

# ENVIRONMENTAL IMPACT STATEMENT

Oakburn Poultry Processing Plant - Tamworth NSW



2 July 2019

## Document Control

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Oakburn Poultry Processing Plant

**This document has been prepared for:**

Baiada (Tamworth) Pty Limited

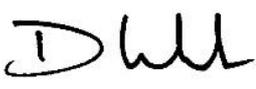
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## Revision History

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
6	2 July 2019	Final	 David Ireland	 Malcolm Griffin

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## DECLARATION

As author of this Environmental Impact Statement and in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*, I declare that:

- a) The statement has been prepared in accordance with section 4.12 (8) of the *Environmental Planning and Assessment Act 1979*, and
- b) The statement contains all available information that is relevant to the environmental assessment of the development to which the statement relates, and
- c) The information contained in the statements is neither false nor misleading.



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# EXECUTIVE SUMMARY

## Project Overview

PSA Consulting has been engaged by Baiada (Tamworth) Pty Limited to prepare this Environmental Impact Statement to accompany a State Significant Development Application seeking Development Consent for the construction of a Poultry Processing Plant on land at 1154 Gunnedah Road, Westdale in Tamworth. Specifically, this development application is seeking approval for the following components and elements:

- Construction of a new poultry processing plant consisting of :
  - 38,936m<sup>2</sup> of Gross Floor Area providing for live bird storage, processing, chilling, cold store and distribution facilities;
  - 1,600m<sup>2</sup> workshop and store building;
  - 3,791m<sup>2</sup> of ancillary administration, staff amenities and childcare space;
  - Expanded Waste Water Treatment Plant; and
  - Installation of ancillary infrastructure, landscaping and services.
- Construction of a new access driveway via an easement connecting to Armstrong Street via Workshop Lane;
- Construction of a new staff car parking area providing 820 car parking spaces;
- Site landscaping and screening vegetation;
- Increase the approved level of poultry processing on the site to a maximum of 3 million birds per week;
- Increase the approved level of rendering at the existing rendering plant to a maximum of 1,680 tonnes of finished product per week (240 tonnes / day 7 days a week); and
- Allow all operational aspects of the site to occur at anytime with no restrictions (24 hours per day / 7 days a week).

## Poultry Consumption and Demand

Research undertaken by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) indicates that total chicken meat consumption in Australia has increased by an average of 5% per annum over the 10 years to 2022-23, representing 45% of the total meat consumption.

The ABARES commodities report shows that chicken continues to be the most consumed meat in Australia and has increased by over 65% between 2000 (~30kg per person) and 2018 (~50kg per person). The growth is driven by the product's versatility, convenience and a lower price point compared to beef, lamb and pork. Per capita poultry consumption is expected to continue growing to reach around 51.5kg by 2022-23.

As a result of the ongoing and predicted growth in demand for poultry meat products in Australia, significant expansion of the industry is required. The proposed construction and increase in the approved production volumes at the Oakburn processing plant is a direct consequence of this increase in demand for poultry products throughout Australia and will provide additional production capacity within Tamworth and the ability for further expansion of all facets of the Company's regional operations to ensure supply meets demand.

## Core Objectives

The core objectives for the proposal are as follows:

- Centralise Baiada's Tamworth poultry slaughtering and processing operations onto a single, integrated and efficient site, which includes the ultimate decommissioning of the current Out Street Processing Facility in Tamworth's town centre;
- Facilitate processing of up to 3 million birds per week in Tamworth;
- Enable further expansion of the poultry cluster within the Tamworth Region; and
- Allow growth of Baiada's operations to meet the demand for additional poultry products in the Australian market.

## Alternatives

The alternatives to carrying out the development include:

1. Maintain the existing operation at the Out Street Processing Plant and Oakburn Rendering Plant with no increase in processing capacity in the Tamworth region;
2. Construction and operation of the processing plant in accordance with the existing approval;
3. Construction of the processing plant in an alternate location within the Tamworth Region; or
4. Expanding operations in a different region or state.

The alternatives to proposed development are either financially unviable, unlikely to succeed or do not represent an efficient approach to expansion of poultry production in Australia in order to the forecast growth in demand. Further, as demonstrated within this EIS, the proposed development can be undertaken in a manner consistent with all applicable environmental and planning safe-guards and standards and as such, the project as proposed is clearly the best option to achieve the core objectives.

## The Proponent

Baiada (Tamworth) Pty Limited is part of the Baiada Group of Companies (Baiada) which includes the Steggles business. Baiada is a privately owned Australian company providing premium quality poultry products throughout Australia and has an employee base of more than 7,000 people. The Baiada business is a fully integrated poultry operation encompassing broiler and breeder farms, hatcheries, processing plants, feed milling and protein recovery. Baiada's products include the sale of live poultry (including breeding stock), poultry feed, fertile eggs, day old chickens, primary processed chicken (raw), processed chicken products and pet food.

## The Site

The subject site is located at 1154 Gunnedah Road, Westdale and described as Lot 100 on DP1097471. The site is located to the north of Tamworth Regional Airport, and approximately 7.5km north west of the Tamworth Central Business District. The key components of the development (Poultry Processing Plant, Rendering Plant and Waste Water Treatment Plant) are to be located within Lot 100 on DP1097471 which has an area of 57.4Ha. As the proposed development also includes the construction of a new access road connecting the site to Workshop Lane, the south east adjoining lots (Lots 101 & 102 on DP1097471) are also included as part of this Development Application.

## Existing Operations and Approvals

The Oakburn Poultry Processing Plant was originally approved on the site in February 1998 under the (now repealed) *State Environmental Planning Policy 34 – Major Employment Generating Industrial Development*. The processing plant was to be constructed in 4 stages (in any order) including a:

- Protein Recovery Plant (Rendering Plant);
- Processing Plant (750,000 Birds per week – later modified to 1 Million birds per week);
- Deboning Plant; and
- Processed Products Plant (Further Processing).

The immediate need was for a rendering facility to handle poultry by-products, which was completed in 2000. To date only Stage 1, the Rendering Plant has been constructed, and replaced in 2014 (as per Modification 5) following a fire which destroyed the original facility. The rendering facility currently processes raw material (poultry by-products) producing an average of 160 tonnes of finished meals and oil per day (as per Modification 6). The Rendering Plant also operates in accordance with an existing Environmental Protection License #7566 allowing for Livestock Processing Activities (Rendering or Fat Extraction) >4000T and General Chemical Storage (LPG) of 0 - 5000kL.

Development of the balance of the processing plant was delayed following acquisition of several national poultry businesses that provided additional processing capacity, however the approval remains in force and effect.

Baiada has recently obtained Consent from the Tamworth Regional Council for construction of a new waste water treatment plant to service the existing rendering plant. The waste water treatment plant consists of a series of Sequence Batch Reactors, Coverer Anaerobic Lagoons and maturation ponds aimed improving the quality of the existing waste water generated by the rendering plant. The waste water treatment plant is currently under construction.

Demand for Baiada's poultry products has continued to grow and there is now a need for additional processing capacity exceeding that provisioned in the current Development Consent for the site.

## Land Use Planning and Permissibility

Under the *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, Part 2, 8(1), the development is classified as a State Significant Development as it involves "Agricultural produce industries and food and beverage processing" that has a Capital Investment Value greater than \$30 million.

Under the *Tamworth Regional Local Environmental Plan 2010*, the subject site is located in the RU1 Primary Production Zone. The existing and proposed development falls under Tamworth LEP definition of a **Livestock Processing Industry**. In accordance with clause 3 of the Tamworth LEP development of a Livestock Processing Industry located in the Primary Production Zone (RU1) is permitted with consent.

The ancillary access road (via Workshop Lane) also traverses land included in the Special Activities (SP1) and Environmental Management (E3) zones. While a Livestock Processing Industry is identified as prohibited development within these zones, Section 4.38 (3) of the *Environmental Planning and Assessment Act 1979* provides that development consent may be granted for State Significant Development, despite the development being partly prohibited by an Environmental Planning Instrument (EPI).

## Consultation

In preparing the Environmental Impact Statement consultation has been undertaken with Authorities, Stakeholders and the broader community. A Planning Focus Meeting was held on 1 June 2018 in Tamworth and was attended by representatives from Tamworth Regional Council, Department of Planning and Environment, Department of Primary Industries and Environmental Protection Agency.

Subsequently, a formal Request for the Secretary's Environmental Assessment Requirements (dated 6 June 2018) was submitted with the NSW Department of Planning and Environment. The Department of Planning and Environment consulted with a number of other departments including NSW Environmental Protection Agency, Roads and Marine Services, Office of Environment and Heritage, Tamworth Regional Council and Department of Industry and requirements from each of these departments was included in the SEARS issued on 2 July 2018. Additional consultation was also undertaken by the Applicant with the Civil Aviation Safety Authority, Natural Resources Access Regulator, NSW Health/Hunter New England Local Health District and Essential Energy.

Consultation was also undertaken with the broader community, including surrounding residents and businesses to gain preliminary feedback with respect to the proposed development. This included a letter, flyer and offers to meet with the nearest neighbours, media releases and an advertisement in the Northern Daily Leader, distribution of a project information flyer to residents and businesses in the local area, interviews about the project on the local ABC Radio station and operation of a free phone line and email for more information. No stakeholders requested a meeting with the project team and 3 formal responses from interested community members were received.

All feedback from the consultation activities has been utilised to form and guide the preparation of this EIS.

## Assessment of Potential Impacts

An assessment of the proposed development has been undertaken and has found that the development will not have any significant detrimental impact upon the community, economy and receiving environment. Further details on the assessments undertaken are provided below.

## Direct Employment

At full operation the facility is expected to provide employment for large workforce of up to 1,176 people in various areas of the processing plant. There are 494 staff currently employed at the existing Out Street Processing facility. As a result, there will be an estimated increase of 682 associated with the processing and rendering operations at full operation.

## Water Use and Wastewater Treatment

The existing Out Street processing plant is currently utilising an average of 2ML per processing day. Based on current estimates at full operation, the Oakburn Processing Plant will consume up to 8ML of potable water per processing day. It

is important to note, that as the development of the Oakburn processing plant will result in the cessation of operations at Out Street, the net increase in potable water demand will be approximately 6ML per processing day.

To minimise water demand, Baiada are proposing to implement an Advanced Water Treatment Plant which will treat 100% of the water used, and deliver approximately 75% (6ML), back to a potable standard and made ready for re-use within the processing plant.

Hydroflux Industrial Pty Ltd has prepared a concept process design for the proposed Waste Water Treatment Plant (WWTP) and Advanced Water Treatment Plant. The wastewater from the poultry processing facility will initially be treated in the WWTP in a conventional manner, using primary and secondary treatment processes.

The wastewater is then introduced to secondary solids removal process before being treated by the Advanced Water Treatment Plant including filtration and low-pressure Reverse Osmosis (RO) to reduce the levels of dissolved solids to provide water suitable for re-use in the processing plant. The system will be designed to meet and exceed the re-use water quality standards.

A RO concentrate stream will also be produced which will have a high concentration of dissolved salts, and is intended to be discharged to the municipal sewer to be shandied with other reticulated sewer and treated at the Westdale Sewer Treatment Plant. This discharge to the sewer will be subject to a Trade Waste Agreement with Tamworth Regional Council. The Applicant has met with Council officers with respect to the terms of agreement and are working with Baiada on the ultimate discharge arrangement for trade waste.

## Ecological Impact Assessment

Native vegetation was calculated to occupy approximately 4.8% of the specific subject land and includes a single plant community type in two broad condition states that align to Plant Community Type (PCT) 599 - Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion. The remaining land within the subject land comprises exotic dominated pasture, garden beds and cleared land.

It is important to note that a portion of this planted vegetation zone is not naturally occurring vegetation community and technically does not conform to the PCT. But for the purpose of the assessment and calculation of offsets has been assigned to PCT 599 based on the dominant planted natives.

Approximately 0.83 ha of the 1.41 ha of Box Gum Woodland TEC and approximately 0.51 ha of the 1.45 ha of planted natives will be removed under the proposed development. The remaining ~0.58 ha and ~0.94 ha, respectively, will be retained within the subject land. The remainder of the vegetation to be removed consists of exotic dominated pasture and gardens beds that do not constitute a recognised ecological community.

Two large *Eucalyptus melliodora* hollow-bearing trees that contain hollows ranging from small to large in size, one stick nest and the habitat associated with the native vegetation will be directly impacted under the proposed development. Four hollow-bearing trees and over half the native vegetation within the subject land will be conserved. Overall, the removal of these habitat features are considered to have only minor implications for fauna species due to the highly modified and degraded ecological context they are within and the high mobility of the species likely to utilise these habitats.

As the project includes the removal of some areas of native vegetation, offsets are required in the form of ecosystem credits. This assessment indicated that the removal of the native vegetation within the subject land requires a total of 20 ecosystem credits for PCT 599. A suite of other PCTs could be utilised to offset this PCT under the offset rules.

Several management recommendations have been provided to minimise potential ecological impact, particularly during the construction phase of the project.

Based on the assessment undertaken by Cumberland Ecology, the report concludes that the implementation of the proposed mitigation and offsetting measures, it is considered that the impacts of this project on biodiversity, in particular on Box Gum Woodland will be minimal and can be appropriately managed.

## Cultural Heritage Assessment

A Cultural Heritage Assessment has been undertaken by Everick Heritage Consultants to support the proposed new processing plant at Oakburn. The methods used for this assessment are in compliance with the Office of Environment and Heritage (OEH) 'Code of Practice for Archaeological Investigation of Aboriginal objects in New South Wales' (2010) and the relevant legislation.

