Ref: **SSD 9601 MOD 1**
WTJ20-342

WILLOWTREE PLANNING

RESPONSE TO SUBMISSIONS
PROPOSED PLANT 2 UPGRADE WORKS – SSD 9601 MOD 1

780 Wallgrove Road, Horsley Park
(Lot 7 DP 1059698)

—

Prepared by Willowtree Planning Pty Ltd
on behalf of The Austral Bricks Co Pty Ltd

31 March 2022

SYDNEY

—

Suite 1, Level 10
56 Berry Street
North Sydney NSW 2060

NEWCASTLE

—

Unit 2, 56
Hudson Street
Hamilton NSW 2303

GOLD COAST

—

Suite 21, 2
Eighth Avenue
Palm Beach QLD 4221

BRISBANE

—

Level 3, 240
Queen Street
Brisbane QLD 4000

02 9929 6974
equiries@willowtp.com.au
willowtreeplanning.com.au

WILLOWTREE
PLANNING

DOCUMENT CONTROL TABLE			
Document Reference:	SSD 9601 MOD 1_Response to Submissions		
Contact:	Travis Lythall		
Version and Date	Prepared by	Checked by	Approved by
Version No. 1 – 17/03/2022	Travis Lythall Associate	Andrew Cowan Director	Andrew Cowan Director

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

PART A PRELIMINARY

1.1 PROJECT OVERVIEW

Development Consent in relation to SSD 9601 was granted by the Minster for Planning and Public Spaces on 18 May 2020 for "Upgrade works to the Horsley Park Brickworks Plant 2 Facility", which comprised of the following development particulars:

- Partial demolition of existing Plant 2 facility and existing kilns;
- Installation of a new kiln;
- Extension of existing production building;
- Stormwater detention basin; and
- Internal fire access road.

Austral Bricks Co Pty Ltd (Austral) wish to undertake future expansion works on the Site in order to improve the operational efficiencies across the business. This Modification Application represents the first Modification Application which seeks to modify the existing SSD 9601 Development Consent for the following:

- Amendment to the approved site layout – Appendix 1 under SSD 9601, for the purposes of alterations and additions on-site (refer to Appendix 1). The scope of works includes:
    - Upgrade scrubber to Twin Tower Scrubber.
    - Expansion of the hardstand area.
    - Proposed new entry.
    - Provisions for 15 new car parking spaces.
    - Extension of existing OSD Basin.
    - Installation of new gatehouse.
- Increase of capacity from 80 million to 130 million bricks.

As mentioned above, and in response to the operational needs of Austral, it has been determined that the proposed modification to Plant 2 is required to support to the growth of the business and increasing demand for their products. Accordingly, the proposed modifications form an extension to these existing works undertaken wholly within Plant 2 and would continue to operate wholly within the Plant 2 site.

SSD 9601 made provision for alterations and additions (for the purposes of upgrade works) to an existing Brick Manufacturing Facility. The application proposed, simply seeks to modify the form of the plant upgrade to permit the full utilisation of the plant which has been approved and now installed on-site. The modification simply expands the production capacity using existing infrastructure. The modification simply allows the Plant upgrade to utilise the full capacity of the equipment which has been installed in response to high demand within the Sydney Construction industry and reflects the existing operations previously established under existing approvals (dating back to 1960).

The proposed modifications can be accommodated without generating impacts that are considered unacceptable, in line with the relevant legislation applicable to the Subject Site; and that the proposed modifications would result in development that is materially and substantially the same as the development approved under SSD 9601. Furthermore, the proposed modifications to the Proposed Development (subject to approval) would remain consistent with the objectives outlined within *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* (former *State Environmental Planning Policy (Western Sydney Parklands) 2009*); *A Metropolis of Three Cities – Greater Sydney Region Plan*; the *Western City District Plan*; and remains consistent with the principles of Ecologically Sustainable Development (ESD), as part of the overall vision for the Site.

Based on the finds of this Planning Report, the modifications sought continue to support a Brick Manufacturing Facility and upgrades to the kiln by way of expansion, providing further employment-generating opportunities in the immediate locality, as well as the wider locale of the Sydney Metropolitan Area, particularly the Western Sydney Region.

1.2 APPLICATION PROCESS OVERVIEW

Development Consent is being sought for the proposal, as a Modification Application, under Part 4, Division 4.9, Section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

In accordance with Sections 98-100 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation), a Planning Report (including specialist consultant reports) has been prepared in accordance with the requirements of Sections 98-100 of the EP&A Regulation.

The proposal was exhibited from 3 December 2021 to 17 December 2021, during which, several submissions were provided to the NSW Department of Planning, Industry and Environment (DPIE), as discussed herein this Response to Submissions (RtS) Report.

1.3 PURPOSE OF THIS REPORT

The purpose of this RtS Report is to detail and respond to the matters raised in the submissions received for SSD 9601 MOD 1.

The RtS Report has been set out to address each submission matter, and is structured as follows:

PART A	provides an overview of the project, the application process and the RTS Report purpose and structure;
PART B	provides a detailed response table of the submissions received;
PART C	provides responses to each of the issues raised in submissions received;
PART D	provides consideration of the project description and addresses any additional environmental assessment requirements;
APPENDIX A	provides a summary of the submissions received;
APPENDIX B	provides a revised set of project management and mitigation measures, following the review of submissions and technical responses;
APPENDIX C	provides copies of any supporting information required by the received submissions.

1.4 CHANGES TO THE PROPOSAL AS EXHIBITED

Following the exhibition phase, and upon review of all submissions received, there are no such amendments to the modifications required to be identified. All submissions have been responded to in an appropriate manner.

PART B SUMMARY OF SUBMISSIONS

2.1 SUBMISSIONS PROCESS

The proposal was exhibited from 3 December 2021 to 17 December 2021, during which, several submissions were provided to the NSW DPIE.

Clause 59 of the EP&A Regulation, 2021 permits the Planning Secretary of the NSW DPE to request that the Applicant provide a written response in relation to the issues raised within any submissions made during public exhibition. This RtS Report aims to fulfil the request from the Planning Secretary.

2.2 SUBMISSIONS RECEIVED

A total of eight (8) submissions were received during the exhibition period, all of which have been received from government agencies, as summarised below:

- NSW DPIE
- Environment, Energy and Science Group (EES) in the NSW DPIE
- NSW Environment Protection Authority (EPA)
- Fairfield City Council
- Blacktown City Council
- Transport of NSW (TfNSW)
- WaterNSW
- Sydney Water

Of the eight (8) submissions, the following is noted::

- Four (4) submissions provide support, no comment and/or conditions of consent
- Four (4) submissions provide comment and request additional information

PART C RESPONSE TO SUBMISSIONS

3.1 RESPONSE TO AGENCY SUBMISSIONS

This section seeks to tabulate all submissions received from government agencies and provide a detailed response to each matter.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
NSW DPIE	Project Description	The Department notes the modification includes the expansion of the hardstand area to the west of the Plant 2 facility. The Department requires confirmation on the extent of additional hardstand area proposed.	The proposed hardstand expansion accounts for an additional 0.90 hectares (ha) of hardstand area. It is noted, that the existing hardstand comprises 0.31 ha, for which the total hardstand as a result of the increase proposed pertains to 1.71 ha (Phase 1A Yard & Phase 1B Yard) of hardstand along the western portion of Plant 2. The figure below illustrates the existing hardstand (green) and the proposed hardstand (yellow).

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			 **Figure 1 Identification of Existing and Proposed Hardstand (Source: At&I, 2022)**
		Further to the above, the Department requests further justification for the additional hardstand area including the need for additional hardstand and any associations to the proposed increase in throughput capacity.	The Proponent confirms that the increased yard enables the relocation of the weighbridge from the eastern side of the factory, which provides a new entrance, improved stock layout to improve loading times and loading safety and expanded capacity which can support optimal production efficiency throughout the year. Accordingly, the nexus for the expansion of the hardstand area stems from improving the overall operational efficiencies across the Site to facilitate an improved holistic operations from end-to-end

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			production and distribution, including consideration of reduced energy consumption across the Site.
		The Department requires further information on the proposed 'continuous shift' operations including details on employee changeovers, energy consumption, and time periods for the different stages in the production cycle in comparison to existing operations to further demonstrate the efficiency benefits.	The continuous shift at the Site allows constant operation at the most efficient rate, offering a 10% energy efficiency opportunity to be achieved as a result of the modifications proposed. Accordingly, this would further improve the energy efficiency of the kiln (which is noted to be operating in a positively energy efficient state), thereby greatly outperforming internal energy efficiency benchmarks. Brickworks consider this to be a crucial carbon reduction opportunity for brick production in Australia. Incorporating a night shift into the shift structure allows continuous operation, allowing the Site to fully utilise the maximum plant capacity. This continuous operation allows the Site to avoid wasted kiln capacity due to labour bottlenecks between production cycle stages, avoiding wasted kiln capacity of approximately 50 million SBEs p.a.. The extract below outlines a comparison of the operations between the subject Modification Application and SSD 9601:

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS

SUBMITTER	MATTERS RAISED	COMMENTS / REQUESTS	FORMAL RESPONSE
			<table><tr><td></td><td>SSD 9601</td><td>SSD 9601 Mod 1</td></tr><tr><td>Employee changeovers</td><td>Day shift (6am-5:30pm): 35 staff Afternoon shift (5:20-10pm): 35 staff (Batch operation)</td><td>Day shift (6am-5:30pm): 35 staff Afternoon shift (5:20-10pm): 35 staff Night Shift 10pm-6am: 10-12 staff (Continuous operation)</td></tr><tr><td>Time periods in stages in the production cycle</td><td>Loading (0.5 days-1 day) Bricks are extruded and then loaded (or set) onto kiln cars. Firing (1.5 days dryer; and 1 day in the kiln) Kiln cars progress along rails into the dryer and then into the kiln. Unloading (0.5 days – 1 day): Fired bricks are unloaded from kiln cars. Kiln cars are then emptied and available to loaded again.</td><td>No change</td></tr><tr><td>Maximum Kiln Capacity</td><td>130 mill SBEs p.a.</td><td>130 mill SBEs p.a.</td></tr><tr><td>Throughput – Maximum Output based on available labour</td><td>80 mill SBEs p.a.</td><td>130 mill SBEs p.a.</td></tr><tr><td>Wasted kiln capacity due to labour bottlenecks between production cycle stages</td><td>Approx. 50 mill SBEs p.a.</td><td>Nil</td></tr><tr><td>Energy consumption</td><td>475,637 GJ p.a. 13,561 MWh p.a. Energy use hard to estimate and can be based on peak demand.</td><td>683,728 GJ p.a. 18,646 MWH p.a. Improved efficiency; Kiln at full capacity continuously; Improvements in energy efficiency measurement and forecasting; and Allows for increased production.</td></tr><tr><td>Energy efficiency</td><td></td><td>Over 10% further improvement in energy efficiency per unit produced</td></tr></table>
	Biodiversity	The Department notes the modification application includes the implementation of 24-hour operations for the Plant 2 facility. The Department requests consideration of the proposed 24-	In relation to potential indirect impacts to biodiversity, Table 7-3 of the revised Biodiversity Development

