of the premises:-

Certificates/Documentary Evidence

5. A Section 73 compliance certificate under the Sydney Water Act 1994 must be obtained from Sydney Water.

Application can be made either directly to Sydney Water or through a Sydney Water accredited Water Servicing Coordinator.

Go to sydneywater.com.au/section73 or call 1300 082 746 to learn more about applying through an authorised Water Servicing Coordinator or Sydney Water.

Following application, Sydney Water may issue a Notice of Requirements letter detailing all requirements that must be met prior to the issue of the section 73 certificate.

Parking/Driveway

6. All parking spaces shall be signposted and line marked in accordance with the Australian Standards (i.e. AS2890.1-2004, AS2890.2-2002 and 2890.6-2009).

7. The entry / exit driveway shall be indicated with appropriate signage and line marking to avoid traffic conflict at the driveway.

8. Wheel stops shall be provided at appropriate parking locations and in accordance with AS 2890.1-2004.

9. Directional arrows for internal circulation shall be proximately displayed on the pavement approaches to, and within, the car park area.

10. All disabled parking spaces shall be provided with a shared area, bollards and slip resistant surface in accordance with Australian Standard 2890.6.2009.

Traffic and Transport Management Plan

11. A Traffic and Transport Management (TTM) Plan shall be prepared and lodged with Council’s Manager of Development Services, for Council’s records, within the first 90 days of the subject consent being issued. A copy of the TTM Plan shall also be present on site at all times.

The TTM Plan shall be based on the Traffic Impact Assessment Report prepared by Ason Group, Project Number 0614, Revision r01, dated 14 August 2018, which identifies a number of employees are expected to utilise public transport and car sharing, rather than solely relying upon single patronage car trips. The TTM shall identify a strategy in the event that employees journey to work patterns change, and the demand for on-site parking increases. The strategy shall not rely upon the use of on-street parking to satisfy the demand. All control measures / works / methods / procedures / recommendations made within the TTM Plan shall subsequently be implemented accordingly.
Fire Safety

12. Submission to Council of a Final Fire Safety Certificate pursuant to Clause 170 of the Environmental Planning and Assessment Regulation 2000 in respect of each essential fire or other safety measure listed on the Fire Safety Schedule.

NOTE:
1. Such Certificate shall state, pursuant to Clause 80E in relation to each essential fire safety measure mentioned in the certificate:—
   - that the service has been assessed by a properly qualified person (chosen by the owner of the building); and
   - that the service was found to be, when assessed, capable of performing to at least the standard required by the current fire safety schedule for the building for which the certificate is issued.

2. The person who carries out the assessment must inspect and verify the performance of each fire safety measure being assessed, and must test the operation of each new item of equipment installed in the building premises that is included in the current fire safety schedules for the building.

3. The assessment must have been carried out within the three (3) months prior to the date on which the final fire safety certificate is issued.

13. A copy of the Fire Safety Certificate, together with a copy of the current Fire Safety Schedule, is to be given to the Commissioner of New South Wales Fire Brigades, and a further copy of the Certificate and Schedule is to be prominently displayed in the building.

14. At least once in each period of twelve (12) months after a Fire Safety Certificate is required to have been furnished to the Council, the owner of the building shall, pursuant to Clause 177 of the Regulation, submit to the Council and the Commissioner of the New South Wales Fire Brigades, an Annual Fire Safety Statement, in respect of each essential fire or other safety measure listed on the current Fire Safety Schedule. A copy of the Certificate and Schedule is to be prominently displayed in the building.

Loading Dock Management Plan

15. A loading dock management plan shall be prepared by a suitably qualified traffic practitioner and submitted to Council. The loading dock management plan shall identify measures to deal with issues such as a truck arriving when all the loading spaces are occupied and ensuring safety of pedestrians within the loading dock and truck manoeuvring areas.

General

16. Documentary evidence and/or certificate of compliance must be submitted to Council to show that all works have been completed in accordance with this Development Consent.
CONDITIONS RELATING TO USE

The following conditions are applicable to the use of the development:

Safety & Amenity

17. No signs or goods are to be displayed or trading of any description is to be carried out on the public road, public footpath, utility service land, customer and/or employee parking area, the driveways or pedestrian walkways outside or in the immediate vicinity of the premises.

18. Hours of operation are maintained to 24 hours / 7 days a week.

19. The number of staff on-site shall be restricted to a maximum of 35 at any one time.

20. All industrial activities are to be confined within the building (with the exception of the area between the factory and warehouse), and no such activity shall occur externally to the building and this shall include loading and unloading, also storage of new and used materials.

21. Business is to be conducted and patrons are to be controlled at all times so that no interference occurs to the amenity of the adjoining occupations.

22. The operation of the premises shall be conducted in such a manner as not to interfere with or materially affect the amenity of the neighbourhood by reason of noise, vibration, odour, fumes, vapour, steam, soot, ash, dust, particulate matter, waste water, waste products or other impurities which are a nuisance or injurious to health.

23. Where an intruder alarm is installed on the premises it shall be fitted with a timing device in accordance with the requirements of the Protection of the Environment Operations Act 1997.

24. All industrial activity is to be conducted so that it causes no unreasonable interference to adjoining industrial occupations.

25. All new and used oils/lubricants are to be stored in sealed containers under cover, in a designated, bunded area while awaiting removal from the premises.

26. The business is to be operated in a manner so that no contaminants from the workshop are permitted to enter the stormwater drainage system by the washing down of work areas or the disposal of waste and spills.

27. Sufficient supplies of appropriate absorbent materials shall be kept on site to recover any liquid spillage. Liquid spills shall be cleaned up using dry methods, by placing absorbent material on the spill and sweeping or shovelling the material into a secure bin. Absorbent materials used to clean up must be disposed of to an appropriately licensed waste facility.

28. Disposal of liquid waste via the sewer shall only be carried out after approval from Sydney Water via a Trade Waste Agreement. Alternatively, liquid waste shall be removed by a licensed liquid waste contractor.

Traffic and Parking

29. The car parking spaces, driveways and manoeuvring areas are to be used for employees and visitors vehicles only and not for the storage of new or used materials, finished goods or commercial vehicles.
30. The driveways shall be clear of parked vehicles and stored materials at all times.

31. At least 26 car parking spaces numbered and line marked in accordance with the endorsed plan, are to be made available at all times for employees and visitors' vehicles only in conjunction with the occupation of the building/precinct.

32. All loading and unloading of service vehicles shall be undertaken on site.

33. The maximum size vehicle that will enter/exit the site shall be restricted to a Heavy Rigid Vehicle (HRV), 12.5 metres long.

34. All vehicles (including heavy vehicles) shall enter and exit the site in a forward direction.

Refuse & Trade Waste

35. Waste storage bins must be covered at all times to prevent entry of stormwater or dispersal by wind and must be sealed to prevent leakage.

Emergency Procedures

36. The owner of a building to which an essential fire safety measure is applicable must not fail to maintain each essential fire safety measure in the building premises to a standard not less than that specified in the Fire Safety Schedule.

Air Emissions

37. The use of the premises shall not give rise to air impurities in contravention of the Protection of the Environment Operations Act 1997 and shall be controlled in accordance with the requirements of such Act.

38. In the event of Council receiving complaints regarding air pollution or odour from the premises, the person(s) in control of the premises shall at their own cost arrange for an environmental investigation to be carried out (by a suitably qualified person) and submit a report to Council specifying the proposed methods for the control of odour exiting the premises.

39. Any discharge to the atmosphere must not result in any odour or other air impurity detectable outside the boundaries of the property.

40. In the event of Council receiving complaints regarding excessive odour from the garbage bay area, the person(s) in control of the premises shall at their own cost arrange for an environmental investigation to be carried out (by a suitably qualified person) and submit a report to Council specifying the proposed methods for the control of odour emanating from the garbage bay area.

Noise

41. The operation of all plant and equipment shall not give rise to an equivalent continuous (L_{Aeq}) sound pressure level at any point on any residential property greater than 5dB(A) above the existing background L_{Aeq} level (in the absence of the noise under consideration).

42. In the event of Council receiving complaints regarding excessive noise, the person(s) in control of the premises shall at their own cost arrange for an acoustic investigation to be
carried out (by a suitably qualified person) and submit a report to Council specifying the
proposed methods for the control of noise emanating from the premises.

43. Noise and vibration from the use of the air conditioning system (if any installed) shall not exceed the background level by more than 5dB(A) and shall not be audible in any premises of a different occupancy between 10:00pm and 7:00am on weekdays and 10:00pm and 8:00am on weekends and public holidays.

Clean Water Discharge

44. The operation of the premises shall be conducted in a manner, which does not pollute waters as defined by the Protection of the Environment Operations Act 1997.

Signage on Stormwater Drains (Industrial)

45. Signs shall be displayed adjacent to all stormwater drains on the premises indicating that only clean water is allowed to enter these drains. Examples of possible signage include: ‘Clean Rainwater Only’, ‘Clean water only - NO waste’ or ‘H₂O only’.

Waste Collection

46. Liquid and solid wastes generated on the site shall be collected, transported and disposed of in accordance with the Protection of the Environment Operation Act 1997. Records shall be kept of all liquid and solid waste disposal from the site, and be made available to Council Officers on request.

Maintenance of Bunded Area

47. Bunded areas shall be properly maintained and all spillages and/or wastes within the bunded areas cleaned up as soon as practicable and disposed of in a manner that does not pollute waters.

Lighting

48. Any lighting on the site shall be designed so as not to cause nuisance to other residences in the area or to motorists on nearby roads, and to ensure no adverse impact on the amenity of the surrounding area by light overspill. All lighting shall comply with AS4262-1997 Control of the obtrusive effects of outdoor lighting.

Trees / Vegetation

49. The large mature *Eucalyptus tereticornis* (Forest Red Gum), located within the western corner of the site shall remain isolated from the concrete works, including impacts from soil contamination, excessive dust particles, soil compaction and mechanical damage.

Air Quality Impact Assessment

50. The mitigation measures outlined in Section 7 of the Air Quality Impact Assessment prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097-R02, Version Number - v1.0, dated 13 August 2018, are required to be adhered to whilst the premises is in use.
Water Environmental Assessment

51. The recommendations of the Water Environmental Assessment Report prepared by SLR Consulting Australia Pty Ltd, Reference Number 610.18097-R06, Version Number -v1.0, dated 15 August 2018, are required to be adhered to for the duration of the use.

