



# *Horsley Park Brickworks Plant 2 Upgrade*

*State Significant  
Development  
(SSD-9601)*



May 2020

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Cover photo

Horsley Park Brickworks Plant 2 Facility (Source: Site Inspection 2019)

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# Glossary

Abbreviation	Definition
Applicant	Austral Brick Co Pty Ltd
BDAR	Biodiversity Assessment Report
CIV	Capital Investment Value
CIP	Community Involvement Plan
Consent	Development Consent
Council	Fairfield City Council
Department	Department of Planning, Industry and Environment
Development	Horsley Park Brickworks Plant 2 facility upgrade works
DPI	Department of Primary Industries
EES	Environment, Energy and Science Group
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
LEP	Local Environmental Plan
LGA	Local Government Area
Minister	Minister for Planning and Public Spaces
POM	Western Sydney Parklands Plan of Management 2030
RMS	Roads and Maritime Services (now TfNSW)
RTS	Response to Submissions
SBE	Standard Brick Equivalent
SEARs	Planning Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning, Industry and Environment
SEPP	State Environmental Planning Policy

SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
TfNSW	Transport for New South Wales
WSPT	Western Sydney Parklands Trust



# Executive Summary

This report details the Department of Planning, Industry and Environment's (the Department) assessment of a State significant development application (SSD 9601) for the Horsley Park Brickworks Plant 2 Upgrade works. Austral Brick Co Pty Ltd (the Applicant) proposes upgrade works to Plant 2 including demolition of existing kilns and replacement with one new kiln and the extension of the existing production building on 780 Wallgrove Road, Horsley Park (Lot 7 DP1059698) in the Fairfield local government area (LGA).

The site is located approximately 1.1 kilometres (km) east of the M7 motorway, to the west and adjacent to Prospect Reservoir and covers approximately 82 hectares (ha) within the Western Sydney Parklands (the Parklands). The development site contains an existing quarrying, brick manufacturing, brick display and sales facility (known as Austral Bricks) which has operated since the 1960s to the present date. The surrounding area consists of a SITA Waste Facility, the Sydney Dragway, poultry sheds, warehousing, distribution and extractive industries.

## Current Proposal

The Applicant proposes to undertake upgrade works to the Plant 2 facility including the construction of a 13,250 square metres (m<sup>2</sup>) extension to the existing production building to accommodate dryers, demolition of the two existing kilns and the installation of one new kiln, new footings for clay bins and scrubber, construction of a new fire access road and the provision of an onsite detention (OSD) basin. The proposal does not seek to alter the current production capacity of the site.

The proposed development (the development) has a capital investment value of \$26 million and is expected to generate 60 construction jobs and retains the existing 35 operational jobs.

## Statutory Context

The development is classified as State significant development (SSD) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it involves development that has a capital investment values of more than \$10 million on land identified within the Parklands. This satisfies the criteria in Schedule 2, Clause 5 of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

Consequently, the Minister for Planning and Public Spaces is the consent authority for the proposed development under section 4.5(a) of the EP&A Act.

## Engagement

The Department exhibited the Development Application (DA) and accompanying Environmental Impact Statement (EIS) for the development from 9 October 2019 until 5 November 2019. A total of 10 submissions were received including eight from government agencies and 2 from local Councils. Of the 10 submissions received, none objected to the development.

Key concerns raised related to air quality, biodiversity, aboriginal cultural heritage and hydrology. The Applicant submitted a Response to Submissions (RTS) on 24 January 2020 to address and clarify matters raised in the submissions.

### *Assessment*

The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development. The Department has identified the key issues for assessment are air quality and biodiversity.

### *Summary*

The Department's assessment concluded the development provides improved environmental efficiencies by reducing the impacts of the site's operation on air quality. Furthermore, the Department has considered the impacts of the development can be mitigated and/or managed to ensure an acceptable level of environmental performance, subject to the recommended conditions of consent including:

- the implementation of air emission control and air quality measures
- the retirement of three biodiversity credits
- the management and maintenance of vegetation buffers
- the implementation of a stormwater management system

Consequently, the Department considers the development is in the public interest and is recommended for approval, subject to conditions.



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# 1. Introduction

## 1.1 The Department's Assessment

This report details the Department of Planning, Industry and Environment's (the Department) assessment of a Development Application for State significant development (SSD 9601) for the Horsley Park Brickworks Plant 2 Upgrade. The proposed development (the development) involves upgrade works to the Plant 2 facility including demolition of existing kilns and replacement with one new kiln and the extension of the existing production building. The Department's assessment considers all documentation submitted by the Applicant, including the Environmental Impact Statement (EIS) and Response to Submissions (RTS), and submissions received from government authorities, stakeholders and the public. The Department's assessment also considers the legislation and planning instruments relevant to the site and the development.

This report describes the development, surrounding environment, relevant strategic and statutory planning provisions and the issues raised in submissions. The report evaluates the key issues associated with the development and provides recommendations for managing any impacts during construction and operation. The Department's assessment of the Horsley Park Brickworks Plant 2 Upgrade has concluded the development is in the public interest and should be approved, subject to conditions.

## 1.2 Development Background

Austral Brick Co Pty Ltd (the Applicant) is seeking development consent to upgrade the existing Austral Brick Plant 2 facility at 780 Wallgrove Road, Horsley Park in the Fairfield local government area (LGA) (see **Figure 1**). The Applicant proposes the demolition of two existing kilns and the installation of one new kiln and a 13,250 square metre (m<sup>2</sup>) extension to the existing production building to accommodate the new kiln, dryers, new footings for the clay bins and scrubber, construction of a new fire access road and the provision of an onsite detention (OSD) basin. The development does not seek to alter the current production capacity of the site.

The development has a capital investment value of \$26 million and is expected to generate 60 construction jobs and retain the existing 35 operational jobs.

The site has operated as a brick manufacturing facility and extractive industry for clay and shale since 1962 under a development consent (DA No. 145/20/33) approved on 17 November 1960 by the then Blacktown Shire Council.



**Figure 1 | Site Location**

### 1.3 Site Description

The site comprises 82 hectares (ha) of land located within the Wallgrove Precinct of the Western Sydney Parklands (WSP) at 780 Wallgrove Road, Horsley Park and is legally described as Lot 7 DP 1059698 (see **Figure 2**). The site is located 32 kilometres (km) west of the Sydney CBD and adjoins Wallgrove Road to the west and Ferrers Road to the east.

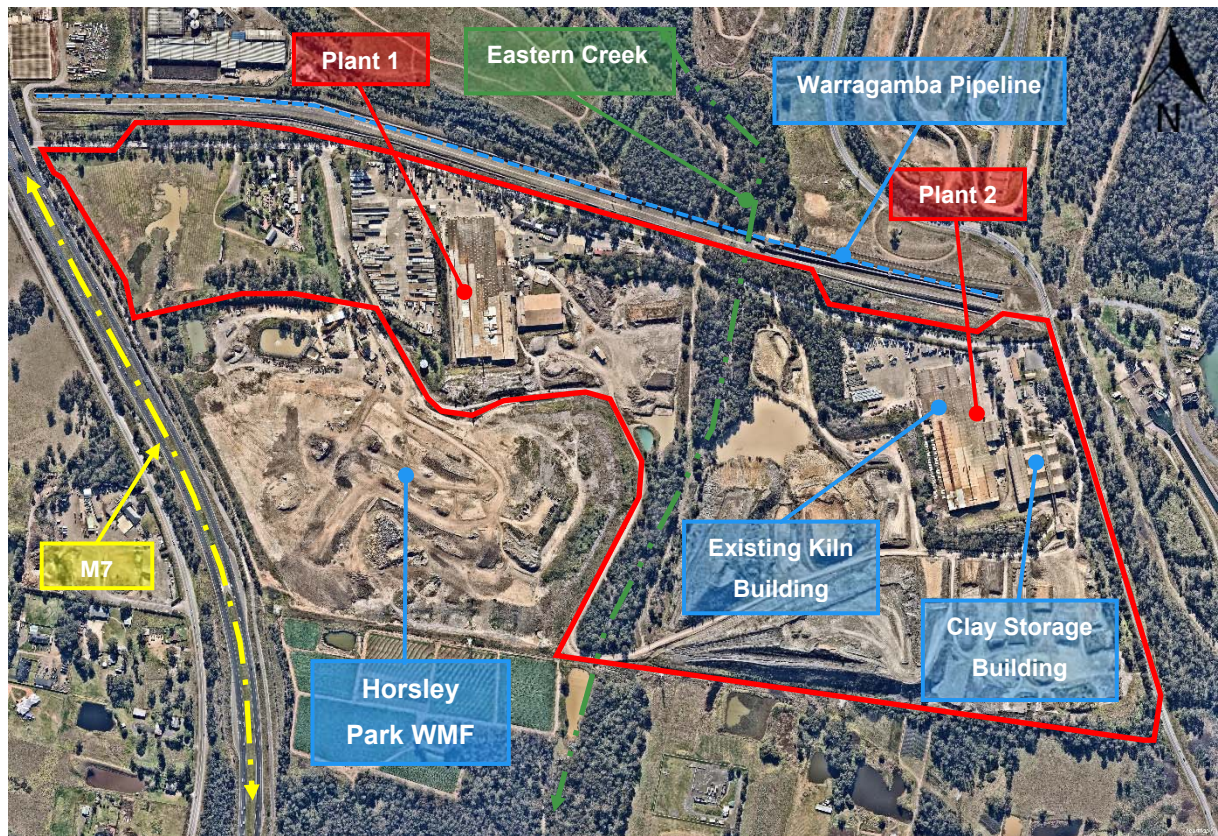


**Figure 2 | Site Context**

A major interchange between the M4 and M7 motorways is located three km north of the site, which connects the site to the Sydney CBD and western Sydney suburbs. The site is in private ownership and not owned or managed by the Western Sydney Parklands Trust (WSPT).

The site is unzoned, which is the case with all land in the Parklands, under State Environmental Planning Policy (Western Sydney Parklands) 2009 (Parklands SEPP). The site contains an existing quarry, brick manufacturing, brick display and sales facility (known as Austral Bricks, which is one of the brands of building materials manufactured by the Applicant) which has operated since the 1960s. The Plant 1 facility is located in the north-western part of the site and the Plant 2 facility is within the north-eastern part of the site (see **Figure 3**). In addition, the Horsley Park Waste Management Facility (WMF) is located directly to the south-west of the Plant 2 facility.





**Figure 3 | Site Layout**

Eastern Creek flows through the centre of the site and is bound by riparian forest vegetation which is heavily impacted by weeds. Eastern Creek meets the Hawkesbury River approximately 25 km to the north. There are no known significant items of Aboriginal or European Heritage on the site. An electricity transmission line runs along part of the southern site boundary before deviating to the south-east away from the site.

#### 1.4 Surrounding Land Uses

The site is surrounded by a range of land uses which include:

- SP2 - Infrastructure zoned land containing the WaterNSW Warragamba water pipelines, located immediately to the north and east;
- the Eastern Creek Waste Management Centre (DA 271-6-2003) and Sydney Dragway further to the north;
- Prospect Reservoir and filtration plant to the east and south-east;
- rural residential properties containing low intensity agricultural uses (such as market gardens) to the south along Chandos Road and to the west in Horsley Park;
- IN1 - General Industrial Zoned land further to the west, which falls within the Western Sydney Employment Area; and
- RU4 - Primary Production Small Lots zoned land with associated rural residential dwellings to the west on the other side of the M7 and Wallgrove Road (see **Figure 2**).

The nearest residence is located approximately 730 metre (m) from the southern boundary of the site on Chandos Road.

## 1.5 Other Development Approvals

The Applicant operates an existing brick manufacturing plant, including clay and shale extraction on the site. All development approvals on the site have been identified in **Table 1** below.

**Table 1** | Development Approvals

Development	Description	Consent Authority	Date
DA No. 145/20/33	Manufacture of bricks and the extraction of clay and shale	Blacktown Shire Council	17 November 1960
DA No. 104/83	Factory extensions	Blacktown City Council	8 August 1983
DA No. 577/97	Use of the site for the purpose of a solid waste landfill with a capacity of 430,000 tpa	Blacktown City Council	8 December 1998
DA No. 708/2005	Extensions to the existing sales office of Austral Bricks	Blacktown City Council	12 July 2005
DA No. 1431/2005	Construction of a single storey administration building for the Austral Brick Company	Blacktown City Council	24 March 2006
DA No. 880/2006	Alterations and additions to Austral Bricks' Sales Office	Blacktown City Council	13 December 2006
DA No. 1510.1/2008	Demolition of a portable building and covered pergola and alterations and additions to an existing office building for Austral Bricks	Blacktown City Council	20 October 2009
DA No. 1373.1/2009	Erection of a brick display panel with dimensions 10 m x 10 m.	Blacktown City Council	16 April 2010
DA No. 286.1/2012	Installation of a gas pipeline for the delivery and use of captured landfill gas in the brick manufacturing process	Blacktown City Council	12 November 2013

In addition, the site has an Environment Protection Licence (EPL) 546 issued by the Environment Protection Authority. The EPL allows for the production of up to 200,000 tonnes of 'ceramics' and the 'crushing, grinding or separating' of up to two million tonnes of material annually. A variation to the EPL is likely to be required, if the development is approved.

## 1.6 Current Operations

Plant 2 historically operated as a face brick plant with an annual output of 80 million bricks. The kiln infrastructure and equipment were established and operational since the 1960's. Since July 2018, the Plant 2 facility has been out of operation due to product demand shortages and the costs associated with operations and upkeep of the facility.