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
		hour operations and their indirect impacts such as on biodiversity values and the local amenity. The development should incorporate mitigation measures to reduce the impacts of 24-hour operations such as (but not limited to) light pollution prevention measures.	Assessment Report (BDAR) has been updated to consider parameters pertaining to the following: **<u>Noise – Short-term Construction:</u>** All works are proposed to be undertaken during standard construction hours, including: ▪ Monday to Friday: 7am to 6pm; ▪ Saturday: 8am to 1pm; and ▪ No work on Sundays and public holidays. Accordingly, construction will be temporary and remain consistent with the mitigation measures as outlined with **Appendix B** of this RtS Report. **<u>Noise – Long-term Operation:</u>** Ecologique note that the proposed modifications will result in the operation of forklifts (placing product in the yard) between 10pm and 6am. The anticipated forklift noise sources are located within the central area of the plant yard and are considerably distanced from the 'more' intact vegetation and habitat areas associated with the Eastern Creek riparian corridor. The spatial distance from the Eastern Creek riparian corridor, in combination with the relatively low noise levels

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			generated from forklifts, is not anticipated to pose a risk on the viability of habitat for resident fauna. **<u>Light Spill:</u>** The proposed lighting is located within the cleared hardstand area of the yard, being located south of existing vegetation and habitat for resident fauna. Consequently, the proposal is considered unlikely to reduce the viability of any adjacent native vegetation or habitat due light spill as illustrated in Figure 7-2 of the revised BDAR (refer to **Appendix C3**). **<u>Traffic:</u>** The proposed modifications will result in increased traffic movement by 20 road trucks per day, during the daytime period. Road traffic noise levels associated with the development (as modified) have been considered against the *NSW Road Noise Policy*. Ecologique note, that given the existing noise from existing operations on-site and the surrounding road network (including the M7 Motorway), it is anticipated that resident fauna within and surrounding the Subject Site are already accustomed to high levels of urban noise pollution. Furthermore, traffic noise outside of the daytime period would be limited to 10-12 light vehicles at the shift changeover, which Ecologique consider to be of low consequence to vegetation and faun habitats.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			Accordingly, the increased vehicle movement is considered unlikely to reduce the viability of any adjacent native vegetation or habitat due to the increase in vehicle movements as illustrated in Figure 7-2 of the revised BDAR (refer to **Appendix C3**). In relation to the abovementioned parameters, all mitigation measures identified within Section 8 of the BDAR (refer to **Appendix C3**) and **Appendix B** of this RtS Report would be applied to the Site to ensure a safe and efficient operation can be achieved.
	Greenhouse Gas Emissions	The Department requests confirmation the estimated greenhouse gas (GHG) emission contributions to state and national emissions provided in Appendix 6 of the Modification Report are GHG emissions estimates of the proposed production rate of 130 million standard brick equivalents (SBE) per annum.	The Proponent confirms that the estimated Greenhouse Gas (GHG) emission contributions to both State and National emissions as provided in Section 3.3 of the Revised Air Quality Impact Assessment Report (JAN21013M.3, dated 19 October 2021) are emissions corresponding to the proposed production rate of 130 million standard brick equivalents (SBE) per annum.
		Further to the above, the Department requests clarification on the total GHG emissions proposed in comparison to the approved GHG emissions of existing Plant 2 facility operations to demonstrate the extent of new GHG emissions generated by the modification application.	With regards to clarification sought by the NSW DPE on total GHG emissions for the Modification Application, when compared to emissions for existing operations, please refer to the below table. The table outlined below presents a comparison of total GHG emissions (Scope 1 and Scope 2) for the existing / approved Plant 2 facility operations (at 80 million SBE per annum) and the proposed modification application (at an increased production rate of 130 million SBE per annum). As seen from the **Figure 2** below, total (Scope 1 and Scope 2) GHG emissions for existing / approved operations (at 80 million SBE per annum) are estimated to be 43,227 tCO2-

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			e/annum, which equates to approximately 0.54 tCO2-e/annum per thousands of SBE. For the Modification Application, total emissions are estimated to be 50,806 tCO2-e/annum, equating to approximately 0.39 tCO2-e/annum per thousands of SBE. Upon comparison, it is noted that the total Scope 1 and Scope 2 GHG emissions are estimated to increase by approximately 17% for a 62% increase in the production rates. This modest increase in total emissions when compared to the increase in production rates can be attributed to avoiding wasted kiln capacity through continuous operation of the Site. Improvement measures are outlined in Section 3.4 of the Revised Air Quality Impact Assessment Report (JAN21013M.3, dated 19 October 2021). Accordingly, the marginal increase (17%) in the total GHG (Scope 1 and Scope 2) emissions when compared to a 62% increase in production is not expected to have a considerable impact. Minimal increase in the emissions, when compared to production volumes is attributed to improvements proposed by Brickworks for gas consumption. Moreover, this marginal increase is not expected to have a considerable impact on the State and National GHG footprints as seen from the below table.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS

SUBMITTER	MATTERS RAISED	COMMENTS / REQUESTS	FORMAL RESPONSE
			<table><tr><th>Parameter</th><th>Plant 2 Existing / Approved Operations</th><th>Plant 2 SSD 9601 Mod 1 Application</th><th>Units</th></tr><tr><td>Production</td><td>80,000,000</td><td>130,000,000</td><td>SBE per annum</td></tr><tr><td rowspan="2">Gas Usage Rates</td><td>475,637</td><td>683,728</td><td>GJ/annum</td></tr><tr><td>475,637,000</td><td>683,728,190</td><td>MJ/annum</td></tr><tr><td>Gas Usage per SBE</td><td>5.9</td><td>5.3</td><td>MJ/SBE</td></tr><tr><td>Electricity Consumption</td><td>13,561</td><td>18,646</td><td>MWh/annum</td></tr><tr><td>Electricity Usage per SBE</td><td>0.17</td><td>0.14</td><td>kWh/SBE</td></tr><tr><td>Total Scope 1 and Scope 2 Emissions</td><td>43,227</td><td>50,806</td><td>tCO2-e/annum</td></tr><tr><td>Total Emissions per SBE</td><td>0.54</td><td>0.39</td><td>$\frac{tCO2-e/annum}{thousands\ of\ SBE\ per\ annum}$</td></tr></table> **Figure 2 Emissions comparison pertaining to the proposal and SSD 9601 (Source: Brickworks, 2022)**
	Noise Impacts	The Department identifies in the Noise Impact Assessment provided in Appendix 5 of the Modification Report, that the Leq(15 Minute) criteria for modelling Scenario 1 with source-to-receiver winds for evening and night periods is not available at residential receivers R3 to R8. The Department requests clarification on why source-to-receivers winds are not applicable to residential receivers R3 to R8 in the assessment methodology.	As per the Noise Policy for Industry (EPA 2017) Appendix D2 and also stated in Section 5.2 of the Noise Impact Assessment Report: 201189_NIA_Rev5, the Noise Enhancing Wind Analysis (NEWA) program is to be utilised from the NSW EPA website to determine the significance of source-to-receiver winds. Table 5-1 in the Noise Impact Assessment Report contains the noise wind component analysis from the NEWA software. Wind speeds are taken up to 3 m/s and wind direction is taken from source-to-receiver, plus and minus 45 degrees, as per appendix D2 of the Noise Policy for Industry. As shown in Table 5-1 the instances during the evening and night periods, where more than 30% of wind speeds are less than 3 m/s in the plus and minus 45 degree arc from source to receiver only occur at residential

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			receivers R1 and R2. Residential receivers R3-R8 are not in the direction from site where noise enhancing meteorological conditions occur for 30% or more of the period and season, as demonstrated by using the NEWA program, meteorological data from Horsley Park and coordinates of the receivers.
	Substantially the Same Development	The Department notes in Section 5.2 of the Modification Report a qualitative and quantitative assessment of the proposed modification in comparison with the original SSD approval. Section 5.2 stipulates the character and purpose of the original SSD-9601 approval granted was a brick manufacturing facility. However, SSD-9601 granted consent for upgrade works to the existing Plant 2 facility including an installation of the existing kiln and the product building.	SSD 9601 authorised an upgrade to the plant and allowed the installation of a new kiln. These upgrade works and specifically the installation of the new kiln itself has created the opportunity for the Applicant to utilise additional production capacity – a flow on benefit from the works already approved under SSD 9601. For this reason, the only material change put forward by the Applicant pertains to utilising the additional production capacity created under SSD 9601 – provided for by the plant and equipment which has already been installed. There are no substantive changes to the development footprint (apart from formalisation of an existing stockpiling area), bulk, operation or neighbouring impacts of the proposed Modification. The result is a mere increase in efficiency utilising the equipment authorised to be installed and upgraded by SSD 9601 continuing the use of the Site, which dates back to the 1960's. SSD 9601 made provision for alterations and additions (for the purposes of upgrade works) to an existing Brick Manufacturing Facility. The application proposed, simply seeks to modify the form of the plant upgrade to permit the full utilisation of the plant which has been approved and now installed on-site. The modification expands the production capacity using existing infrastructure. The

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			modification allows the Plant upgrade to utilise the full capacity of the equipment which has been installed in response to high demand within the Sydney Construction industry and reflects the existing operations previously established under existing approvals (dating back to 1960). Accordingly, whilst the scope of works pertaining to SSD 9601 comprised of upgrade works to the existing operations, the purpose of the operations on-site would remain unchanged. Rather, the modifications proposed would improve efficiencies across the Site through a modified plant upgrade which increased capacity and employment generation, with the character of the Site remaining consistent for the purposes of a Brick Manufacturing Facility.
		The Department does not consider the assessment provided to be sufficient in demonstrating the development as modified is substantially the same as the SSD-9601 approval. Therefore, the Department requests further justification to demonstrate the development as modified is substantially the same as the SSD-9601 approval.	In relation to the NSW DPEs comments pertaining to the 'substantially the same' test and the comments provided under Section 5.2 of the Planning Report, further justification is provided below. In accordance with the application of the 'substantially the same' test under Section 4.55(2)(a) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the focus of the test is on 'the development' as a whole. Accordingly, a comparison must be made between the development as modified and the development that was originally approved (*Scrap Realty v Botany Bay City Council* [2008] NSWLEC 333 at [16]).