There were no items or sites of Indigenous cultural heritage or historic heritage found during the site inspection. No items or places of potential historic heritage significance were located within the Project Area therefore a Historic cultural heritage significance assessment was not warranted. The assessment provides a number of recommendations for the management of cultural heritage (if encountered) during construction of the processing plant.

## Contamination Assessment

A detailed Contaminated Site Assessment Report has been prepared by SMK Consultants to determine if there was any contamination on the subject site. The investigation took into consideration the characteristics of the site, historical land uses and adjoining land uses when analysing potential sources of contamination. This investigation did not identify any contamination of concern within the property boundary of the “Oakburn” Development site.

PFAS was detected within the watercourse sediment of Lot 101 to the east of the processing site. The PFAS was identified at a concentration below adopted investigation threshold levels for human health or ecological screening. The PFAS chemicals are considered at trace levels in the sediment retained in a small gully dam within the adjoining Council land. This trace PFAS concentration is considered most likely to occur onsite because of lateral migration from the upstream registered PFAS contaminated site, mainly the Tamworth Regional Airport. This migration pathway is not expected to impact directly upon the proposed poultry plant development site. No physical contact pathways are present between the gully and the development site, other than during a period where the proposed access road would be constructed.

Based on the methodology adopted for this investigation, the development site does not contain contaminated land that would impact construction of the Oakburn Processing Plant or pose an unacceptable risk to human health or the surrounding environment.

## Odour Impact Assessment

An Odour Impact Assessment (OIA) has been prepared by The Odour Unit (TOU) to assess the potential impact of the development in terms of odour and dust. All on-site odour sources have been assessed and modelled as a cumulated impact and separately grouped by origin including the Protein Rendering Plant, Processing Plant and the Waste Water Treatment Plant. It is noted that the Odour emissions from the rendering plant biofilters was included as a worst-case scenario despite being a treated emission.

Modelling of the proposed development identified the cumulative site odour impact (odour footprint) at the NSW EPA Impact Assessment Criteria (IAC) of 5ou. The cumulative 5ou contour encroaches beyond the site boundary marginally to the north and marginally to the south, but does not cover any sensitive receptors. Therefore, TOU has identified that the proposed processing plant is unlikely to cause adverse odour impacts under normal conditions within the assumptions made in their assessment.

Regardless of this finding, TOU recommends the preparation and implementation of an Odour Management Plan for the site to prevent or minimise the potential for odour generation through a hierarchy of controls, in the form of, but not limited to, engineered, administrative and/or management practices.

## Dust Impact Assessment

Based on TOU’s experience with poultry processing facilities across Australia, processing, rendering and wastewater sources are high in moisture and low in particulate emissions and as such, dust emissions are unlikely to be problematic due to:

- the nature of all processing, rendering and wastewater sources of the proposed facility are not high risk (compared with, for example, feed mills);
- the sealing of site carparks and roadways; and
- the large separation distance to the nearest rural residential dwelling, being located over 1.1 km to the north of the processing plant structure, and the rest being over 1.5 km away.

In response to these factors, a quantitative assessment of dust impacts is not considered necessary.

## Noise Impact Assessment

A detailed assessment has been undertaken by Reverb Acoustics to assess the proposed development against the relevant acoustic criteria. The report has shown that providing recommendations detailed in this report are implemented, noise levels from the upgraded site will be compliant with the EPA's NPI requirements at all nearby residential receivers during the day, evening and night, for neutral and worst-case atmospheric conditions. Noise emissions from activities associated with the site will be either within the criteria or generally below the existing background noise level in the area for the majority of the time.

Considering the abundance of industrial/commercial premises already in the area and relatively constant traffic on nearby roads, noise generated by the site may be audible at times but not intrusive at any nearby residence. Since the character and amplitude of activities associated with the site will be similar to those already impacting the area, it will be less intrusive than an unfamiliar introduced source.

During construction the total impact at each receiver is related to the received noise level and the duration of excessive noise. Generally, construction noise will comply with the criteria, however, during major construction activities some exceedances may occur. However, nearby neighbours should accept some periods of high noise, considering the relatively short-term nature of louder construction activities.

To reduce the impact in the area during construction, we recommend that louder construction activities, should be completed with the minimum of undue delay. In any case, all reasonable attempts should be made to complete significant noisy activities within as short a time as possible.

Reverb has concluded that operation and construction of the Oakburn site will not cause any long term excessive environmental noise at any residential properties.

## Traffic Impact Assessment

A Traffic Impact Assessment has been prepared by TTPP which reviewed the proposed development and its impacts on the existing road network. At full operation, the proposed development is expected to generate up to 408 heavy vehicles trips per day (comprised of 204 incoming and 204 outgoing trips). Staff working at the facility are expected to generate up to 1,966 vehicle trips per day (comprised of 983 inbound and 983 outbound trips). The proposed development includes the construction of a new access driveway via an easement connecting the site to Armstrong Street within the Glen Artney Industrial Estate via Workshop Lane.

It is noted that the traffic generation of the processing plant is forecast to be low during the on-street peak hours, with site-generated peaks occurring outside of the on-street peaks. Regardless, to ensure a robust assessment of the future operating conditions, the analysis assumed that the peak volume of additional traffic resulting from the processing plant during the surveyed morning and afternoon periods (6am to 9am and 3pm to 7pm) would coincide with the surveyed peak volumes over those same periods. This will result in an overestimate of the future peak hour conditions, as those peaks are unlikely to coincide. The analysis demonstrates that with the traffic changes forecast to result from the processing plant, the key intersections would continue to operate at good levels of service.

Analysis of the longer term peak hour operating conditions was also undertaken with the assumed coincidence of peak activity as above, and an increase in background traffic at 2 percent per year over 10 years. The results demonstrate that with the combined effects of background traffic growth and the processing plant traffic, the intersections are forecast to operate with satisfactory levels of service and spare capacity over the 10 year horizon.

The proposed provision of staff car parking (820) is expected to meet the requirements of the processing plant staff and visitors and the layout of the internal road network and car parking areas is satisfactory for the expected usage.

## Stormwater Management Plan

A detailed Stormwater Management Plan has been prepared by MPN Consulting Engineers. The aim of the SMP is to:

- Prevent or minimise adverse social or environmental impacts from stormwater runoff originating from the proposed development;
- Achieve acceptable levels of stormwater runoff quality and quantity; and
- Identify stormwater quantity and quality best management practice for the site and demonstrate that water quantity and quality impacts will be minimised in receiving waters.

As part of the development and expanded stormwater management system will be implemented with stormwater runoff to be collected and conveyed in a new internal stormwater pit, pipe and open channel network, prior to discharge to three separate treatment/detention basins. From the basins, stormwater will discharge via overland flow across the site boundaries as per existing condition. Litter baskets will be fitted to the new field inlet pits to capture gross pollutants. The design of the expanded stormwater management system will ensure no worsening impact on upstream or downstream locations.

In order to reduce overall post-development pollutant loads and concentrations being discharged from the site, treatment solutions have been provided to remove hydrocarbons, suspended solids and nutrients prior to being discharged from site. The assessment demonstrates that implementation of these recommendations will achieve compliance with the relevant Water Quality Objectives.

A range of erosion and sediment control measures are proposed to be implemented during construction to prevent stormwater contamination. The contractor shall be responsible for the implementation and maintenance of the erosion and sediment control measures through the construction phase of the project.

The Stormwater Management Plan confirms that stormwater quality and quantity treatment is achievable to the levels required by Tamworth Regional Council and Industry Best Management Practice.

## **Economic Impact Assessment**

A Social and Economic Impact Assessment has been prepared by Hill PDA for the project. At full operation the facility is expected to provide employment for large workforce of up to 1,176 people in various areas of the processing plant. There are 497 staff currently employed at the existing Out Street Processing facility. As a result, there will be an estimated increase of 679 associated with the processing and rendering operations at full operation. Baiada currently have a training and skills program for the benefit of staff. These programs will be expanded to recruit, train and accredit staff for the additional roles and positions at the facility.

At present Baiada employs 1,029 workers in the local area, of which approximately half are working in Baiada operated farms including breeding and rearing farms and a small number of broilers. A further 18 workers work at the Tangaratta feedmill, 17 in distribution and 7 in sales and administration. 66 workers including 18 also managers work on the 17 contract broiler farms in the local area.

In addition to these inputs Baiada uses specialised contractors to collect and transport the birds to the processing plant as well as transportation of feed and bedding material throughout the production cycle. That contractor currently employs 60 workers in the Tamworth area which would need to grow in a manner commensurate with the increase in production numbers associated with expansion of the processing plant.

In addition to the above, Baiada also requires various services and external inputs to production via other contractors and service providers. These would include plumbers, electricians, mechanics, gardeners and others required to ensure all facilities and operations are well maintained and operating smoothly.

Based on ABS national input / output tables, HillPDA estimates that for every new job in poultry processing results in the creation of a further 3 jobs in supporting areas. As such, HillPDA estimates that a net increase in 656 jobs will deliver an additional 1,962 jobs.

Construction to the cost of \$203m is also forecast to generate a further \$265m of activity in production induced effects and \$190m in consumption induced effects. Total economic activity generated by the construction of the proposed development is estimated to be \$658m. HillPDA calculates that every one million dollars of construction generates 2.15 full time positions over 12 months directly in construction on site. Based on the estimated cost of \$203m, approximately 438 job years would be directly generated. Including the multiplier impacts the proposed development would therefore have potential to generate 1,736 job years during the period of construction.

A key component in the development of the Tamworth region as a poultry cluster is the availability of local grain from farms in the region to produce poultry feed blends while minimising transport costs. As per current operations, grain for the expanded operation will be primarily sourced from the surrounding areas including Tamworth, Moree, Narrabri, Walgett and Gunnedah. The economic benefits from the increase in regional grain supply are estimated to be 546,000 tonnes per year (~\$136.5m).

To support the increase in processing of poultry within the region, significant increases in the supply of birds will be required. It is expected that around 300 additional poultry sheds will be required to service the ultimate capacity of the

Oakburn processing plant. This growth is expected to occur via expansion of existing farms, as well as new farms located on suitable sites, located within a 2-hour drive of the Oakburn processing plant in accordance with animal welfare considerations.

## Social Impact Assessment

The findings of the social impact assessment reflect the findings of the detailed technical assessments undertaken in relation to the potential impacts on the development on sensitive receptors and the surrounding community. The HillPDA Assessment concludes that the proposed development is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures are implemented, however it was determined the project will generate significant, positive impacts, particular in relation to economic impacts.

## Animal welfare

Baiada currently have in place a national Livestock Animal Welfare and Biosecurity Manual which contains a comprehensive livestock management program which will be applied to the site. Baiada is committed to achieving high standards of bird welfare and the company understands that bird welfare and economic performance go hand-in-hand. As well as being in the bird's best interest, it makes sound economic sense to ensure that flocks are maintained in an environment in which they are safe, comfortable and free from injury or harm.

The conditions under which poultry are managed during their growing phase, transportation and slaughter are set down in several statutory and industry endorsed codes of practice designed to safeguard their health and welfare. In this regard, Baiada is committed to meet or exceed the standards of care detailed in the following Primary Industries Standing Committee documents:

- *Model Code of Practice for the Welfare of Animals - Land Transport of Poultry (2006)*; and
- *Model Code of Practice for the Welfare of Animals - Livestock at Slaughtering Establishments (2002)*.

## Biosecurity

Baiada currently have in place a national Livestock Animal Welfare and Biosecurity Manual which contains a comprehensive livestock management program which will be applied to the site. Bio-security will be managed in accordance with the Hazard Analysis and Critical Control Points (HACCP) Plan which will be developed for the site. The HACCP plan will identifies hazards and risks that have the potential to compromise food safety and outlines the relevant risk management and mitigation procedures.