## 2. Project Description

### 2.1 Description of the Development

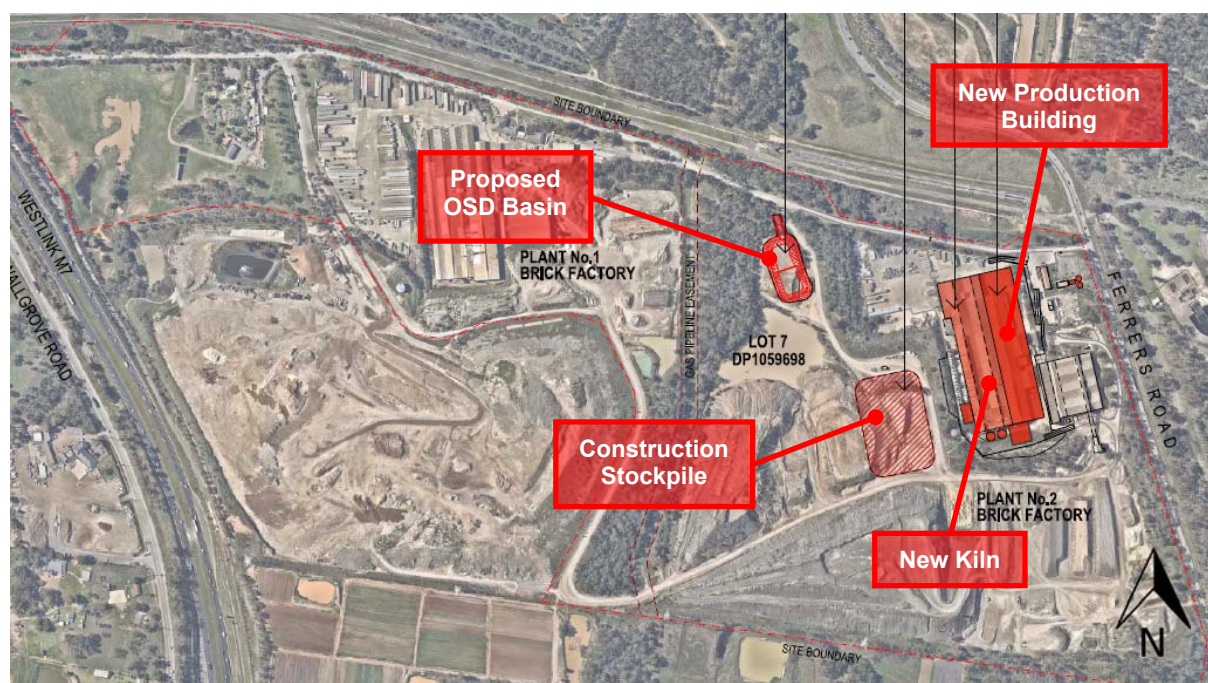
The Applicant is seeking development consent for upgrades to the existing Horsley Park Brickworks Plant 2 facility including replacing existing kilns with a new kiln and extension of the existing production building. The main components of the development are summarised in **Table 2** and shown in **Figure 4**, **Figure 5**, **Figure 6**, **Figure 7** and **Figure 8** and described in full in the Environmental Impact Statement (EIS) and Response to Submissions (RTS) report included in **Appendix B**.

**Table 2** | Main Components of the Project

Aspect	Description
<b>Development Summary</b>	<ul style="list-style-type: none"><li>• <b>Upgrade works to the Horsley Park Brickworks Plant 2 facility</b></li></ul>
Site area and development footprint	<ul style="list-style-type: none"><li>• The site is approximately 82 hectares in area</li><li>• Development footprint of approximately 4,485 m<sup>2</sup></li></ul>
Operation	<ul style="list-style-type: none"><li>• No changes to the existing output of the Plant 2 facility</li></ul>
Demolition	<ul style="list-style-type: none"><li>• Demolition of existing ramps and hardstand</li><li>• Demolition of existing clay bins</li><li>• Partial demolition of existing production building</li><li>• Demolition of electrical substation</li><li>• Demolition of existing stormwater drainage infrastructure</li></ul>
Construction	<ul style="list-style-type: none"><li>• New production building providing 11,350 m<sup>2</sup> of additional floor space</li><li>• New roof sheeting 13,250 m<sup>2</sup> in size</li><li>• New stack 32 m in height</li><li>• New clay bin footings of 900 m<sup>2</sup> and 460 m<sup>2</sup></li><li>• Construction of a new kiln</li></ul>
Earthworks, civil works and services extension	<ul style="list-style-type: none"><li>• New stormwater detention basin to the south-east of the development</li><li>• Cut off swale 600 mm wide x 100 mm high</li><li>• New outlet headwall discharging to existing dam</li><li>• New pits over existing stormwater pipes</li><li>• New drainage downpipes</li><li>• New inlet headwall</li></ul>



	<ul style="list-style-type: none"> <li>• New pavement areas</li> <li>• Landscape batters in the northern, eastern and southern extent of the works</li> </ul>
Roadworks	<ul style="list-style-type: none"> <li>• New internal fire access road around the perimeter of the Plant 2 building with a minimum width of 6 m</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>• 20 vehicles per day comprising 10 cars and 10 heavy vehicles</li> </ul>
Hours of operation	<ul style="list-style-type: none"> <li>• No changes to operational hours</li> </ul>
Capital investment value	<ul style="list-style-type: none"> <li>• \$26 Million</li> </ul>
Employment	<ul style="list-style-type: none"> <li>• 60 full-time equivalent construction jobs and retains 35 operational jobs</li> </ul>



**Figure 4 | General Arrangement Plan**

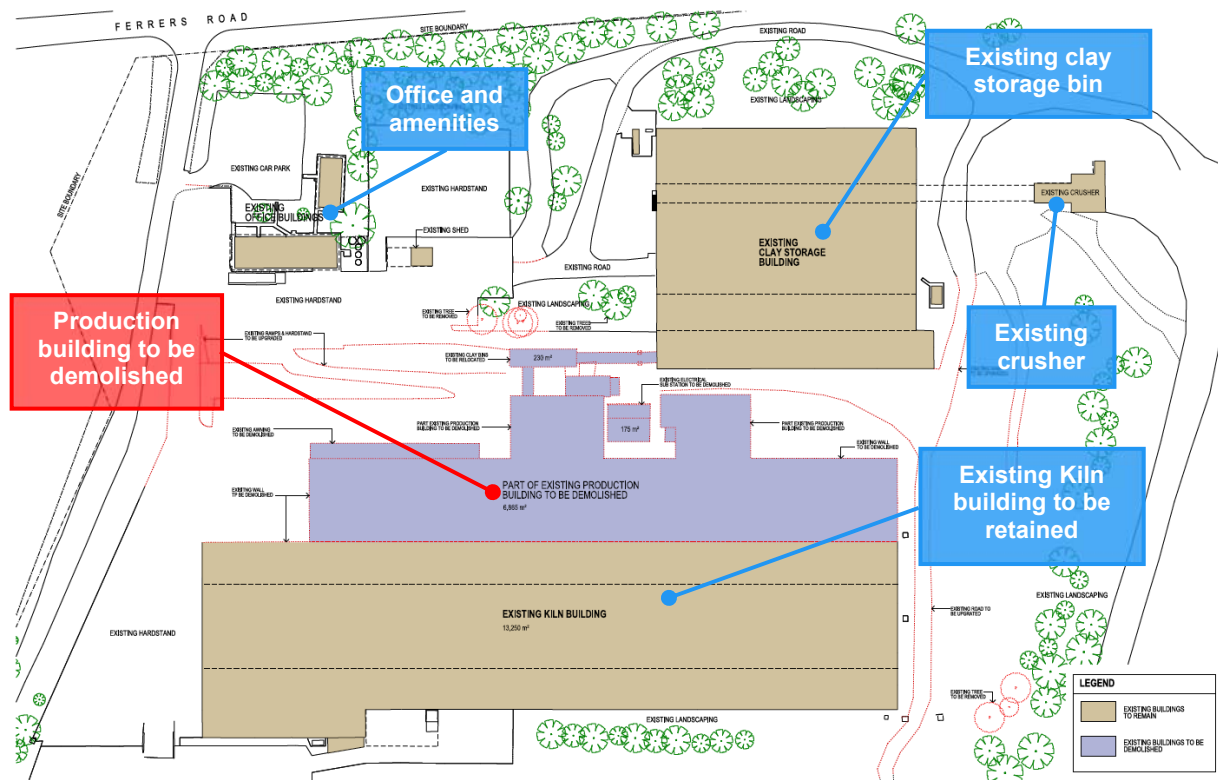


Figure 5 | Proposed Demolition

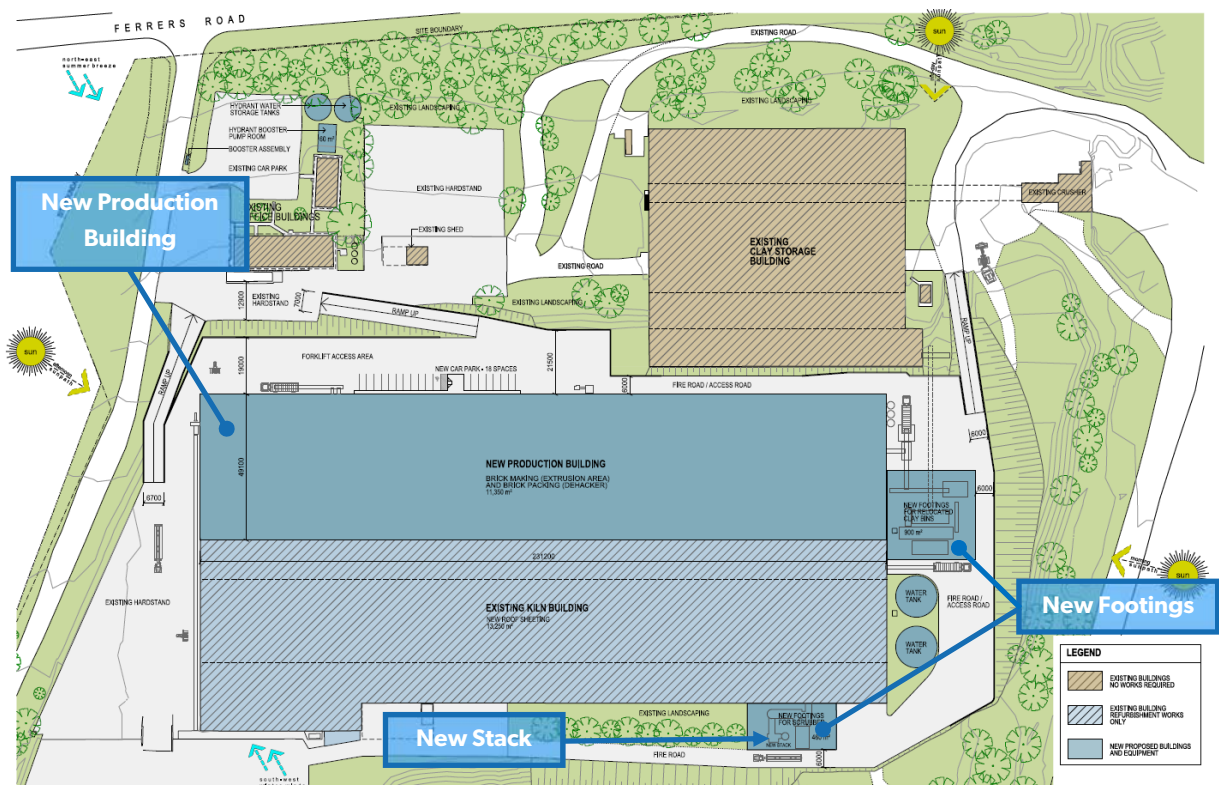
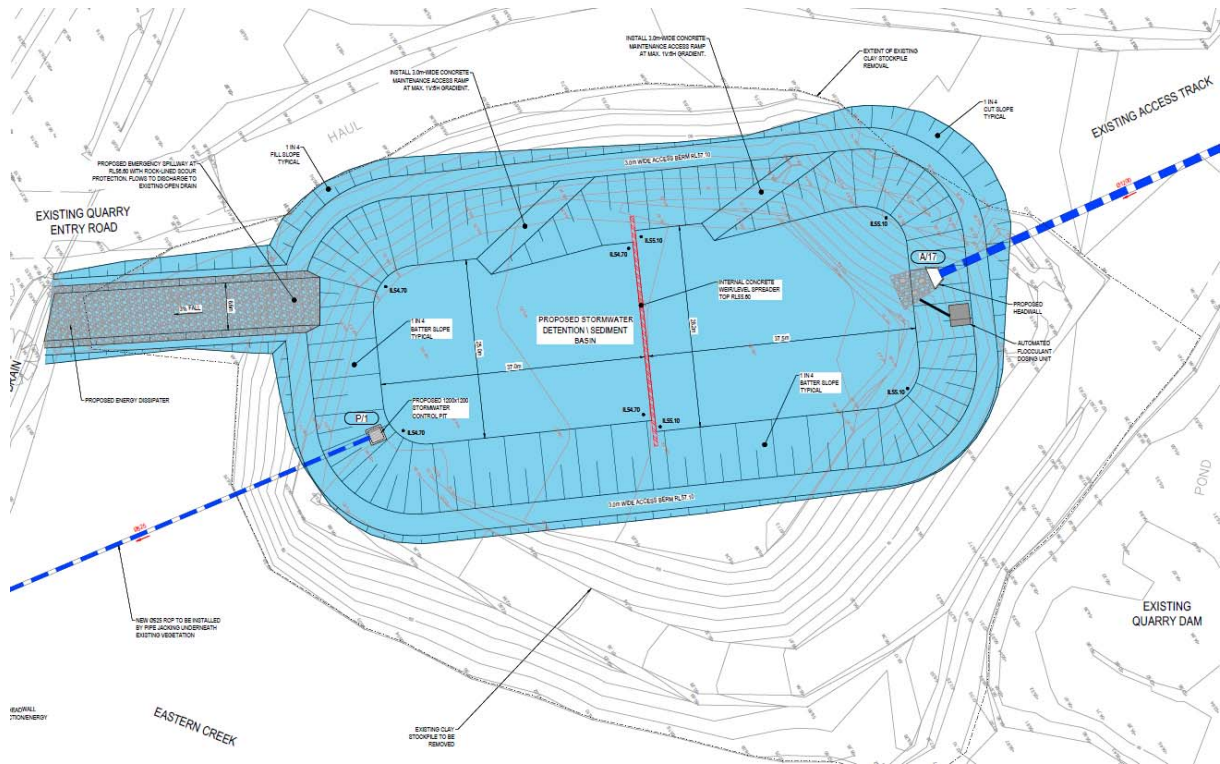
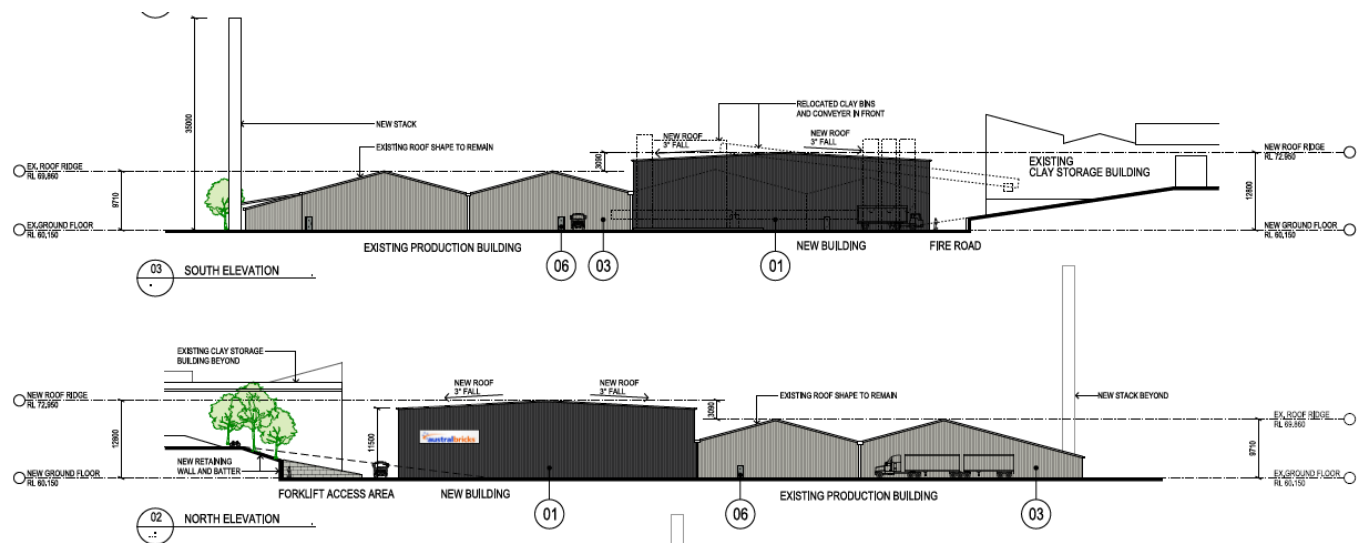