Environmental Management Plan

52. The Environmental Management Plan prepared by Precast Elements Pty Ltd, Revision A.4, dated 15 August 2018, is required to be implemented.

General

53. No retail sales or advertising of retail sales is to be undertaken from the subject site at any time.

54. An identification number is to be clearly displayed at the front of the premises.
ADVISORY NOTES

Other Necessary Approvals

A. The applicant’s attention is drawn to the need to obtain Council’s separate approval for any ancillary activity not approved by this consent, including:
   (a) Works, including the pruning or removal of any tree(s) not authorised in the preceding conditions or on the approved plans. Council’s Tree Preservation Order protects trees by definition taller than 3.5m or having a trunk circumference exceeding 500mm measured one metre above ground level. If in doubt contact Council’s Tree Management Officer.
   (b) Any fencing located forward of the proposed building and exceeding the limitations specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
   (c) The erection of any advertising sign, not being exempt from the need to obtain approval.
   (d) The installation of any furnace, kilns, steam boiler, chemical plant, sand blast, spray painting booth or the like.

NOTE: * If you carry out building work as an owner builder and sell your home within seven (7) years from the date of completion (date of final occupation certificate), then a Certificate of Insurance must be attached to your Contract of Sale.

B. Section 8.7 of the Act provides that an applicant who is dissatisfied with the Council’s determination of the Development Application may appeal to the Land and Environment Court within 6 months of the date of determination, or as otherwise prescribed.

C. Section 8.2 of the Act provides that an applicant may request, within 6 months of the date of determination of the Development Application, that the Council review its determination (this does not apply to integrated or designated development). A fee is required for this review.

It should also be noted that an application under Section 8.2 of the Act cannot be reviewed/determined after 6 months of the date of determination. Therefore, the submission of a Section 8.2 Application must allow sufficient time for Council to complete its review within the prescribed time frame, including the statutory requirement for public notification.

D. The applicant and Owner are advised that the Commonwealth Disability Discrimination Act 1992 may apply to this particular proposal. Approval of this application does not imply or confer compliance with this Act. Applicants and owners should satisfy themselves as to compliance and make their own enquiries to the Human Rights and Equal Opportunity Commission. Attention is also drawn to the provisions of Parts 2, 3 and 4 of Australian Standard 1428 - Design for Access and Mobility.
E. SIGNS

Signs visible from the road or external public areas are to have Council approval, unless they are "exempt" or "complying" under the State Environmental Planning Policy (Exempt & Complying Codes) 2008, Holroyd Local Environmental Plan 2013 or Holroyd Development Control Plan 2013.

Yours faithfully,

Sohail Faridy
COORDINATOR DEVELOPMENT ASSESSMENT
Attachment 16
Holroyd Local Environmental Plan 2013 Compliance Assessment
## Holroyd Local Environmental Plan 2013 Compliance Assessment

<table>
<thead>
<tr>
<th>No.</th>
<th>Required/Permitted</th>
<th>Comment</th>
<th>Comply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 2 Permitted or prohibited development</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Zoning IN1 – General Industrial</strong></td>
<td></td>
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<tr>
<td>Objectives of zone:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• To provide a wide range of industrial and warehouse land uses.</td>
<td>The development is permissible, and achieves the objectives of the zone.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• To encourage employment opportunities.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• To minimise any adverse effect of industry on other land uses.</td>
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<tr>
<td>• To support and protect industrial land for industrial uses.</td>
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<tr>
<td>• To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.</td>
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</tbody>
</table>

| **Zone E2 – Environmental Conservation** | | | |
| Objectives of zone: | | | |
| • To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values. | No works or use are proposed within the E2 Environmental Conservation zone. | Yes |
| • To prevent development that could destroy, damage or otherwise have an adverse effect on those values. | | |
| • To promote cultural interpretation and scientific study of the natural environment. | | |

| 2.7 | Demolition requires consent. | Not Applicable. | N/A |

| **Part 4 Principal development standards** | | | |
| 4.3 | Height of Buildings | Not Applicable. | N/A |
| 4.4 | Floor Space Ratio | Not Applicable. | N/A |
| 4.6 | Exceptions to Development Standards | Not Applicable. | N/A |

| **Part 5 Miscellaneous provisions** | | | |
| 5.6 | Architectural Roof Features | Not Applicable. | N/A |
| 5.10 | Heritage | The subject site is not heritage listed; nor is it located within the vicinity of any heritage items. | N/A |

<p>| <strong>Part 6 Additional local provisions</strong> | | | |
| 6.1 | Acid Sulfate Soils | The site is not affected by potential acid sulfate soils. | N/A |
| 6.4 &amp; 6.7 | Flood Planning and Stormwater Management | The site is affected by Mainstream Flooding. Council’s Development Engineer has reviewed the application, and raises no concerns. | Yes |
| 6.5 | Terrestrial Biodiversity | Not Applicable. | N/A |
| 6.6 | Riparian land and watercourses | Riparian land and a natural watercourse transverse the sites western boundary. The use of the site is maintained outside of the riparian land. The application has been referred to the Department of Primary Industries – | Yes |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Required/Permitted</th>
<th>Comment</th>
<th>Comply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Office of Water, who have raised no concerns.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.8</td>
<td>Salinity</td>
<td>The site is located on lands identified as being affected by moderate salinity. No works are proposed.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
DOCUMENTS
ASSOCIATED WITH
REPORT EELPP024/19

Attachment 17
Holroyd Development Control
Plan 2013 Compliance
Assessment
### Holroyd Development Control Plan 2013 Compliance Assessment

<table>
<thead>
<tr>
<th>No.</th>
<th>Required/Permitted</th>
<th>Provided</th>
<th>Comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Subdivision</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Roads and Access</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td>2.4</td>
<td>Vehicular Crossings, Splay Corners, Kerb &amp; Guttering</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td>2.7</td>
<td>Guidelines For Road Widenings, Road Closures And Splay Corners in and Adjacent to Residential R4 Zones</td>
<td>Check maps in Appendix K.</td>
<td>Road widening is not applicable.</td>
</tr>
<tr>
<td>3</td>
<td>Car Parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Minimum Parking Spaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Factories (including amenities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Required</td>
<td>Provided</td>
</tr>
<tr>
<td>GFA</td>
<td>1 space per 70m²</td>
<td>2,021m² / 70m² = 29sp</td>
<td>26 spaces provides overall.</td>
</tr>
<tr>
<td>+GFA for Offices</td>
<td>1 space per 40m²</td>
<td>884m² / 40m² = 22sp</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51 Spaces Req.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehouse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Required</td>
<td>Provided</td>
<td></td>
</tr>
<tr>
<td>GFA</td>
<td>1 space per 300m²</td>
<td>860m² / 300m² = 3sp</td>
<td>26 spaces provides overall.</td>
</tr>
<tr>
<td>+GFA for Offices</td>
<td>1 space per 40m²</td>
<td>As above</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3 Spaces Req.</strong></td>
<td></td>
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</tbody>
</table>

*Refer to commentary within the report.

### 3.3 Dimensions & Gradient
Council's Traffic Engineer has reviewed the submitted traffic plan, and raises no concerns. Yes

### 3.5 Access, Maneuvering and Layout
Council's Traffic Engineer has reviewed the submitted traffic plan, and raises no concerns. Yes

### 3.6 Parking for the Disabled
2 spaces per 100 spaces up to 400, and 1 per 100 thereafter, or part thereof. Two (2) accessible spaces have been provided to service the development. Yes

### 4 Tree and Landscape Works
Council's Tree Management Officer has reviewed the application and raises no concerns, subject to conditions. Yes

### 5 Biodiversity
Not Applicable. N/A

### 6 Soil Management
6.1 Retaining Walls | Not Applicable. | N/A |
6.3 Erosion and Sediment Control | Not Applicable. | N/A |

### 7 Stormwater Management
7.4 Stormwater Management – Easements | Not Applicable. | N/A |

### 8 Flood Prone Land
The site is affected by Mainstream Flooding. Council's Development Engineer has reviewed the application, and raises no concerns. Yes