## Impact Management and Mitigation Measures

The following table presents a summary of the impact management and mitigation measures proposed to be implemented in associated with the proposed development.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
<p><b>TRAFFIC</b></p>	<ul style="list-style-type: none"> <li>• Staff and processing plant traffic are to be directed to use the proposed driveway connecting to Workshop Lane.</li> <li>• Direct access to the Oxley Highway is to be maintained for visitors to the site and emergency access only.</li> <li>• 820 car parking spaces are to be provided on site with a minimum of 8 spaces be designated for people with a disability.</li> <li>• Car park design and line-marking is to be undertaken in accordance the Australian Standard 2890.1 (2004).</li> <li>• Due to the length of aisles, speed humps be provided in in accordance with AS2890.1 to provide positive speed control.</li> <li>• Detailed design of the car park to incorporate minor amendments to the kerb line near the northern end of the staff car park to ensure fire truck access is available through the car park if required.</li> <li>• The Internal T-intersection between the staff car park access road and the</li> </ul>

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	<p>weighbridge access road be designed as a standard priority T-intersection to reflect the dominant traffic flow.</p>
<p><b>AIR QUALITY</b></p>	<ul style="list-style-type: none"> <li>• Filling of the SBR is to be programmed to take place outside of daylight hours where practical.</li> <li>• Prepare and implement an Odour Management Plan for the site to prevent or minimise the potential for odour generation through a hierarchy of controls, in the form of, but not limited to, engineered, administration and/or management practices.</li> </ul>
<p><b>NOISE</b></p>	<p><b>Noise Mound/Barrier Adjacent to Live Bird Area</b></p> <ul style="list-style-type: none"> <li>• An acoustic mound or barrier 2400mm above FGL is to be erected along the west side of the Live Bird Module/Shelter areas.</li> </ul> <p><b>General Noise Control Recommendations</b></p> <ul style="list-style-type: none"> <li>• All access roads should be kept in good condition, i.e. no potholes, etc.</li> <li>• Trucks and other machines should not be left idling for extended periods unnecessarily. Machines found to produce excessive noise compared to industry best practice should be removed from the site or stood down until repairs or modifications can be made.</li> <li>• A regular maintenance schedule should be adopted for all mobile and fixed plant items. Items found producing high noise should be stood down until repairs are completed.</li> <li>• A noise monitoring program, during commissioning, or in the early life of the site is recommended. This program will verify our predictions and in the unlikely event that complaints may arise, enable noise control strategies to be implemented, where required.</li> </ul> <p><b>Site Child Care Centre</b></p> <ul style="list-style-type: none"> <li>• An acoustic fence 1800mm above FGL is to be erected at the perimeter of the child care centre outdoor area.</li> <li>• Windows to the Cot Rooms must be upgraded to achieve an acoustic rating of Rw32. This can typically be achieved with the use of laminated glass and Q-Lon seals at sliders.</li> <li>• Consideration should be given to installing ceiling fans to supplement air conditioning.</li> </ul> <p><b>Noise Monitoring Program</b></p> <ul style="list-style-type: none"> <li>• Noise monitoring should be carried out at the commencement of each process/activity that has the potential to produce excessive noise.</li> </ul> <p><b>Acoustic Barriers/Screening</b></p> <ul style="list-style-type: none"> <li>• Place acoustic enclosures or screens directly adjacent to stationary noise sources such as compressors, generators, drill rigs, etc.</li> </ul> <p>Consultation/Complaints Handling Procedures</p> <ul style="list-style-type: none"> <li>• The construction contractor should analyse proposed noise control strategies in consultation with the Acoustic Consultant as part of project pre-planning.</li> </ul> <p><b>Equipment Selection</b></p> <ul style="list-style-type: none"> <li>• All combustion engine plant, such as generators, compressors and welders, should be carefully checked to ensure they produce minimal noise, with particular attention to residential grade exhaust silencers and shielding around motors, where necessary.</li> </ul> <p><b>Risk Assessment</b></p> <ul style="list-style-type: none"> <li>• A risk assessment should be undertaken for all noisy activities and at the change of</li> </ul>

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	each process.
<p><b>ECOLOGICAL</b></p>	<p>Should any works need to be conducted within the Peel River Tributary, in order to minimise any impact to amphibians, works are to be:</p> <ul style="list-style-type: none"> <li>• Undertaken during the winter months when movement of amphibian species is not occurring; or</li> <li>• Undertaken during periods of no ephemeral pooling of water in the tributary; or</li> <li>• Undertaken after a pre-clearance inspection by a qualified ecologist determines no amphibian presence at that time.</li> </ul> <p><b>Pre-clearance Surveys:</b> In order to avoid impacts to fauna species during construction, pre-clearance surveys will be conducted in all areas that are required to be cleared.</p> <ul style="list-style-type: none"> <li>• Pre-clearing surveys will be undertaken ahead of clearing, to limit fauna injury and mortality and to identify habitat features to be relocated. Pre-clearance surveys will be conducted by suitably qualified ecologists and all fauna found during these surveys will be encouraged to move on or relocated by the ecologists in areas of similar habitat nearby that will not be impacted.</li> </ul> <p><b>Delineation of Clearing Areas:</b></p> <ul style="list-style-type: none"> <li>• Areas that require clearance will be flagged and clearly delineated by temporary fencing to ensure that no areas intended for conservation will be inadvertently cleared during the construction process.</li> </ul> <p><b>Weed Management:</b></p> <ul style="list-style-type: none"> <li>• Undertake, appropriate weed control activities in accordance with all state, regional and local weed management plans.</li> </ul> <p><b>Pre-clearance Surveys (Structures):</b></p> <ul style="list-style-type: none"> <li>• In order to mitigate or avoid impacts to fauna species, (In particular the Eastern Bentwing-bat) during demolition of structures, pre-clearance checks will be conducted of all human made structures proposed to be demolished prior to construction.</li> <li>• Pre-clearance surveys will be conducted by suitably qualified ecologists and all fauna found during these surveys will be encouraged to move on or relocated by the ecologists in areas of similar habitat nearby that will not be impacted.</li> </ul> <p><b>Native vegetation:</b></p> <ul style="list-style-type: none"> <li>• Provide an offset of a total of 20 ecosystem credits for PCT 599</li> </ul>
<p><b>CULTURAL HERITAGE</b></p>	<p><b>Aboriginal Objects Find Procedure:</b> If suspected Aboriginal material has been uncovered as a result of development activities within the Project Area:</p> <ul style="list-style-type: none"> <li>• work in the surrounding area is to stop immediately;</li> <li>• a temporary fence is to be erected around the site, with a buffer zone of at least 10 meters around the known edge of the site;</li> <li>• an appropriately qualified archaeological consultant is to be engaged to identify the material; and</li> <li>• If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)</i>.</li> </ul> <p><b>Aboriginal Human Remains:</b> In the unlikely event that Remains are found, all works should halt. Once the site is cordoned off the nearest police station should be contacted in conjunction with the Tamworth LALC and the OEH Regional Office. If no investigation is sought and the remains are of Aboriginal origin then the Aboriginal community and OEH should be consulted as to how the remains are to be dealt with. Work may resume</p>

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	<p>once all parties are in agreement.</p> <p><b>Notifying the OEH:</b> If Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to be registered as Sites on the AHIMS, managed by the OEH.</p>
<b>STORMWATER</b>	<ul style="list-style-type: none"> <li>• Provide all stormwater management treatment actions in accordance with the project Stormwater Management Plan prepared by MPN consulting engineers.</li> <li>• During prior to commencement of construction, prepare and implement a detailed Erosion and Sediment Control Plan to ensure compliance with the <i>Protection of the Environment Operations Act 1997</i>.</li> </ul>
<b>WASTE</b>	<ul style="list-style-type: none"> <li>• Prepare and implement a Site Based Waste Management Plan consistent with Baiada's Australian Packaging Covenant Action Plan.</li> </ul>
<b>CHEMICAL USE</b>	<ul style="list-style-type: none"> <li>• Chemical handling and storage procedures will be undertaken in accordance with the Applicable Material Safety Data Sheets (MSDS) and all relevant Australian Standards.</li> </ul>
<b>CONSTRUCTION MANAGEMENT</b>	<p>The Construction Management Plan could address potential social impacts, including reducing stress and inconvenience to neighbouring businesses and residents, by</p> <ul style="list-style-type: none"> <li>• Identifying construction vehicle traffic routes that minimise impacts to neighbours, as far as possible;</li> <li>• Providing arrangements for parking of worker and construction vehicles on-site</li> <li>• Storing all equipment on site;</li> <li>• Identifying management practices to minimise and manage interruptions to traffic flows;</li> <li>• Establishing practices to maintain traffic and pedestrian safety to local residents;</li> <li>• Minimising disruption proposed road closures, temporary traffic routes, loss of pedestrian or cyclist access or reversing manoeuvres;</li> <li>• Providing queueing space onsite for the standing of vehicles;</li> <li>• Providing clear signage to direct construction vehicles; and</li> <li>• Provide signage on site that provides a contact number for residents to direct enquiries and report incidents (e.g. theft or break and enter to the site while unattended), should they occur</li> </ul>
<b>ENVIRONMENTAL MANAGEMENT</b>	<ul style="list-style-type: none"> <li>• Prepare an implemented a detailed Environmental Management System for the Oakburn Processing Plant for certification in accordance with the AS/NZS/ISO 14001: 2015 Standard.</li> </ul>

## Conclusion

This Environmental Impact Statement has been prepared in accordance with the requirements of the relevant State and Local statutory planning requirements and assesses all relevant impacts of the proposed development. Where impacts have been identified, appropriate management and mitigation measures have been prescribed. Provided that the management and mitigation measures described in this EIS are adhered to, the proposed development is not predicted to result in unacceptable impacts on the receiving environment or local community. Accordingly, the development is recommended for Approval, subject to relevant and reasonable conditions.

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ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ABL	Assessment Background Levels
AHIP	Aboriginal Heritage Impact Permit
AOBV	Areas of Outstanding Biodiversity Value
AQIA	Air Quality Impact Assessment
AWTP	Advanced Water Treatment Plant
BAM	Biodiversity Assessment Method
BDAR	Biodiversity Development Assessment Report
BOM	Bureau of Meteorology
CASA	Civil Aviation Safety Authority
CBD	Central Business District
CIV	Capital Investment Value
CSM	Conceptual Site Model
DAF	Dissolved air flotation
DBYD	Dial Before You Dig
DCP	Development Control Plan
DPI	Department of Primary Industries
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
EMS	Environmental Management System
EPA	Environmental Protection Agency
EPL	Environmental Production Licence
FTE	Full time equivalent
GFA	Gross floor area
Ha	Hectare
HACCP	Hazard Analysis Critical Control Points
IBRA	Interim Biogeographic Regionalisation for Australia
ICNG	Interim NSW Construction Noise Guideline
INP	Industrial Noise Policy
JRPP	Joint Regional Planning Panels
LEP	Local Environment Plan
LGA	Local Government Area
LoS	Level of Service

mm	Millimetres
MMF	Multi-media filtration
NHMRC	National Health and Medical Research Council
NRAR	Natural Resources Access Regulator
NRMCC	Natural Resource Management Ministerial Council
NPI	National Pollutant Inventory
NSW	New South Wales
OEH	Office of Environment and Heritage
PCT	Plan Community Type
POEO	<i>Protection of the Environment Operations Act 1997</i>
RBL	Rating Background Levels
RMS	Roads and Maritime Services
RNP	Road Noise Policy
RO	Reverse osmosis
SEARs	Secretary's Environmental Assessment Requirements
SEIA	Social and Economic Impact Assessment
SEPP	State Environmental Planning Policy
SMP	Stormwater Management Plan
SOP	Standard Operating Procedures
SQF	Safe Quality Food
STP	Sewer Treatment Plant
TDS	Total Dissolved Solids
TIA	Traffic Impact Assessment
TN	Total Nitrogen
TP	Total Phosphorus
TRC	Tamworth Regional Council
TRLEX	Tamworth Regional Livestock Exchange
TSS	Total Suspended Solids
TTPP	The Transport Planning Partnership
UF	Ultra filtration
WWTP	Waste Water Treatment Plant

# 1 THE SITE

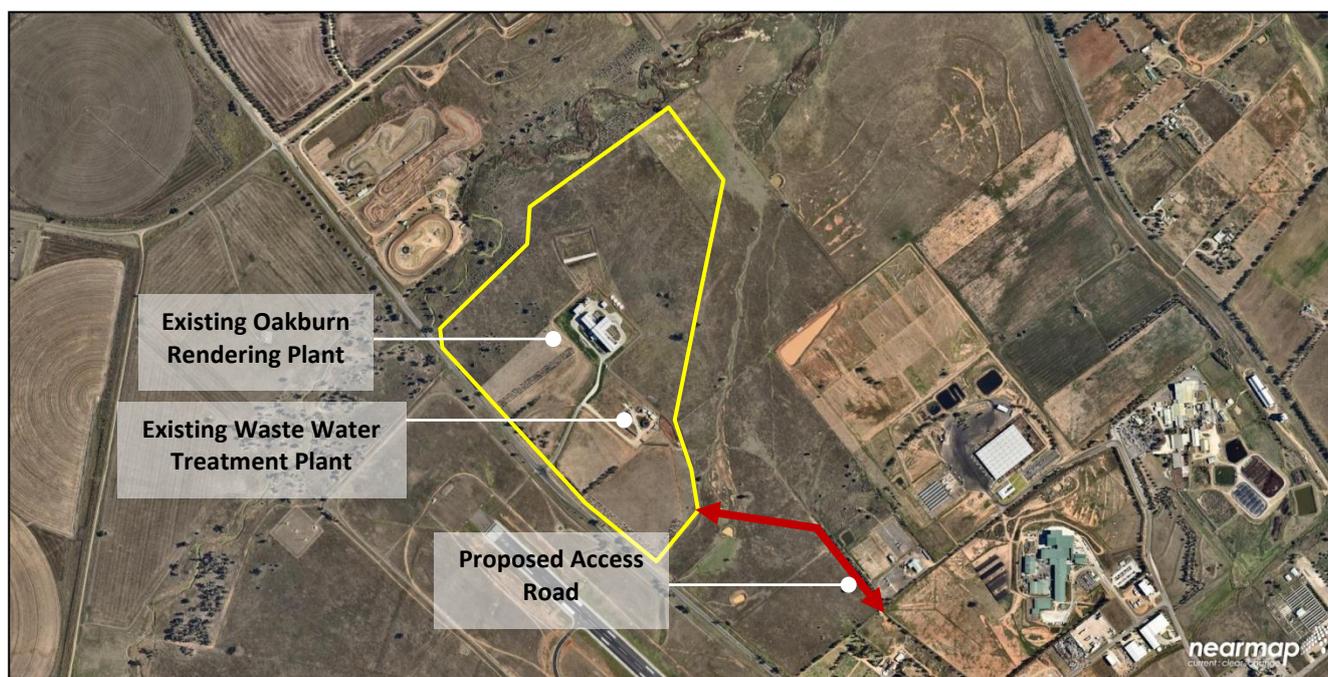
## 1.1 SITE OVERVIEW

<b>Address</b>	1154 Gunnedah Road, Westdale, NSW
<b>Property</b>	Lot 100 on DP1097471 (Processing Plant, Rendering Plant and Ancillary Infrastructure) Lot 101 on DP1097471 (Access road) Lot 102 on DP1097471 (Access road)
<b>Land Owners</b>	Baiada (Tamworth) Pty Limited (Lot 100) Tamworth Regional Council (Lot 101 & 102)
<b>Applicant</b>	Baiada (Tamworth) Pty Limited
<b>Consent Authority</b>	Tamworth Regional Council
<b>Zoning</b>	RU1 – Primary Production (Tamworth Regional Local Environmental Plan 2010)
<b>Total Site Area</b>	57.6 Ha (Lot 100)

A copy of a current Certificate of Title for each of the properties the subject to this Development Application are included in **Appendix 1**.