Figure 6 | Proposed Development





**Figure 7 | Proposed Stormwater Detention/ Sediment Basin**



**Figure 8 | Southern and Northern Elevations**

## 2.2 Infrastructure and Staging

The Plant 2 upgrade works are proposed to be undertaken over the course of four stages as follows:

- Stage One: Demolition and construction of stormwater infrastructure – five months
- Stage Two: New kiln installation & existing building refurbishments – 15 months
- Stage Three: Construction of new production building – eight months
- Stage Four: Civil works – five months

The Applicant has noted Stages Two and Three will be undertaken concurrently and Plant 2 will be out of operation during the Stage Two and Three works period.

## 2.3 Process Description

The operational processes of the facility involve the manufacturing, storage and distribution of brick product. The manufacturing of bricks at the facility is identified in **Figure 9** and **Figure 10** and undertaken over the following the operation stages:

### 1. *Raw Material Preparation*

The preparation of raw materials includes the extraction of clay and shales from the adjoining quarry via the use of heavy plant. The raw materials are fed into crusher machinery and crushed to a particle size of 10 cm and mixed with various clays. The crushed material is transferred by conveyor to a pan mill for further crushing of the material.

### 2. *Shaping*

Crushed materials are then shaped as either semi-dry pressed bricks or extruded bricks. Semi-dry pressed bricks consist of 10 – 12% water content and are compressed into a steel mould under the materials weight. Extruded bricks consist of 18 – 25% water which are pressed through column shaped tubes and cut into bricks by wire cutter.

### 3. *Drying*

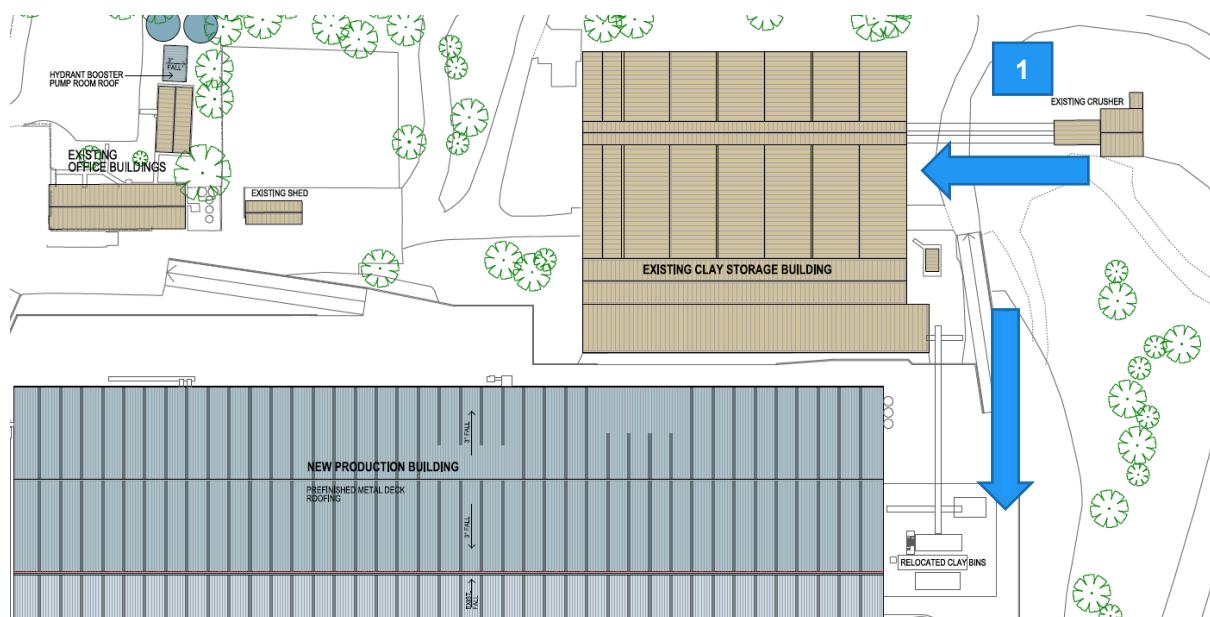
Pressed bricks are subsequently loaded onto kiln cars and dried by small fire and hot exhaust gases from the kiln. Extruded bricks have a low moisture content and therefore do not require drying. They are set on kiln cars and proceed onto firing.

### 4. *Firing*

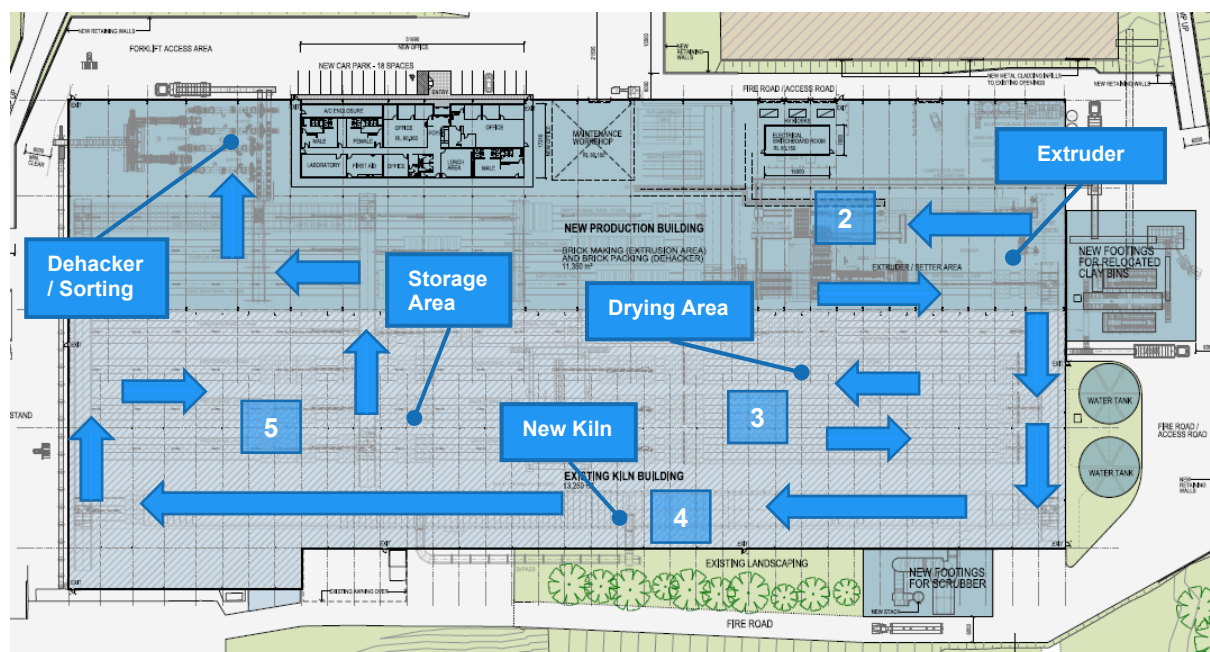
Bricks are moved on kiln cars through the kiln and fired at temperatures between 1,000 degrees Celsius (°C) and 1,200 °C.

### 5. *Packing*

Processed bricks are stacked vertically between 50 to 60 bricks high and strapped into a 'leaf'. Approximately four leaves are strapped together to form a pack for transportation.



**Figure 9 | Operational Process 1**



**Figure 10 | Operational Process 2**

## 2.4 Applicant's Need and Justification for the Development

The Applicant has stated that the upgrade to the brick works facility is required to reduce the environmental impacts associated with the existing two kilns which will be upgraded to address environmental concerns of the site operation regarding gas usage and emissions. In particular, the two current kilns are identified as being outdated as the kilns have been operating since the 1960's without any significant upgrade works. Therefore, Plant 2 requires the construction and implementation of an updated kiln to improve environmental and operational efficiencies of the facility. The proposed upgrade works are estimated to improve the gas efficiency of the facility by reducing gas energy use per brick by 30%. In addition, the improved kiln is anticipated to reduce greenhouse gas emissions by 40%.

Furthermore, the extension of the production building will accommodate an increased storage area for the kiln car and the relocation of the existing de-hacker which will improve the emergency egress and movement flows for staff to address occupational health and safety requirements.

The Applicant has identified specifically the following needs of the proposed development:

- to improve the site's production efficiency
- to improve the site's sustainability performance
- to improve the site's environmental performance regarding air quality impacts, heat loss and gas usage
- to reduce specific work health and safety risks at the site.

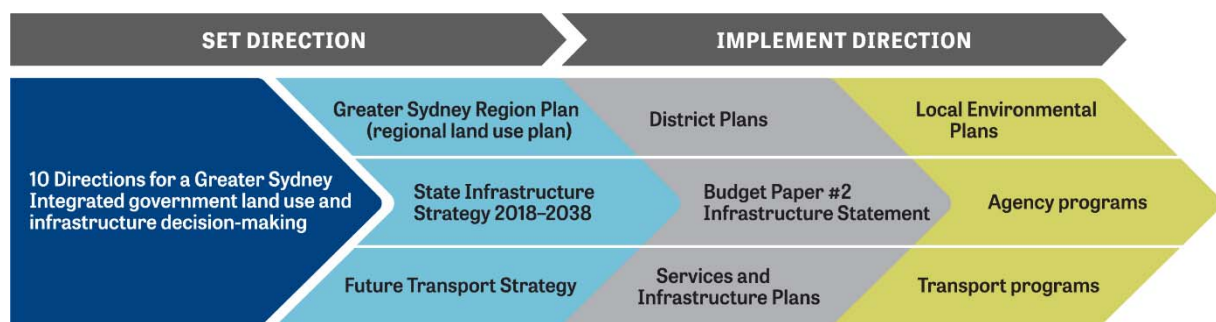
The Applicant has noted that no changes to operational capacity of the development is proposed.



## 3. Strategic Context

### 3.1 Greater Sydney Region Plan, 2018

The vision of the 'Greater Sydney Region Plan 2018, A Metropolis of Three Cities' falls within the integrated planning framework for Sydney (see **Figure 11**) and seeks to meet the needs of a growing and changing population by transforming Greater Sydney into a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. It brings new thinking to land use and transport patterns to boost Greater Sydney's liveability, productivity and sustainability by spreading the benefits of growth.



**Figure 11** | Integrated Planning for Greater Sydney

Objective 23 outlines that industrial and urban services land is to be planned, retained and managed. Strategy 23.1 also recognises the need for retaining industrial and urban services land uses for skilled industrial employment and to safeguard industrial development from competing land use pressures such as residential and mixed-use zoning. By retaining the existing industrial use of the site and providing construction jobs within western Sydney the proposed development will support the objectives and strategies of the Greater Sydney Region Plan.

### 3.2 Western Sydney Parklands Plan of Management 2030

The Western Sydney Parklands Plan of Management 2030 (POM) sets the strategic direction to guide the operation and the development of the parklands towards 2030. The POM provides defining principles for the Parklands as follows:

- protect natural environmental values
- respond to the needs of new and existing communities
- build a strong identity
- respect cultural heritage
- provide educational opportunities
- enhance community health
- co-locate complementary land uses
- be accessible to visitors



- be financially and operationally sustainable
- contribute to the economic development of Western Sydney
- adopt a partnership approach

Pursuant to the POM, the site is located within the Wallgrove Precinct identified as Precinct 6 (**Figure 12**).