### 9 Managing External Road Noise
Not Applicable. N/A

### 10 Safety and Security
Safety and security has been maintained to an acceptable level. Yes

### 11 Waste Management
Council's Resource Recovery Officer has reviewed the application, and raises no concerns. Yes

### 12 Services
Services are available on site. Yes
<table>
<thead>
<tr>
<th>No.</th>
<th>Required/Permitted</th>
<th>Provided</th>
<th>Comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Subdivision</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Design Guidelines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Site Area, Frontage and Gross Floor Area</td>
<td>Provide, where possible, a min. street frontage of 24m.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food and drink premises in Zone IN1 &amp; IN2 shall be limited to 300sqm.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td>2.2</td>
<td>Site Layout</td>
<td>Buildings shall be located to reinforce the streetscape.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where in close proximity to residential areas, industrial developments shall be designed to maintain amenity. Consideration shall be given to overshadowing, overlooking, lighting, dust, noise and fumes.</td>
<td>Lighting, dust and noise has been considered within the reports submitted with the subject Application. Council's Environmental Health Officer has reviewed the reports, and raises no concerns, subject to conditions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offices shall address and activate the street/s.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All warehouse/factory functions, car parking, maneuvering areas and loading and unloading facilities within the site.</td>
<td>All industrial functions, car parking and maneuvering areas are located within the site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where a site adjoins a non-industrial use other than residential, side and rear setbacks shall be min. 4m.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td>2.3</td>
<td>Amenity Impacts on Nearby and Adjoining Zones</td>
<td>Lighting, dust and noise has been considered within the reports submitted with the subject Application. Council's Environmental Health Officer has reviewed the reports, and raises no concerns, subject to conditions.</td>
<td>Yes</td>
</tr>
<tr>
<td>2.4</td>
<td>Building Design and Appearance</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td>2.5</td>
<td>Setbacks</td>
<td>Landscape all front setbacks to provide a high quality street presence.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Front setback areas shall not be used for storage, display of goods, excessive signage, loading / unloading or large areas of car parking.</td>
<td>The front setback area of the site at present accommodates loading and unloading functions, and has previously gained approval to accommodate car parking to service the development. The proposal continues to maintain this arrangement.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proportionally increase any setbacks between the development and adjoining residential developments relative to the height of the development.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Min. 1m setback is required to at least one side boundary.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where basement parking extends beyond the building envelope, a minimum soil depth of 1m is required.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Landscape setbacks shall be free from overhanging paths, ramps, signs, parking and advertising structures.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensure that setbacks for new development on corner sites are consistent with setback requirements for each particular street.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In locations where a 30.5 metre or 15 metre building line to the principal street frontage of a corner lot is</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td>No.</td>
<td>Required/Permitted</td>
<td>Provided</td>
<td>Comply</td>
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<td>-----</td>
<td>------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>2.6</td>
<td><strong>PARKING AND VEHICULAR ACCESS</strong></td>
<td></td>
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<tr>
<td></td>
<td>For major industrial undertakings, provide at least one courier space.</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Integrate parking into the site planning with high quality landscaping.</td>
<td>The proposed parking is designed to an existing hard standard area.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Suitably cover car parking areas with canopy trees.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Tandem parking will not be accepted for new developments.</td>
<td>Tandem parking has not been proposed to the development.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Permit only limited visitor &amp; disabled car parking (max. 50% of street frontage)</td>
<td>The front setback area of the site at present accommodates loading and unloading functions, and has previously gained approval to accommodate car parking to service the development. The proposal continues to maintain this arrangement.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>within the front setback, where the front setback equals or exceeds 15m (excluding multi-unit industrial development).</td>
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<tr>
<td></td>
<td>Provide all loading and unloading facilities and the majority of car parking to the rear / side of the development (excluding multi-unit industrial development).</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Car parking and loading areas are not permitted within the front setback of multi-unit industrial development.</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>All parking areas shall be readily accessible and usable.</td>
<td>The proposed parking area is readily accessible and usable.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Vehicular crossings shall be maintained to a max. width of 8m.</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Locate driveways on side or rear road frontages where available.</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>All vehicles shall enter and exit the site in a forward direction.</td>
<td>Standard Condition of Consent.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Do not locate driveways off an arterial road, unless no option is available.</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Entry gates shall be designed to all the largest vehicle to enter the site, without blocking the footpath when the gate is closed.</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Provide separation between parking and loading / unloading areas.</td>
<td>The proposed parking and loading / unloading areas are separate.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>For small factories and factory units, provide one small truck bay for each factory / factory unit.</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>All garbage collection shall be carried out wholly.</td>
<td>Council's Resource Recovery Officer</td>
<td>Yes</td>
</tr>
<tr>
<td>No.</td>
<td>Required/Permitted</td>
<td>Provided</td>
<td>Comply</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>2.7</td>
<td>Road Design and Construction within Industrial Zones</td>
<td>Not Applicable</td>
<td>N/A</td>
</tr>
<tr>
<td>2.8</td>
<td>Fences</td>
<td>Fences shall be located within the 3m width landscape frontage (between the front parking and boundary). The front fence shall be open (permeable) style, with a dark finish. Solid metal panel fences are not permitted. Max. height of 1.2m for fences in the front setback, or 2.1m for fences behind the front setback. Masonry elements within the front fence are limited to 1.2m high.</td>
<td>Existing fencing is present along the site boundary.</td>
</tr>
<tr>
<td>3</td>
<td>Landscaping of Industrial Sites</td>
<td>Min. of 10% of the site shall be landscaped. Where the site is &gt;2000m², provide a minimum of 15% of the site.</td>
<td>The extent of hardstand and landscape area on site is not proposed to change.</td>
</tr>
<tr>
<td>4</td>
<td>Retail &amp; Commercial Uses in Industrial Zones</td>
<td>In the General Industrial I1 and the Light Industrial I12 zones, Council will only permit business and office premises and non-retail showrooms which: a) are ordinarily incidental or subsidiary to and situated on the same land as an industry; b) cover no more than 20% of the gross floor area of the industrial building; and c) provide no retailing or over-the-counter sales.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Council, under normal circumstances, restricts the hours of industrial operations to the hours of 7.00am to 7.00pm, Monday to Friday, 7.00am to 12 noon, Saturday and no work on Sunday.</td>
<td>The proposed development seeks 24 hours a day, 7 days a week operation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Council, under normal circumstances, restricts the hours of retail trade in industrial zones to the hours of 7.00am to 8.00pm, Monday to Saturday and 7.00am to 2.00pm on Sunday.</td>
<td>An acoustic report has been submitted with the Development Application, which has been found to be acceptable by Council's Environmental Health Officer, subject to conditions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>An acoustic report is required, where activities are proposed outside of Council's standard hours of operation.</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Pollution Control</td>
<td>An Air Quality Impact Assessment has been submitted with the application. Council’s Environmental Health Officer has reviewed the report, and raised no concerns, subject to conditions.</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Factory Units</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td>7</td>
<td>Prospect Creek</td>
<td>In addition to the requirements for land within the Environmental Conservation zone and the local clauses of the HLEP 2013, such land shall not be used for the erection or use of any building or the</td>
<td>No works or use are proposed within the E2 Environmental Conservation zone.</td>
</tr>
<tr>
<td>No.</td>
<td>Required/Permitted</td>
<td>Provided</td>
<td>Comply</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------</td>
<td>----------</td>
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</tr>
<tr>
<td>carrying out or use of any work other than for landscaping, bush fire hazard reduction, subdivision, drainage or installation of underground utility services. Further details can be gained by contacting officers of Council’s Environmental and Planning Services.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Planning Controls for Sex Services Premises</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
<tr>
<td>9</td>
<td>Yennora Distribution Park</td>
<td>Not Applicable.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Part E – Public Participation**

**Comment:** The Development Application was placed on public exhibition for 30 days from 12 September 2018 to 12 October 2018.

*No submissions were received.*
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

Item No: ELPP025/19

**PLANNING PROPOSAL FOR 1-11 NEIL STREET, MERRYLANDS**

Responsible Division: Environment & Planning
Officer: Manager Strategic Planning
File Number: SC563

<table>
<thead>
<tr>
<th>Lodged</th>
<th>18 October 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proponent</td>
<td>Chapman Planning</td>
</tr>
<tr>
<td>Owner</td>
<td>Landmark Group Australia</td>
</tr>
<tr>
<td>Description of Land</td>
<td>1-11 Neil Street Merrylands</td>
</tr>
<tr>
<td>Site Area</td>
<td>Approximately 15,765m²</td>
</tr>
<tr>
<td>Site Description and Existing Use</td>
<td>The site area is approximately 15,765m² and is bounded by Neil Street to the south, rail corridor to the east, ‘New Road 2’ to the west and Holroyd Gardens to the North. A number of residential flat buildings are under construction on the site.</td>
</tr>
</tbody>
</table>

**Proposal Summary**

The Planning Proposal Request seeks to:
- Increase the height of buildings control to 50m (16 storeys) for Building 3 which is to be located within the south-eastern portion of the site; and
- Increase the FSR to 3.66:1 at the eastern portion of the site.

**Existing and Proposed Planning Controls**

<table>
<thead>
<tr>
<th>Planning Controls (Holroyd LEP 2013)</th>
<th>Existing controls</th>
<th>Proposed controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning</td>
<td>R4 High Density SP 2</td>
<td>No change</td>
</tr>
<tr>
<td>Height of Building</td>
<td>T2:29m U1:30m V2:39m</td>
<td>Y:50m T2:29m U1:30m V2:39m</td>
</tr>
<tr>
<td>Floor Ratio</td>
<td>W: 3.5:1</td>
<td>W: 3.5:1 W1:3.66:1</td>
</tr>
</tbody>
</table>

**Heritage**

Nil

**Disclosure of political donations and gifts**

Nil

**Previous Consideration**

Nil

**SUMMARY:**

The Planning Proposal Request seeks to:
- Increase the height of buildings control from 39m to 50m (16 storeys) for the south-eastern portion of the site; and
• Increase the FSR from 3.5:1 to 3.66:1 on the eastern portion of the site.

The status of the planning proposal is outlined in Figure 1.

![Figure 1: Planning Proposal Status](image)

**REPORT:**

**The site and its context**

The site is located on the fringe of the Merrylands Town Centre within the “Neil Street Precinct”. The site comprises a total area of 15,765m² and consists of two lots being Lot 1 in DP 203553 and Lot 11 in DP 228782.

![Figure 2: Subject site](image)

The site is subject to a number of approved developments that include:

• Building 1 (1-7 Neil Street) – Approved under DA-80/2016 being 9 storeys and containing 120 units;
• Building 2 (1-7 Neil Street) – Approved under DA-203/2015 and DA-343/2016 being 12 storeys and containing 115 units;

• Building 3 (9-11 Neil Street) – Approved under DA-496/2016 being 12 storeys accommodating 178 units; and

• Building 4 (9-11 Neil Street) – Also approved under DA-496/2016 being a part 6, part 9, part 12 storey building containing 133 units.

The change in building height that is proposed relates to Building 3 as highlighted in figure 3 below.

Figure 3: Extract from plans showing proposed increase in building height of Building 3

**Neil Street Planning Proposal**

The site was identified in the Neil Street Precinct Planning Proposal as Block E. As part of the Neil Street Planning Proposal, land was zoned SP2 Drainage and RE1 Public Recreation to address flood risk through the provision of an overland flow path channel, and provide open space and areas for passive recreation. The application of these zones reduced the planned development yield from the site from 45,177m² to 39,413m²; a reduction of 5,736.5m².
Figure 4: Location diagram for the Neil Street Planning Proposal

**Local Context**

The site is located on the northern fringe of the Merrylands Town Centre. The site is approximately 300 metres from Merrylands Bus and Rail Terminus. The Stockland Shopping Centre is located within easy walking distance to the west of the site and Holroyd Gardens, providing key open space, is located directly to the north.

**Regional Context**

The site is located in the suburb of Merrylands within the Local Government Area of Cumberland Council, approximately 3 Kilometres south of Parramatta CBD and 25 km west of the Sydney CBD.

**Land Use Zoning**

The site is currently zoned R4 High Density Residential.

Figure 5: Existing Land Use Zoning
Floor Space Ratio Control
A FSR control of (W) 3.5:1 applies to the site.

Height of Building Control
A Height of Building controls of (V2): 39 metres, (U1) 30 metres and (T2) 29 metres apply to the site.

Minimum Lot Size Control
A Minimum Lot Size Control of (T) 900m² applies to the site.
Heritage
The site is identified on the Heritage Map as an Archaeological item.

Riparian Lands and Watercourse Control
Part of the site is identified on the Riparian lands and Watercourse Map.

Land Reservation Acquisition
The site is identified on the Land Reservation Acquisition Map.