## 1.2 SITE DESCRIPTION

The subject site is a property known as “Oakburn” and located at 1154 Gunnedah Road, Westdale on Lot 100 in DP1097471. The site is in the Parish of Murroon and County of Parry and has an area of 57.6Ha. It is located to the north of Tamworth Regional Airport, and approximately 7.5km northwest of the Tamworth Central Business District (CBD). The site location and existing infrastructure is shown in **Figure 1**.



**Figure 1: Subject site (NearMap, 2019)**

As the proposed development also includes the construction of a new access road connecting the site to Workshop Lane, the south east adjoining lots (Lots 101 & 102 on DP1097471) are also included as part of this Development Application.

## 1.3 SURROUNDING AREA

The subject site is located approximately 7.5km north west of the Tamworth CBD, and 1km north-west of the Glen Artney Lane Industrial Estate, within a livestock and food processing hub. Land uses which surrounding the site include the following:

- The Tamworth Regional Livestock Exchange (TRLEX), located approximately 1,000m to the East;
- The TEYS Beef Abattoir, located on the eastern side of Phoenix Street approximately 1,500m to the East;
- The Thomas Foods International Lamb Abattoir located on the western side of Phoenix Street approximately 1,300m to the South East;
- Bellata Gold Pasta Flour Mill located on Bowlers Lane approximately 1,000m to the North;
- Baiada's Bowlers Lane Poultry Broiler Farms, located on the northern side of Bowlers Lane to the north;
- The Oakburn Park Raceway located on the corner of the Oxley Highway and Bowlers Lane approximately 400m to the north west; and
- The Tamworth Regional Airport located on the southern side of the Oxley Highway.

The nearest residential dwelling is located approximately 1km to the north of the site, along Bowler's Lane adjacent to the Bellata Gold Pasta Flour Mill. **Figure 2** identifies the subject site and the range of surrounding land uses.

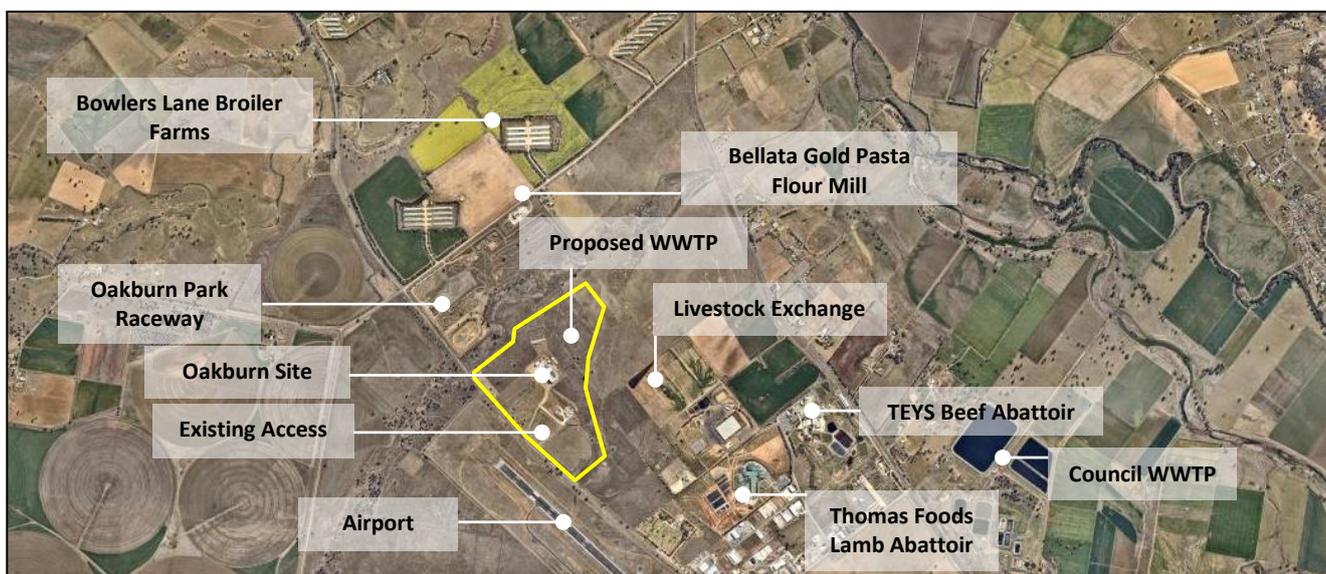


Figure 2: Site Surrounds (NearMap, 2019)

## 1.4 THE EXISTING OPERATIONS AND APPROVALS

In the late 1960's, Baiada began processing poultry at Out Street in West Tamworth, a facility which is still in operation and has approval to process up to 840,000 Birds per week. In 1998, Baiada sought and received approval to build an integrated poultry processing plant at the Oakburn site as part of a long term plan for expansion in the region. The processing plant was to be constructed in 4 stages to be constructed in any order including a:

- Protein Recovery Plant (Rendering Plant);
- Processing Plant (750,000 Birds per week);
- Deboning Plant; and
- Processed Products Plant (Further Processing).

The immediate need was for a rendering facility to handle poultry by-products, which was completed in 2000. Operations at the rendering facility include the processing of by-products generated by poultry processing which consist of offal, blood and feathers. These valuable by products are then processed into a range of protein-based meals and oils.

Since that time, the company has experienced significant national growth and is now in need of processing capacity exceeding that provisioned in the current Development Consents for the site. A copy of the current approval (Modification 5) is included in **Appendix 2**.

**Table 1: Existing Consents**

DATE	REFERENCE	APPROVAL SUMMARY
9/2/98	<b>53/97</b>	<ul style="list-style-type: none"> <li>• A poultry processing complex to be developed in four stages.</li> <li>• Rendering capacity of 120 tonnes of finished product per day.</li> <li>• Processing capacity of 750,000 birds per week.</li> </ul>
22/2/99	<b>53/97 - Modification 1</b>	<ul style="list-style-type: none"> <li>• Revisions to Site Plan.</li> </ul>
13/8/01	<b>53/97 - Modification 2</b>	<ul style="list-style-type: none"> <li>• Revisions to Site Plan.</li> </ul>
27/2/09	<b>53/97 - Modification 3</b>	<ul style="list-style-type: none"> <li>• Revisions to Site Plan.</li> <li>• Processing capacity increased to 1 million birds per week.</li> <li>• No change to rendering capacity.</li> </ul>
2/12/09	<b>53/97 - Modification 4</b>	<ul style="list-style-type: none"> <li>• Removal of unlawful condition.</li> </ul>
16/01/14	<b>53/97 - Modification 5</b>	<ul style="list-style-type: none"> <li>• Construction of a Replacement Rendering Plant after fire.</li> </ul>
20/06/18	<b>DA2018-0443</b>	<ul style="list-style-type: none"> <li>• Approval for the construction of new waste water treatment plant.</li> </ul>
10/04/19	<b>53/97 – Modification 6</b>	<ul style="list-style-type: none"> <li>• Increase in rendering capacity to 160 tonnes of finished product per day (averaged over 7 days).</li> </ul>

To date only Stage 1, the Rendering Plant has been constructed, and replaced in 2014 (as per Modification 5) following a fire which destroyed the original facility. The rendering facility currently processes raw material (poultry by-products) producing an average of 160 tonnes of finished meals and oil per day, operating in accordance with DA53/97 (Modification 6) issued in April 2019. The rendering plant was built with the capacity to increase production to up to 240 tonnes of finished product per day, however operations are capped by the current approval.

The Rendering Plant also operates in accordance with an existing Environmental Protection License #7566 allowing for livestock processing activities (rendering or fat extraction) >4000T (Animal and General Chemical Storage 0-5000kL. A copy of this licence is included in **Appendix 2**.

Baiada has recently obtained Consent (DA2018-0443) from the Tamworth Regional Council for construction of a new waste water treatment plant to service the existing rendering plant. The waste water treatment plant consists of a series of Sequence Batch Reactors (SBR), Coverer Anaerobic Lagoons (CAL) and maturation ponds aimed improving the quality of the existing waste water generated by the rendering plant. The waste water treatment ponds are currently being constructed. A copy of the latest approval for the waste water treatment plant is included in **Appendix 2**.

## 1.5 THE PROPONENT

Baiada (Tamworth) Pty Limited is part of the Baiada Group of Companies (Baiada). The Baiada business is a fully integrated poultry operation encompassing broiler and breeder farms, hatcheries, processing plants, feed milling and protein recovery. Baiada's products include the sale of live poultry (including breeding stock), poultry feed, fertile eggs, day old chickens, primary processed chicken (raw), processed chicken products and pet food.

The company has its head office at Pendle Hill, 30km west of Sydney CBD, with major operating centres located in New South Wales (including Tamworth), South Australia, Victoria and Western Australia. Baiada have a current employee base of approximately 6,000 people.

Baiada is the largest producer of poultry meat in Australia and currently supplies approximately 35% of the national demand, equating to around 5 million birds per week.

## 1.6 AUSTRALIAN POULTRY INDUSTRY CONTEXT

Research undertaken by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) indicates that total chicken meat consumption in Australia has increased by an average of 5% per annum over the 10 years to 2022-23, representing 45% of the total meat consumption.

The ABARES commodities report shows that chicken continues to be the most consumed meat in Australia. As shown in **Figure 3**, consumption of chicken meat per person has increased by over 65% between 2000 (~30kg per person) and 2018 (~50kg per person), driven by the product’s versatility, convenience and a lower price point compared to beef, lamb and pork. Per capita poultry consumption is expected to continue growing to reach around 51.5kg by 2022-23. The growth of chicken meat production in Australia in response to this demand is shown **Figure 4** which shows the historical trend and projected increase in the consumption of chicken meat in Australia beyond 2020.

As a result of the ongoing and predicted growth in demand for poultry meat products in Australia, significant expansion of the industry is required. The proposed construction and increase in the approved production volumes at the Oakburn processing plant is a direct consequence of this increase in demand for poultry products throughout Australia and will provide additional production capacity within Tamworth and the ability for further expansion of all facets of the Company’s regional operations to ensure supply meets demand.

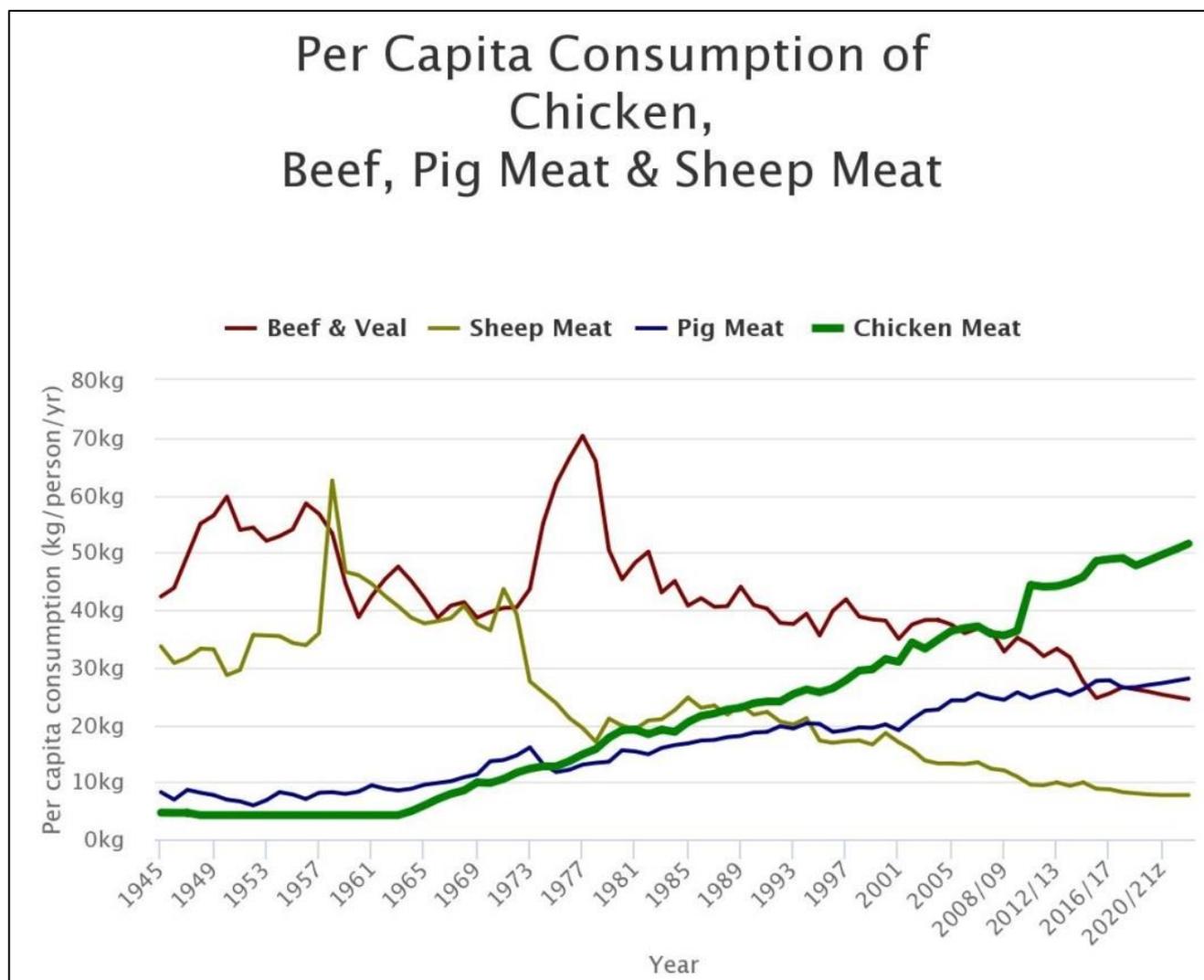


Figure 3: Consumption of various meats in Australia (ABARES, 2018)