**Figure 12 | Wallgrove Precinct Map**

The development is consistent with the principles for the Parklands as the new kiln will improve the operational and environmental efficiencies of the facility. In addition, the increased efficiencies will contribute to the economic development of Western Sydney.



## 4. Statutory Context

### 4.1 State Significant Development

The development is State significant development pursuant to section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it has a capital investment value (CIV) of more than \$10 million on land identified as being within the WSP as defined in the State Environmental Planning Policy (Western Sydney Parklands) 2009 (WSP SEPP). This meets the criteria in Clause 5 of Schedule 2 in State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

On this basis, the Minister or a delegate may determine the carrying out of the development.

### 4.2 Permissibility

The site is located within the WSP and is subject to the zoning provisions outlined in the WSP SEPP. The site is unzoned and all land uses are permissible with development consent with the exception of residential accommodation, which is prohibited. The development is a type of industrial development, which represents an innominate use with respect to Clause 11(2) of the WSP SEPP and is therefore permissible with development consent.

### 4.3 Consent Authority

The Minister is the consent authority for the development under section 4.5 of the EP&A Act. On 9 March 2020 the Minister delegated the functions to determine SSD applications to the Executive Director, Regions, Industry and Key Sites where:

- the relevant local council has not made an objection and
- there are less than 50 public submissions in the nature of objections and
- a political disclosure statement has not been made.

Of the 10 submissions received, none objected to the proposed development and no submissions were received from the public. Council did not object to the development and no reportable political donations were made by the Applicant in the last two years or by any persons who lodged a submission.

Accordingly, the application can be determined by the Executive Director, Regions, Industry and Key Sites under delegation.

### 4.4 Other Approvals

Under section 4.42 of the EP&A Act, other approvals may be required and must be approved in a manner that is consistent with any Part 4 consent for the SSD under the EP&A Act.

In its submission, the EPA advised the development does not constitute any changes to the scheduled activity under the *Protection of the Environment Operations Act 1997* (POEO Act), however a variation

to the existing Environment Protection Licence (EPL) is required to reflect environmental monitoring requirements of upgraded facility infrastructure.

#### 4.5 Considerations under Section 4.15 of the EP&A Act

Section 4.15 of the EP&A Act sets out matters to be considered by a consent authority when determining a development application. The Department's consideration of these matters is set out in **Section 6** and **Appendix D**. In summary, the Department is satisfied the proposed development is consistent with the requirements of section 4.15 of the EP&A Act.

#### 4.6 Environmental Planning Instruments

Under section 4.15 of the EP&A Act, the consent authority, when determining a development application, must take into consideration the provisions of any environmental planning instrument (EPI) and proposed EPI (that has been subject to public consultation and notified under the EP&A Act) that apply to the development.

The Department has considered the development against the relevant provisions of several key EPIs including:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy (Western Sydney Parklands) (Parklands SEPP)
- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- State Regional Environmental Plan No. 20 Hawkesbury – Nepean River (SREPP 20)

Development Control Plans (DCPs) do not apply to SSD under Clause 11 of the SRD SEPP. However, the Department has considered the relevant provisions of the Fairfield City Wide DCP 2013 in its assessment of the development in **Section 6** of this report.

Detailed consideration of the provisions of all EPIs that apply to the development is provided in **Appendix D**. The Department is satisfied the proposed development complies with the relevant provisions of these EPIs.

#### 4.7 Public Exhibition and Notification

In accordance with section 2.22 and Schedule 1 to the EP&A Act, the development application and any accompanying information of an SSD application are required to be publicly exhibited for at least 28 days. The application was placed on public exhibition from Wednesday 9 October 2019 until Tuesday 5 November 2019. Details of the exhibition process and notifications are provided in **Section 4.1**.

#### 4.8 Objects of the EP&A Act

In determining the application, the consent authority should consider whether the development is consistent with the relevant objects of the EP&A Act. These objects are detailed in section 1.3 of the EP&A Act. A response to the Objects of the EP&A Act is provided in **Table 3**.



**Table 3 | Considerations Against the EP&A Act**

Objects of the EP&A Act	Consideration
(a) <i>to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources</i>	The development would improve the current management, development and utilisation of clay resources for the State.
(b) <i>to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment</i>	The development includes upgrading the existing two kilns with a more environmentally efficient kiln. The development will reduce the amount of natural gas consumption and subsequent pollution emissions to operate the facility. The Department considers this is consistent with the principles of ESD.
(c) <i>to promote the orderly and economic use and development of land</i>	The development is a permissible use which would promote the orderly and economic development of land.
(d) <i>to promote the delivery and maintenance of affordable housing</i>	N/A
(e) <i>to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats</i>	The Department's assessment in <b>Section 6</b> of this report demonstrates that, with the implementation of recommended conditions of consent, the impacts of the development can be mitigated and/ or managed to ensure an acceptable level of environmental performance.
(f) <i>to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)</i>	N/A
(g) <i>to promote good design and amenity of the built environment</i>	N/A
(h) <i>to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants</i>	The alterations and additions of the existing brick works facility is sought to improve the sites compliance with relevant occupational work health and safety standards.
(i) <i>to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State</i>	The Department has assessed the development in consultation other Government authorities. This is consistent with the object of sharing the responsibility for environmental planning between the different levels of government in the State.
(j) <i>to provide increased opportunity for community participation in environmental planning and assessment</i>	The application was exhibited in accordance with Schedule 1 Clause 9 of the EP&A Act to provide public involvement and participation in the environmental planning and assessment of this application.

## 4.9 Western Sydney Parklands Act 2006

The *Western Sydney Parklands Act 2006* (WSP Act) establishes the Western Sydney Parklands Trust (the Trust), defines the boundaries of the Parklands and guides its management. Clause 12 of the WSP Act identifies the principal function of the Trust is to '*develop the Parklands into a multi-use urban parkland for the region of Western Sydney and to maintain and improve the Parklands on an on-going basis*'.

Section 12(j) of the WSP Act identifies further specific functions including the provision or facilitation of commercial, industrial, retail and transport activities and facilities, with the object of supporting the viability of the management of the Parklands. The development is considered to enable the ongoing management of industrial land within the WSP.

## 4.10 Ecologically Sustainable Development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) *the precautionary principle*
- (b) *inter-generational equity*
- (c) *conservation of biological diversity and ecological integrity*
- (d) *improved valuation, pricing and incentive mechanisms.*

The potential environmental impacts of the development have been assessed and, where potential impacts have been identified, mitigation measures and environmental safeguards have been recommended.

As demonstrated by the Department's assessment in **Section 6** of this report, the development is not anticipated to have any adverse impacts on native flora or fauna, including threatened species, populations and ecological communities, and their habitats. The development does not require the removal of vegetation. As such, the Department considers that the development would not adversely impact on the environment and is consistent with the objectives of the EP&A Act and the principles of ESD.

## 4.11 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Under the EPBC Act, assessment and approval is required from the Commonwealth Government if a development is likely to impact on a matter of national environmental significance (MNES), as it is considered to be a 'controlled action'. The EIS for the development included a preliminary assessment of the MNES in relation to the development and concluded the development would not impact on any of these matters and is therefore not a 'controlled action'. As such, the Applicant determined a referral to the Commonwealth Government was not required.



## 5. Engagement

### 5.1 Consultation

The Applicant, as required by the Planning Secretary's Environmental Assessment Requirements (SEARs), undertook consultation with relevant local and State authorities as well as the community and affected landowners. The Department undertook further consultation with these stakeholders during the exhibition of the EIS and throughout the assessment of the application. These consultation activities are described in detail in the following sections.

#### 5.1.1 Consultation by the Applicant

The Applicant undertook a range of consultation activities throughout preparation of the EIS including:

- meeting with the Department and the former Office of Strategic Lands (OSL)
- A letter distribution to State government agencies including:
  - Environment Protection Authority (EPA)
  - Fairfield City Council (Council)
  - Transport for NSW (TfNSW)
  - Environment, Energy and Science Group (EES)
  - The Department of Primary Industries (DPI) (now part of Regional NSW)
  - Fire and Rescue NSW (FRNSW)
- A letter distribution to surrounding landowners on 9 April 2019.

#### 5.1.2 Consultation by the Department

After accepting the EIS for the application, the Department:

- made it publicly available from **Wednesday 9 October 2019** until **Tuesday 5 November 2019**:
  - on the Department's website
  - at the Department's Sydney office (Pitt Street, Sydney)
  - at Fairfield City Council (86 Avoca Road, Wakeley)
  - at Wetherill Park Library (561-583 Polding Street, Wetherill Park)
- notified landowners in the vicinity of the site about the exhibition period by letter
- notified and invited comment from relevant State government authorities, Blacktown City Council and Fairfield City Council by letter
- advertised the exhibition in the Fairfield Advance and the Fairfield City Champion.

### 5.2 Submissions

A total of 10 submissions were received on the proposed development during the exhibition period, including eight from public authorities and two from Councils. No submissions were received from special interest groups or the general public. Of the 10 submissions received, none objected to the

development. A summary of the issues raised in submissions is provided below, with a copy of each submission included in **Appendix B**.

### 5.2.1 Key Issues – Government Agencies

**EPA** did not object to the proposed development but requested additional information regarding the assessment undertaken of air quality impacts. In particular, the EPA raised concern regarding inconsistencies of dispersion modelling, fugitive emissions calculations, modelling meteorology along with the offsite hydrogen fluoride impacts and the efficiency of the proposed scrubber

The EPA additionally noted the noise assessment of the EIS was satisfactory and would not require a change to the noise limits specified in the EPL.

**EES** did not object to the proposed development but requested the Applicant submit an Aboriginal Cultural Heritage Assessment Report (ACHAR) and a Biodiversity Assessment Report (BDAR). EES noted the development includes the removal of Cumberland Plain Woodland (CPW) and considered there to be existing vegetation links between significant bushland in Prospect Reservoir and along Eastern Creek with the site which may have significant biodiversity values.

**WaterNSW** did not object to the proposed development but requested the Applicant to provide additional stormwater design modelling and provided recommended conditions of consent.

**RMS** did not object to the development but noted the development is to be clear of the existing RMS easement to the west of the site and for a Construction Traffic Management Plan (CTMP) to be prepared prior to the issue of a Construction Certificate (CC).

**WSPT** did not object to the development but requested the Applicant to consider the implementation of environmental or recreational access links through the site and how the proposal will contribute to the implementation of the objectives and long-term vision for the Parklands in line with the WSP POM.

**Western Sydney Airport (WSA)** did not object to the development but requested the Applicant provide a plume rise assessment.

**DPI** did not object to the development and provided no comment.

**FRNSW** did not provide a submission on the development.

### 5.2.2 Key Issues – Councils

**Fairfield Council** did not object to the development but requested the Applicant provide additional information on the stormwater drainage design, an assessment of flora and fauna impacts and traffic engineering, including requesting additional staff parking spaces be provided.

**Blacktown Council** did not object to the development and noted the development would likely have minimal impacts on the Blacktown LGA.

## 5.3 Response to Submissions

On 6 February 2020, the Applicant provided a Response to Submissions (RTS) on the issues raised during the exhibition of the development (see **Appendix C**). In particular, the RTS included an amended

AQIA, a Biodiversity Development Assessment Report (BDAR), an Aboriginal Due Diligence Assessment, amended Landscape Plans and an amended Waste Management Plan (WMP). The RTS was referred to the agencies that provided a submission during the exhibition of the EIS and the following comments were received:

**Fairfield City Council** did not object to the development but raised further matters for consideration relating to the Obstacle Limitation Surfaces (OLS), biodiversity and on-site detention (OSD) design. Council noted although the proposed stack maybe under the OLS height of the Western Sydney Airport (WSA), the plume dispersion may still be considered a controlled activity in accordance with Section 182 of the *Airports Act 1996* (Airports Act). Council also noted concerns with the findings of the BDAR provided in the RTS.

**EPA** advised the amended AQIA was satisfactory and had no further issues. The EPA additionally provided recommended conditions for the Department's consideration.

**EES** advised the BDAR provided in the RTS was satisfactory but, EES noted a due diligence assessment is not suitable in assessing the impacts of major projects on Aboriginal cultural and heritage values.

**WaterNSW** reviewed the RTS and advised the Applicant had not satisfied the requirements of Clause 13 of the WSP SEPP in relation to drinking water infrastructure. In addition, further flood modelling was requested.

**WSPT** advised its comments had been addressed in the RTS and that the Applicant's response was reasonable given the existing use and context of the site.

**WSA** advised the plume rise assessment provided by the Applicant adequately demonstrated the plume rise of the development would not impact on obstacle limitation surfaces (OLS).



## 6. Assessment

The Department has considered the EIS, the issues raised in the submissions, the Applicant's RTS and supplementary information in its assessment of the development. The Department considers the key assessment issues are:

- Air Quality
- Biodiversity Impacts

A number of other issues have also been considered. These issues are considered to be minor and are addressed in **Table 7** under **Section 6.3**.