The Planning Proposal
The proposal seeks to amend the Holroyd LEP 2013 by:

- Amending the floor space ratio control from (W) 3.5:1 to (W1) 3.66; and
- Amending the height of building control for the southern portion of the site from (V2) 39 metres to (Y) 50 metres.

The intended outcomes for the proposal are to:
• create a strong urban corner to Neil Street, identifying and reinforcing this gateway to the Merrylands Town Centre from Neil Street to the east;

• establish a building height which is generally consistent with the surrounding built form;

• present a more suitable transition in building height from the higher scale mixed use development in the core of the Merrylands town centre to the lower-scale residential development and the Holroyd Gardens to the north;

• create variation in the height plane that currently sees a plateau of 12 storeys on the site;

• contribute to the integration of development with public transport by creating higher residential density 300m from the Merrylands Railway Station; and

• provide a mix of housing choices within the locality; and maintain and contribute to the natural landscape by responding to dedication of land on the site to provide a future public park and landscaped drainage swale corridor.

**Proposed Planning Controls**

**Floor Space Ratio Control**

A FSR control of (N) 3.66:1 applies to the site.

![Figure 12: Proposed Floor Space Ratio](image)

**Height of Building Control**

Height of Building controls of (V2): 39 metres, (U1) 30 metres, (T2) 29 metres and (Y) 50 metres apply to the site.

![Figure 13: Proposed Height of Building](image)
Strategic Merit Assessment

Capacity of existing planning controls

There is merit in progressing the planning proposal to the next phase of assessment, as the proposal does not exceed the development yield that was planned for the site under the Merrylands Town Centre Urban Design Review 2015 and the Neil Street Planning Proposal.

The planning proposal increases the floor area by 4,292m² resulting in a Gross Floor Area across the site of 44,437m². This development yield is within the planned development yield of the original Neil Street Masterplan and subsequent LEP that allowed 45,177m² of Gross Floor Area across the site. The additional floor area on Building 3 purely compensates for the dedication of land to Council for SP2 Drainage and RE1 Public Recreation uses.

Traffic and Transport Impacts

There is merit in progressing the proposal to the next phase of assessment as the proposal does not exceed the planned development yield for the site. Traffic and transport considerations, impacts and mitigation measures have previously been addressed by the Neil Street Planning Proposal.

Open Space Provision

There is merit in progressing the proposal to the next phase of assessment as there is not a need to provide additional open space within the Neil Street precinct, as the proposal does not increase the planned development yield of the site. Importantly, the open space requirements for this proposal have previously been addressed by the Neil Street Planning Proposal, which see a portion of this site being utilised for open space.

Flooding

There is merit in progressing the proposal to the next phase of assessment as flood migration measures were identified as part of the Neil Street Planning Proposal and are being implemented through DAs that apply to the site.

A Metropolis of Three Cities - Greater Sydney Region Plan

There is strategic merit on progressing this proposal to the next phase of assessment as the proposal consistent with the following Planning Directions in a Metropolis of Three Cities:

- **City supported by infrastructure** – the site is well connected to public transport infrastructure. The site and surrounds have been identified for increased density of commercial and residential development with the Neil Street Precinct LEP Amendments and Merrylands Station and McFarlane Street Precinct Planning Proposal.
• City for its people – the future development will facilitate active uses and opportunities for social interaction. The landmark building will assist people to navigate through the town centre.
• Housing in the City – the proposal will provide new housing adjacent to Merrylands railway station and set within a network of new roads and pathways.
• An efficient city – the proposal has potential to reduce transport costs and emissions by increasing the resident population with access to public transport and within walking distance of an established town centre.

Consistency with the Central City District Plan

There is strategic merit in progressing this proposal to the next phase of assessment as consistent with the following Planning Priorities of the Central City District Pan:
• Planning Priority C2 Planning for a city supported by infrastructure – the proposal seek to rezone land close to key existing infrastructure such as the Merrylands Bus and Rail Interchange.
• Planning Priority C5 Providing housing supply, choice and affordability with access to jobs, services and public transport – the planning proposal seeks to deliver additional jobs and housing in Merrylands Town Centre, Cumberland’s key Commercial Centre. The site is accessible to all of the jobs, service and public transport of the Parramatta CBD

CONCLUSION:

It is recommended that the Planning Proposal be reported to Council seeking a resolution that the Proposal be forwarded to the Department of Planning and Industry for a gateway determination. This recommendation is being made as the proposal does not exceed the planned development yield of the Merrylands Town Centre Urban Design Review 2015 and the Neil Street Planning Proposal.

CONSULTATION:

The proposal was publicly exhibited (pre-Gateway) for a period of 30 days from 24 July 2018 to 22 August 2018 in accordance with Cumberland Council’s Planning Proposal Notification Policy.

In response to the exhibition, Council received no submissions.

FINANCIAL IMPLICATIONS:

The Planning Proposal Request was submitted with the relevant fee. There are no further financial implications for Council associated with this report.

POLICY IMPLICATIONS:

This report recommends that this matter be reported to Council for further consideration. Should Council resolved to forward this planning proposal to the Department of Planning and Industry for a Gateway Determination, there will be policy implications associated with the subsequent stages of the planning proposal process. These will be outlined in subsequent Council reports.
COMMUNICATION / PUBLICATIONS:

The final outcome of this matter will be notified in the newspaper. The objectors will also be notified in writing of the outcome.

REPORT RECOMMENDATION:

That Cumberland Local Planning Panel (CLPP) recommend:

That a Planning Proposal Request be reported to Council seeking a resolution to forward a planning proposal to the Department of Planning and Industry for a Gateway Determination.

ATTACHMENTS

1. Proponent’s Planning Proposal Report
DOCUMENTS
ASSOCIATED WITH
REPORT ELPP025/19

Attachment 1
Proponent’s Planning Proposal
Report
Planning Proposal

1 – 11 NEIL STREET MERRYLANDS
BUILDING 3

Change to Height of Building and FSR Development Standards

3 July 2018

Prepared by Chapman Planning

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1.0 ExecutiveSummary

The planning proposal applies to Building 3 within The Mills development at 1-11 Neil Street, Merrylands. The subject site adjoins the Cabramatta-Granville railway to the east, Neil Street to the south, and Holroyd Gardens (open space) to the north.

A meeting was held with Cumberland Council representatives including Adan Davis on 16 April 2018 to discuss the planning proposal including an increase in building height and an increase in the gross floor area. An increase in building height and associated floor area was confirmed to be a suitable outcome for Building 3 noting the reduction in development yield by the dedication of part of the site (4,292m²) to Council as Infrastructure (Zone SP2 – Drainage).

The subject site is zoned R4 – High Density Residential under the Holroyd Local Environmental Plan 2013 (Holroyd LEP 2013). The planning proposal seeks an increase to the height of building development standard to 50m and the floor space ratio development standard to an FSR of 3.66:1 to accommodate an additional four storeys at Building 3. The additional four (4) levels on Building 3 increases the gross floor area by 2,468m².

The zoning of the site was amended under the Holroyd LEP 2013 with 4,292m² of the site dedicated to Council for infrastructure zoned SP2 – Drainage and Recreation under the LEP. In accordance with clause 4.5(4) – Exclusions form the site area the SP2 zoned land is excluded from site area for the purpose of calculating the FSR. Clause 4.5(4) states:

(4) Exclusions from site area
The following land must be excluded from the site area:
(a) land on which the proposed development is prohibited, whether under this Plan or any other law,
(b) community land or a public place (except as provided by subclause (7)).

The zoning of the site under LEP 2013 reduced the total development yield from 45,177m² to 39,413m²; a reduction of 5,764.5m². This planning proposal seeks to compensate for the reduction in floor area with additional floor area applied to Building 3 being a gateway building and increasing the floor area by 2,468m².

The proposed increase in building height and FSR looks to create a strong urban corner to Neil Street to reinforce and identify the entrance to the Merrylands Town Centre from the east. Further, the proposal allows for a suitable transition in height having regard to the 54m height control at 224-240 Pitt Street, opposite the subject site to the south.

The planning proposal is supported by concept plans and an Urban Design Analysis prepared by Marchese Partners, as well as an Urban Design Review prepared by urban planners, Johannsen and Associates.

The planning proposal is accompanied by:
Extraordinary Cumberland Local Planning Panel Meeting
1 May 2019

Chapman Planning Pty Ltd

- Survey plan numbered DA1.01 dated 23 May 2018 prepared by Marchese Partners International Pty Ltd (Annexure 1).
- Architectural plans numbered DA1.06, DA2.00 – DA2.09, DA3.00 – DA3.03, dated 23 May 2018 prepared by Marchese Partners International Pty Ltd (Annexure 2).
- Shadow Studies and Building Envelope Diagrams numbered DA4.00 – DA4.10 dated 23 May 2018 prepared by Marchese Partners International Pty Ltd (Annexure 2).
- Perspectives views numbered DA5.00 – DA5.03 dated 23 May 2018 prepared by Marchese Partners International Pty Ltd (Annexure 2).
- Traffic and Parking Assessment dated 1st November 2016 prepared by Asen Group, and

In this report, the planning proposal is presented and assessed in relation to the relevant planning documents, being:

- Sydney Metropolitan Strategy (A Plan for a Growing Sydney 2014);
- Metropolitan Plan for Sydney 2036;
- Plan for Growing Sydney 2015;
- Neil Street Precinct Planning Proposal;
- Merrylands Station and McFarlane Street Precinct Planning Proposal;
- Holroyd Local Environmental Plan 2013;
- Community Strategic Plan (CSP) 2013 – Living Holroyd;
- State Environmental Planning Policy No. 55 Remediation of Land; and
- State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development.

2.0 Introduction

This planning proposal has been prepared in accordance with Section 3.33 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and relevant guidelines produced by the Department of Planning and Environment. The purpose of this application for a planning proposal is to seek an amendment to the Holroyd LEP 2013 to amend the building height and FSR development standards applying to land at 1-11 Neil Street, Merrylands. The site comprises a total area of 15,765m² and consists of two lots being Lot 1 in DP 203553 and Lot 11 in DP 228782.

The site is subject to a number of approved developments as follows:

- Building 1 (1-7 Neil Street) – Approved under DA-80/2016 being 9 storeys and containing 120 units.
- Building 2 (1-7 Neil Street) – Approved under DA-203/2015 and DA-343/2016 being 12 storeys and containing 115 units.
• Building 3 (9-11 Neil Street) – Approved under DA-496/2016 being 12 storeys accommodating 178 units. 
• Building 4 (9-11 Neil Street) – Also approved under DA-496/2016 being a part 6, part 9, part 12 storey building containing 133 units.