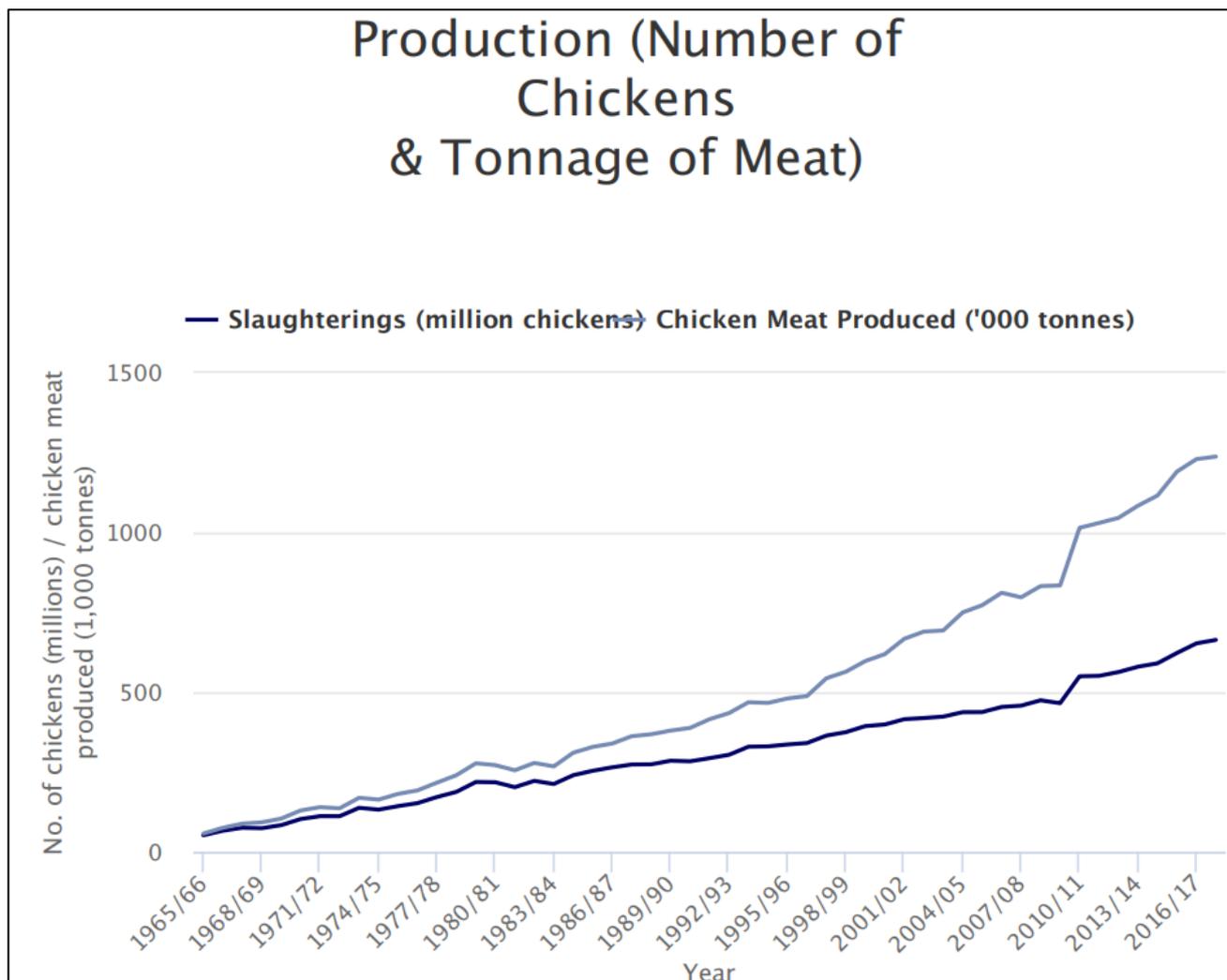


Figure 4: Chicken Meat Production in Australia (ABARES, 2018)

## 1.7 TAMWORTH REGIONAL CONTEXT

In response to the projected demand for poultry products in the Australian marketplace, there is a need to increase production, bird numbers and processing capacity. Without Baiada’s contribution to capacity which will be generated by this development, it is highly likely that there will be a significant shortfall in supply of poultry products in the Australian market in the coming years.

Baiada sees the Tamworth region as being an ideal location for expansion and the increase in production capacity. This is due to the existing accumulation of high value poultry assets and geographic, infrastructure and commercial attributes in the region which have created a poultry meat cluster.

Examples of the attributes of this cluster include the following:

- Access to large quantities of locally grown grain including wheat and canola (typically sourced from Tamworth, Moree, Narrabri, Walgett and Gunnedah);
- Proximity to key NSW markets (including Sydney) and South East QLD and direct access to the State road network;
- Ideal land types and topography for the construction of suitable shedding for poultry production;
- An ideal climate in terms of temperature and humidity for poultry production;
- Access to high quality water sources including bore water, dams, rivers and reticulated networks;
- Suitable sites for the location of poultry farms away from sensitive receptors and population centres; and
- Support from existing major investment in infrastructure covering all facets of the integrated business.

It is rare to have the combination of the assets and infrastructure and presents a unique opportunity to benefit the local region, future demand for poultry products and facilitate growth of the Baiada business.

### 1.7.1 Existing Operations

This combination of factors is only present in a handful of areas across NSW and Australia which results in the long term protection of the poultry industry in Tamworth being vitally important and the focus for infrastructure associated with the necessary expansion. As shown in Table 2 the Tamworth poultry industry is an almost a perfect cluster of related production entities. These entities rely on each other for the efficient performance of the cluster and indeed, its continuance and future growth.

**Table 2: Tamworth Poultry Operations**

OPERATIONS	EXISTING AND APPROVED SITES
Administration	Out Street
Administration	Basil Brown Drive
Retail Outlet	Out Street
Livestock Research	Basil Brown Drive
Hatchery	Cook Street
Hatchery	Country Road
Hatchery	Kootingal Hatchery
Rendering Plant	Oakburn Rendering Plant
Feed Mill	Tangaratta Stockfeeds
Processing Plant	Out Street, Tamworth
Processing Plant	Oakburn (Subject to Approval)
Grandparent Farm	Currabubala
Grandparent Farm	Glenara Park 1
Grandparent Farm	Glenara Park 2
Grandparent Farm	Boronia 1
Grandparent Farm	Boronia 2
Parent Farm	Lynwood 1
Parent Farm	Lynwood 2
Parent Farm	Lynwood 3
Parent Farm	Lynwood 4
Parent Farm	Loomberah Road
Parent Farm	Tangaratta
Parent Farm	Woodleigh 1
Parent Farm	Woodleigh 2
Parent Farm	Woodleigh 3
Parent Farm	Boronia 3
Parent Farm	Woodleigh 4
Parent Farm	Colly Blue 1
Parent Farm	Colly Blue 2
Parent Farm	Halls Creek 1
Parent Farm	Halls Creek 2
Parent Farm	Halls Creek 3

OPERATIONS	EXISTING AND APPROVED SITES
Parent Farm	Kelinda
Parent Farm	Winton 1
Parent Farm	Winton 4
Broiler Farm	Attard
Broiler Farm	Bowlers Lane 1
Broiler Farm	Bowlers Lane 2
Broiler Farm	Bowlers Lane 3
Broiler Farm	Bective 1
Broiler Farm	Bective 2
Broiler Farm	Brubri 1
Broiler Farm	Brubri 2
Broiler Farm	Gatt
Broiler Farm	Gidley 1
Broiler Farm	Gidley 2
Broiler Farm	Klasen
Broiler Farm	Mackaway
Broiler Farm	Mitchell
Broiler Farm	Moana
Broiler Farm	Murrami 1
Broiler Farm	Murrami 2
Broiler Farm	Tarbrook
Broiler Farm	Roach
Broiler Farm	Strathfield 1 (Approved)
Broiler Farm	Strathfield 2 (Approved)
Broiler Farm	Strathfield 3 (Approved)
Broiler Farm	Strathfield 4 (Approved)
Broiler Farm	Strathfield 5 (Approved)
Broiler Farm	Tarradale
Broiler Farm	Imlet
Broiler Farm	Glenburnie
Broiler Farm	Monteray
ISA Grandparent Farm	Winton 2
ISA Grandparent Farm	Winton 3
ISA Layer Farm	Dungowan 1
ISA Layer Farm	Dungowan 2
ISA Layer Farm	Dungowan 3
ISA Layer Farm	Clarefields
ISA Layer Farm	Kilimani

The above businesses are also supported by many contractors providing services including but not limited to:

- Transport and logistics;
- Bedding suppliers and used litter removal;
- Bird collection and transportation;
- Service, cleaning and maintenance of all facilities; and
- Gas and electricity services.

At any point in time, Baiada’s Tamworth Livestock operations currently involve farming of:

- Approximately 1.3 Million Production Birds (Parent and Grandparent Farms);
- Approximately 5.8 Million Broiler Birds (Meat Chickens);
- Approximately 120,000 ISA Production Birds (Producing Table Egg Layers for the egg industry); and
- An additional 2.94 Million Broiler Birds to be accommodated within the Approved Strathfield Broiler Farms.

The current livestock operations facilitate processing of a maximum of 840,000 birds per week at the existing Out Street Processing Plant. The relationship between the various components of the Tamworth Poultry Cluster is shown diagrammatically in **Figure 5**.

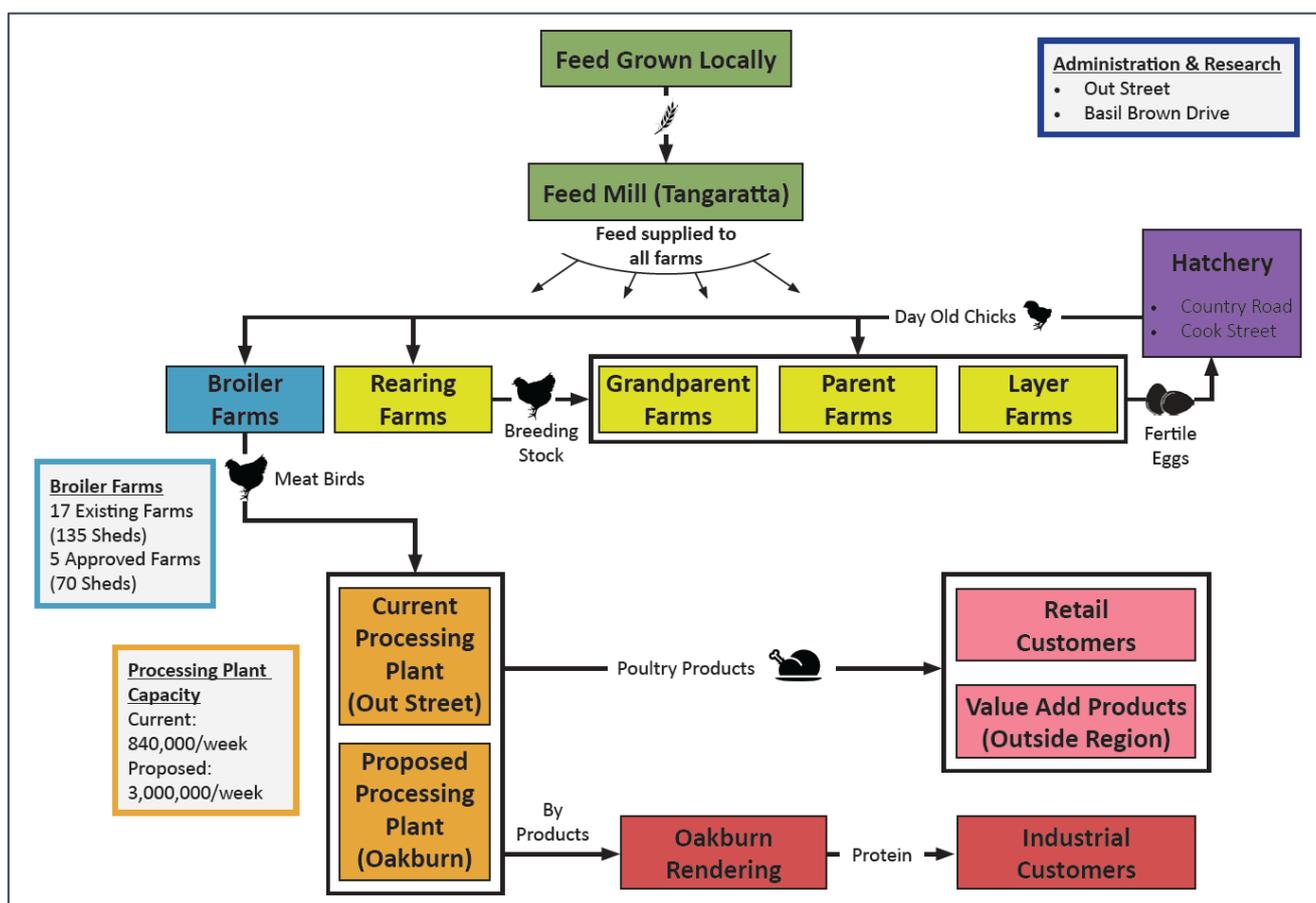


Figure 5: Tamworth Poultry Cluster Flow Chart

### 1.7.2 Existing Employment and Investment

Having been active in the Tamworth region for over 50 years, Baiada has a long track record of local and regional employment and source most of their staff from the local region. As at January 2019, Baiada’s Tamworth operations provide direct employment for 1029 staff comprised of 690 staff and 339 Agency / Contractor positions. 494 staff are active at the current processing and rendering plants. The 1,029 staff also includes Baiada workers on company owned broiler and breeder production farms. There are also a number of contracted broiler farms which employ up to 66 staff. Baiada engage a specialised and permanent live bird collection and transport contractor which also directly employs approximately 60 staff.