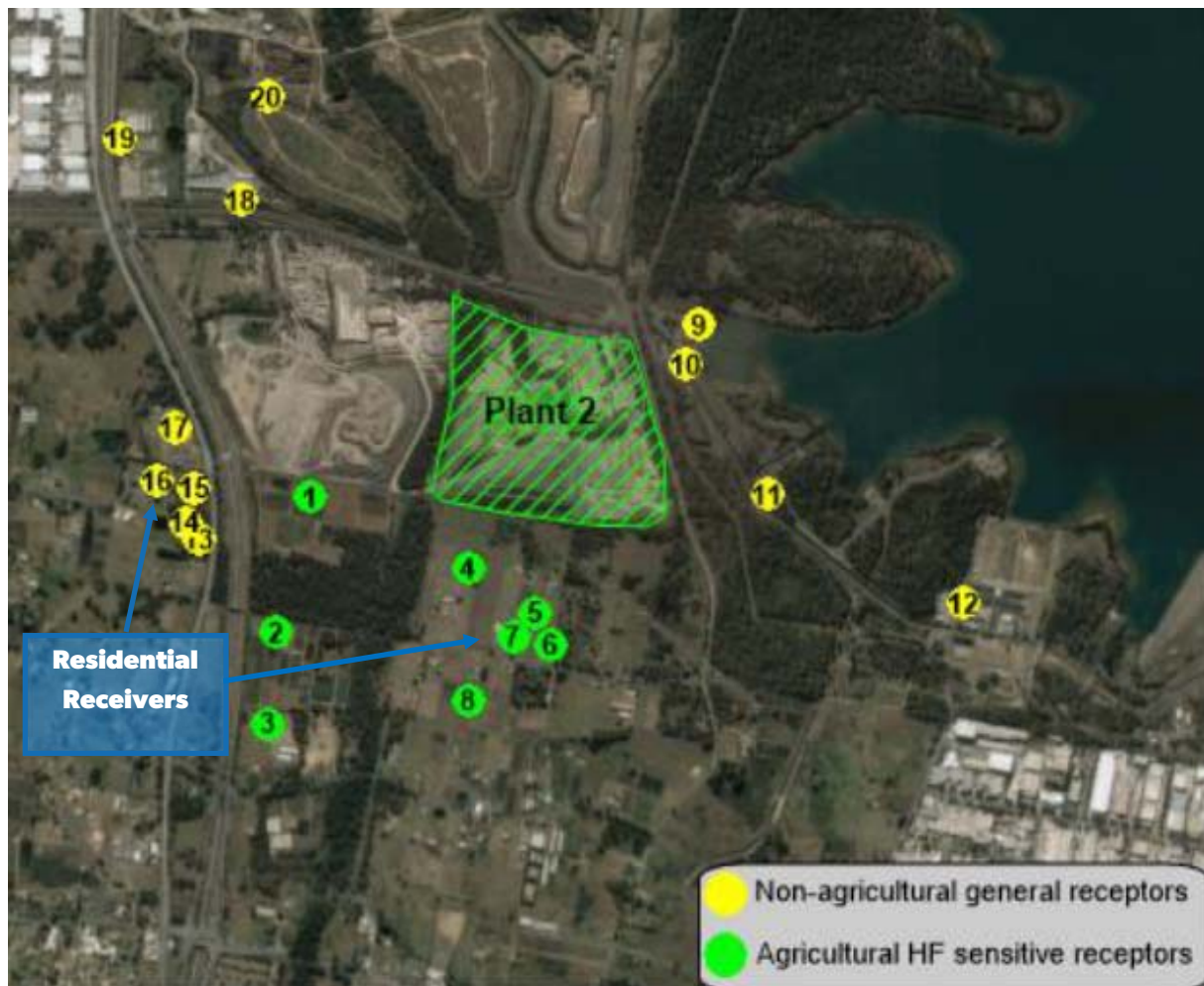
### 6.1 Air Quality and Odour

The Plant 2 facility currently operates by burning natural gas to provide heat for the two rotary kilns, resulting in pollutants being emitted from the kiln exhaust stack. The proposed Plant 2 kiln upgrade is intended to improve the environmental efficiency of the brickworks facility by reducing concentrations of pollutants such as Hydrogen Fluoride (HF). Fugitive particulate emissions, such as dust and fine particles, will also be generated during the construction and installation of the new kiln and associated upgrade works. The proposed development may have an impact on local air quality and have the potential to affect human health and the environment, including on nearby water resources, such as the adjacent Prospect Reservoir, if not appropriately mitigated.

The EIS included an Air Quality Impact Assessment (AQIA) prepared by Airlabs Environmental Pty Ltd to inform the likely air quality impacts of the upgraded facility. Subsequent to comments raised by the EPA in its submission, the Applicant revised the AQIA. The AQIA has been undertaken in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*, EPA, January 2017 (Approved Methods).

The AQIA has considered the locations of sensitive receivers (R1 to R20) in its assessment of air quality impacts (see **Figure 13**). These are located within a 1.4 km radius of the development site and include both agricultural receptors (R1 to R8) and non-agricultural receptors (R9 to R20). The closest residential receivers are R4 and R5, which are located approximately 730 m to the south of the site on Chandos Road in Horsley Park.





**Figure 13 | Location of sensitive receivers**

The AQIA identifies the point source for the new kiln being the upgraded 35 m stack. The operation of the kiln is proposed to use 100% natural gas as a fuel source and will generate emissions of Hydrogen Fluoride (HF), Sulfur Oxides (SO<sub>2</sub>), oxides of Nitrogen (NO<sub>x</sub>) and Nitrogen Dioxide (NO<sub>2</sub>) and sulfuric acid mist.

HF is known to be the key pollutant for the existing operation and previous exceedances have been reported for Plant 2 operations. To prevent any future HF exceedances, the Applicant has proposed the following emissions control measures for the management of gas pollutants:

- Fluorine cascade scrubber system to reduce high fluorine concentrations by 45 - 65%; and
- Replace existing 16m high stack with new 35 m stack to improve the dispersion of pollutants.

The AQIA has conducted a Level 2 impact assessment in accordance with the Approved Methods which involves dispersion modelling using site-specific input data. The AQIA has also undertaken an assessment of the cumulative impacts of the development by quantifying the emissions data of existing and adjoining Plant 1 and Plant 3 brickwork operations.

In addition, the AQIA identified fugitive dust and particle emissions are generated during operation activities such as loading and unloading raw materials, crushing and milling, heavy vehicle movements

and wind erosion. The emissions have been quantified as part of the AQIA, including an assessment of particulate matter with an equivalent diameter of 10 microns or less (PM<sub>10</sub>), particulate matter with an equivalent diameter of 2.5 microns or less (PM<sub>2.5</sub>) and Total Suspended Particulates (TSP).

In accordance with the EPA's Approved Methods, the AQIA modelled the existing and proposed cumulative ground-level concentrations of specific emissions at the identified sensitive receptors, incorporating the proposed emission control measures.

#### Pollutant Emissions

The AQIA provides air dispersion modelling conducted using the USA-EPA non-steady CALPUFF dispersion model which included the proposed 35 m stack height in the modelling. The cumulative impact of emissions from surrounding emissions sources and the direct environment were also considered in the air dispersion modelling of the AQIA.

The concentration limit for HF in accordance with the HF Impact Assessment Criteria (IAC) of the POEO Act is identified as 50 mg/m<sup>3</sup>. The AQIA noted the maximum historical non-compliance concentration of the Plant 2 kiln was recorded as 68 mg/m<sup>3</sup>. The maximum discharge concentration of HF for the development with the implementation of a cascade scrubber is identified in the AQIA as 20 mg/m<sup>3</sup>, being significantly below the concentration limits under the POEO Act. The emissions concentrations of SO<sub>2</sub>, NO<sub>2</sub> and sulfuric acid remain below the existing licence limits and the concentration limits under the POEO Act.

The cumulative impacts of the development were subsequently assessed against meteorological data of the locality. The AQIA considered the emissions of the existing Plant 1, Plant 3 brickwork facilities and the Horsley Park WMF in determining the cumulative air quality impacts of the site on both agricultural land uses and general land uses. The cumulative modelling predicted the concentrations of HF on 90-day, 30-day, 7-day and 24-hour averages. The modelling demonstrated HF concentrations would be below the impact assessment criteria for both agricultural and general land uses (see **Table 4**). The highest concentration of HF predicted by the modelling was a concentration of 0.16 µg/m<sup>3</sup> at receiver R1 over a 90-day period, achieving less than 64% of the agricultural land use impact assessment criteria (0.25 µg/m<sup>3</sup>).

**Table 4 | Summary of HF Cumulative Concentrations**

Model Predicted Maximum (100 <sup>th</sup> Percentile) HF Cumulative Concentrations (µg/m <sup>3</sup> )				
Agricultural Land Use Sensitive Receivers				
Averaging Period	90-days	30-days	7-days	24-hours
Impact Assessment Criteria (µg/m <sup>3</sup> )	0.25	0.4	0.8	1.5
Maximum	0.16	0.17	0.25	0.49
Percentage of Impact Assessment Criteria	64%	43%	31%	33%
General Land Use Sensitive Receivers				
Averaging Period	90-days	30-days	7-days	24-hours



<b>Impact Assessment Criteria</b> ( $\mu\text{g}/\text{m}^3$ )	0.5	0.84	1.7	2.9
<b>Maximum</b>	0.17	0.21	0.33	0.72
<b>Percentage of Impact Assessment Criteria</b>	34%	25%	19%	25%

The AQIA subsequently found the anticipated impacts of the Plant 2 upgrade works to be minor and noted the modelling suggested the upgrade works improved the environmental performance of the Plant 2 facility, particularly in terms of HF pollutant concentrations.

### *Fugitive Dust Emissions*

The AQIA predicted the incremental concentrations of fugitive dust emissions at all 20 receivers for TSP,  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$ . The predictions indicated all fugitive dust emissions were under the impact assessment criteria for both 24-hour and annual averages. The AQIA combined the predicted Plant 2 incremental concentrations data with the existing Plant 1 facility operations, the Horsley Park Waste Management Facility (WMF), the existing Plant 3 facility operations and the existing ambient background levels recorded from an EPA monitoring station located nearby at Prospect Reservoir.

The cumulative modelling indicated particulate matter concentrations were under the impact assessment criteria at all 20 sensitive receivers for all averaging periods. However, the AQIA noted sensitive receiver R1 located south of the Horsley Park WMF, was predicted to be close to exceeding the 24-hour average impact assessment criteria for  $\text{PM}_{2.5}$ . Results of the modelling indicated R1 could experience concentrations of up to  $24.94 \mu\text{g}/\text{m}^3$  compared to the impact assessment criteria of  $25 \mu\text{g}/\text{m}^3$ , however the majority of this contribution is from existing background levels (see discussion below). Furthermore, receiver R1 was also predicted to record a high annual average of  $\text{PM}_{2.5}$  cumulative concentrations with an annual average of 99.2% of the impact assessment criteria (see **Table 5**).

**Table 5** | Summary of particulate matter concentrations at R1 and R4

Model Predicted Maximum (100 <sup>th</sup> Percentile) Cumulative Concentrations ( $\mu\text{g}/\text{m}^3$ )					
Pollutant	TSP	PM10		PM2.5	
Averaging Period	Annual	24-hours	Annual	24-hours	Annual
<b>Impact Assessment Criteria (<math>\mu\text{g}/\text{m}^3</math>)</b>	90	50	25	25	8
<b>R1 (Most Impacted)</b>	49.08	42.63	20.29	24.94	7.94
<b>R4 (Closest Proximity)</b>	48.40	41.69	19.68	24.63	7.78

However, source contributor analysis identified the proposed development would only contribute to 0.5% of the average 24-hour concentrations and 1.1% of the average annual concentrations of  $\text{PM}_{2.5}$  at sensitive receiver R1. The results of the assessment reflected the existing ambient background levels

of PM<sub>2.5</sub> are high (see **Table 6**), contributing to 96.7% of the 24-hour average and 95.5% of the annual concentrations at sensitive receiver R1.

**Table 6 | PM<sub>2.5</sub> Concentrations Contributions**

Source Contribution – Average Maximum PM <sub>2.5</sub> Concentrations (µg/m <sup>3</sup> ) at R1		
Averaging Period	24-hours	Annual
Impact Assessment Criteria (µg/m <sup>3</sup> )	25	8
Plant 2 Facility	0.12 (0.5%)	0.09 (1.1%)
Plant 1, Plant 3 & WMF	0.69 (2.8%)	0.27 (3.4%)
Ambient Background Levels	24.12 (96.7%)	7.58 (95.5%)

Furthermore, the analysis also identified the contributions to PM<sub>2.5</sub> concentrations at sensitive receiver R4, located south of the Plant 2 facility on Chandos Road, was predicted to contribute 0.9% and 1.2% on a 24-hour and annual average respectively, of PM<sub>2.5</sub> concentrations. The AQIA therefore determined the proposed development would have a minimal contribution to concentrations of PM<sub>2.5</sub> and the high cumulative concentrations were representative of the existing ambient concentration levels of the area.

#### Department's Assessment

The EPA reviewed the EIS, RTS and the revised AQIA and advised the Department it was satisfied with the level of environmental assessment undertaken. In particular, the EPA was satisfied with the proposed cascade scrubber as a measure to reduce the maximum HF concentrations dispersed by the Plant 2 facility. The EPA noted the development would require a variation to the existing EPL and provided recommended conditions of consent including the installation of the proposed stack and cascade scrubber in accordance with the AQIA, operation of the development to comply with the requirements of the EPL and the preparation of a post-commissioning air quality report including emissions testing to confirm the performance of the development is consistent with the AQIA.

The Department has reviewed the AQIA and is satisfied the air quality impacts associated with the development's operation are below the relevant impact assessment criteria prescribed by the POEO Act for both incremental and cumulative emissions concentrations at all sensitive receivers of the development.

The Department is satisfied the proposed cascade scrubber and 35 m stack are effective in improving the dispersion and treatment of pollutants, particularly capping concentrations of HF to a maximum of 20 mg/m<sup>3</sup> to ensure the overall development can continue to meet the existing EPL limits. The Department considers the development will provide a substantial improvement to the dispersion control of HF concentrations and an overall reduction in air quality impacts generated from the site's operation compared to the previous operation of the facility. To further ensure any air emissions can be managed, the Department has recommended to ensure emissions are consistent with estimated predictions and further mitigation is available should issues be identified.

While the Department considers the existing ambient levels of particulate matter within the site's locality are high, the contribution of PM<sub>2.5</sub> from the proposed development would be minimal. The Department notes changes to the operational processes of the Plant 2 facility relate directly to the operation of the new kiln with dust generating activities such as crushing and screening, remaining unchanged and no changes to the maximum brick production of the Plant 2 facility. Furthermore, the fugitive emissions of the development have been demonstrated in the AQIA to be below the prescribed impact assessment criteria for all sensitive receivers with minimal contributions to already elevated ambient background concentration levels, presenting negligible impacts on the local amenity.