This planning proposal relates to 9-11 Neil Street being the southern and eastern portion of the site, and seeks to allow for an increase in height and FSR to Building 3 in order to provide four additional storeys containing 24 units. The planning proposal also relates to a Development Application lodged 15th November 2016 numbered DA-497/2016. The additional storeys and floor area compensates for the reduction in development site area by 4,292m² which is land dedicated to Council. The additional floor area allows for a total GFA in the precinct of 44,437m² consistent with the development yield under the Merrylands Station and McFarlane Street Precinct Planning Proposal, which is also still well less than the original allowable 45,177m² allowed on the site.

The proposed upper levels – additional 4 storeys will present a strong urban corner to reinforce the entry to the Merrylands Town Centre, and align the height of Building 3 with adjacent buildings to form a strong perimeter edge to the precinct. The proposal will result in a net increase of total floor space within Building 3 and the Neil Street Precinct.

In summary, the proposed amendments seek to:
• Allow an increase in the height of Building 3 to 50m (16 storeys) within the south-eastern portion of the site labelled V2 – 39m. 
• Increase the floor space ratio control applicable to the eastern portion of the site sufficient to accommodate the additional height of Building 3, being an FSR of 3.66:1.

The Planning Proposal describes the site, the strategic context and provides an assessment of the relevant matters of consideration under the Environmental Planning and Assessment Act 1979 (EP&A Act) and ‘A guide to preparing planning proposals’ NSW Department of Planning (August 2016). The proposal also considers the Ten Directions for Greater Sydney and the draft District Plans as set out by the Greater Sydney Commission.

The application for a Planning Proposal is consistent with the strategic studies undertaken in the Merrylands Town Centre by Council including the Neil Street Precinct, and the Merrylands Station and McFarlane Street Precinct. The proposal is also informed by urban design studies carried out for the site by Marchese Partners International Pty Ltd in relation to the recent Council proposals and development applications carried out for the site, including discussions with Cumberland Council.

This application is supported by an Urban Design Analysis (UDA) prepared by Marchese Partners International Pty Ltd and Urban Design Review by Architecture Johannsen and Associates which builds on the Urban Design
Studies undertaken for the abovementioned Planning Proposals and the independent review of building heights and city centre urban form undertaken by SJB Consultants for Cumberland City Council. The UDA by Marchese Partners demonstrates that the proposed building form to be achieved from this application will:

- Create a strong urban corner to Neil Street, identifying and reinforcing this gateway to the Merrylands Town Centre from Neil Street to the east;
- Establish a building height which is consistent with the surrounding built form;
- Present a more suitable transition in building height from the higher-scale mixed use development in the core of the Merrylands town centre to the lower-scale residential development and the Holroyd Gardens to the north;
- Allow for development yield that is consistent with the Neil Street Masterplan subject to dedication of land to Council for infrastructure — SP2 – Drainage and Recreation zoned land;
- Create variation in the height plane that currently sees a plateau of 12 storeys along a significant length of Buildings 2, 3 and 4 on the site;
- Contribute to the integration of development with public transport by creating higher residential density 300m from the Merrylands Railway Station;
- Provide a mix of housing choices within the locality; and
- Maintain and contribute to the natural landscape by responding to dedication of land on the site to provide a future public park and landscaped drainage swale while also providing rooftop communal open spaces.

3.0 Locality and Site Description

3.1 Site Description

This application for a Planning Proposal applies to land within No. 1-11 Neil Street, Merrylands. The site is identified in the Neil Street Precinct Planning Proposal as Block E, shown shaded in blue on Figure 1. The development layout on the site consists of Buildings 1 – 4 and is indicated in Figure 2 below.

The new building height control is proposed to apply specifically to Building 3 in the south-eastern corner of the site as seen in Figure 3. The new floor space ratio (FSR) control is intended to apply to the entirety of the subject site to accommodate the additional height proposed at Building 3.

The land to which this application applies is identified as Lot 11 in DP 228782 and 1-7 Neil Street, Merrylands, being the south-eastern portion of Block E on the site.
Figure 1: Location diagram for the Neil Street Precinct (Source: Merrylands Neil Street Precinct – Urban Design Review Holroyd City Council October 2015)

Figure 2: Development layout on the site (Source: Marchese Partners)
Figure 3: Extract from plans showing proposed increase in building height of Building 3 (Source: Marchese Partners)

Figure 4: Context plan for the Neil Street Precinct (Source: Planning Proposal Neil Street Precinct Holroyd Council February 2019)
3.2 Locality Description

Surrounding land uses in the locality are consistent with the Neil Street Precinct Planning Proposal developed by Holroyd City Council in February 2016. An aerial photograph depicting the precinct is at Figure 5 below.

![Aerial photograph of the Neil Street Precinct](image)

*Figure 5: Photograph of the Neil Street Precinct (Source: Merrylands Neil Street Precinct Urban Design Review, Cumberland Council August 2016)*

Surrounding development in various stages is described as follows:

**224-240 Pitt Street, Merrylands**

A number of approved developments are in various stages opposite the subject site at 224-240 Pitt Street, Merrylands. This site has a total area of approximately 2.3 hectares and contains the following approved/in progress developments:

- Stage 1 (Block C) – 358 units and 2,300m² of retail/commercial
- Stage 2 (Block D) – 147 units and 130m² of retail
- Stages 3 & 4 (Blocks A & B) – 647 units, 530m² of retail and 5000m² public park

This site is currently the subject of a planning proposal seeking the following amendments to the Holroyd Local Environmental Plan 2013:

- Increase the existing Floor Space Ratio (FSR) control for the entire site from 5:1 to 6:1;
- Change the configuration of the existing R4 High Density Residential and B6 Enterprise Corridor zones within the site; and
- Increase the maximum height of building (HOB) control for that portion of the site to be zoned B6 Enterprise Corridor (as relocated) to 82m (approximately 26 storeys).

![Figure 6: Development layout plan for 224-240 Pitt Street, Merrylands (Source: Planning Proposal for 224-240 Pitt Street and 4 Terminal Place, Merrylands – Cumberland City Council website)](image)

### 13-15 Neil Street, Merrylands

Adjoining the site to the east is 13-15 Neil Street, Merrylands. Development consent was granted to DA-493/2012 for the following development of the site:

- 8 storey mixed use building containing 28 residential units and 2 commercial units at ground floor
- 7-8 storey residential flat building containing 59 units
- 3 levels of basement parking containing 122 car spaces

This development has subsequently been modified to provide an additional 2 levels of basement car parking with minor alterations to the ground floor levels and units.

### 3.3 Neil Street Precinct

The Neil Street Precinct Planning Proposal prepared by Holroyd City Council on February 2016 received a Gateway determination on 27 June 2016 and the changes were published on 8 December 2017. The proposed planning provisions for the locality involved the following changes to the subject site:

- Application of land use zones SP2 – Drainage and RE1 Public Recreation to address flood risk through the provision of an overland
flow path channel, and provide open space and areas for passive recreation;
  - Change in height of buildings to 27m, 30m, and 39m to maintain an appropriate height transition and protect the amenity of development to the north of the precinct; and
  - Change in floor space ratio to 3.5:1, as a result of land dedication on the site to accommodate an overland flow path and new roads.

The changes introduced by the Neil Street LEP amendments have been determined and are now the current LEP controls as presented in detail within Section 3 of this report.

The Planning Proposal for the Neil Street Precinct identified constraints within the precinct and parts of the subject site as follows:

  - Flooding and the requirement of an overland flow path;
  - Noise and vibration from the adjacent railway corridor; and
  - Access routes for pedestrians and vehicles which are compatible with flood evacuation and stormwater management.

The management of flooding and stormwater within the site requires the construction of an open drainage swale within A Beckettts Creek running through the site from north to south. The Urban Design Review report undertaken by Council in 2015 and flood management investigations have resulted in the dedication of land on the site for a drainage swale to be constructed by Council zoned SP2 – Drainage, and the dedication of land as a public park being zoned RE1 – Recreation.

The proposed additional height and associated increase in FSR for Building 3 is an opportunity to provide a suitable urban corner that responds to the form and height of the adjacent development at 224-240 Pitt Street south of the site which has a maximum permissible building height of 54m. The proposal will have no impact on the management of flooding impacts and the location of vehicle and pedestrian movement pathways. The additional apartments located at the upper levels of Building 3 will be less affected by rail noise and vibration than apartments at lower levels closer to the rail line. Further appropriate protection measures can be addressed during the assessment of the development application relating to the additional apartments to mitigate issues resulting from the proximity to the rail corridor. The Planning Proposal is therefore compatible with the identified constraints for the Neil Street Precinct.

3.4 Merrylands Station and McFarlane Street Precinct Planning Proposal

The LEP amendments for the Merrylands Station and McFarlane Street Precinct Planning Proposal were informed by an independent review of the building height and FSR controls for the Merrylands Town Centre completed by SJB Consultants commissioned by Holroyd Council. The review recommended specific heights and FSRs as well as the introduction of a design excellence provisions in the LEP linked to potential bonus FSR and height. It is noted that the McFarlane Street Proposal does not affect the site.
The independent review identified two key focal points within the Merrylands Town Centre being the City Square and the Merrylands Railway Station, and recommended that these focal points should ideally be identified by more prominent landmark buildings distinguished by height in particular.

The Merrylands Station and McFarlane Street Precinct Planning Proposal received a Gateway determination on 15 August 2016 and proposes changes to HLEP 2013 summarised as follows:

- Height of Buildings increase from 41m (12 storeys) to a maximum of 105m (32 storeys); and
- Floor Space Ratios ranging from 2:1 to 8.5:1

4.0 Existing Planning Provisions

4.1 Holroyd Local Environmental Plan 2013

The current planning controls that apply to the site under Holroyd LEP 2013 are summarised as follows:

- Land use zones R4 High Density Residential, SP2 – Drainage, and RE1 Public Recreation (see Figure 7);
- Height of buildings controls of 27m, 30m, 39m with the tallest buildings to be located within the southern portion of the site (see Figure 8);
- Floor space ratio 3.5:1 for the entire site as a result of Council land dedication of 4,292m² (see Figure 9);
- A minimum lot size of 600m² (see Figure 10);
- The land contains a heritage item but is not within a heritage conservation area (see Figure 11);
- Land to be acquired by Council on the site being for drainage, local open space and a local road (see Figure 12); and
- The land is identified as containing riparian land (see Figure 13).