Employment associated with additional third party companies or suppliers working as part of the larger poultry supply chain are not included in the above figures (e.g. manufacturing supplies, trade services, logistics support and the like).

Baiada have a formal training program in place for the training and up-skilling of production and administrative staff which have a skills pathway which lead staff through a nationally accredited training program ranging from Certificate III up to Degree qualifications. Baiada currently have 108 full time staff involved in this program and have a full time training coordinator to manage these matters with a nationally accredited training company.

To service the poultry cluster, in the 2017-2018 financial year, Baiada spent in excess of \$201 million on various goods and services as inputs to production and processing of poultry in the Tamworth, Gunnedah and Liverpool Plains Local Government Areas.

## 1.8 PHYSICAL ENVIRONMENT

### 1.8.1 Topography and Soils

The terrain of the site and the immediate surrounding area is generally described as flat. Specifically, the site generally falls away from the South Western boundary to the West towards Boltons Creek and to the North and East towards an existing overland flow path. Stormwater runoff from the site discharges as overland sheet flow across the West, North and East boundaries.

Soils across the site generally consist of shallow clay loams and light clays of moderate permeability. Acid sulphate soils are generally found in estuarine regions along the coast of Australia and occasionally inland where salinity is an issue. There are no known occurrences of acid sulfate soils within this region and as such they are considered unlikely to affect the site.

### 1.8.2 Ground Water

Regional groundwater is relatively deep (generally 10m+ below ground level). The single groundwater well located within the site is consistent with the surrounding region, with a water bearing zone occurring at 21m below surface and flowing north, towards the Peel River. Some localised ground water was encountered in recent construction of the new waste water treatment plant. As such particular areas of higher groundwater may be encountered at the site.

### 1.8.3 Meteorological Data

Tamworth Airport (~2km south of site) is the primary centre for metrological data collection for the Tamworth Region. Data for the Tamworth area dates back to 1881 and the Tamworth Airport site (number 055054) operated between 1881 until it was closed in 1992. In its place, Tamworth Airport AWS was created (number 055325) which has been operating since 1992. For the purposes of this section of the report, Tamworth Airport AWS has been used (providing data from 1992-2018).

#### 1.8.3.1 Temperature

Under the Köppen climate classification scheme, Tamworth has a humid subtropical climate. The long-term temperature figures show a mid-summer mean maximum temperature of approximately 31.9°C and a mid-winter mean minimum average temperature of approximately 17.4°C. Table 3 shows the average temperature recorded at Tamworth Airport AWS since 1992.

**Table 3: Temperature information: Tamworth Airport 1992-2018 (Bureau of Meteorology, 2019)**

WEATHER STATION:	TAMWORTH AIRPORT AWS (APPROXIMATELY 2KM FROM THE SUBJECT SITE)												
Monthly	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean maximum temperature (Celsius)	32.8	31.6	29.3	25.5	20.8	17.0	16.4	18.4	21.8	25.5	28.4	30.5	24.8
Mean minimum temperature (Celsius)	17.5	16.9	14.4	10.1	6.0	3.7	2.2	2.7	5.8	9.6	13.3	15.6	9.8
Mean temperature	32.8	31.6	29.3	25.5	20.8	17.0	16.4	18.4	21.8	25.5	28.4	30.5	24.8

### 1.8.3.2 Rainfall

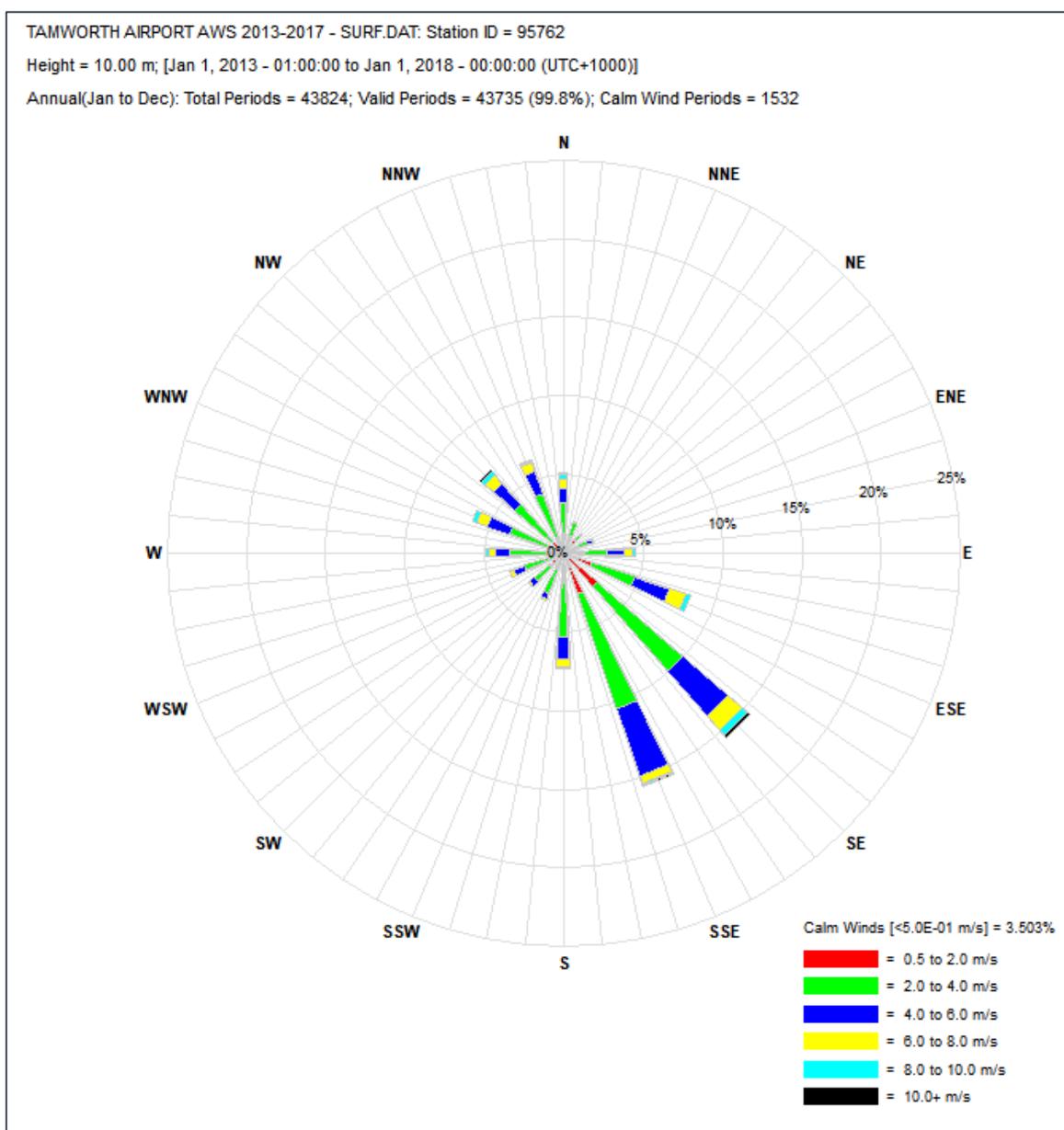
As shown in **Table 4**, rainfall in the local area is historically experienced throughout the year within an average of 642mm received per year. It is noted that Tamworth is currently experiencing a drought with consecutive years of less than average rainfall.

**Table 4: Rainfall information – Tamworth Airport (Bureau of Meteorology, 2019)**

WEATHER STATION:	TAMWORTH AIRPORT AWS (APPROXIMATELY 2KM FROM THE SUBJECT SITE)												
Monthly	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Rainfall (mm)	61.4	70.5	50.6	25.7	30.2	55.8	42.4	39.8	45.2	55.2	83.0	79.3	642.0

### 1.8.3.3 Wind

Annual wind roses for the site show the frequency of calms (< 0.5 m/s) was at 3.2%, with very light winds (0.5 – 2 m/s) occurring 22.8% of the time. Annual wind roses also highlight the most frequent winds experienced at the site are from the south east, in a pattern that occurs throughout the year.



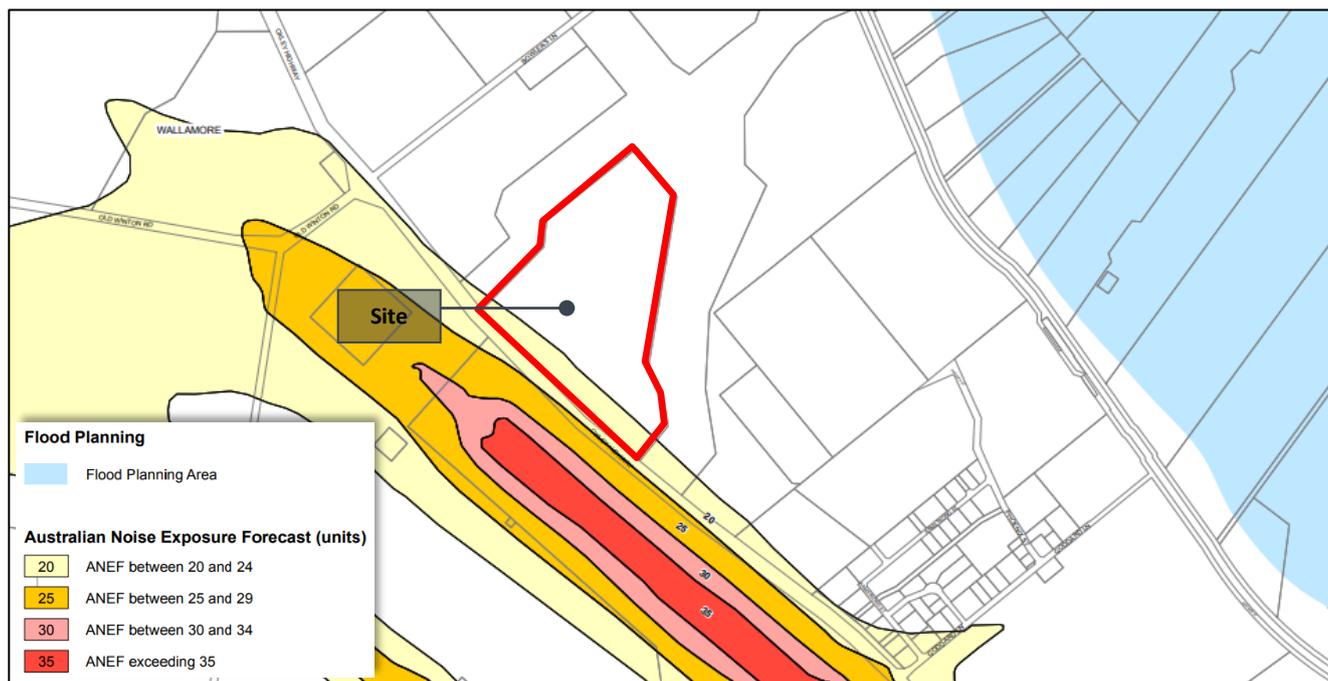
**Figure 6: Annual Wind Rose 2013 - 2017 (Bureau of Meteorology, 2019)**

### 1.8.4 Flooding and Stormwater

The site generally falls away from the centre of the site's South Western boundary to the West towards Boltons Creek and to the North and East towards an existing overland flow path. Stormwater runoff from the site discharges as overland sheet flow across the West, North and East boundaries of the site.

There is an existing detention basin which was constructed with the replacement rendering plant to treat and detain the stormwater runoff. No external catchments appear to flow through the site.

The Tamworth Regional Council Flood Mapping shows that while the Oakburn property is bound by two drainage channels, the subject site is not located in the Flood Mapping Area and there is no previous history of the site flooding (see **Figure 7**).



**Figure 7: Flood and Noise Map (Tamworth LEP, 2018)**

## 1.9 URBAN INFRASTRUCTURE

### 1.9.1 Urban Infrastructure

The site has access to all necessary service and infrastructure networks. The location of these services and existing connections, based on dial before you dig searches are shown on in **Figure 8** and further details are provide below.

#### 1.9.1.1 Water and Sewer

The site is currently provided with potable water supply via a connection to Council's reticulated network. The site is serviced by a connection to Council's trunk water main (375mm dia.) located within the Oxley Highway road reserve.

Waste water from the site is currently discharged to Council's waste water treatment via a connection a rising main also located within the Oxley Highway road reserve.

#### 1.9.1.2 Power Supply

Power to the site is provided by Essential Energy via an underground cable connecting to the High Voltage network located within the Oxley Highway Road Reserve. The existing processing plant is serviced via 4 transformers along the frontage of the existing rendering plant.

As a result of the unreliability of supply within the reticulated gas network in proximity to the site, the existing rendering plant has 240,000L of LNG stored on site which is used for heating of the boilers. The storage is currently undertaken in accordance with the existing EPL (refer to **Appendix 2**).

### 1.9.1.3 Telecommunications

Communications to the site is provided by Telstra with underground cable connecting the site to the network located within the Oxley Highway Road Reserve.