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			Further precedence confirms, that to pass the test, the result of the comparison must include a finding that the modified development is 'essentially' or 'materially' the same as the approved development (*Moto Developments (No 2) v North Sydney Council* [1999] NSWLEC 280 at [55]; *Vacik v Penrith City Council* [1992] NSWLEC 8). Both a qualitative and quantitative assessment of the Modification Application is required. Case Law confirms that differences in qualitative and quantitative effects do not necessarily mean that the character of a development is changed in a material respect (*David Development v Leichardt Council* (2007) NSWLEC 106). Accordingly, even if each of the changes / modifications proposed to be made are significant in their own right, the proposed modifications may still be considered substantially the same as a whole (*Tyagrah Holdings v Byron Bay Shire Council* [2008] NSWLEC 1420 at [12]). **<u>Quantitative Assessment</u>** With respect to the abovementioned legal interpretation and pursuant to listed Case Law, a quantitative assessment confirms that: ▪ Amendments to the approved Architectural Plans and Civil Engineering Drawings approved under SSD 9601, can be classified as minor alterations and additions on-site required to facilitate the

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS

SUBMITTER	MATTERS RAISED	COMMENTS / REQUESTS	FORMAL RESPONSE

improvements to overall site operational efficiencies.

- Potential traffic impacts proposed to be amended are considered to be consistent with those assessed under SSD 9601. This includes the following comparison demonstrating the proposal's consistency with SSD 9601.

	SSD9601	SSD9601 MOD 1	Difference as a numeric	Difference as a percentage
Truck Movements	Traffic generation associated with the approved works (forming the SSD 9601 application) was determined to be essentially unchanged from the traffic generation of the plant	Approximately 2-3 trucks per hour	Minimal	Minimal
Level of Service at intersection		Unchanged	Unchanged	Unchanged
Total Number of Staff on site at one time	35	35	0	0%
Changes to Shifts	Day shift Afternoon shift	Day shift Afternoon shift Night shift – 10-12 people	1 additional shift	1 additional shift

Figure 3 Comparison of traffic impacts in relation to the proposal and SSD 9601 (Source: Brickworks, 2022)

In addition to the above, the total trip generation counts per SSD 9601 were noted as follows:

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			▪ Heavy Vehicles: 480 per day ▪ Light Vehicles: 155-157 per day In accordance with the above, the Proposal forecasts an additional: ▪ Heavy Vehicles: +20 per day ▪ Light Vehicles: +10-12 per day Quantitatively, Ason Group confirm that the potential impacts on the intersection performance as a result of the proposed modifications would be considered negligible based on the additional truck movements; Level of Service; and total number of staff on-site at any given time. Accordingly, the proposed modifications are considered substantially the same as originally approved under SSD 9601. ▪ Amendments proposed would continue to ensure compliance can be achieved with Council's pollution reduction targets, as well as the pre-and-post-development scenarios on-site pertaining to stormwater and flooding. Of particular relevance, Table 3.8 of the Civil Engineering Report (Appendix 3 of the Modification Application package), confirms the stormwater management solutions proposed under the subject Modification Application will significantly improve the pre-and-post-development pollutant loads.

	Annual Pollutant Loading (kg/year)			
Scenario/Catchment	**TSS**	**TP**	**TN**	**GP**
Pre-Development[1]	24,000	22.4	135	973
Post-Development (with treatment)	2,910	11.9	97.3	81.1
Difference (Pre-Post)	-21,090	-10.5	-37.7	-891.9
% Improvement	87.9%	46.9%	27.9%	91.7%
Neutral or Beneficial Effect? Y/N	**Y**	**Y**	**Y**	**Y**

Notes:
1) For the purposes of comparison, the existing case includes the previously-approved and recently-constructed Plant 2 upgrade works since this catchment shares part of the same treatment train (i.e. sediment basin and filter unit) with some proposed catchments.

Figure 4 Stormwater Management Improvements as a result of the proposed modifications (Source: at&l, 2021)

Quantitatively, the above extract affirms the notion that the proposed modifications are supportable from a stormwater management perspective through improved treatment measures across the Site.

Furthermore, the conclusions drawn in relation to flooding, confirm SSD 9601 and SSD 9601 MOD 1 are not affected by flooding from Eastern Creek.

- Potential noise emissions are anticipated to continue to comply with the relevant noise emission criteria as a result of the proposed modifications.

  Specifically, as part of the proposed modifications Benbow Environmental have reviewed the operational activities against the *Noise Policy for Industry* Project Criteria (Table 7-3) and EPL Project Criteria (Table 7-4). The data has been collated and is further presented within **Appendix C7** of this RtS Report.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			Notwithstanding, as a result of the minor increases in acoustic modelling identified as a result of the proposed modifications, Benbow Environmental consider the potential noise impacts negligible when considered against the criteria established under SSD 9601, for which the proposal is considered to be substantially the same in terms of acoustic impacts from a quantitative perspective. ▪ Potential air quality emissions are anticipated to be well below the relevant emissions criteria as a result of the proposed modifications. Importantly, the provision to upgrade the scrubber to a twin tower cascade scrubber will ensure air emissions are reduced to meet the emission concentration levels approved under SSD 9601. Accordingly, from a quantitative perspective, there is estimated to be less than a 3% increase with respect to the ground level emissions assessment criteria from SSD 9601 when compared to the proposed modifications. The emissions as a result of the proposed modifications are considered to represent a minor fraction (<31%) of the ground level emissions assessment for all emissions. For context, Brickworks have prepared a comparative analysis of the incremental concentrations and cumulative concentrations, which considers SSD 9601 against the proposed modifications.

Pollutant	Averaging Period	Maximum incremental (Project only) concentration across sensitive receptors - % of Assessment Criteria – Scenario A **(SSD 9601)**	Maximum incremental (Project only) concentration across sensitive receptors - % of Assessment Criteria – Scenario B **(SSD 9601 MOD 1)**	Difference between Scenario B and Scenario A
Hydrogen fluoride – assessment against sensitive land-use criteria	90-days	28%	31%	3.0%
	30-days	25%	26%	1.0%
	7-days	23%	22%	-1.0%
	24-hours	29%	30%	1.0%
Hydrogen fluoride – assessment against general land-use criteria	90-days	20%	20%	0.0%
	30-days	16%	16%	0.0%
	7-days	11%	11%	0.0%
	24-hours	20%	21%	1.0%
TSP	Annual	1.9%	1.9%	0.0%
PM_{10}	24-hours	10.5%	10.4%	-0.1%
	Annual	4.9%	5.0%	0.1%
$PM_{2.5}$	24-hours	4.5%	4.4%	-0.1%
	Annual	3.1%	3.2%	0.1%
SO_2	10-minutes	15.9%	14.6%	-1.3%
	1-hour	10.5%	9.7%	-0.8%
	24-hour	1.9%	2.0%	0.1%
	Annual	0.7%	0.8%	0.1%
NO_2	1-hour	16.3%	15.0%	-1.3%
	Annual	0.5%	0.5%	0.0%
SO_3	1-hour	83%	16.2%*	-66.8%
Deposited Dust	Annual	13.2%	13.2%	0.0%

*A review of historic emissions and exclusion of a historic anomaly improves the accuracy of the modelled emissions for SO_3.

Figure 5 Comparison of Incremental Concentrations (I.e. Impacts from the Project only – no background concentrations) (Source: Brickworks, 2022)

Pollutant	Averaging Period	Maximum incremental (Project only) concentration across sensitive receptors - % of Assessment Criteria – Scenario A **(SSD 9601)**	Maximum incremental (Project only) concentration across sensitive receptors - % of Assessment Criteria – Scenario B **(SSD 9601 MOD 1)**	Difference between Scenario B and Scenario A
Hydrogen fluoride – assessment against sensitive land-use criteria	90-days	64%	66%	2.0%
	30-days	45%	45%	0.0%
	7-days	31%	32%	1.0%
	24-hours	35%	35%	0.0%
Hydrogen fluoride – assessment against general land-use criteria	90-days	34%	35%	1.0%
	30-days	25%	26%	1.0%
	7-days	20%	21%	1.0%
	24-hours	25%	25%	0.0%
TSP	Annual	54.8%	54.8%	0.0%
PM_{10}	24-hours	85.9%	86.0%	0.1%
	Annual	81.4%	81.4%	0.0%
$PM_{2.5}$	24-hours	99.9%	99.9%	0.0%
	Annual	99.3%	99.3%	0.0%
SO_2	10-minutes	39.7%	40.9%	1.2%
	1-hour	26.4%	27.2%	0.8%
	24-hour	8.7%	8.8%	0.1%
	Annual	5.6%	5.6%	0.0%
NO_2	1-hour	68.4%	69.6%	1.2%
	Annual	33.3%	33.3%	0.0%
Deposited Dust	Annual	56.9%	56.9%	0.0%

Figure 6 Comparison of Cumulative Concentrations (Source: Brickworks, 2022)

- All potential viewpoints would be subject to negligible impacts from a visual amenity standpoint confirming that the proposed modifications would not incur any additional visual impacts.