This application proposes to amend the provisions for height of buildings and FSR development standards as described in Section 4. All other provisions including zoning of the land are to remain unchanged.
**Figure 7:** Extract from HLEP 2013 Land Use Zoning Map

**Figure 8:** Extract from HLEP 2013 Height of Buildings Map
Figure 9: Extract from HLEP 2013 Floor Space Ratio Map

Figure 10: Extract from HLEP 2013 Minimum Lot Size Map
Figure 11: Extract from HLEP 2013 Heritage Map

Figure 12: Extract from HLEP 2013 Land Reservation Acquisition Map
4.2 Holroyd Development Control Plan 2013

The Holroyd Development Control Plan 2013 (Holroyd DCP) came into effect on 5 August 2013 and applies to the site. Specifically Part M – Merrylands Centre contains specific objectives and controls for redevelopment of the town centre.

This application for a Planning Proposal does not change the provisions contained in Part M of the DCP, noting there is no change to the approved building footprint that affect concept designs such as the location of public open space, street tree planting, access pathways and the open drainage swale may necessitate adjustments to the DCP in the future.

The planning proposal is consistent with the objectives and intent of Section 4 of the DCP noting concept plans indicate a height of 50m and 16 storeys as informed by the detailed Urban Design Analysis prepared by Marchese Partners.

5.0 Draft Planning Proposal

5.1 Proposed LEP Amendments

The proposed amendments to Holroyd LEP 2013 to apply to Building 3 at 1-11 Neil Street, Merrylands are described as follows:

- Increase the height of buildings control to 50m (16 storeys) for Building 3 which is to be located within the south-eastern portion of the site by amending the Height of Buildings Map 009 as shown in Figure 14.
- Increase the FSR to 3.66:1 at the eastern portion of the site by amending the Floor Space Ratio Map 009 as shown in Figure 15.

**Figure 14:** Proposed amendment to Height of Buildings Map 009 in HLEP 2013

**Figure 15:** Proposed amendment to Floor Space Ratio Map 009 in HLEP 2013
5.2 Objectives and Intended Outcomes

The Planning Proposal will amend Holroyd LEP 2013 to:

- Create a strong urban corner to Neil Street, identifying and reinforcing this gateway to the Merrylands Town Centre from Neil Street to the east;
- Establish a building height which is consistent with the surrounding built form;
- Present a more suitable transition in building height from the higher-scale mixed use development in the core of the Merrylands town centre to the lower-scale residential development and the Holroyd Gardens to the north;
- Create variation in the height plane that currently sees a plateau of 12 storeys along a significant length of Buildings 2, 3 and 4 on the site;
- Contribute to the integration of development with public transport by creating higher residential density 300m from the Merrylands Railway Station;
- Provide a mix of housing choices within the locality, and
- Maintain and contribute to the natural landscape by responding to dedication of land on the site to provide a future public park and landscaped drainage swale while also providing rooftop communal open spaces.

5.3 Justification

This section details the reasons for the proposed LEP amendments and is based on a series of questions as outlined in the Department of Planning and Environment’s ‘A Guide to Preparing Planning Proposals’. The matters to be addressed include the strategic planning context of the amendments, potential State and Commonwealth agency interests, environmental, social and economic impacts, needs, benefits and challenges presented by the opportunity to redevelop the site in a manner coordinated with the Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct.

Detailed justification with respect to each factor is provided in Sections 5.3.1 to 5.3.4 where it is clearly demonstrated that the proposed amendments are consistent with the intentions of all applicable strategic plans, community plans and planning-related considerations. The environmental, social and economic impacts, needs, benefits and challenges of the proposed changes are specifically detailed in Section 5.3.3.

5.4 The Need for the Planning Proposal

Is the Planning Proposal the result of any strategic study or report?

The Planning Proposal application is informed by an Urban Design Analysis prepared by Marchese Partners International Pty Ltd which responds to the Urban Design and independent review documents produced to support the
original Neil Street Precinct Planning Proposal prepared by Holroyd City Council in February 2016.

The accompanying Urban Design Analysis by Marchese Partners International and Urban Design Review by Architects Johannsen & Associates demonstrate that the proposed height of buildings control and the FSR control to accommodate additional height at Building 3 is consistent with the anticipated built form of the precinct, movement networks and activity spaces in the public domain, open space and landscaped areas, and land use patterns.

Further, the planning proposal increases the floor area at Building 3 to compensate for the reduction in development yield across the precinct under the amendment to the Holroyd LEP 2013. The proposed GFA of 44,437 m² is consistent with the original controls for the site which allowed for a total GFA of 45,177 m².

_is the Planning Proposal the best means of achieving the objectives or intended outcomes or is there a better way?

The current provisions of the Holroyd LEP 2013 do not permit the built form described in the supporting Urban Design Analysis by Marchese Partners International and therefore cannot deliver the opportunity for a building height providing a strong urban corner element that reinforces the entrance to the Merrylands Town Centre. The proposal also allows for a suitable transition in height from the development at 224-240 Pitt Street to the lower density residential zones to the north, by presenting a stepped skyline that aligns taller buildings with adjacent buildings forming a strong perimeter edge to the site.

A Planning Proposal is the only means to address this matter. The FSR and building height provisions introduced by the amendments to the Holroyd LEP 2013 in February 2016 do not allow for the proposed built form to be achieved through the development application process.

The planning proposal results in floor area that is consistent with the original Neil Street Masterplan and subsequent LEP that allowed 45,177 m² of GFA across the site. This additional floor area on Building 3 compensates for the dediction of land to Council for SP2 – Drainage and RE1 – Public Recreation resulting in a development yield that is consistent with the objectives and planning outcomes of the original masterplan for the site.

5.5 Relationship to the Strategic Planning Framework

_is the Planning Proposal consistent with the objectives and actions of the applicable regional or subregional strategy?

The Plan for Growing Sydney released in December 2014 includes key directions and actions intended to guide development, environmental protection, housing, employment and the provision of infrastructure and open space. This application to amend Holroyd LEP 2013 is consistent with the intent of the Plan for Growing Sydney in providing additional residential floor space in
an established urban area for efficient use of infrastructure and adding to the livability and vitality of the Merrylands Town Centre.

The Draft Greater Sydney Region Plan prepared by the Greater Sydney Commission shows the site is located within the ‘Central River City’ region identified in this draft Plan which has targets for increasing job containment by 10% (to 55%), 27.4% of the projected 725,000 new dwellings are to be located within this region and specifically an increase in the proportion of the population aged over 65 years. This proposal will contribute new jobs, new housing and housing suitable for people aged over 65 years.

The West Central Draft District Plan promotes the use and growth of existing public infrastructure and the redevelopment of urban land to accommodate dwellings and employment at increased density and efficiencies. This application proposes height and FSR controls which will facilitate increased density of residential development on the site in close proximity to the Merrylands train station and bus interchange located 500m south of the site.

The Greater Sydney Commission has established 10 Directions for achieving greater integrated decision making to deliver coordinated land use and infrastructure. This application for a Planning Proposal is consistent with these Directions as follows:

- **Direction 1 – A City supported by Infrastructure** – The site and surrounds have been identified for increased density of commercial and residential development with the Neil Street Precinct LEP Amendments and Merrylands Station and McFarlane Street Precinct Planning Proposal. These planning proposals will also deliver new public roads and pathways, public open space and new infrastructure and utilities. This application optimises the density of development on the site noting the dedication of land for the provision of local infrastructure and a public park, and is therefore consistent with Direction 1.

- **Direction 2 – A City for people** – This Direction seeks to improve social and cultural connections with recognition of local identity and access to services. The concept plans submitted as part of the proposal indicate the future public park located central to the site as part of Council’s land dedication. This results in the development being set within a new road and pathway network with high quality public open space to provide a vibrant and active land use mix in the vicinity of the Merrylands railway station.

- **Direction 3 – Housing in the City** – This Direction aims to deliver a greater variety of new dwellings close to employment, transport and movement networks. This application will provide new housing in the immediate vicinity of the Merrylands railway station and set within a network of new roads and pathways. Building 3 is to contain 2,468m² of additional residential floor space within a suitable location having regard to employment and transport networks.
- **Direction 4 – A city of great places** – This Direction encourages new development to create and sustain a sense of community, foster social interaction and healthy lifestyles. The submitted concept plans demonstrate that the setting of the site includes a network of public open space and private communal open space areas with opportunities for a variety of recreational and social activities.

- **Direction 5 – Jobs and Skills for the City** – The proposal has the potential to enhance productivity through the more efficient use of services on urban land, improved opportunities for the use of an established public transport hub and improvements to the bus interchange facility adjacent to Merrylands Station.

- **Direction 6 – A well connected City** – This Direction aims to increase the proportion of the population with 30 minute public transport access to major hubs and the colocation of jobs and services. The site is within a short walking distance to Merrylands railway station and new bus interchange to be established within the Neil Street precinct redevelopment. The site is also within walking distance of the Merrylands town centre and the variety of existing and new services and facilities which will be improved with the town centre redevelopment.

- **Direction 7 – a City in its landscape** – The concept plans prepared by Marchese Partners provide substantial details of the future landscaped setting of the site which includes landscaping surrounding Buildings 3 and 4 as well as within upper level communal open spaces. The Neil Street Precinct Urban Design Review prepared by Council identifies the dedication of the central portion of the site for a future public park and drainage swale as opportunities to provide green aspects and enhance the recreational and passive uses of green spaces within the site and the precinct.

- **Direction 8 – An efficient city** – This application has potential to reduce transport costs and emissions by increasing the resident population with access to public transport and within walking distance of an established town centre. The new development is intended to incorporate water and energy efficient innovations. The conceptual layout of apartments in the accompanying plans indicates a high degree of natural light and natural ventilation can be achieved for new dwellings being located at the upper levels.

- **Direction 9 – A resilient city** – The broad scale redevelopment of the Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct represents opportunities for the inclusion of Smart City technologies within both private and public spaces to assist in managing places for change.

- **Direction 10 – A collaborative city** – As stated above, the redevelopment of two adjoining precincts is an opportunity for implementation of resource and infrastructure sharing.
Is the Planning Proposal consistent with a Council’s local strategic or other local strategic plan?

Community Strategic Plan 2013 – Living Holroyd

Council’s 2015 Community Strategic Plan (CSP) 2013 – Living Holroyd contains Council’s long term planning framework and strategic vision for development and resource management throughout the LGA. The themes for the CSP are: social cohesion, local economy, natural and built environment and inclusion.