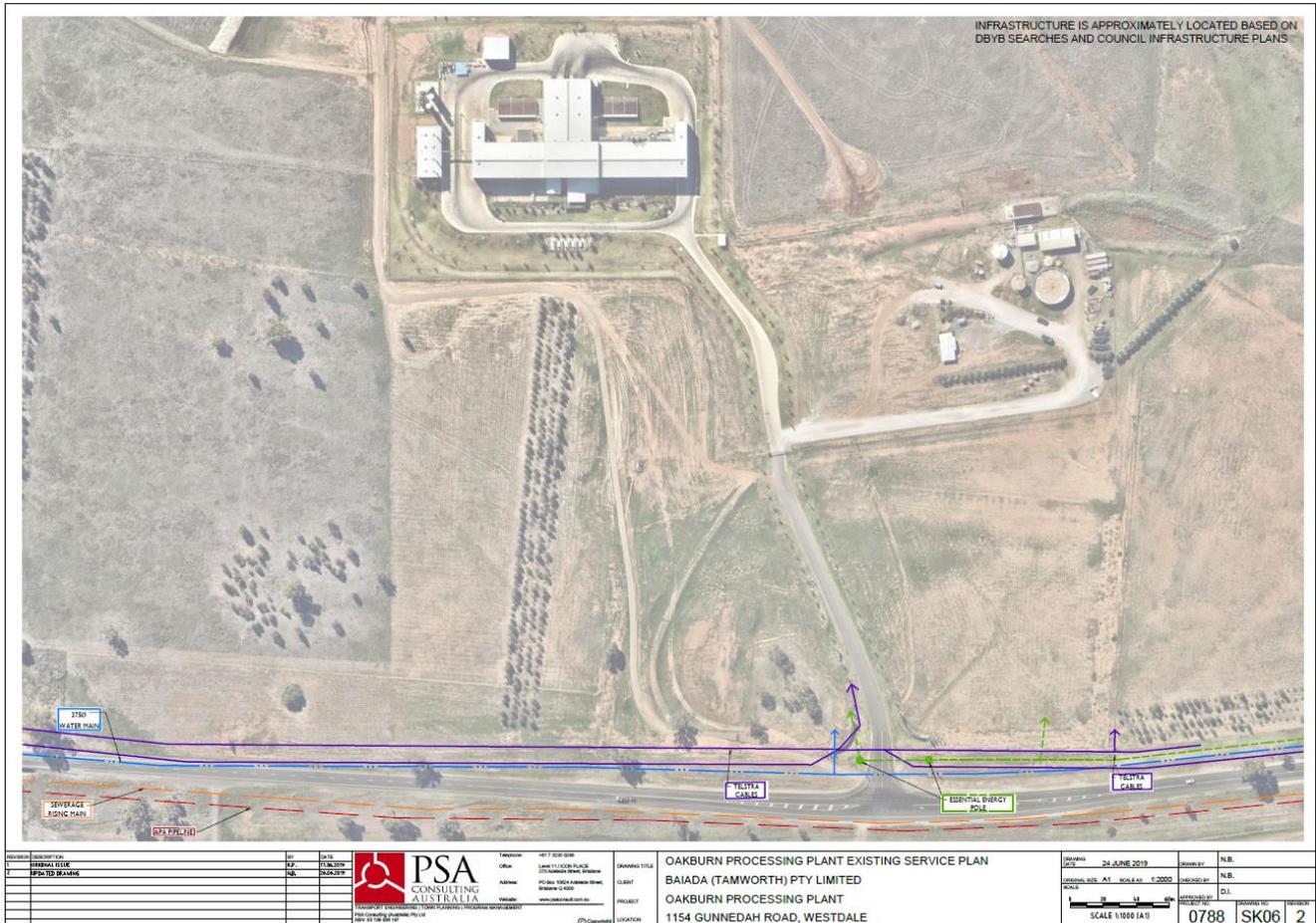


Figure 8: Existing Infrastructure (Source: Dialbeforeyoudig 2019)

### 1.9.1.4 Road Network and Site Access

Vehicular Access to the site is currently achieved via the Oxley Highway which is classified as a State Road. The Oxley Highway forms part of the HW11 State road link between Port Macquarie in the east and Nevertire in the west, via Tamworth, Gunnedah and Coonabarabran. In the vicinity of the site, Oxley Highway is known as Gunnedah Road, and has a single travel lane in each direction and sealed shoulders. The posted speed limit is 100 km/h.

Access to the site is currently achieved via a T-intersection constructed in accordance with the conditions of the original Development Consent for the Oakburn Processing Plant (DA53/97). At the intersection, Gunnedah Road is locally widened to provide an auxiliary right turn deceleration and storage lane for vehicles entering the site. The intersection treatment is generally consistent with an Austroads Channelised Right Turn (CHR) treatment in Gunnedah Road, which moves the slower turning vehicles from the through traffic stream.

As shown in **Figure 9**, the Oxley Highway is identified by the National Highway Vehicle Regulator as an approved B-Double Route providing for 25/26m B-Doubles without conditions.

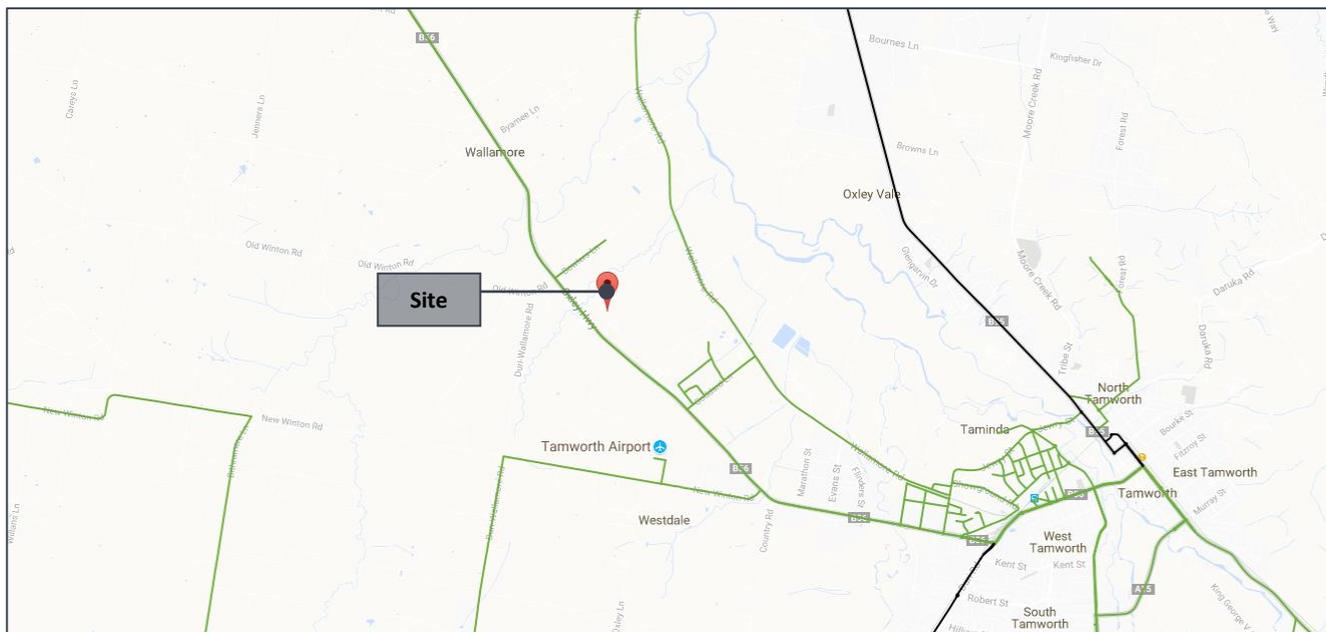


Figure 9: Heavy Vehicle Approved Roads (Roads and Maritime NSW, 2019)

## 1.10 STATUTORY PLANNING

### 1.10.1 Tamworth Regional Local Environmental Plan 2010

As shown in **Figure 10** Under the *Tamworth Regional Local Environmental Plan 2010*, the subject site is located in the RU1 Primary Production Zone.

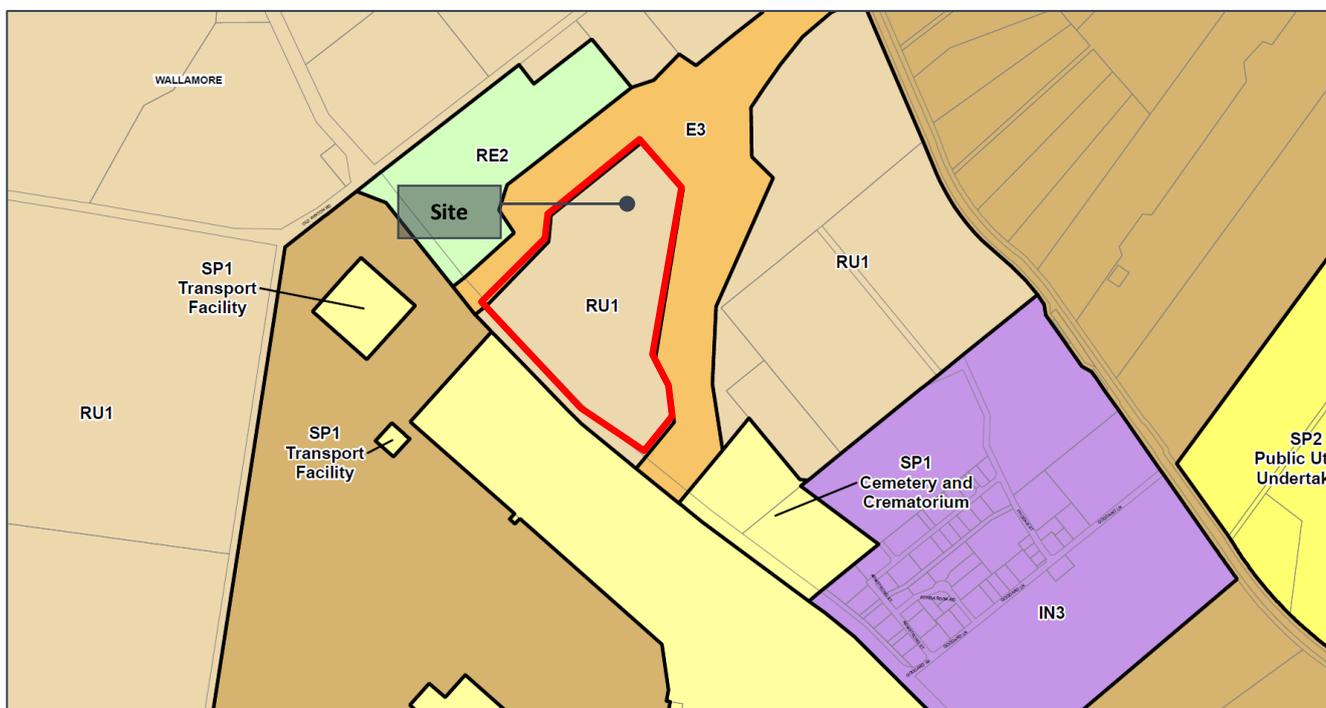


Figure 10: Zoning Plan (Tamworth LEP, 2018)

The objectives for the RU1 Primary Production Zone are as follows:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base
- To encourage diversity in primary industry enterprises and systems appropriate for the area
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

- *To permit subdivision only where it is considered by the Council to be necessary to maintain or increase agricultural production*
- *To restrict the establishment of inappropriate traffic generating uses along main road frontages*
- *To ensure sound management of land which has an extractive or mining industry potential and to ensure that development does not adversely affect the extractive industry*
- *To permit development for purposes where it can be demonstrated that suitable land or premises are not available elsewhere.*

The existing and proposed development falls under Tamworth LEP definition of **Livestock Processing Industry** which means “*a building or place used for the commercial production of products derived from the slaughter of animals (including poultry) or the processing of skins or wool of animals, derived principally from surrounding districts, and includes abattoirs, knackereries, tanneries, woollscours and rendering plants.*”

In accordance with clause 3 of the Tamworth LEP development of a Livestock Processing Industry located in the Primary Production Zone (RU1) is permitted with consent.

The site is located in food production hub which contains a number of major rural industries including a livestock exchange, beef abattoir, lamb abattoir, flour mill, other industrial operations and intensive animal husbandry. As such, the existing, approved and proposed use of the site is considered to be a complementary land use to the surrounding area and adjoining zones. Further, the development of the Oakburn Poultry Processing Plant will support expansion of primary industry enterprises across the region and accordingly aligns with the objectives for the zone. The proposed access easement via Workshop Lane is located in the Special Activities (SP1) and Environmental Management (E3) Zones.

## 2 THE PROPOSAL

### 2.1 PROPOSAL OVERVIEW

In response to an increase in demand for their poultry products in Australia, Baiada is now seeking Development Consent for a new, integrated poultry processing plant at Oakburn. Specifically, this development application is seeking approval for the following components and elements:

- Construction of a new poultry processing plant consisting of :
  - 38,936m<sup>2</sup> of Gross Floor Area providing for live bird storage, processing, chilling, cold store and distribution facilities;
  - 1,600m<sup>2</sup> workshop and store building;
  - 3,791m<sup>2</sup> of ancillary administration, staff amenities and childcare space;
  - Expanded Waste Water Treatment Plant; and
  - Installation of ancillary infrastructure, landscaping and services.
- Construction of a new access driveway via an easement connecting to Armstrong Street via Workshop Lane;
- Construction of a new staff car parking area providing 820 car parking spaces;
- Site landscaping and screening vegetation;
- Increase the approved level of poultry processing on the site to a maximum of 3 million birds per week;
- Increase the approved level of rendering at the existing rendering plant to a maximum of 1,680 tonnes of finished product per week (240 tonnes / day 7 days a week); and
- Allow all operational aspects of the site to occur at anytime with no restrictions (24 hours per day / 7 days a week).