  SSD 9601 identified Viewpoint 8 as having the most visually sensitive ('high-moderate') impacts given its proximity to the Site immediately alongside Ferrers Road.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			Accordingly, as a result of the proposed modifications, Group GSA affirm that there will be no additional visual impacts anticipated to occur. ▪ The proposed modifications are expected to continue to comply with the relevant criteria from the *Planning for Bushfire Protection 2019* (PBP) document. This includes retention of relevant Asset Protection Zones (APZs) established under SSD 9601. ▪ Additional biodiversity offsets are required to facilitate the proposed modifications as outlined below.

	SSD9601	SSD9601 MOD 1	Difference as a numeric	Difference as a percentage
Ecology – Clearing	0.62ha or 6,200m2 Inadvertently not assessed: 167 + 156 approved stormwater basin and spillway Total 6,523m2	1392m2	1392m2	21% In addition to offsets, over 10,000m2 of native planting on-site vegetation management along Ferrers Road bund is in progress with Toolijooa environmental restoration

Figure 7 Potential biodiversity impacts in relation to the proposal compared to SSD 9601 (Source: Brickworks, 2022)

The revised BDAR confirms that there would be no additional biodiversity impacts on-site as a result of the modifications proposed. The modifications are located on land that has been approved for clearing and existing operational areas, for which Ecologique confirm there would be no serious and irreversible impacts associated with the proposed modifications.

- Accordingly, from a quantitative perspective, the amendments to the Site layout and quantum of bricks to be produced on an annual basis are considered to be consistent with the intentions for the Site.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			Notwithstanding, if comparable review of the 'before' (SSD 9601) and 'after' pertaining to the subject Modification Application were undertaken, the proposed modifications do not materially alter the purposes and functions of the approved development (SSD 9601), despite modifications proposed to the Site Layout (*Gordon & Valich Pty Ltd v City of Sydney Council* [2007] NSWLEC 780). Accordingly, it is not considered that the proposed modifications results in a 'radical transformation' of the original Development Consent (SSD 9601). Rather, the proposed modifications improve the overall operational efficiencies able to be achieved across the Site. **Qualitative Assessment** The proposed modifications are considered to result in an overall improvement of operational efficiencies across the Site, including an improvement to the functionality of the existing Brick Manufacturing Facility (approved in 1960) and the expansion works (approved under SSD 9601). From a qualitative perspective, it is considered that all features and the overall purposes of the development will continue to operate and function as approved, including remaining consistent and qualitatively 'the same' as the development approved under SSD 9601. Qualitatively, the existing operations on-site (governed by existing approvals – including SSD 9601, which facilitate upgrade works on-

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			site) would see vast improvements as a result of the proposed modifications which includes:

	SSD	SSD Mod	Overall increase	Qualitative indicator
Production	Kiln Capacity: 46 cars capacity Day and Afternoon shift Processing 248,000 tpa	Kiln Capacity: 46 cars capacity Day, Afternoon and Night shift Processing 403,000 tpa	Kiln Capacity: No increase in capacity Increased utilisation of labour to reduce bottlenecks and improve energy efficiency	 24/7 Operation 130 mill SBEs or 403,000 t
Footprint	Building footprint remains the same Existing yard footprint includes informal stockpile area of around 1.71 ha.	Building footprint remains the same Formalise existing yard footprint stockpile area (1.71ha) into hardstand area (Part of Phase 1A 0.90 ha, and all of Phase 1B 0.81ha)	Building footprint remains the same	
Energy Efficiency	Kiln fired continuously to preserve kiln temperature (>1000 degrees C), creating some spare capacity when kiln cars are delayed Energy use hard to estimate and can be based on peak demand	Improved efficiency Kiln at full capacity continuously Improvements in energy efficiency measurement and forecasting	12% increase in gas efficiency and 15% increase in electricity efficiency	

Figure 8 Qualitative Comparison of Existing and Proposed Operational Outputs (Source: Brickworks, 2022)

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			In addition to **Figure 8** above, the proposed modifications will be considered qualitatively substantially the same in accordance with the following aspects: ▪ Site Layout and Operations: The application proposed, seeks to modify the form of the plant upgrade to permit the full utilisation of the plant which has been approved and now installed on-site. The modification simply expands the production capacity using existing infrastructure. The modification simply allows the Plant upgrade to utilise the full capacity of the equipment which has been installed in response to high demand within the Sydney Construction industry and reflects the existing operations previously established under existing approvals (dating back to 1960). The current Modification Application utilizes the same plan, product and manufacturing process as approved under SSD 9601. The only material difference is that the efficiency of the use of the plant and equipment is improved by utilizing the spare capacity now available as a result of the kiln upgrade. Concurrently, by utilising spare capacity, the scope of the upgrade to Plant 2 must also be modified to account for ancillary aspects of the development. This includes formalising currently informal hardstand and stockpile areas, thereby providing a more effective stormwater solution, which is best illustrated within the revised Architectural Plans and Civil Engineering Drawings.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			The modification, in itself, is merely about a more efficient use of space on the Site. The additional kiln output and hardstand area conversion does not physically alter the development in any substantial manner. ▪ Civil Engineering: the proposed modifications will improve the existing stormwater management outcomes across the Site, as the stormwater management strategy has been revised to that approved under SSD 9601 to concentrate the discharge between catchments which influences a beneficial and improvement outcome with respect to pollutant reduction targets and pre-and-post-development scenarios with respect to flooding. ▪ Traffic: all traffic impacts will be negligible based on the existing intersection performance of Ferrers Road and the Access Road. This includes consideration of the additional vehicle movements anticipated as a result of the proposed modifications. ▪ Noise: qualitatively all acoustic mitigation measures will continue to be implemented across the Site to ensure attenuation can be achieved for nearby receiver locations. Notwithstanding, all noise emission criteria will be continued to be complied with ensuring the Site can operate in a suitable manner. ▪ Air Quality: the upgrades proposed to improve the operational efficiencies across the Site, have been proposed by virtue of improving potential air

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			quality emissions across the Site with the view to implement new and improved technology that will not only increase the ability to increase capacity; however, will improve the emissions in the long-term operational outcomes experienced across the Site. ▪ Visual: the Site will visually appear substantially the same as originally approved under existing approvals and SSD 9601 as the footprint of the Site will not change, nor will the built form outcomes visible from the receiver locations. ▪ Bushfire: the Subject Site will continue to operate as approved and provide improvements across the Site. Retention of existing APZs and compliance with the PBP 2019 will be ensured as part of the proposed modifications. ▪ Biodiversity: the proposed modifications are contained wholly within the same site / footprint as approved under SSD 9601, for which there are no additional biodiversity impacts anticipated to occur. The advice provided by Mills Oakley (and articulated within Section 5.2 of the Planning Report) is considered to support the abovementioned assessment items further reinforcing that the proposed modifications would result in development that can be deemed as 'substantially' and 'materially' the same development as approved under SSD 9601.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
Environment, Energy and Science Group (EES)	Review of Biodiversity Development Assessment Report and Impacts	The EES review was undertaken without access to the assessment in the biodiversity assessment method (BAM) calculator as the case has not been submitted. The assessor must finalise the calculator and 'submit to consent authority'.	Appendix B of the BDAR (refer to **Appendix C3**) has been updated to include the BAM Reports, including the respective calculations. Further consideration is not considered to be warranted in this respect.
		In addition, this review has been undertaken without access to GIS files, as these have not been provided to EES.	GIS files have been provided as part of this RtS Report and are located within **Appendix C4**.
	Required BDAR Clarifications	Table 4-2 of the Brickworks Plant 2 Upgrade SSD-9601 MOD 1 Biodiversity Development Assessment, dated 3 May 2021 (the BDAR) lists the candidate species for the site. This table states that some species were not included as candidate species for targeted survey, because they were not recorded during surveys by Cumberland Ecology and the assessor. This is not the correct application of the BAM. In accordance with Steps 1-3 in section 5.2 of the BAM, candidate species do not require survey only if the habitat constraints or microhabitats are absent, or if the species is a vagrant, or if the habitat is degraded. Also, Figure 4-1 indicates the surveys undertaken by Cumberland Ecology were on a different part of the site.	Table 4-2 of the BDAR (refer to **Appendix C3**) has been revised (included amendments to Appendix B – BAM Reports) to include all species surveyed on-site. The ecological surveys undertaken pertain to the 'study area' investigated by Ecologique, with relevance towards an indirect impact assessment, which includes an area of PCT 849 that is proposed to be cleared as a result of the proposed modifications.
		Section 6.1.1 of the BDAR states impacts have been avoided by locating most of the proposed yard extension in previously cleared areas. The BDAR should justify why it was not possible to avoid any vegetation clearing.	Section 6.1.1 of the revised BDAR has been amended per the Submission item from EES Group, which confirms unavoidable impacts that will be offset under the Biodiversity Offsets Scheme are required due to the following reasons: ▪ To facilitate a more practical and safer new point of ingress (entrance) to the plant yard area, which surfaced following the approval of SSD 9601. ▪ Construct the stormwater basin and spillway approved under SSD 9601, which was inadvertently