The Department recommends the Applicant implement an Air Quality Management Plan (AQMP) to ensure the operational air quality impacts are appropriately monitored and controlled, and effective contingency measures are identified prior to the commissioning of the upgraded facility. Furthermore, post-commissioning monitoring and reporting will be required to demonstrate HF emissions have been reduced at the Plant 2 facility and the emissions limits specified in the amended EPL are achieved.

The Department's assessment concludes the development incorporates effective measures and technology to mitigate the concentrations of pollutants emitted from the operation of the development. The Department considers the development to reduce the air quality impacts of the site's operations on the amenity of the locality. In addition, the Department acknowledges the development will have a negligible contribution to the cumulative concentrations of particulate matter within the site's vicinity. The Department is satisfied the Applicant's AQIA was undertaken in accordance with the relevant EPA guidelines and the POEO Act and represents a robust assessment of the predicted air quality impacts associated with the operation of the development.

## 6.2 Biodiversity Impacts

The development will require the removal of 0.62 hectares (ha) of vegetation surrounding the existing building footprint to accommodate the Plant 2 upgrade works. The vegetation clearing has the potential to impact on endangered flora and potential habitats of threatened fauna species. Vegetation clearing will include the loss of 0.11 ha of degraded Cumberland Plain Woodland. Additionally, the site is located between the Prospect Reservoir to the east and the WSP to the west with known riparian corridors within close proximity of the development. The development has the potential to impact on habitat connectivity and the inhabitation of listed endangered species under the *Biodiversity Conservation Act 2016* (BC Act).

Subsequent to consultation with EES, the Applicant provided a Biodiversity Assessment Report (BDAR) prepared by Cumberland Ecology for the development in accordance with the BC Act.

### Flora Impacts

The BDAR notes the site's existing vegetative condition is highly disturbed due to the historic and existing use of the site as a brick manufacturing facility. The extent of native vegetation within the development site is identified to be 0.14 ha, representing 8% of the Plant 2 site. The remaining 1.63 ha of land comprises of 0.49 ha planted exotic vegetation and 1.14 ha of hardstand or developed areas. Desktop assessment and field surveys were undertaken by Cumberland Ecology to identify threatened

species present within the development site to inform the BDAR. Surveying identified two plant community types (PCT) prevalent in the development site being 0.11 ha of Grey Box Forest Red Gum (PCT 849) and 0.03 ha of Swamp Oak (PCT 1232) (see **Figure 14**). The BDAR included an assessment of the integrity of the existing PCTs including the zones of vegetation and patch sizes. The BDAR provided low vegetation integrity scores of 29.2 for PCT 849 and 38 for PCT 1232.

The BDAR identified the development will require offsets to be undertaken due to the clearance of native vegetation in accordance with the Biodiversity Assessment Method (BAM). The clearance of PCT 849 will require the offsetting of 2 ecosystem credits and the clearance of PCT 1232 will require to offsetting of 1 ecosystem credit.

### *Fauna Impacts*

The BDAR stipulates the clearance of vegetation may impact on the habitat connectivity of local fauna and potentially threatened species. Desktop surveying identified 23 threatened fauna species with potential to be within the development site. Subsequent to the completion of field surveying, only one species was identified to require further assessment of potential impacts as vegetation did not present the necessary indicators to determine habitats such as hollow bearing trees for endangered bird species. The subject fauna species identified was the Cumberland Plain Land Snail.

Nine active search surveys were undertaken on the development site to identify the presence of the Cumberland Plain Land Snail. The searches consisted of checking within 1 m of the base of eucalypt trees within the development site and searching through leaf litter for both living snails and snail shells. The presence of Cumberland Plain Land Snails was not identified during the surveys.

In relation to connectivity, the BDAR notes the existing vegetation on site is disconnected with larger density clusters of native vegetation adjoining the site and is considered to only provide 'stepping-stone' connectivity for native fauna.

The BDAR considers the removal of vegetation to have a minor impact on the connectivity of mobile fauna considering the vegetation proposed to be removed is disconnected and existing vegetation links are prevalent surrounding the site for fauna to traverse. Furthermore, the BDAR notes potential fauna to frequent the sites locality such as the Grey-head Flying-fox forage at a minimum distance of 30 km from their direct habitat in which the vegetation to be removed would not be considered a direct foraging source or solely relied on as a habitat. The BDAR therefore recommend that no species credit offsetting was required in accordance with the BAM for fauna.

The BDAR additionally provided mitigation measures to manage potential impacts of construction works on native vegetation and habitat. These mitigation measures included weed management, delineating vegetation clearing limits, protective tree fencing and the staging of vegetation clearing.





**Figure 14 | Identified PCTs**

### *Department's Assessment*

The EIS and BDAR was referred to EES and Council for comment. EES advised the Department the BDAR provided by the Applicant was adequate and had no further comments. Council provided comments on the BDAR in its submission on the development which queried why species credit offsetting was not proposed to offset impacts to the Cumberland Plain Land Snail. EES subsequently confirmed the number of species credits proposed to be offset in the BDAR was correct and no further credits were required to offset the removal of vegetation.

The Department has considered the extent of vegetation to be removed to be minimal and disconnected from native vegetation linkages adjoining the development site. The Department additionally notes the Plant 2 facility is a disturbed site and has been operational since the 1960 being an undesirable habitat location for fauna. Furthermore, the Department acknowledges the development will not impact on connectivity values and sufficient habitat linkages are prevalent surrounding the site.

The Department’s assessment concludes the Applicant’s BDAR has undertaken a satisfactory assessment of the direct and indirect impacts the development would have on native flora and fauna in accordance with the BAM. The Department is satisfied the removal of vegetation will have a minimal impact on biodiversity values as the extent of vegetation is minimal and isolated from surrounding native vegetation clusters including riparian corridors. In addition, the Department is satisfied with the recommended mitigation measures in the BDAR to be implemented for the removal of vegetation to minimise any risks or further impacts on native vegetation and habitat.

The Department recommends conditions of consent be imposed requiring the Applicant to purchase and retire three species credits to offset the removal of native vegetation in accordance with the BC Act. Furthermore, the Department recommends the Applicant implement the proposed mitigation measure provided in the BDAR. With these measures, the Department is satisfied the development will have a negligible impact on biodiversity values within the locality and appropriately manage the removal of vegetation on site with minimal risk of impacting native vegetation and habitat.

6.3 Other Issues

The Department’s assessment of other issues is provided in **Table 7 | Assessment of other issues**.

**Table 7 | Assessment of other issues**

Consideration	Recommended Conditions
GHG Emissions	
<ul style="list-style-type: none"><li>The development is proposed to improve the environmental efficiency of the Plant 2 facility operations including reducing the consumption of gas fuel source and energy.</li><li>The EIS notes during the 2017 to 2018 financial year, the Plant 2 facility consumed approximately 335,693 gigajoules (GJ) of natural gas to produce approximately 28 million standard brick equivalents (SBE).</li><li>The approximate gas usage per SBE of the Plant 2 facility equates to 12 megajoules (MJ)/ SBE. The existing facility additionally consumed 6,154,526 kilowatt hours (kWh) during the 2017 to 2018 financial year in which approximately 0.22 kWh was consumed per SBE.</li><li>The development will have the production capacity to produce 80 million SBE per year with an approximate natural gas consumption of 475,637 GJ, providing a consumption rate of 6 MJ per SBE.</li></ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"><li>prepare and implement an AQMP.</li></ul>

Consideration	Recommended Conditions
<ul style="list-style-type: none"> <li>• The development will reduce the natural gas consumption of the facility's operation by 50% per SBE. The Plant 2 facility is predicted to consume 13,560,777 kWh per annum of electricity for the operation of the Plant 2 facility with a consumption rate of 0.17 kWh per SBE being a 26% reduction in electricity consumption.</li> <li>• The AQIA predicted the Plant 2 facility would have an efficiency rate of 0.54 CO<sub>2</sub>-e / annum per SBE, providing a 49% reduction of GHG emissions per SBE produced by the upgraded Plant 2 facility.</li> <li>• The predicted total GHG emissions generated by the Plant 2 facility of 43,226.8 CO<sub>2</sub>-e / annum was identified as contributing to 0.03% of the NSW 131.6 megatons (Mt) of CO<sub>2</sub>-e emissions per year and 0.008% of the national 524 megatons (Mt) of CO<sub>2</sub>-e emissions per year.</li> <li>• The Department notes no concerns were raised in the submissions regarding GHG emissions.</li> <li>• The Department has reviewed the EIS and AQIA and considers the proposed Plant 2 upgrade works to provide a significant reduction in total Scope 1 and Scope 2 GHG emission efficiency of 49%.</li> <li>• The Department notes the Plant 2 facility operations will remain compliant with the existing EPL licence limit of 200,000 tonnes of production capacity per annum.</li> <li>• The Department recommends the preparation and implementation of an AQMP to monitor and manage pollutant emissions from the operation of the development.</li> <li>• The Department's assessment concludes the development will significantly improve the operational efficiency of the Plant 2 facility by reducing the consumption of energy per SBE, subsequently reducing the rate of GHG emissions generated per SBE.</li> </ul>	
Construction Air Quality Impacts	
<ul style="list-style-type: none"> <li>• The development is proposed to improve the environmental efficiency of the Plant 2 facility operations including reducing the consumption of gas fuel source and energy.</li> <li>• The construction activities related to the development with the potential to generate dust include earthworks operations, handling of spoil and structural fill material, wind erosion from exposed areas and stockpiles and heavy vehicle movements.</li> <li>• The development is proposed to be undertaken in four stages approximately 730 m from the nearest residential receiver. The Applicant has considered the short-term and temporary nature of the construction activities and the distance to sensitive receivers to have minimal impacts on the locality.</li> <li>• The AQIA has provided a number of mitigation measures to control dust emissions during the construction staging of the upgrade works, including minimising material stockpiles, staging of dust generating activity, cleaning of haul roads, speed restrictions and the preparation of an Erosion and Sediment Control Plan.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>• prepare and implement an Erosion and Sediment Control Plan.</li> <li>• implement proposed mitigation measures.</li> </ul>



Consideration	Recommended Conditions
<ul style="list-style-type: none"> <li>No issues regarding dust impacts generated from construction works were raised in the submissions.</li> <li>The Department recommends the Applicant prepare and implement an erosion and sediment control plan and implement the proposed mitigation measures to manage and suppress dust generating activities.</li> <li>The Department acknowledges the construction works to be undertaken are of a temporary nature and the predicted air quality impacts generated to be minor. The Department considers the proposed construction mitigation measures proposed to be implemented are satisfactory in managing and suppressing dust generating activities during the construction of the Plant 2 facility upgrade.</li> </ul>	
Noise	
<ul style="list-style-type: none"> <li>Noise generated by the construction and operation of the new facility has the potential to impact on local amenity.</li> <li>Construction noise will be generated by machinery associated with the demolition works and construction of new kiln, factory exterior and excavation for drainage works. Operational noise will be generated from the operation of the new kiln.</li> <li>The EIS included a Noise Impact Assessment (NIA) prepared by Benbow Environmental in accordance with the <i>NSW Industrial Noise Policy</i> (INP). The NIA identified the nearest residential receivers to be located approximately 730 m from the Plant 2 brickworks facility to the south of the site, located on Chandos Road.</li> </ul> <p><u>Construction Noise</u></p> <ul style="list-style-type: none"> <li>Construction activities are proposed to be undertaken from between 7 am and 6 pm Monday to Friday and 8 am to 1 pm on Saturday's over a period of 18 months.</li> <li>The NIA predicted the construction phases that would generate the most noise will be demolition works, civil works, concreting works and structural works.</li> <li>The NIA modelling identified that construction activities would generate noise below the construction noise criteria at all sensitive receivers during the standard construction hours.</li> <li>EPA reviewed the EIS and provided no comment on construction noise generation.</li> <li>To ensure the construction noise criteria is achieved, the Department has recommended a condition of consent that requires the Applicant to construct the development in accordance with the <i>Interim Construction Noise Guidelines</i> (ICNG) and incorporates noise mitigation measures and managements practices within a Construction Environmental Management Plan (CEMP).</li> </ul> <p><u>Operational Noise</u></p> <ul style="list-style-type: none"> <li>The NIA provided a noise generating scenario which assessed the noise generation of operating equipment including the kiln, extruder, crusher, dehacker, conveyors and front-end loader.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>implement construction noise mitigation measures within a CEMP</li> <li>incorporate operational noise mitigation measures into an OEMP.</li> </ul>



Consideration	Recommended Conditions
<ul style="list-style-type: none"> <li>• The predicted noise generation from the modelling scenario was assessed against the facility's existing noise limits restricted by the EPL and the noise criteria established by the INP. The NIA identified that the operational activities would comply with both criteria of the INP and the noise limits under the site's EPL.</li> <li>• The EPA reviewed the EIS and noted it was satisfied with the assessment of noise and acknowledged that no changes to the noise limits of the existing EPL were required.</li> <li>• To ensure the operational noise criteria of the EPL and INP is achieved, the Department has recommended a condition of consent that requires the Applicant to operate the upgraded Plant 2 facility in accordance with the EPL noise criteria and incorporates noise mitigation measures and managements practices within an Operational Environmental Management Plan (OEMP).</li> <li>• The Department is satisfied both construction and operational noise can be effectively managed through conditions of consent and the noise mitigation measures proposed in the EIS.</li> </ul>	
Stormwater	
<ul style="list-style-type: none"> <li>• The development includes the construction of an OSD basin to reduce the peak stormwater flow discharge into Eastern Creek. The proposed OSD basin is located to the north-west of the site and is adjacent to WaterNSW's Warragamba Pipelines Corridor (WPC).</li> <li>• The OSD basin has been designed with a storage volume of 4,500 m<sup>3</sup>. The OSD has been designed to capture stormwater flows from the primary development footprint catchment referred to as Catchment A.</li> <li>• The Applicant provided a Civil Engineering Design Report (CEDR) in support of the development and to demonstrate OSD basin design and discharge rates were satisfactory and consistent with Council's stormwater management policy.</li> <li>• WaterNSW raised concern the discharge control of the OSD basin into Eastern Creek would result in longer periods of surface water flows traversing the WPC and potentially impacting on existing water infrastructure. WaterNSW requested the Applicant to provide stormwater modelling for both pre and post development scenarios and to provide mitigation measures for potential blockages.</li> <li>• Council requested the Applicant provide detailed calculations of the OSD design to demonstrate storage volume and site discharge.</li> <li>• The Applicant prepared an RTS which included updated stormwater modelling for pre and post development scenarios. In addition, the Applicant provided a revised CEDR to address Council's comments.</li> <li>• WaterNSW reviewed the RTS and advised the Applicant had sufficiently addressed the issues raised in its submission and provided recommended conditions regarding the management of overland flows within the WPC.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>• prepare and implement a Stormwater Management System.</li> </ul>