Key outcomes relevant to this Planning Proposal are:

"Community Strategy G1.2

G5.1 Establish and maintain clear guidelines for zoning, urban planning and development.

G5.3 Enhance accessibility to all public spaces.

G6.2 Ensure infrastructure is well planned to support future development.

G8.1 Develop and maintain planning controls to stimulate growth of housing stock to meet population projections”.

The proposed LEP amendments are consistent with the objectives of the recent changes for the Neill Street Precinct and the Merrylands Station and McFarlane Street Precinct Planning Proposal and are therefore aligned with Community Strategy G5.1.

The delivery of additional building height to the south east to create a strong urban corner and centrally located public park will enhance accessibility and use of public spaces through new connections as recommended by the Merrylands Station and McFarlane Street Precinct Planning Proposal. In this regard the planning proposal application is consistent with Community Strategy G5.3.

The proposal will not place excessive demands on the capacity of existing infrastructure. The dedication of land to Council to provide new planned infrastructure will support the redevelopment of the Merrylands town centre and is therefore consistent with Community Strategy G6.2.

The proposal will facilitate the delivery of additional housing stock as demonstrated in the design concept scheme contained in the accompanying plans prepared by Marchese Partners and so is consistent with Community Strategy G8.1.
Context and Setting Neil Street Precinct and McFarlane Street Precinct

As explained throughout this Planning Proposal application and as presented in the accompanying Urban Design Analysis and concept plans, this proposal fits well with the anticipated built form, set out of future infrastructure and public open space and the economic, social and environmental changes that will result from the imminent development facilitated for the Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct.

The proposed amendments to the height and FSR to allow for four additional storeys at Building 3 are consistent and compatible with the broader Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct. As demonstrated in the concept plans prepared by Marchese Partners the built form for Building 3 is spatially balanced with this increased height allowing for the alignment of taller buildings with adjacent buildings to form a strong perimeter edge to the site, while providing a suitable transition in height from the 54m height at 224-240 Pitt Street and the 8 storey height to the north. This adds variety and diversity of built form on the site scale and neighbourhood scale which is consistent with quality urban design principles in creating opportunities for character, diversity and place identification to future buildings.

The proposed height and FSR changes with the Merrylands Station and McFarlane Street Precinct are detailed in Figure 3. As explained in Section 3.2.2 the proposed changes to building heights and FSRs have been selected to enhance building variety, to emphasise landmark locations and deliver solar access and a pleasant city centre microclimate which accommodates new commercial and high density residential land uses.

This Planning Proposal application represents those same principles in that it adds to future variety of built form (not exceeding the densities proposed within the new city centre), optimises density in a corner location reinforcing the entry to the Merrylands town centre, allows high levels of solar access to surrounding land (see Section 4.3.3) and accommodates a positive landscape feature being a new public park and landscaped swale on Council dedicated land.

Is the Planning Proposal consistent with the applicable State Environmental Planning Policies?

There are no State Environmental Planning Policies (SEPPs) or draft Policies or Deemed SEPPs that would prohibit or restrict this Planning Proposal. A list of relevant SEPPs is included in Table 1.
### Table 1 – Relevant State Environmental Planning Policies

<table>
<thead>
<tr>
<th>SEPP</th>
<th>Relevance</th>
<th>Consistency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPP 55 – Remediation of Land</td>
<td>Introduces state-wide planning controls for the remediation of contaminated land.</td>
<td>Yes</td>
<td>This application for a Planning Proposal does not propose to change the land use zoning or the range of land uses permissible on the site in accordance with the recent changes made for the Neil Street Precinct. Detailed Site Contamination Investigations have been undertaken in relation to the approved developments on the subject site. The investigations include the recommendations for remediation to make the land suitable for its intended use without risk to human health and the environment. The remediation of the site will be undertaken during the staged redevelopment in accordance with SEPP 88. This application for a Planning Proposal will not result in any activities which would be likely to expose humans or the environment to risks of contamination. This application does not change the manner in which this SEPP applies to the site.</td>
</tr>
<tr>
<td>SEPP (Building Sustainability Index BASIX) 2004</td>
<td>This SEPP requires residential development to achieve minimum performance standards for thermal comfort and water efficiency with the intention of reducing demand for energy and potable water.</td>
<td>Yes</td>
<td>This proposal does not change the manner in which this SEPP will apply to any future development application for new dwellings.</td>
</tr>
<tr>
<td>SEPP (Affordable Rental Housing) 2009</td>
<td>This SEPP facilitates the provision of affordable rental housing and retention of existing affordable housing as well as encourages the siting of affordable housing in accessible locations through bonus incentives.</td>
<td>Yes</td>
<td>The site is in an accessible location as defined by the SEPP. This proposal does not change the manner in which this SEPP applies to the site.</td>
</tr>
<tr>
<td>SEPP (Exempt and Complying)</td>
<td>This SEPP defines types of development for</td>
<td>Yes</td>
<td>This application for a Planning Proposal does not change the</td>
</tr>
<tr>
<td>Development Codes) 2008</td>
<td>which development consent is not required.</td>
<td>manner in which this SEPP applies to the site.</td>
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| SEPP (Infrastructure 2007) | This Policy aims to facilitate the delivery of new infrastructure and protect the safe and efficient operation of existing infrastructure. | Yes | The application for a Planning Proposal does not change the way in which the SEPP would apply to the site or to future development upon the site. The provision of infrastructure to meet the needs of the precinct will be undertaken by Council on the land dedicated central to the site. Noise and vibration attenuation measures will be investigated with any future development application to ensure new dwellings are compatible with the ongoing operation of the adjoining railway line.

The increased density of development sought by this application will be serviced by the train station and bus interchange 500m south of the subject site. |
| SEPP 65 (Design Quality of Residential Apartment Development) | This SEPP aims to improve the design quality of developments containing apartments. The SEPP is linked to the Apartment Design Guide (ADG) which includes specific objectives and recommendations for detailed design requirements. | Yes | This application seeks increased height and FSR controls to increase the scale of future built form on a landmark site within Merrylands Town Centre. The provisions of SEPP 65 will continue to apply to the site. The concept plans prepared by Marabou Partners demonstrate the additional storeys to Building 3 could potentially accommodate an additional 24 apartments with a rooftop communal open space area, a variety of apartment layouts and more than 70% of apartments capable of achieving the solar access requirements of SEPP 65 and the ADG. |

Is the Planning Proposal consistent with the applicable Ministerial Directions?

The consistency of the Planning Proposal with the relevant Ministerial Directions is demonstrated in Table 2 below.
Table 2 – Assessment against Ministerial Directions

<table>
<thead>
<tr>
<th>Relevant Direction</th>
<th>Relevance</th>
<th>Consistency</th>
<th>Implications</th>
</tr>
</thead>
</table>
| 3.1 Residential Zones | (1) The objectives of this direction are to:  
(a) to encourage a variety and choice of housing types to provide for existing and future housing needs;  
(b) to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services; and  
(c) to minimise the impact of residential development on the environment and resource lands.  
The Direction applies to all planning authorities and applies when a relevant planning authority prepares a planning proposal that will affect land within an existing residential zone or a zone which permits significant residential development.  
A planning proposal must encourage the provision of housing that will:  
(a) broaden choice of building types and locations;  
(b) make more efficient use of existing infrastructure and services;  
(c) reduce land consumption on the urban fringe;  
(d) be of good design.  
A Planning Proposal must:  
(a) contain a provision that residential development is not permitted until land is adequately serviced; and  
(b) not contain provisions that reduce density. | Yes | Direction 3.1 applies to this application for a Planning Proposal as the subject site is to be within Zone R4 High Density Residential.  
This application for a Planning Proposal will facilitate the construction of additional dwellings within a landmark building form which is consistent with the anticipated changes within the planned anticipated redevelopment of the site.  
As detailed in the Urban Design Analysis by Marchese Partners, the additional dwellings have the potential to include a variety of apartment sizes and layouts, high levels of solar access and access to a large area of rooftop private communal open space as well as being enhanced by the setting created from extensive new public open space to the west and north of Building 3. Therefore the new dwellings will be of high quality design and entirely consistent with the requirements of SEPP 66.  
The additional residential densities will be serviced by the existing and planned stormwater drainage and new road construction that will be undertaken during the staged redevelopment of the site.  
The application for a Planning Proposal is therefore consistent with Direction 3.1. |
| 3.4 Integrating Land Use and Transport | The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:  
(a) improving access to housing, jobs and services by walking, cycling and public transport, and  
(b) increasing the choice of available transport and reducing dependence on cars, and | Yes | This Direction applies to this application for a Planning Proposal as it seeks to increase housing within urban zoned land.  
This application for a Planning Proposal seeks to increase the density of residential development within direct vicinity of the Merrylands railway station and transport interchange on land which is anticipated to be redeveloped to include extensive |
(c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and  
(d) supporting the efficient and viable operation of public transport services, and  
(e) providing for the efficient movement of freight.

This direction applies to all relevant planning authorities and to all Planning Proposals that will create, alter or remove a zone or a provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.

A planning proposal must locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of: (a) Improving Transport Choice – Guidelines for planning and development (DUAP 2001), and (b) The Right Place for Business and Services – Planning Policy (DUAP 2001).

| 6.3 Site Specific Provisions | Improvements to the pedestrian and cycling facilities.  
The proposal also seeks to increase the number of dwellings within the town centre containing a number of commercial and mixed uses encouraging the integration of land uses and reducing car dependence.  
The new public park will be provided with pedestrian and bike paths that will provide connections to the train station from residential precincts to the north and Holroyd Gardens. End of trip facilities such as bike parking are provided within the basement of Building 3 as approved and also within the public domain in order to encourage other modes of transport.  
Due to proximity to the station the proposal is likely to encourage pedestrian activity.  
For these reasons the application is consistent with Direction 3.4. |
|-------------------------------|--------------------------------------------------|
| 6.3 Site Specific Provisions | Yes  
The objective of this direction is to discourage unnecessarily restrictive site specific planning controls.  
This direction applies to all relevant planning authorities and to all Planning Proposals.  
A planning proposal that will amend another environmental planning instrument in order to allow a particular development proposal to be carried out must either:  
- allow that land use to be carried out in the zone the land is situated on, or  
- rezone the site to an existing zone already applying in the environmental planning instrument that allows that land use without imposing any development standards or requirements in addition to those already contained in that zone, or  
- allow that land use on the relevant land without imposing any development standards or requirements in addition to those already contained in the principal environmental planning instrument being amended. |
|-------------------------------|This application for a Planning Proposal seeks amendments to Holroyd LEP 2013 which are specific to the site and specific to a building envelope for Building 3 but does not seek to facilitate a specific type of development proposal as such.  
The amendment is consistent with Direction 6.3 because it:  
- does not require a change to the permissible land uses;  
- does not introduce a new land use zone; and  
- does not introduce new development standards that are not already proposed throughout the Marylands town centre in accordance with the Marylands Station and McFarlane Street Precinct.  
For these reasons the application for a Planning Proposal is considered to be consistent with the requirements of Direction 6.3. |
A Planning Proposal must not contain or refer to drawings that show details of the development proposal.