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			not assessed within the BDAR prepared under SSD 9601. ▪ To facilitate works under an existing development (DA 145/20/33), for which construction would not be possible.
		A table of credit classes and matching credit profile has not been provided, as is required by Table 25 of the BAM.	Appendix B of the BDAR (refer to **Appendix C3**) has been updated to include the BAM Reports, including the respective calculations. Further consideration is not considered to be warranted in this respect.
NSW Environment Protection Authority	Conditions of Consent	1. The proponent must install a limestone fluorine cascade scrubber at the Plant 2 kiln that meets the emission design concentrations presented in Table 1 of the Air Quality Impact Assessment (Airlabs Environmental, 19 October 2021).	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
		2. The scrubber stack must be built to a minimum height of 35 m above ground level.	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
		3. The final design of the exhaust stack of the pollution control system must allow for emission testing requirements and have consideration for the requirements outlined in Australian Standard AS4323.1 Stationary source emissions - Selection of sampling positions (2021).	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
		4. Within 90 days of commissioning the new Plant 2 Kiln and scrubber, the proponent must undertake post-commissioning monitoring for all pollutants listed in the Environment Protection Licence no. 546 (licence).	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
		5. Emissions testing must be conducted when the kiln is operating at full capacity and provide a suitable characterisation of the emissions during normal plant operations.	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
		6. The results of the post commissioning emission verification must be presented in a detailed report to the EPA within six weeks of completing the monitoring. The report must contain, as a minimum:	Noted and agreed. This can be conditioned as part of the Conditions of Consent.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
		a. all monitoring results, b. a detailed description of the sampling locations, c. all information listed under Analytical report, Stationary source monitoring in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales, d. Details of operating conditions at the time of testing (including production rates, materials produced, material input and any activities or parameters affecting emissions), e. A statement of compliance against the emission limits included under Condition L3.4 of the licence and all applicable standards of concentration prescribed in the Protection of the Environment (Clean Air) Regulation (2021).	
Fairfield City Council	Traffic Matters for Consideration	A loading management plan providing a summary of the types and the frequency of vehicles servicing the site on a daily basis throughout the day shall be submitted to Council for assessment	Noted. This can be implemented as a Condition of Consent to be issued prior to the issue of the Occupation Certificate.
		Swept path diagram (AG04) showing heavy rigid vehicle manoeuvring through the fire access road to drive up the ramp would conflict with passenger vehicles accessing the car park. The potential conflicts between heavy vehicles and passenger vehicles shall be addressed and additional information shall be submitted to Council for assessment	Ason Group note that the swept paths identified in AG04 demonstrate Heavy Rigid Vehicles (HRV) driving on the ramp and around the Site. The HRVs represent fire trucks circulating around the Site. Importantly, the fire trucks will not be loading/unloading and will not be on-site in the event of an emergency. As such, there will be no conflicts or interactions between heavy vehicles and light vehicles at the car parking (including the ramp) during standard daily operations.
		Swept path diagrams to demonstrate heavy vehicles travelling down the ramp can satisfactorily exit the site without conflicting with other users in the site	As mentioned above, the HRVs represent fire trucks and are not expected to be on-site unless there is an emergency. As

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			such, heavy vehicles will not conflict with other users within the Site during regular day-to-day operations.
		Longitudinal section of the proposed entry driveway showing the grades and levels shall be submitted to Council for assessment	At&l have prepared Drawing C045 which includes a drawing pertaining to the longitudinal section / profile (refer to **Appendix C2**).
		The location of the exit driveway is not shown on the plans. Clarification is required regarding this matter	SBA have revised the Architectural Plans to address articulated both an entrance and exit on the Plans (refer to **Appendix C1**).
		Swept path diagrams to demonstrate the intersection areas within the site have sufficient capacity to cater for two-way traffic movements	Ason Group prepared the Traffic Report for SSD 9601 which stipulated a traffic generation of fewer than 10 vehicles per hour (vph) in the peak hours. Accordingly, the traffic generation of SSD 9601 MOD 1 includes provision for an additional 10 heavy vehicles throughout the day, resulting in approximately 2-3 vph in the peak hours. Ason Group note, that the projected heavy vehicle traffic generation is sufficiently low such that two-way flow at the internal intersections is not considered to be warranted. Ason Group affirm the design generally provides for one-way circulation in accordance with best-practice from a safety and efficiency standpoint. A Signage and Line Marking Plan can be implemented as a Condition of Consent, which will provide the appropriate signage to facilitate safe traffic movements.
		Clarification regarding the waiting bay proposed adjacent to the entry driveway of the development site	Ason Group note the waiting bay adjacent to the driveway is proposed to allow vehicles to queue outside the site entry

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
			in scenarios where there may be traffic congestion at the driveway, which would prevent right turn movement into the Site. The waiting bay will allow trucks to queue without blocking the through movements on the Access Road and is therefore beneficial to the operation of the Access Road.
		The proposed hardstand areas to cater for various types of heavy vehicles within the site shall be dimensioned and be reflected on the plans	Appendix A of **Appendix C6** provides swept path analysis of expected heavy vehicle movements within the proposed hardstand location. This includes dimensions of the hardstand area and the respective proposed stockpile locations. This is consistent with the Site Plans located within **Appendix C1**.
		Longitudinal section of the ramp (adjacent to the car park) indicating grades and levels to accommodate heavy vehicles shall be submitted to Council for assessment	A vertical clearance assessment of the longitudinal section of the ramp adjacent to the car park has been undertaken in accordance with AS2890.2:2018 and is included within Appendix B of **Appendix C7** of this Submission.
	Conditions of Consent	1. Compliance Monitoring An acoustic report is to be prepared and submitted to the NSW Environment Protection Authority being the Appropriate Regulatory Authority (ARA) for noise related issues, for its assessment and approval within three (3) months of operation of the modified plant 2. The report will include but is not limited to the following information: a. Noise measurements taken at the nearest noise sensitive locations as indicated in the Noise Impact Assessment prepared by Benbow, dated October 2021, Ref:201189	Noted and agreed. A Report will be provided within three (3) months of operation. This is consistent with the Conditions of Consent pertaining to SSD 9601.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
		b. Verification that noise levels at the nearest potentially affected receiver/s comply with all relevant assessment criteria detailed in the abovementioned report; c. All complaints received from local residents in relation to the operation of the premises/development. d. Where noise measurements required under point a) above indicate that the relevant assessment criteria are exceeded, recommendations shall be provided in relation to how noise emissions can be satisfactorily reduced to comply with the assessment criteria.	
		2. NSW Protection of the Environment Operations Act 1997 The use of the premises shall operate in accordance with the Protection of the Environment Operations Act (POEO) 1997. All activities and operations carried out shall not give rise to air pollution (including odour), offensive noise or pollution of land and/or water as defined under the Protection of the Environment Operations Act 1997.	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
		3. Environmental Audit Within one year of the commencement of operation of the distribution centre and whenever requested by consent authority, a comprehensive Environmental Audit of the premises shall be undertaken and submitted to consent authority for approval. This audit shall be carried out by a qualified environmental consultant to be approved by consent authority. Further, the company shall comply with any reasonable requests of the consent authority in respect to the implementation of any upgrades or mitigation measures that may arise from the audit, within such time as agreed to by consent authority.	Noted and agreed. This can be conditioned as part of the Conditions of Consent.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
		4. Landscaping Landscaping is to comply with Appendix F of the Fairfield City Wide Development Control Plan 2013.	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
		5. Stormwater Plans Revised Approved plans is to make reference to revised Stormwater Plans prepared by AT & L Engineering Job 20-782, C030- Rev A dated 24-2-2021, C031 - Rev A dated 24-2-2021, C032 - Rev A Dated 24-2-2021, C033 Rev A dated 03-03-2021, and C034 Rev A dated 24-2-2021.	Noted and agreed. The Stormwater Plans provided are recommended to be stamped and approved as part of the final determination.
TfNSW	Assessment	The supporting documentation provided for the proposed modification application has been reviewed, and TfNSW has no comments. The Department should be satisfied that the additional traffic as a result of development can be accommodated with the road network.	Noted and agreed. No further action is required with respect to comments raised by TfNSW.
Sydney Water	Section 73 Approval	Sydney Water advises the Proponent to provide further detailed information at the Section 73 stage regarding the usage and discharge of water and wastewater, along with hydraulic calculations. Special requirements such as firefighting requirements apply to this development and the proponent should provide details of this at the Section 73 application stage. **Water Servicing** ▪ Potable water servicing should be available via a 150 CICL watermain (laid in 1971) on Ferrers Road. ▪ Amplifications, adjustments, and/or minor extensions may be required. **Wastewater Servicing**	Noted and agreed. This can be conditioned as part of the Conditions of Consent.

TABLE 1: RESPONSE TO AGENCY SUBMISSIONS			
SUBMITTER	**MATTERS RAISED**	**COMMENTS / REQUESTS**	**FORMAL RESPONSE**
		▪ Wastewater servicing is being provided for via a private on-site wastewater management system and therefore requires no comment from Sydney Water.	
	Conditions of Consent	Please note that due to possible requirements for trade waste updates, the potential risk of damage to the Portable water asset, as well as the proposal resulting in impaired maintenance access to the asset, Sydney Water recommends that Council impose the following conditions of consent: **Building Plan Approval** The approved plans must be submitted to the Sydney Water Tap in™ online service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met.	Noted and agreed. This can be conditioned as part of the Conditions of Consent.
WaterNSW	Assessment	Given the extent of changes proposed to the approved development and the separation of the development footprint from the Warragamba Pipelines corridor, the proposed modifications are expected to have a negligible impact to WaterNSW lands. WaterNSW has no specific comment or conditions to apply.	Noted and agreed. No further action is required with respect to comments raised by WaterNSW.

3.2 RESPONSE TO PUBLIC AND OTHER STAKEHOLDER SUBMISSIONS

No public submissions were received for the proposal.

PART D SUMMARY OF CHANGES

Following the exhibition phase, and upon review of all submissions received, there are no such amendments to the modifications required to be identified. All submissions have been responded to in an appropriate manner.

PART E PROJECT JUSTIFICATION

5.1 JUSTIFICATION

The proposed development is justified on environmental, social and economic grounds and is compatible with the locality in which it is proposed. The proposed development would enhance the Subject Site's operational efficiencies with respect to existing operations on the Site.

This RtS Report seeks to provide an updated justification and evaluation, as required, for the proposed modifications as a whole

5.1.1 Supports State, Regional and Local Planning Objectives

The proposed development is consistent with the objectives, provisions and vision contained within *A Metropolis of Three Cities – Greater Sydney Region Plan*; the *Western City District Plan*; and the *State Environmental Planning Policy (Western Sydney Parklands) 2009* (WSP SEPP). The proposal would contribute to ongoing employment generation in an area already earmarked for employment through both State and Regional planning policies.

In response to the operational needs of Austral Bricks at a regional and national scale, it has been determined that the proposed modifications are required to support the growth of the business and improve on operational efficiencies across the Site.

The proposed modifications would continue to maintain employment objectives associated with the operations of the Site within the Western Sydney Parklands, forming part of the wider Western City District Plan. The proposed modifications will continue to contribute to a greater productivity through efficient on-site operations, as well as an increase in jobs for the Western Sydney Parklands within a site designated for employment-generating potential.

The proposed modifications in relation to SSD 9601 are considered to remain consistent with the strategic direction of both the *Western City District Plan* and the Western Sydney Parklands Plan of Management 2030 (WSP POM). Additionally, the proposed modifications will further contribute to the growth of jobs in the Western Sydney Region; hence, contributing to the Western City District's economic growth.