Consideration	Recommended Conditions
<ul style="list-style-type: none"> <li>The Department has reviewed the EIS, RTS and the submissions regarding the proposed OSD basin. The Department considers the proposed OSD basin as being sufficient in improving the stormwater management of the Plant 2 facility by capturing surface water and attenuating the discharge rate of stormwater into Eastern Creek.</li> <li>Furthermore, the Department notes the flow rate of the discharged stormwater will have a negligible impact on the adjoining WPC subject to the mitigation measures recommended by WaterNSW.</li> <li>The Department recommends the Applicant prepare and implement a Stormwater Management System including finalised detailed designs of the OSD basin and associated stormwater infrastructure in consultation with Council.</li> <li>The Department's assessment concludes the proposed OSD design is satisfactory in reducing peak stormwater discharge flows of the sites surface water and subsequently improves the stormwater management of the Plant 2 facility.</li> </ul>	
Traffic & Access	
<ul style="list-style-type: none"> <li>The construction of the new kiln and associated upgrade works to the Plant 2 facility will generate additional traffic movements.</li> <li>The EIS notes no additional traffic is proposed to be generated from the operation of the upgraded Plant 2 facility as there are no proposed changes to the throughput capacity of brick manufacturing.</li> <li>The EIS included a Traffic Impact Assessment (TIA) prepared by Ason Group Pty Ltd to assess the impact of the upgrade works on nearby key intersections and the surrounding road network.</li> </ul> <p><u>Construction Traffic</u></p> <ul style="list-style-type: none"> <li>The TIA notes the maximum amount of heavy vehicle trips during peak hours would be four heavy vehicle trips per hour during the construction phase. The TIA notes further details of the construction phase will be subject to the finalisation of a construction program and recommends the implementation of a Construction Traffic Management Plan (CTMP) to effectively manage the construction phase of the Plant 2 upgrade works.</li> <li>Furthermore, the TIA notes light vehicle generation associated with construction staff will generate approximately 10 trips outside of traditional peak hours.</li> <li>RMS and Council reviewed the EIS and provided no comments on construction traffic generation.</li> <li>The Department considers the Applicant should prepare and implement a CTMP prior to the commencement of construction to identify and manage all potential construction vehicle impacts, such as number of trucks, hours of operation, access arrangements and traffic controls.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>prepare and implement a CTMP for the demolition and construction of Plant 2 facility upgrade.</li> <li>incorporate operational traffic mitigation measures into an OEMP.</li> </ul>

Consideration	Recommended Conditions
<p><u>Operation</u></p> <ul style="list-style-type: none"> <li>• The EIS stipulates that as the development does not propose an increase to the existing production capacity of the Plant 2 facility, there are no additional traffic movements associated with the operation of the development. The EIS notes site currently generates an average of 20 heavy vehicle movements per day for the loading and delivery of brick product offsite.</li> <li>• Furthermore, the EIS reiterated all heavy vehicle movements associated with the operation of the Plant 2 facility are to be restricted to Wallgrove Road for access to and from the site. The EIS notes only employees' private vehicles will access the site via Ferrers Road.</li> <li>• The Department notes that no concerns were raised in the submissions.</li> <li>• The Department recommends conditions of consent restricting the development from vehicle queuing and heavy vehicle parking on local roads along with incorporating operational traffic mitigation measures in the OEMP.</li> <li>• The Department acknowledges the development does not change the existing operational capacity of the Plant 2 facility and is therefore not considered to produce any additional operational traffic impacts.</li> </ul>	
<p><u>Heritage</u></p> <ul style="list-style-type: none"> <li>• The proposed stormwater detention basin is to be constructed outside of the existing development footprint and has the potential to impact on aboriginal cultural heritage values.</li> <li>• The EIS identified the site had a low potential for the site to contain any items of Aboriginal cultural heritage that have not yet been identified due to the site's disturbance and operation since the 1960s.</li> <li>• The proposed development was referred to the Environmental, Energy and Science (EES) division for comment. EES advised that an Aboriginal Cultural Heritage Assessment Report (ACHAR) should be provided to determine the impact of the development on Aboriginal cultural and heritage values.</li> <li>• The Applicant subsequently provided an assessment of Aboriginal cultural and heritage values prepared by Biosis Pty Ltd in consultation with the Deerubbin local Aboriginal land council (LALC). The assessment predicted the likely impacts of the development on Aboriginal cultural heritage and provided recommended best conservation practices to be implemented into the site's management practices.</li> <li>• The assessment found the site had low archaeological potential of holding any items of Aboriginal cultural and heritage values. Subsequently, no further archaeological assessment was required within the development footprint.</li> <li>• Furthermore, the assessment recommended unexpected finds protocols to be implemented during construction works of the development to prevent any damage</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>• prepare and implement and unexpected finds protocol.</li> </ul>

Consideration	Recommended Conditions
<p>to Aboriginal cultural and heritage values in the event an item of potential significance is obtained.</p> <ul style="list-style-type: none"> <li>• EES reviewed the assessment and provided no comments. Council also reviewed the assessment but raised no objection subject to the imposition of an unexpected finds protocol.</li> <li>• The Department considers the assessment has provided a satisfactory level of detail and assessment of Aboriginal cultural and heritage values of the site in consultation with the LALC. It is the Department's view the development site is unlikely to contain items of Aboriginal cultural and heritage significance considering the history of disturbance and operation of the site since the 1960s and the impacts of the development are therefore considered to be low due to the small disturbance footprint of the development.</li> <li>• In addition, the Department considers the implementation of an unexpected finds protocol effective in managing any uncovered item of potential Aboriginal cultural and heritage significance.</li> <li>• The Department's assessment concludes the development site has a low likelihood of containing items of Aboriginal cultural and heritage significance due to history of site disturbance. Conditions of consent are to be imposed requiring the implementation of an unexpected finds protocol.</li> </ul>	
Visual	
<ul style="list-style-type: none"> <li>• The proposed development includes the upgrade works to the façade of the Plant 2 facility in addition to the construction of a new 35 m high stack at the south west of the facility (see <b>Figure 8</b>). The changes to the building façade and increased stack height may have visual impacts on the amenity of the Western Sydney Parklands area.</li> <li>• The site currently consists of substantial industrial infrastructure including the existing production building and clay storage bin. The existing facility is buffered to the south by topographical features and vegetation, mitigating the existing visual impacts of the site on rural residential receivers directly to the south.</li> <li>• The EIS included a Visual Impact Assessment (VIA) prepared by Group GSA which assessed the visual sensitivity and visual magnitude of the development from eight key viewpoints within the locality. In particular, the VIA assessed a viewpoint from Chandos Road located approximately 730 m to the south of the site being the nearest residential receivers of the development.</li> <li>• The VIA found that none of the key viewpoints were identified as having high visual impacts resulting from the development. The VIA stipulated the Plant 2 facility is effectively screened by the existing topography and vegetation. In addition, the direct locality of the site is of an existing industrial and commercial character which the VIA does not consider the development to negatively impact on.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>• manage and maintain existing vegetation screening.</li> </ul>

Consideration	Recommended Conditions
<ul style="list-style-type: none"> <li>During the exhibition period, no comments or concerns were raised in respect to the visual impacts of the development on the locality in the submissions made on the development.</li> <li>The Department recommends the Applicant manage and maintain existing vegetation screening to mitigate visual impacts of the development.</li> <li>The Department supports the findings of the VIA and concludes the existing topographic screening of the site is effective in mitigating visual impacts on rural residences adjoining to the south of the site. Furthermore, the proposed development is consistent with the industrial and commercial character of the site's locality.</li> </ul>	
Obstacle Limitation Height	
<ul style="list-style-type: none"> <li>The development site is located within the boundary of the Western Sydney Airport's (WSA) protected airspace being the Obstacle Limitation Surface (OLS). The proposed new 35 m high stack and additional plume rise dispersed from the stack may encroach into the WSA OLS.</li> <li>The OLS at the development site has been identified as being RL 222.2 AHD. The proposed new stack height is RL 95.15 AHD being below the OLS.</li> <li>WSA reviewed the EIS and advised although the stack height is below the OLS, a plume rise assessment is required to determine the velocity of emissions from the stack and its potential impact on air turbulence. WSA specified the development is not to generate emissions with an upward vertical velocity of 4.3 m per second within the OLS.</li> <li>The Applicant subsequently provided a plume rise assessment in conjunction with the RTS. The assessment identified the velocity of stack emissions will be below 4.3 m per second within 20 seconds from dispersion. Subsequently, the assessment concluded the velocity of the development's emissions would have a maximum height of 205.6 AHD.</li> <li>WSA reviewed the PRA and advised the Department the PRA demonstrates the plume rise velocity of the new kiln and stack will be below the velocity of 4.3 m per second at the OLS.</li> <li>The Department considers the PRA satisfactorily demonstrates the development will not encroach in the identified OLS for the site and therefore not impact upon aircraft movements above the site.</li> <li>The Department recommends conditions of consent requiring the implementation of an AQMP to ensure the dispersion of pollutants does not encroach the OLS of the site.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>prepare and implement an AQMP to monitor pollutant dispersion.</li> </ul>

Consideration	Recommended Conditions
Consistency with WSP POM 2030	
<ul style="list-style-type: none"> <li>• The development site is located within the WSP and is therefore subject to the POM. The development is to be consistent with the objectives of the POM Wallgrove precinct.</li> <li>• The POM outlines management priorities for the Wallgrove precinct to achieve the strategic directions including the improvement of water quality and biodiversity of Eastern Creek, explore recreational links and manage impact of future service infrastructure.</li> <li>• The Applicant addressed the objectives of the Wallgrove precinct in the EIS. The EIS noted the development would facilitate the ongoing use of the site as a brickmaking facility, aligned with the future character of the precinct. Furthermore, the EIS noted the potential impacts on biodiversity and visual amenity were low.</li> <li>• WSPT provided comment in its submission, requiring further consideration of the POM in the EIS. In particular, WSPT requested the Applicant to further address the potential for environmental or recreational links within the site to promote connectivity within the WSP and address opportunities to improve waterways and wetlands within the WSP.</li> <li>• The Applicant addressed WSPT comments on the EIS in the RTS. The Applicant noted the development includes an OSD basin in conjunction with landscaping to improve the long-term water quality of the site and provide visual screening.</li> <li>• The Applicant additionally noted the implementation of recreational linkages through the site are unwarranted, referencing the site's existing industrial context and the ongoing use of the site as a brickmaking facility.</li> <li>• WSPT reviewed the RTS and advised the Department the Applicant's response was reasonable considering the site and its existing industrial land use.</li> <li>• The Department has considered the development to be consistent with the existing land use being a brickmaking facility and is consistent with the future vision for the site in the POM. The Department acknowledges the constraints of the site to provide recreational linkages throughout the site given the industrial use of the site.</li> <li>• The Department's assessment concludes the development is consistent with the objectives of the Wallgrove precinct and the broader objectives of the POM.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
Hazards and Risks	
<ul style="list-style-type: none"> <li>• The development includes the construction of a new gas fired kiln which has the potential for hazard and fire risks.</li> <li>• The EIS noted the proposed development does not propose to store any dangerous goods on site and is not identified as potentially hazardous under SEPP 33. In addition, the closest residence is approximately 730m from the proposed development.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>• prepare and implement a Fire Safety Study prior to construction to the satisfaction of NSW Fire and Rescue; and</li> </ul>



Consideration	Recommended Conditions
<ul style="list-style-type: none"> <li>• The Department notes Fire and Rescue NSW was notified during the exhibition period and additionally notified of the RTS submitted by the Applicant and did not make a submission on the DA.</li> <li>• To manage fire risk, the Department has recommended a condition of consent requiring the Applicant to prepare and implement a Fire Safety Study prior to construction, to the satisfaction of Fire and Rescue NSW. This plan will specifically consider the proposed fire control systems and access arrangements for staff and emergency services during fire emergencies.</li> <li>• In addition, prior to commissioning the Department has recommended the Applicant update its existing Safety Management System (to identify the measures and systems in place to prevent an incident) and Emergency Plan (to develop responses to site-specific types of emergencies).</li> <li>• The Department's assessment concludes the requirement to identify and implement appropriate measures in the updated management plans will appropriately mitigate and manage risks from the development.</li> </ul>	<ul style="list-style-type: none"> <li>• update the existing Safety Management System and Emergency Plan prior to commissioning.</li> </ul>



## 7. *Evaluation*

The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development.

The Department's assessment concluded the upgrade works to the Plant 2 facility will result in an overall reduction in environmental impacts, such as air quality and greenhouse gas emissions compared to the previous operation of the existing Plant 2 facility. To ensure these impacts are reduced, the Department has recommended a number of conditions, including:

- an AQMP to manage and monitor emissions during operation
- air quality post-commissioning sampling and reporting
- the purchase and retirement of three biodiversity credits
- the preparation and implementation of a CEMP and OEMP
- ongoing independent environmental auditing and reporting.

The Department has recommended conditions for the payment of development contributions and the Applicant's contribution to infrastructure upgrades to service the development, including road and intersection works and drainage.