Yes

This application is consistent with A Plan for Growing Sydney as detailed in Section 4.3.2.

5.6 Environmental, Social and Economic Impacts

Is there a likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The site is part of an urban environment and does not contain habitat for threatened species, populations or ecological communities.

Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

Environmental Effects of Height and FSR Amendments:

Shadowing:

The additional height and FSR sought by this application will increase the shadow to be cast by Building 3. Shadow diagrams are included in the Urban Design Analysis prepared by Marchese Partners that demonstrate that the majority of the shadow cast by the increase in height falls upon the railway corridor and roadways before noon and majority of additional shadow falling upon the low density zone opposite the railway corridor in the afternoon, during midwinter. Furthermore as the building is positioned to the south, there are no shadow impacts over existing or proposed public open space. On this basis it is considered that this impact has been appropriately considered and mitigated.

The additional 4 levels Building 3 do not impact on Building 2 and the development at 224 – 240 Pitt Street on the opposite side of Neil Street maintaining a minimum of 2 hours of solar access at mid-winter.
Visual Impact, Navigation, Way-finding and Sense of Place in the Urban Environment:

The Urban Design Analysis prepared by Marchese Partners includes a contextual analysis of the urban form of Building 3 as set within the anticipated built form of the Merrylands centre. Development on the southern adjacent site at 224-240 Pitt Street has been identified as suitable to support a building height of 54m and FSR of up to 5:1 due to its location adjacent to the Merrylands Railway station. The subject site is considered to warrant a 50m building height at its south-eastern corner due to its location at the entrance of the Merrylands Town Centre and by providing a transition in height from the opposite development.

The Urban Design Analysis also includes perspectives of conceptual Building 3 as viewed:

- From the north across the railway line showing the transition in height from the proposed development at 224-240 Pitt Street to the residential flat building at 42-50 Brickworks Drive, Holroyd;
- From the west across new public open space;
- From the railway over bridge on Neil Street which shows a building scale consistent with its setting within the renewal precinct of Merrylands Town Centre. The UDA contains 3D comparison studies which show that the proposed LEP amendments will achieve a built form which will assist in identifying a strong urban corner being the entrance to the Merrylands Station without detracting from the hierarchy of built form throughout the town centre as recommended by the city structure analysis by SJB Consultants and as adopted by Council for the Merrylands Station and McFarlane Street Precinct.

Demands for infrastructure, utilities and services:

The increase in building height and FSR will translate to approximately 24 dwellings compared to the approved building and 2,468m² of residential floor space. The additional dwellings will not result in unreasonable demand on infrastructure, utilities and services noting this floor area was originally planned for the precinct. The additional apartments are likely to be within the functional capacity of infrastructure, utilities and services in response to the broader scale redevelopment of the Merrylands town centre and redevelopment of the site.

Variety of Housing:

Although subject to detailed design with a future development application, the inclusion of a higher tower element for Building 3 will add to the variety of housing forms created within the Neil Street precinct. As shown in the concept plans submitted with this application, the proposed dimensions of Building 3 will add variety to the permissible dimensions for residential components throughout the site at heights of 6, 8, 12 and 16 storeys. The apartments will have multiple aspects and regional-scale views. The concept allows for rooftop communal open space which will be a high quality landscaped area with
impressive outlooks and unobstructed solar access providing amenity to the residents of the site.

*Pedestrian and Vehicle Traffic:*

Additional residents and their visitors will have requirements for movement spaces which can be accommodated within the new public open space areas, shared pathways and public roads planned to support the overall redevelopment of the Merrylands town centre as part of the Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct. Figure 13 is an extract from Council's Urban Design Review for the Neil Street Precinct and demonstrates planned spaces for future movement and open space areas surrounding the anticipated building footprint of Building 3 and the entire site at 1-11 Neil Street, Merrylands.

![Figure 13: Proposed Connectivity plan for the Neil Street Precinct (Source: Merrylands Neil Street Precinct – Urban Design Review)](image)

*Has the Planning Proposal adequately addressed any social and economic effects?*

The site is part of the urban renewal and revitalization of the Merrylands town centre. The addition of four storeys on the site is essential to achieving a consistent and legible built form which identifies the entrance to the Merrylands town centre whilst also delivering high quality new housing to support the vitality of the town centre. The final future building form will have a high quality of architectural expression and set a benchmark for future development within the Neil Street Precinct.
5.7 State and Commonwealth Interests

Is there adequate public infrastructure for the Planning Proposal?

The site is within an established urban area well serviced by infrastructure, utilities, public transport and a variety of social support services and recreational facilities. The additional development potential facilitated by the proposed LEP amendments will not exceed the capacity or availability of public infrastructure.

It is noted that a central portion of the land has been dedicated to Council for the provision of a landscaped drainage swale and future public park. This is considered to be a substantial public benefit as the physical infrastructure will be delivered and coordinated with the population generated by the development.

What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?

A future Gateway determination will specify the list of agencies and public authorities required to be consulted and the methods and timing of such consultation. The public authorities and agencies identified for consultation in the Gateway notices issued for the Nell Street Precinct and the Merrylands Station and McFarlane Street Precinct were as follows:

- Transport for NSW
- Transport for NSW – Sydney Rail
- Transport for NSW – Roads and Maritime Services
- Sydney Water
- Energy Australia
- Telstra
- Family and Community Services – Housing NSW
- Office of Environment and Heritage
- Department of Education and Communities

5.8 Mapping

Proposed amendments to LEP maps are indicated in Figures 14 to 15 inclusive. Should Council resolve to support the application for a Planning Proposal, proposed mapping amendments will be prepared by Council staff.

5.9 Community Consultation

It is anticipated that a draft Planning Proposal would be publicly exhibited for a period of 28 days. The exhibition material will include documents as specified in the Gateway determination and will include a copy of the Planning Proposal, an explanation of provisions, draft LEP maps and an indication of the timeframes for completion of the process as estimated by Council.
It is anticipated that the Community Consultation methods will include forwarding copies of relevant documents to appropriate State and Commonwealth agencies, notice of public exhibition in a local newspaper and on Cumberland Council’s website, providing copies of exhibition material in electronic and hard copy form at relevant local government premises and letters of notification to nearby and potentially affected land owners.

5.10 Information for Public Exhibition

The Gateway determinations for both the Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct included instructions to make amendments to the content of the draft Planning Proposal and supporting documents. It is also relevant to note that Section 2.3 of ‘A guide to preparing planning proposals’ states “It is not expected that a council or a proponent will provide comprehensive information to support a request for Gateway determination … the planning proposal document may identify the need for investigations and an approach for addressing the issues”.

The accompanying concept plans and Urban Design Analysis will all form part of the public exhibition material. There are no matters which would prevent the lodgement of an application for a Planning Proposal or a Gateway determination subject to conditions.

5.11 Project Timeline

The project timeframe set for the Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct Planning Proposals was 1 year. Given that this application relates to minor adjustments to the existing adopted controls, it is considered reasonable that the project timeline could be reduced to 6 months.
6.0 Conclusion

This application for a planning proposal demonstrates that the proposed amendment to Holroyd LEP 2013 to allow an increase in the height of Building 3 to 50m (16 storeys) and associated additional floor space over the entire site will:

- Create a strong urban corner to Neil Street, identifying and reinforcing this gateway to the Merrylands Town Centre from Neil Street to the east;
- Establish a building height which is consistent with the surrounding built form;
- Present a more suitable transition in building height from the higher-scale mixed use development in the core of the Merrylands town centre to the lower-scale residential development and the Holroyd Gardens to the north;
- Create variation in the height plane that currently sees a plateau of 12 storeys along a significant length of Buildings 2, 3 and 4 on the site;
- Contribute to the integration of development with public transport by creating higher residential density 300m from the Merrylands Railway Station;
- Provide a mix of housing choices within the locality; and
- Maintain and contribute to the natural landscape by responding to dedication of land on the site to provide a future public park and landscaped drainage swale while also providing rooftop communal open spaces.
- Compensate for the dedication of public infrastructure land that reduced the total development yield from 45,177m² to 39,413m², a reduction of 5,764.6m². The planning proposal seeks to compensate for the reduction in floor area with additional floor area applied to Building 3 being a gateway building and increasing the floor area by 2486m².
- Ensure that the additional floor area is consistent with the original Neil Street Precinct Masterplan and compensates for the dedication of land to Council and associated change on zoning to SP2 – Drainage and RE! – Recreation under the current Holroyd LEP 2013.
- Not result in unreasonable traffic or parking impacts noting the parking can be accommodated in the approved basement levels and the floor area will not result in significant traffic generation.
- Not result in unreasonable social impacts.

The application is entirely consistent with the recent amendments to HLEP 2013 for the Neil Street Precinct and the proposed amendments for the Merrylands Station and McFarlane Street Precinct which adjoins the site.

The Urban Design Analysis prepared by Marchese Partners builds on the Urban Design Studies undertaken for the Neil Street Precinct and the Merrylands Station and McFarlane Street Precinct Planning Proposals. The proposed height and FSR controls are consistent with the recommendations for redevelopment of the Merrylands Town Centre as undertaken by SJB Consultants for Holroyd Council.
The submitted concept plans and urban design analysis comprehensively demonstrate that the proposed building form to be achieved from this application will:

- Suit the anticipated future urban form of the locality;
- Deliver additional apartments and new rooftop open space of high quality and potentially compliant with the requirements of SEPP 65 and the ADG;
- Provide increased housing opportunities to optimise the efficient use of infrastructure, services and facilities which are anticipated to be augmented as part of the redevelopment of Merrylands town centre; and
- Maintain a mix of land uses expected to facilitate the orderly and economic development of the site with no detrimental impacts to the amenity and accessibility of public open spaces and at a density which will be within the capacity of growing Council infrastructure.