Furthermore, the proposed modifications in relation to SSD 9601 will continue to support the growth of existing sectors in the Western City District, such as manufacturing and the wider construction industry through provision of manufactured brick-related supplies, whilst promoting industry diversification.

The proposal seeks improvements to the existing Brick Manufacturing Facility through SSD 9601 and as proposed to be modified (SSD 9601 MOD 1). The subject proposal seeks further upgrade works beyond that of the consent provided under SSD 9601, through provision of increase in capacity and expansion of the hardstand area, of which will help drive an increase in operational efficiencies currently experienced across the Site.

The driving factors and need for the proposed modifications are justified as follows:

- Improvement to the Site's production efficiency performance.
- Improve the Site's sustainability performance.
- Need to improve the site's environmental performance, most specifically with regards to air quality impacts, heat loss and gas usage.
- Need to reduce specific work health and safety risks at the site.
- Increased need for employment opportunities in the Sydney Metropolitan Area, particularly the Western Sydney Region (i.e. Western Sydney Parklands).

- Need to improve the production capacity on-site, including improved efficiencies with production to reduction emissions.
- It is considered to be consistent with State, Regional and Local Government objectives intended for the region and the immediate locality.

5.1.2 Demonstrates an Appropriate Use of a Permissible Development

The proposed modifications would retain and contribute to the growth of manufacturing as previously approved under SSD 9601 for the purposes of upgrade works to an existing Brick Manufacturing Facility, which is an important industry for the region. As the Site is specifically mapped under the WSP POM as being for 'Austral Bricks', the proposed modifications would allow for the strategic direction and aims of the WSP POM to continue to be delivered as originally approved under SSD 9601 (including previous historic approvals pertaining to manufacturing on the Site).

5.1.3 Minimises Environmental Impacts

Specialist consultants have assessed the potential impacts of the proposed development, determining that it could be undertaken with minimal environmental impacts and remain substantially the same development as originally approved under SSD 9601. The commissioned reports have collectively concluded that no significant risk to the locality would result from the proposed modifications. Where impacts have been identified, these fully-developed strategies are set out in detail for mitigation. These measures have been revisited and updated where necessary, as addressed within **Appendix B** of this RtS Report.

5.1.4 Creates Compatibility with Surrounding Development

The proposed development is compatible with existing land uses on adjacent lands, all of which provide very similar employment-generating functions. All are within the immediate vicinity of the Site. Detailed investigations undertaken, as part of this Modification Application, conclude that no significant environmental cumulative impacts, would occur from the proposed modifications and that the proposal will be substantially the same as approved under SSD 9601.

5.1.5 Delivers Ecologically Sustainable Development

The principles of ESD as outlined in Clause 7(4) of the EP&A Regulation have been carefully considered in the formulation of this proposal as approved under SSD 9601 (and proposed to be modified) and are addressed as follows:

5.1.5.1 Precautionary Principle

After careful assessment by both the project team and specialist consultants, it is concluded that no unmanageable threat or irreversible damage to the environment, would result from the proposed modifications.

5.1.5.2 Inter-generational Equity

The project team and specialist consultants have examined the overall effects of the proposed modifications, on both the natural environment and the existing built environment within the vicinity of the Subject Site.

This detailed assessment has concluded that no unreasonable use of resources, affectation of environmental processes or prevention of the use of land for future generations would occur from the proposed modifications in relation to SSD 9601. The proposed modifications would improve the status of the Subject Site and contribute to the economies of the region through both substantial investment and new employment, thereby improving the inter-generational equity.

5.1.5.3 Improved Valuation, Pricing and Incentive Mechanisms

The proposed modifications seek to implement measures to avoid, contain and address any associated air quality impacts, noise impacts, waste or other forms of pollution through appropriate design and management.

The proposed modifications would effectively enable improved cost efficiencies in the manufacturing of locally sourced brick products, in line with the District Plan.

5.2 CONCLUSION

Based on the findings of the Planning Report and further matters considered as part of this RtS, it is concluded that the proposed modifications are consistent with the Objects of the Act, pursuant to Section 1.3 of the EP&A Act.

The proposed modifications are considered a quality outcome for an existing site, which seeks to improve the Site's overall operational efficiencies, forming part of the wider Western Sydney Parklands. Additionally, in the promotion of ongoing employment-generating opportunities, the proposed modifications will continue to deliver on the rationale of full economic utilisation and proper and orderly development of the land for its intended purposes as identified within the WSP POM.

The proposed modifications are considered to be suitable from both a local and regional context and are considered to be orderly and appropriate based on the existing approval pertaining to SSD 9601, as well as additional consideration given to social, cultural, economic and environmental parameters.

Based on the specialist studies and extensive investigations carried out for the proposed modifications, the following conclusions are made:

1. **Strategic and Statutory Context** – The proposed modifications will maintain consistency with the strategic planning framework, namely *A Metropolis of Three Cities*; the *Western City District Plan*; and the WSP POM. Consistency is achieved through the provision of increases to the operational capacity across the Site, which would continue to enable the efficient and sustainable use of existing operational employment land.

   In terms of the statutory context, the proposal is entirely consistent with the Objects of the EP&A Act. The appropriateness of the proposed development is also demonstrated through compliance with the WSP SEPP in that it achieves the employment generating outcomes envisaged for the Subject Site with minimal impact on surrounding land uses and the wider environment.

2. **Suitability of the Site** – The Subject Site is highly suitable for the proposed modifications, as the modifications will facilitate improved operational efficiencies on the Site with respect to the existing land use and further improve upon the upgrade works approved under SSD 9601.

3. **Noise and Vibration** – As a result of the minor increases in acoustic modelling identified as a result of the proposed modifications, Benbow Environmental consider the potential noise impacts negligible when considered against the criteria established under SSD 9601, for

which the proposal is considered to be substantially the same in terms of acoustic impacts from a quantitative and qualitative perspective.

4. **Air Quality and Odour** – The upgrades proposed to improve the operational efficiencies across the Site, have been proposed by virtue of improving potential air quality emissions across the Site with the view to implement new and improved technology that will not only increase the ability to increase capacity; however, will improve the emissions in the long-term operational outcomes experienced across the Site.

5. **Traffic and Transport** – Ason Group consider that all traffic impacts will be negligible based on the existing intersection performance of Ferrers Road and the Access Road. This includes consideration of the additional vehicle movements anticipated as a result of the proposed modifications.

6. **Urban Design and Visual Assessment** – The Site will visually appear substantially the same as originally approved under existing approvals and SSD 9601 as the footprint of the Site will not change, nor will the built form outcomes visible from the receiver locations.

7. **Waste** – A Waste Management Plan has been provided, which considers suitable construction and operational waste measures to be undertaken for the proposed modifications.

8. **Soils and Water** – The proposed modifications will improve the existing stormwater management outcomes across the Site, as the stormwater management strategy has been revised to that approved under SSD 9601 to concentrate the discharge between catchments which influences a beneficial and improvement outcome with respect to pollutant reduction targets and pre-and-post-development scenarios with respect to flooding.

9. **Infrastructure Requirements** – The proposed modifications would not create the need for additional utility services to be provided at the Site.

10. **Hazards and Risks** – As the proposed modifications involve upgrade works only and no changes to the processes used in the actual brickmaking process, it is considered that the proposed modifications would not result in any additional types or quantities of dangerous goods being stored at the Site as previously assessed and approved under SSD 9601.

11. **Bushire** – The Subject Site will continue to operate as approved and provide improvements across the Site. Retention of existing APZs and compliance with the PBP 2019 will be ensured as part of the proposed modifications.

12. **Biodiversity** – The proposed modifications are contained wholly within the same site / footprint as approved under SSD 9601, for which there are no additional biodiversity impacts anticipated to occur.

Given the above reasons and the satisfaction of both of the Objects of the EP&A Act and the aims of WSP SEPP, it is recommended that the proposed modifications, be supported subject to relevant and reasonable conditions.

APPENDIX A
SUBMISSIONS REGISTER

SSD-18204994 – SUBMISSIONS REGISTER			
Group	**Name**	**Matters**	**Addressed**
Public authorities	NSW DPIE	Project Description	Refer to **Section 3.1** of this RtS Report.
		Biodiversity	Refer to **Section 3.1** and **Section 5.2** of this RtS Report.
		Greenhouse Gas Emissions	Refer to **Appendix C1 3.1** of this RtS Report.
		Noise Impacts	Refer to **Appendix C1 3.1** and **Appendix B** of this RtS Report.
		Substantially the Same Development	Refer to **Section 3.1** of this RtS Report.
	EES Group in the NSW DPIE	Review of Biodiversity Development Assessment Report and Impacts	Refer to **Section 3.1** and **Appendix C3-C5** of this RtS Report.
		Required BDAR Clarifications	Refer to **Section 3.1** and **Appendix C3-C5** of this RtS Report.
	EPA	Conditions of Consent	N/A – no action required. Items can be conditioned accordingly.
	Sydney Water	Section 73 Approval	N/A – no action required. Items can be conditioned accordingly.
		Conditions of Consent	N/A – no action required. Items can be conditioned accordingly.
	WaterNSW	Assessment	N/A – no action required.
	TfNSW	Transport Assessment	N/A – no action required.
Council	Fairfield City Council	Traffic Matters for Consideration	Refer to **Section 3.1** and **Appendix C6** of this RTS Report.
		Conditions of Consent	Refer to **Section 3.1** of this RtS Report - Items can be conditioned accordingly.
Stakeholder Groups	N/A	N/A	N/A
Individuals	N/A	N/A	N/A

APPENDIX B
UPDATED MITIGATION MEASURES

PLANNED MANAGEMENT AND MITIGATION MEASURES FOR THE PROPOSED DEVELOPMENT

By:	The Austral Brick Co Pty Ltd
In relation to:	Proposed Modifications to Plant 2 owned by The Austral Brick Co Pty Ltd at 780 Wallgrove Road, Horsely Park, including: ▪ Amendment to the approved site layout – Appendix 1 under SSD 9601, for the purposes of alterations and additions on-site. The scope of works includes: o Upgrade scrubber to Twin Tower Scrubber. o Expansion of the hardstand area. o Proposed new entry. o Provisions for 15 new car parking spaces. o Extension of existing OSD Basin. o Installation of new gatehouse. ▪ Increase of capacity from 80 million to 130 million bricks. The modifications are proposed to improve the environmental, health and safety and sustainability performance of the existing brickworks operation, including improving the overall operational efficiencies across the Site.
Site:	780 Wallgrove Road, Horsley Park (Lot 7 DP1059698)

SPECIFIC ENVIRONMENTAL COMMITMENTS

The following planned management and mitigation measures would be implemented in addition to those established under SSD 9601 to ensure there are no significant environmental impacts resulting from the proposed development.