The Department recognises the importance of employment-generating development in Western Sydney and acknowledges the development would provide 60 jobs during construction and 35 full time jobs during operation. The proposed improvement in the environmental efficiency of the facility, including by reducing greenhouse gas emissions and resource consumption, demonstrates the Applicant's contribution to the retention and sustainable growth of construction industries in Sydney and NSW.

The Department concludes the impacts of the development can be appropriately managed through implementation of the recommended conditions of consent. Consequently, the Department considers the development is in the public interest and should be approved, subject to conditions.



## 8. Recommendation

For the purpose of section 4.38 of the EP&A Act, it is recommended that the Executive Director, Regions, Industry and Key Sites Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report; and
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application;
- **agrees** with the key reasons for approval listed in the notice of decision;
- **grants consent** for the application in respect of State significant development for the Horsley Park Brickworks Plant 2 upgrade works (SSD 9601), subject to the conditions in the attached development consent;
- **signs** the attached development consent and recommended conditions of consent (see Appendix E).

Prepared by:  
Shaun Williams  
Planning Officer

Recommended by:

14/05/20

**Joanna Bakopanos**

Team Leader

Industry Assessments

Recommended by:

14/05/20

**Chris Ritchie**

Director

Industry Assessments



## 9. *Determination*

The recommendation is: **Adopted by:**

*Sargeant*

18/5/2020

**Anthea Sargeant**

Executive Director

Regions, Industry and Key Sites



# *Appendices*

## **Appendix A – Environmental Impact Statement**

A copy of the Environmental Impact Statement (EIS) can be found on the Department's website, at the following link:

<https://www.planningportal.nsw.gov.au/major-projects/project/11561>



## Appendix B – Submissions

A copy of the submissions can be found on the Department's website, at the following link:

<https://www.planningportal.nsw.gov.au/major-projects/project/11561>

## Appendix C – Response to Submissions Report

A copy of the RTS, supplementary RTS and accompanying documents can be found on the Department's website, at the following link:

<https://www.planningportal.nsw.gov.au/major-projects/project/11561>

## Appendix D – Statutory Considerations

### *State Environmental Planning Policy (State and Regional Development) 2011*

The SRD SEPP identifies certain classes of development as SSD. The development is SSD as it involves development with a capital investment value of more than \$10 million on land identified within the Parklands. This satisfies the criteria in Schedule 2, Clause 5.

### *State Environmental Planning Policy (Western Sydney Parklands) 2009*

The Parklands SEPP aims to develop the Western Parklands into a multi-use urban parkland for the region of western Sydney by allowing for a diverse range of recreational, entertainment and tourist facilities; protecting and enhancing its natural systems; and ensuring that development is undertaken in an ecologically sustainable way.

Clause 12 of the Parklands SEPP sets out the matters a consent authority must consider in determining a development application on land within the Parklands. The Department's consideration of these matters is in **Error! Reference source not found.** below.

Clauses 13, 14, 14A, 15, 16, 17, 17A and 17B are also relevant for the assessment of the proposal. The Department's consideration of these additional clauses is in **Error! Reference source not found.**

Matter	Comment
The aim of this Policy	The development is considered to be consistent with the aims of the policy as it is development within the Parklands which will not impede the development of the Parklands.
The impact on drinking water catchments and associated infrastructure	<p>The site is located to the south of the WaterNSW Warragamba Pipelines corridor and to the west of the Prospect Reservoir and Upper Canal which form part of Sydney's drinking water supply infrastructure. WaterNSW have advised they are satisfied with the recommended conditions of consent requiring post-development flows to be no greater than pre-development flows to ensure the pipelines are not impacted by flood waters. The Department has included this requirement in the recommended conditions of consent.</p> <p>The Department is satisfied the development will have a neutral impact on the quality of water in the nearby bulk water supply infrastructure.</p>
The impact on utility services and easements	The development is an existing industrial site with existing services and utilities. The development is not expected to impact on any utility services or easements.
The impact of carrying out the development on environmental conservation areas and the natural environment, including endangered ecological communities	<p>The development would include the clearing of the following flora types currently on-site:</p> <ul style="list-style-type: none"><li>• 0.11 ha of Grey Box Forest Red Gum (PCT 849)</li><li>• 0.03 ha of Swamp Oak (PCT 1232)</li></ul> <p>The Department is satisfied appropriate offsets have been provided in accordance with the relevant EES guidelines, as discussed in Section 5 of this report.</p>

The impact on the continuity of the Western Parklands as a corridor linking core habitat such as the endangered Cumberland Plain Woodland	The Department is satisfied biodiversity connectivity values will not be significantly impacted as a result of the development, as discussed in Section 5 of this report.
The impact on the Western Parkland's linked north-south circulation and access network and whether the development will enable access to all parts of the Western Parklands that are available for recreational use	The development will not impact on the north-south circulation of the Parklands or impede access to the areas available for recreational use given its location.
The impact on the physical and visual continuity of the Western Parklands as a scenic break in the urban fabric of western Sydney	Given the existing manufacturing activities undertaken on-site the impact on the physical and visual continuity of the Parklands is considered to be minimal. The Applicant would implement additional landscaping on-site to mitigate the visual impacts of the development.
The impact on public access to the Western Parklands	The development site does not currently provide public access to the Parklands and would therefore not have any adverse impact on public access.
Consistency with: (i) any plan of management for the parklands, that includes the Western Parklands, prepared and adopted under Part 4 of the <i>Western Sydney Parklands Act 2006</i> , or	The Department considers the development would not impede the principles of the Plan of Management and its supplements.
(ii) any precinct plan for a precinct of the parklands, that includes the Western Parklands, prepared and adopted under that Part	At the time of this report, there is no known precinct plan, prepared under Part 4 of the Western Sydney Parklands Act 2006 applying to the site.
The impact on surrounding residential amenity	<p>The nearest residential receivers are located to the south along Chandos Road approximately 500 m from the site boundary (see <b>Figure 2</b>). The Department has assessed the predicted air quality and noise impacts of the development at Sections 6.1 and 6.3, respectively.</p> <p>The development is not expected to have any adverse impacts on surrounding residential amenity, however, to ensure the amenity of surrounding residential areas is protected, the Department has recommended a number of conditions regarding air quality limits and construction management</p>
The impact on significant views	The tallest component of the development is the new kiln stack, with a proposed height of 35 m.

The proposed development would be screened by existing and proposed landscaping proposed by the Applicant and is contained within an existing industrial site adjacent to existing infrastructure. The Department considers the development will have no impact on significant views.

The effect on drainage patterns, ground water, flood patterns and wetland viability	<p>The new OSD basin will alter the drainage patterns and stormwater discharge rates of the site. The Department has assessed the stormwater and flooding impacts of the development at Section 6.3 of this report.</p> <p>The Department's assessment concludes the potential stormwater and flooding impacts of the development can be managed via the proposed civil works and recommended conditions of consent.</p>
The impact on heritage items	There are no know items of Aboriginal or European heritage on-site. On this basis, the development would not impact heritage items. However, the Department has recommended conditions of consent to manage unexpected finds in the event they are encountered during construction of the development.
The impact on traffic and parking	The development would generate additional traffic during construction with no additional vehicles proposed for the operation of the upgraded facility. As discussed in Section 6.3 of this report, the Department's assessment concludes the anticipated increase in traffic volumes can be accommodated by the local and regional road network, in addition to providing sufficient car parking. However, the Department has recommended a number of traffic related conditions including road constructions standards and the preparation of a construction traffic management plan.

Clause and Requirements	Comment
<p><i>13 - Bulk water supply infrastructure not to be impacted.</i></p> <p>Requires a consent authority to consider the impact of development on bulk water supply infrastructure, including integrity, security and access.</p>	The Warragamba Pipeline corridor runs along the northern boundary of the site, separated by existing on-site vegetation. No works are proposed along the northern boundary or the site, with the exception of internal road upgrades. As these works would be separated from the pipeline corridor, the Department is satisfied the potential impacts on bulk water supply infrastructure would be minimal.
<p><i>14 - Development in areas near nature reserves or environmental conservation areas.</i></p> <p>Requires a consent authority to consider the compatibility of the development near a nature reserve or nature conservation area, any applicable</p>	The site is adjacent to an environmental conservation area beginning on the eastern side of Ferrers Road. The tallest component of the development is the kiln stack. The Department has considered the Prospect Nature Reserve Plan of Management (2012) in addition to the photomontage provided by the Applicant. The Department



management plan and design measures to minimise visual intrusion of the development.

is satisfied the existing and proposed landscaping measures will screen the proposed kilns and ensure the visual intrusion of the development is minimised.

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#### *14A - Flood planning*

Requires a consent authority to consider a development compatible with the flood hazard of the site, would not significantly change flood behaviours, includes measures to manage risk to life from flooding and would not result in unsustainable social and economic costs to the community from flooding.

The Department's assessment of the flooding impacts of the development is at Section 6.3. The Department's assessment concludes the development is compatible with the flood risk of the site and the proposed civil works and management measure would ensure flood events can be managed on-site and would not increase off-site flood risk.

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#### *15 - Heritage conservation*

Requires a consent authority to consider the impacts of development on heritage items in the Western Parklands including associated fabric, settings and views.

No known Aboriginal or European heritage items have been identified on-site. Two heritage items listed in Schedule 1 of the Parklands SEPP are located to the east of the site, across Ferrers Road. These are:

- Prospect Reservoir and surrounding area, State significant, item 4; and
- Spotted Gum forest, local significant, item 5.

The Department has considered the effect of the development on the nearby identified heritage items in accordance with the Parklands SEPP. The Department is satisfied the surrounding landform and current and future landscaping will ensure sufficient screening is in place to minimise the impact on the fabric, settings and views of the heritage items found in the Prospect Reservoir and its surrounds. Appropriate air quality management and mitigation measures are required to be in place to minimise any off-site impacts.

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#### *16 - Signage*

Requires a consent authority to consider the potential impacts from signage on views and vantage points.

N/A. The development does not propose any signage.

- (1) This clause applies to signage that is visible from a public place.
- (2) Development consent must not be granted to the erection of signage unless:
- (a) the consent authority is satisfied that the signage is consistent with any signage policy prepared by the Trust, and
- (b) in the case of a road sign, the Roads and Traffic Authority has been given written notice of the development application and any comments received by the consent authority from the Roads and Traffic Authority within 21 days have been considered by the consent authority.

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#### *17 - Development on private land*

Requires a consent authority to consider:

(a) whether the development will contribute to or impede the implementation of the aim of this Policy,

As stated previously, the site has been an operational brick manufacturing site since the 1960s at least. Existing natural systems on-site (Eastern Creek) would not be affected and

- (b) the need to carry out development on the land,
- (c) the imminence of acquisition of the land,
- (d) the effect of carrying out the development on acquisition costs,
- (e) the effect of carrying out the development on the natural systems of the Western Parklands,
- (f) the cost of restoring those systems after the development has been carried out.

the effect or carrying out the development on the Parklands would be minimal.

The Applicant undertook consultation with the OSL prior to the issuing of SEARs regarding the potential acquisition costs of the land as result of the land. The consultation with OSL concluded the broader Horsley Park brickworks site has substantial longevity remaining in the operation and the development would therefore have a negligible change in the sites future acquisition costs.

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#### 17A - Essential services

Requires a consent authority to consider arrangements are in place for the supply of water, electricity, waste management, stormwater drainage or on-site detention and road access for a development.

The development is located within the site of an existing industrial operation with existing water, electricity and waste services. Suitable road access also exists from the internal site roads, connecting to Wallgrove Road to the west and Ferrers road to the East. The development proposed to construct new stormwater management measures to manage stormwater flows. On the basis, the Department is satisfied adequate arrangements are in place for the development to be properly serviced.

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#### 17B - Earthworks

Requires a consent authority to consider the impact of earthworks on drainage patterns, potential impact on the potential future use of the land, the quality of material used in earthworks, amenity of adjoining properties, the source of fill material and destination of excavated material, the likelihood of disturbing relics, proximity to and potential to impact any watercourse, drinking water catchment or environmentally sensitive area and any appropriate measures to avoid, minimise or mitigate the impacts of the development.

The Development involves earthworks on site to establish building pads for the proposed rotary kilns and to allow the construction of new internal road and hardstand areas to enable the proposed LWA manufacturing operation.

The site has an existing industrial operation with existing stormwater management systems to manage drainage flows.

Conditions require the preparation of a CEMP prior to the commencement of construction to control construction impacts.

### [State Environmental Planning Policy \(Infrastructure\) 2007 \(ISEPP\)](#)

The ISEPP aims to facilitate the effective delivery of infrastructure across the State and lists the type of development defined as Traffic Generating Development.

The development constitutes traffic generating development in accordance with the ISEPP as it is an industry within a site of over 20,000 m<sup>2</sup>. Consequently, it requires referral to RMS for comment and consideration of accessibility and traffic impacts.

The development was referred to RMS for consideration. RMS did not object and recommended conditions of consent relating to site access and car parking arrangements and traffic management during construction.

The Department has incorporated RMS's requirements into the recommended conditions.

The development is therefore considered consistent with the ISEPP.

*State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33)*

SEPP 33 outlines the items that a consent authority must consider to assess whether a development is hazardous or offensive.

The Applicant reviewed the development in accordance with SEPP 33 and advised that the development would not store dangerous goods above the threshold limits specified in SEPP 33, therefore it would not be considered potentially hazardous or offensive development.

*Sydney Regional Environmental Plan No. 20 – Hawkesbury – Nepean River (SREP 20)*

SREP 20 aims to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context. The site is located within the area covered by SREP 20. The Department considers that the development is consistent with the aims and objectives of SREP 20 as it will ensure potential impacts during construction and operation of the development will be managed and mitigated through the implementation of the Applicant's proposed management and mitigation measures and compliance with the recommended conditions of consent.

## Appendix E – Recommended Instrument of Consent

A copy of the recommended Instrument of Consent can be found on the Department's website, at the following link:

<https://www.planningportal.nsw.gov.au/major-projects/project/11561>