Air Quality

1. The following mitigation measures would be undertaken during the construction phase of to minimise the generation of TSP, PM_{10} and $PM_{2.5}$ at the Site:
   a) General mitigation measures to be undertaken throughout the construction phase:
      (i) Identify dust-generating activities and inform site personnel about location; and
      (ii) Identify adverse weather conditions (dry and high wind blowing from dust source to sensitive receptors) and halt dust emitting activities if visible dust impacts are identified at sensitive receptors;
   b) Mitigation measures relating to the handling of spoil and structural fill material to be undertaken throughout the construction phase:
      (i) Minimise drop height for material handling equipment;
   c) Mitigation measures to manage wind generated dust from temporary stockpiles and exposed areas, which are to be undertaken throughout the construction phase:
      (i) Progressive staging of dust generating activities throughout the day to avoid concurrent dust emissions;
      (ii) Minimise exposed area if possible;
      (iii) Minimise amount of temporary material stockpiled if possible; and
      (iv) Apply watering through water trucks or sprinklers (note that this mitigation measure would be employed on an as-needed basis);
   d) Mitigation measures to manage wheel generated dust during hauling, which are to be undertaken throughout the construction phase:
      (i) Cleaning of haul roads;
      (ii) Speed restrictions; and
      (iii) Restrict vehicle movement to haul routes that are watered regularly (note that this mitigation measure would be employed on an as-needed basis).

2. The Site would continue to operate according to the air quality parameters set out in EPL 546.

3. The following management measures would be employed to mitigate Greenhouse Gas Emissions from the site:
   a) Ensuring proper maintenance and management of stationary and mobile equipment to improve fuel efficiency, which will result in lower fuel consumption;
   b) Periodic review and implementation of energy efficient measures to minimise electricity consumption;
   c) Removal of process bottlenecks by processing fired cars during the night shift with limited additional outdoor activities; and
   d) Enabling equipment approved in SSD 9601 to be used at design capacity rather than operating at restricted levels due to employee labour hours.

Biodiversity

4. The following mitigation measures are recommended to protect biodiversity adjacent to impact areas during construction and operation:
   a) Vegetation and Habitat Clearing:
      (i) Pre-Clearance
         a. The pre-clearing process provides a final check for the presence of flora and faun species and habitat on a site immediately before clearing begins. Pre-clearing surveys are required to:
            i. Delineate the extent of clearing permitted and prepare site map(s) identifying exclusion zones;
            ii. Identify and record the details of all habitat features (including where applicable: GPS location; species or type of habitat feature) for inclusion on site map(s);
            iii. Mark habitat features that will be cleared, using suitable methods;
            iv. Locate nearby habitat suitable for the release of fauna that may be encountered during the pre-clearing or clearing stages; and
            v. Locate suitable areas for relocation of habitat features if any (e.g. large woody debris, bush rock).
      (ii) Clearing
         a. Where habitat features are identified in pre-clearing surveys, a two-staged clearance process shall be undertaken and an experienced ecologist present to supervise the process, act as a fauna spotter and relocate any fauna captured. This shall include sufficient notification to proximal veterinarian surgeons and wildlife carers of the intent to commence clearance works and determine nearby locations where any injured or otherwise immature and susceptible fauna may be taken to.
      (iii) Post-Clearing
         a. Following clearing, a post-clearing assessment will be prepared and must include at a minimum the following results:
            i. Details of native fauna captured and relocated, injured or deceased;
            ii. Photos of rescued fauna;
            iii. Number of habitat features felled;
            iv. Analysis of the effectiveness of clearing and fauna rescue methods; and
            v. Details of any woody debris, bushrock or hollow bearing trees that have been retained for habitat and where relocated.
   b) Erosion, sedimentation and pollution control:
      (i) The amount of exposed soils at the Site at any given time would be minimised;
      (ii) All stockpiled soils would be adequately covered when not in use to prevent erosion from heavy rainfall;
      (iii) Sediment fences would be established around the perimeter of the Site to prevent the impacts of sedimentation on the adjoining vegetation;

(iv) During development, precautions would be taken to ensure that no pollution, such as petrochemical substances or water containing suspended solids, escapes the construction site;
(v) Pollution traps would be installed where required; and
(vi) Efficient removal of pollution to an offsite location would be undertaken to help minimise pollution impacts.

Noise

5. The following construction phase management measures would be undertaken to mitigate the potential construction phase noise impacts of the proposed development:
   a) Construction works are only to take place during standard hours as follows:
      (i) Monday to Friday: 7am to 6pm;
      (ii) Saturday: 8am to 1pm; and
      (iii) Sunday and Public Holidays: No works permitted.

6. From an operational perspective, the predicted operational noise levels pertaining to **Figures 9** & **10** below should be complied with.

Receptor	Noise Policy for Industry Project Criteria				Scenario 1 Neutral Weather – Day, Evening and Night		Scenario 1 Source-To-Receiver Winds, Evening and Night	
	$L_{eq(15\ minute)}$			L_{AMax}				
	Day	Evening	Night	Max	$L_{eq(15\ minute)}$	Max	$L_{eq(15\ minute)}$	Max
R1	52	48	43	59	30 ✓	33 ✓	36 ✓	40 ✓
R2	52	48	43	59	30 ✓	33 ✓	36 ✓	40 ✓
R3	52	48	43	59	24 ✓	31 ✓	N/A	N/A
R4	47	46	43	55	27 ✓	20 ✓	N/A	N/A
R5	47	46	43	55	32 ✓	32 ✓	N/A	N/A
R6	47	46	43	55	33 ✓	35 ✓	N/A	N/A
R7	47	46	43	55	33 ✓	37 ✓	N/A	N/A
R8	47	46	43	55	32 ✓	34 ✓	N/A	N/A
R9	68			N/A	55 ✓	N/A	55 ✓	N/A
R10	68			N/A	45 ✓	N/A	N/A	N/A
R11	68			N/A	32 ✓	N/A	31 ✓	N/A
R12	48			N/A	47 ✓	N/A	47 ✓	N/A
✓Complies × Non-compliance								

Figure 9 Predicted $L_{eq,\ 15\ minutes}$ Noise Levels – Operational Activities dB(A) (Source: Benbow Environmental, 2021)

Receptor	EPL Project Criteria $L_{A10(15\ minute)}$		Scenario 1 Neutral Weather – Day, Evening and Night	Scenario 1 Source-To-Receiver Winds, Evening and Night
	Day & Evening	Night	$L_{A10(15\ minute)}$	$L_{A10(15\ minute)}$
R1	50	40	33 ✓	39 ✓
R2	50	40	33 ✓	39 ✓
R3	50	40	27 ✓	N/A
R4	50	40	30 ✓	N/A
R5	50	40	35 ✓	N/A
R6	50	40	36 ✓	N/A
R7	50	40	36 ✓	N/A
R8	50	40	35 ✓	N/A
R9	N/A	N/A	N/A	N/A
R10	N/A	N/A	N/A	N/A
R11	N/A	N/A	N/A	N/A
R12	N/A	N/A	N/A	N/A
✓Complies × Non-compliance				

Figure 10 Predicted L_{A10} Noise Levels – Operational Activities during the Day, Evening and Night dB(A) (Source: Benbow Environmental, 2021)

Bushfire

7. The following management measures would be implemented to mitigate potential bushfire risks for the site:
   a) At the commencement of building works and in perpetuity, an Asset Protection Zone shall be established and maintained as per Figure 7 of the Blackash Bushfire Hazard Assessment Report. The APZ shall be established and maintained as an inner protection area as outlined within Planning for Bushfire Protection 2019 and the NSW RFS document 'Standards for Asset Protection Zones';
   b) Fire hydrants would be provided in accordance with Building Code of Australia E1.3 and AS2419.1:2005, including the ring main requirements for large isolated buildings; and
   c) A static water supply that includes a connection for firefighting purposes that provides a 65 mm Storz outlet with a ball valve is fitted to the outlet.

Erosion and Sediment Mitigation Measures

8. Appropriate erosion and sediment control measures would be installed and maintained for the duration of the proposed construction works to ensure that sediment-laden runoff does not pollute the downstream environment, particularly the Eastern Creek riparian zone.

9. All erosion and sediment control plans would be prepared in accordance with the *NSW Government's Managing Urban Stormwater – Soils and Construction Blue Book Volume 1, 4th Edition, March 2007.* A preliminary erosion and sediment control plan for the site is included as Appendix A to Appendix 3 of the *Planning Report* prepared by Willowtree Planning Pty Ltd in November 2021. Further details of the erosion and sediment control systems and procedures would be provided at the detailed design stage when more information is available regarding in-situ soils and development staging.

10. The following management measures would be implemented to mitigate potential erosion and sediment impacts from occurring as a result of the proposed development:

    i. Pre-construction erosion and sediment controls, implemented prior to construction, to minimise disturbances and ensure water quality performance criteria are met;

ii. Designation and marking of transport routes across undisturbed portions of the site to ensure minimal vegetation disturbance. Transport routes would be provided with stabilised construction entry/exits (e.g. Blue Book SD6-14) at the designated access points;
iii. Installation of the proposed sediment basin would occur before bulk earthworks across the site begin so that sediment-laden runoff from the works can be captured and treated;
iv. Diversions would be constructed to divert clean stormwater away from exposed soils and development areas. The exact location and time of construction for each diversion measure would depend on construction staging;
v. Existing vegetated buffer zones/bunds are to be fenced off;
vi. Filter rolls or geotextile inlet filters (e.g. Blue Book SD6-11&6-12) to be installed around all existing stormwater inlet gullies; and
vii. All site personnel to complete an environmental induction covering the erosion and sediment controls;
viii. Measures to mitigate potential water quality impacts during the construction of the proposed development:
    a. Sediment fences (e.g. Blue Book SD6-8) to be erected at the base of all batters to prevent sediment-laden stormwater from flowing into the Eastern Creek riparian zone;
    b. Regular dust suppression on exposed areas by water truck or the use of chemical dust suppressant;
    c. Progressive stabilisation of filled and disturbed areas;
    d. Sediment fences to be erected around soil stockpiles;
    e. Regular inspections as soon as practicable after storm events to check and maintain controls;
    f. Sediment to be removed from fences when controls are 40% full and at the completion of construction. All material to be reused or stored onsite in a controlled manner or taken offsite for reuse or disposal at a licensed waste disposal facility;
    g. Filter rolls or geotextile inlet filters (e.g. Blue Book SD6-11&6-12) to be installed around all new stormwater inlet gullies;
    h. Monitoring of water quality to determine the effectiveness of the sediment and erosion control management practices; and
    i. Erosion and sediment control measures would remain in place for the duration of construction works and following completion until the site is fully stabilised;
ix. Site inspection and maintenance measures to be undertaken so long as earthworks are being conducted or site subsoils are exposed, after every rainfall event and at least weekly:
    (a) Inspect and assess the effectiveness of the Soil and Water Management Plan and identify any inadequacies that may arise during normal work activities or from a revised construction methodology. Construct additional erosion and sediment control works as necessary to ensure the desired protection is given to downstream lands and waterways;
    (b) Ensure that drains operate properly and to affect any repairs;
    (c) Remove spilled sand or other materials from hazard areas, including lands closer than 5 metres from areas of likely concentrated or high velocity flows especially waterways and paved areas;
    (d) Remove trapped sediment whenever less than design capacity remains within the structure;
    (e) Ensure rehabilitated lands have affectively reduced the erosion hazard and to initiate upgrading or repair as appropriate;
    (f) Maintain erosion and sediment control measures in a fully functioning condition until all construction activity is completed and the site has been rehabilitated; and
    (g) Remove temporary soil conservation structures as the last activity in the rehabilitation.

Surface Water

11. The necessary detention capacity would be provided by the expansion of a single detention tank in the southwestern corner of the Site (i.e. within Catchment 1 (comprising Catchment 1A & 1B), just before flows are discharged towards the existing dam.

12. The proposed development would be required to meet the same water quality discharge standards under EPL 546.

Contamination

13. The power transformers associated with the existing substation are considered to be a possible source of potential polychlorinated biphenyl contamination. Therefore, special consideration and caution would be given to any proposed demolition and excavation works at the substation.

14. Subsurface conditions and any soils to be excavated within the footprint of the substation would be appropriately assessed for the presence of potential contaminants prior to disturbance.

Access and Transport

15. The following mitigation measures are proposed to manage the potential for traffic impacts on the local road network during the construction phase of the proposed development:
    i. Traffic control between the Access Road and Plant 2 Site;
    ii. Scheduling of deliveries outside of the commuter peak;
    iii. Appropriate approvals for any over-sized vehicle deliveries; and
    iv. The use of Old Wallgrove Road as the designated construction vehicle route.

Waste Management

16. The following management measures would be employed to mitigate potential waste impacts at the Site:
    a) Waste management measures to be employed during construction works include:
        (i) Applying practical building designs and construction techniques;
        (ii) Appropriate sorting and segregation of demolition and construction wastes to ensure efficient recycling of wastes;
        (iii) Selecting construction materials taking into consideration their long lifespan and potential for reuse;
        (iv) Ordering materials to size and ordering pre-cut and prefabricated materials;
        (v) Reuse of formwork (where possible);
        (vi) Planned work staging;
        (vii) Reducing packaging waste onsite by returning packaging to suppliers where possible, purchasing in bulk, requesting cardboard or metal drums rather than plastics, requesting metal straps rather than shrink wrap and using returnable packaging such as pallets and reels;
        (viii) Careful onsite storage and source separation;
        (ix) Subcontractors informed of site waste management procedures; and
        (x) Coordination and sequencing of various trades;
    b) The anticipated beneficial reuses of construction wastes include:
        (i) Concrete, tiles and bricks would be reused onsite or reused/recycled offsite;
        (ii) Waste oil would be recycled onsite or disposed offsite of in an appropriate manner;
        (iii) All solid waste timber, brick, concrete, tiles and rock that cannot be reused or recycled would be taken to an appropriate facility for treatment to recover further resources or for disposal to landfill in an approved manner;
        (iv) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements;
        (v) Portable, self-contained toilet and washroom facilities would be provided at the site and would be regularly emptied and serviced by a suitably qualified contractor;

(vi) Provision for the collection of batteries, fluorescent tubes and other recyclable resources would be provided onsite to enable offsite recycling;
(vii) Drink container recycling would be provided onsite or these items sorted offsite for recycling at an appropriately licensed facility;
(viii) All garbage would be disposed of via a council approved system; and
(ix) Opportunities for materials exportation and reuse with other local construction operations would be investigated;

c) Waste management measures to be employed during operational works include:
(i) Provision of take back services to clients to reduce waste further along the supply chain;
(ii) Re-work/re-packaging of products prior to local distribution to reduce waste arising;
(iii) Review of packaging design to reduce waste whilst maintaining 'fit for purpose;'
(iv) Investigating leased office equipment and machinery rather than purchase and disposal;
(v) Establish systems with in-house and supply chain stakeholders to transport products in reuseable packaging where possible;
(vi) Development of 'buy recycled' purchasing policy;
(vii) Flatten or bale cardboard to reduce number of bin lifts required; and
(viii) Providing recycling collections within each of the offices and tearooms (e.g. plastics, cans and glass);

d) The anticipated beneficial reuses of operational wastes include:
(i) Cardboard, paper, plastic, glass, cans and pallets and containers would be reused/recycled offsite;
(ii) Provision for the collection of batteries, fluorescent tubes and other recyclable resources would be provided onsite to enable offsite recycling;
(iii) All waste materials that cannot be reused or recycled would be taken to an appropriate facility for treatment to recover further resources or for disposal to landfill in an approved manner;
(iv) Waste oil (if any) used in equipment maintenance would be recycled or disposed of in an appropriate manner; and
(v) Opportunities for materials exportation and reuse with other local industrial operations would be investigated. This would have two benefits: minimising energy through reduction of material reprocessing, encouraging material reuse;

e) General waste management measures to be employed for waste classification and removal from the site include:
(i) All liquid and non-liquid wastes generated during development construction works (if any) would be classified in accordance with the requirements of *Waste Classification Guidelines, Part 1: Classifying Waste* (EPA, 2014). Samples would be collected by appropriately trained and experienced personnel from stockpiled or in-situ waste materials by the use of a hand trowel. The hand trowel would be thoroughly decontaminated using phosphate free detergent and distilled water between each sampling location;
(ii) During the collection of soil samples, features such as seepage, discolouration, staining, odours and other indications of contamination would be noted on the field documentation;
(iii) Collected soil samples would be immediately transferred to sample containers of appropriate composition (glass jars). Sample labels would record job number; sample identification number; and date and time of sampling;
(iv) Sample containers would be transferred to a chilled ice box for sample preservation prior to and during shipment to the testing laboratory. A chain-of-custody form would be completed and forwarded with the samples to the testing laboratory;
(v) Soil samples would be analysed by both a primary and secondary (independent check) laboratory, both of which would be NATA accredited for the required analyses;
(vi) In addition, the laboratories would also be required to meet the environmental consultant's own internal quality assurance requirements;
(vii) The analytical data would be compared against the waste criteria contained in the *Waste Classification Guidelines, Part 1: Classifying Waste* (EPA, 2014) for

heavy metals, TRHs, BTEX, PAHs, total pesticides (OCPs and OPPs), PCBs and TCLP in benzo(a)pyrene, lead and nickel. A summary of the relevant criteria is provided in Appendix 14 of the *Environmental Impact Statement* prepared by Willowtree Planning Pty Ltd;

(viii) All wastes removed from the site would be transported in accordance with relevant road and transportation regulatory requirements. Where required (depending on the classification of the wastes), appropriately licensed transport contractors would be used. The appointed transporters would be responsible for ensuring they are appropriately licensed to:

a. Carry the particular type of waste; and

b. Transport the materials to an appropriately licensed facility;

(ix) Where the waste is classified as Restricted Waste or Hazardous Waste, the transporter would be required to carry (subject to a number of exceptions) appropriately completed waste data forms with each load, and provide a copy to the waste facility to which the waste is taken.

17. Appropriate spill kits would also be maintained at the site to appropriately respond to any product spills that may occur during site works. These spill kits would contain appropriate components such as sawdust, coconut fibres, dustpan and brush, and drain covers, as well as a copy of any relevant Safety Data Sheets and a copy of the site's Incident Response Management Plan as is required under Part 5.7A of the POEO Act.

Fire Engineering

18. An alternative Fire Strategy would be prepared for the Site as per the *Fire Engineering Strategy*.

19. Additional fire management measures to be provided at the Site include:

- An egress performance solution would address extended travel to exits through:
  - (i) Building height acts as a smoke reservoir;
  - (ii) Low fuel load and fire size resulting in low smoke production;
  - (iii) Low occupant populations; and
  - (iv) Occupant warning initiated by thermal fire detection suitable for industrial applications;
- In lieu of a smoke exhaust system, a manually operated system of smoke clearance fans would be provided to assist the brigade in post fire building ventilation;
- An amplified building occupant warning system would be provided, activated by a thermal fire detection system; and
- Fire hydrants would also be provided as per the relevant standard.

Visual

20. Landscaping (as approved under SSD 9601) would be used at the Site to minimise any significant vegetation clearing which could impact on views. Where such landscaping works are undertaken, species would be selected from the Cumberland Plain Woodland Endangered Ecological Community vegetation grouping.

Aboriginal Heritage

21. In the unlikely event that potential Aboriginal heritage items are discovered during earthworks to facilitate the proposed development, works in the vicinity would cease and the OEH would be contacted.

APPENDIX C
SUPPORTING INFORMATION