A site plan showing the proposed development is provided in **Figure 11** and in **Appendix 3**. Plans of the proposed access road are included in **Appendix 4**.

The proposed At present the site has an existing Gross Floor Area (GFA) of 5,482m<sup>2</sup> which will increase to 47,348m<sup>2</sup> comprised of the components identified in Table 5.

**Table 5: Gross Floor Area Summary**

COMPONENT	GFA (m <sup>2</sup> )
Existing Rendering Plant, Boilers and Maintenance Shed	5,482m <sup>2</sup>
Proposed Poultry Processing Plant	35,145m <sup>2</sup>
Proposed Administration and Amenities	3,791m <sup>2</sup>
Proposed Ancillary Maintenance, Boiler and WWTP Sheds	2,930m <sup>2</sup>
<b>TOTAL</b>	<b>47,348m<sup>2</sup></b>

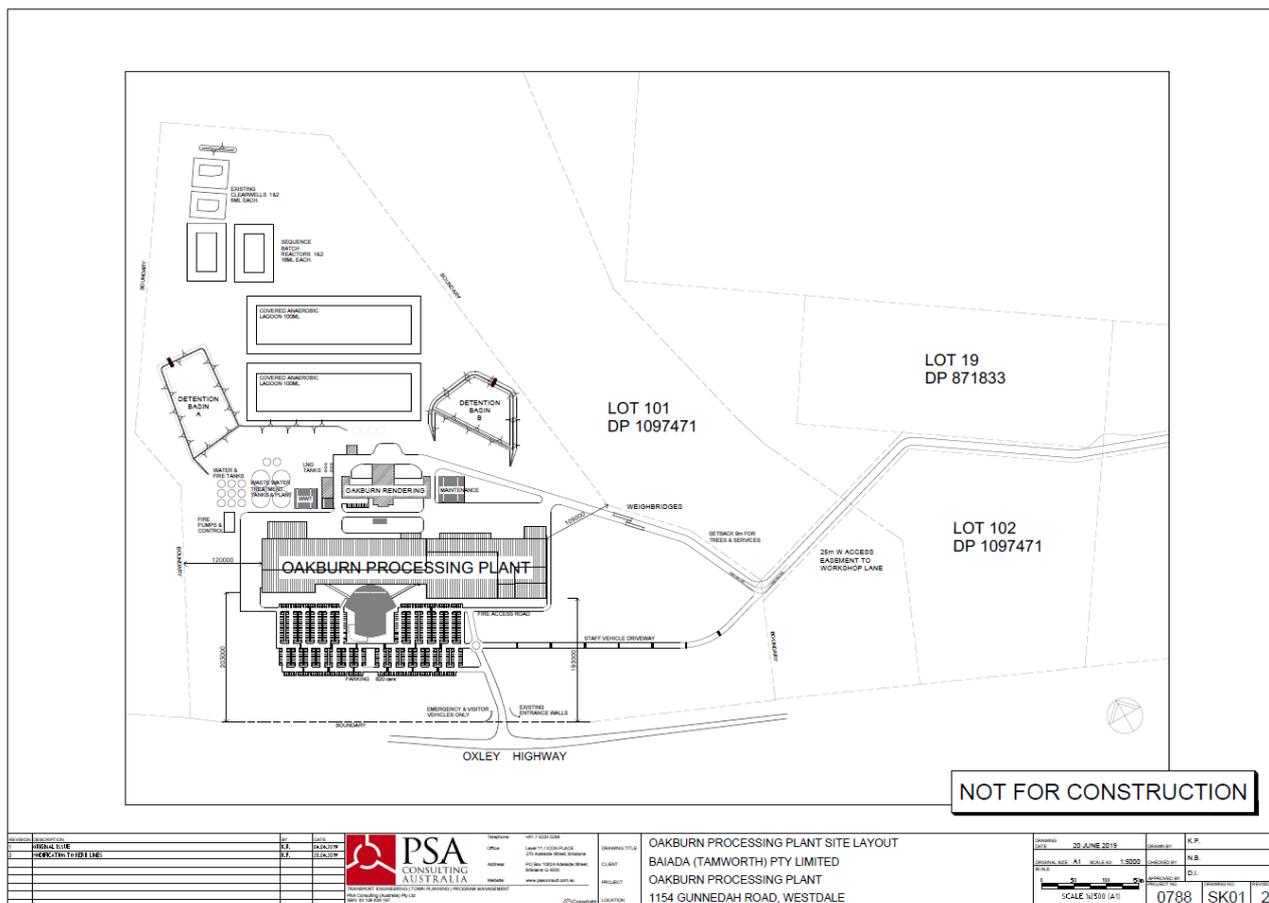


Figure 11: Site Plan (Baيدا, 2019)

## 2.2 CORE OBJECTIVES

The core objectives for the proposal are as follows:

- Centralise Baiada’s Tamworth poultry slaughtering and processing operations onto a single, integrated and efficient site, which includes the ultimate decommissioning of the current Out Street Processing Facility in Tamworth’s town centre;
- Facilitate processing of up to 3 million birds per week in Tamworth;
- Enable further expansion of the poultry cluster within the Tamworth Region; and
- Allow growth of Baiada’s operations to meet the demand for additional poultry products in the Australian market.

## 2.3 DEVELOPMENT DESCRIPTION

The processing plant will be housed within a new, large, modern industrial building approximately 440m Long, 92m wide with a maximum height of 26m. The processing plant is situated immediately in front of the existing Rendering Plant, facing the Oxley Highway. The operation of the processing plant involves the delivery of live birds to the site which are then slaughtered, dressed and processed to produce the range of fresh and value-added poultry products available in the Australian supermarkets, restaurants and other food outlets. Following the completion of processing, the finished poultry products are packaged and moved into refrigerated storage areas and made ready for distribution by road transport. At full operation, the plant will have the capacity to process up to 3 Million birds per week. A floor plan showing the layout of the processing plant is provided in **Figure 12** below.

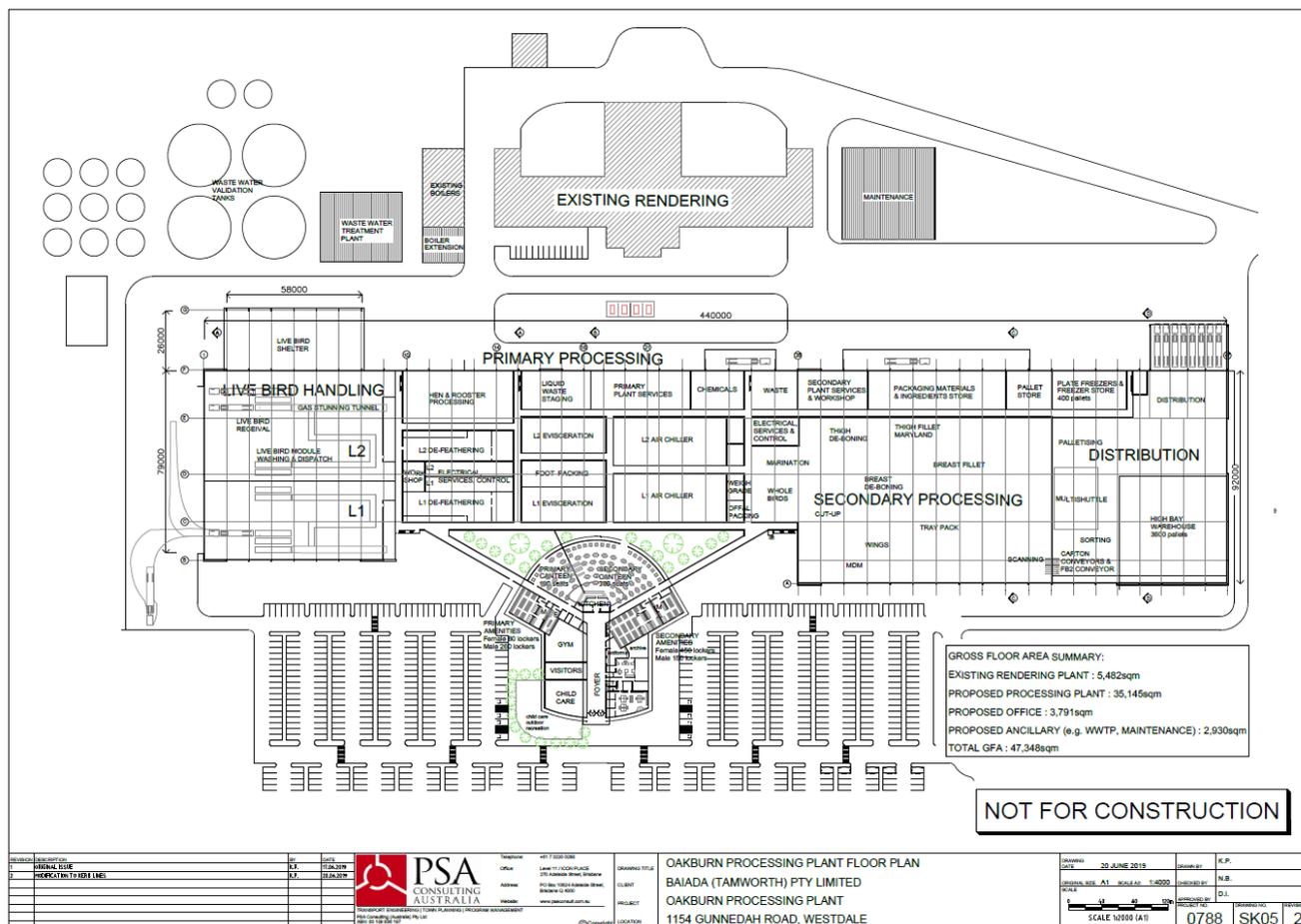


Figure 12: Processing Plant Floor Plan (Baiada, 2019)

By-products generated in the production include of offal, blood and feathers. These valuable by-products are pumped or transported from the processing plant to the existing rendering plant which renders the materials to produce a range of protein - based products including various meals and tallow.

As outlined above, the Rendering Plant was replaced in 2014 following a fire which destroyed the previous facility and currently processes raw renderable material producing an average of 160 tonnes of finished meals and oil per day, in accordance with DA53/97 (Modification 6) issued in April 2019.

The replacement rendering plant was built with the capacity to increase production to up to 800 tonnes of raw material per day, which results in 240 tonnes of finished product per day, however operations are currently limited by existing approvals. Approval is therefore sought to increase production at the rendering plant to its ultimate capacity of 240 tonnes of finished meals and oils per day, sourced from both the processing plant and other off-site facilities. It is important to note that there is no physical change to the existing rendering plant building required to achieve the increase in rendering volumes. The only change to the rendering facility will be the provision of infrastructure (e.g. pipelines) to automatically deliver by-products from the proposed processing plant to the rendering facility.

Baiada has recently obtained Consent (DA2018-0443) from the Tamworth Regional Council for construction of a new waste water treatment plant to service the existing rendering plant. The waste water treatment plant consists of a series of Sequence Batch Reactors (SBR), Coverer Anaerobic Lagoons (CAL) and maturation ponds aimed improving the quality of the existing waste water generated by the rendering plant. The waste water treatment ponds to service the existing rendering plant are currently being constructed.

To accommodate the additional processing activities from the proposed development on site the Waste Water Treatment Plant (WWTP) will also be expanded to include two additional and much larger Sequence Batch Reactors (SBR) with a capacity of 16ML each and two additional Covered Anaerobic Lagoons with a capacity of 100ML each. The waste water treatment plant is located in the northern part of the Oakburn site, behind the existing rendering plant. An advanced water treatment plant is also proposed to be implemented to allow recovery of up to 75% of treated trade waste water, and reprocess it to a potable standard for reuse on site.

In order to accommodate the estimated 1,176 full time staff at site, a large administration and staff amenities building is proposed to be constructed. This building situated at the front of the processing plant will function as the main entrance for all staff and visitors to the site. Specifically the administration building will include:

- Office and administration space including reception, meeting rooms, offices and storage space;
- Staff change rooms and amenities, lockers, uniform collection and storage space;
- Up to 260m<sup>2</sup> of child care space providing care options for the children of staff; and
- A large self-contained canteen to provide meals for the staff, dining areas and breakout space for workers.

Staff car parking will be accommodated via the construction of a car parking area located in front of the processing plant providing 820 spaces.

The plans for the proposed development are included as **Appendix 3**. Plans of the proposed access road are included in **Appendix 4**.

## 2.4 LANDSCAPE PLANTING

To reduce the potential visual impact and soften the built of the proposed development significant landscaping is proposed to be implemented. The landscaping will comprise of formal plantings and gardens in and around the processing plant and screening vegetation alongside the access roads, internal manoeuvring areas and along the Oxley Highway Frontage. A Landscape Concept Plan has been prepared by Site Image and is included as **Appendix 5**.

## 2.5 CAPITAL INVESTMENT VALUE AND DEVELOPMENT COST

The Capital Investment Value (CIV) of the project has been calculated in accordance with the *State Environmental Planning Policy Amendment (Capital Investment Value) 2010* by Wilde and Woollard Quantity Surveyors. As shown in the report included within **Appendix 6**, the CIV for the project is estimated to be \$208,545,901 (Excl. GST).

For the purposes of calculating any contributions payable under the *Tamworth Regional Council Section 94A(Indirect) Development Contributions Plan 2013*, a levy of 1% of development costs (the costs of erecting a building) would be payable based on \$132,947,020 which excludes equipment costs and consultant fees.

## 2.6 ON-SITE EMPLOYMENT

At full operation the facility is expected to provide employment for large workforce of up to 1,176 people in various areas of the processing plant. As noted in section 1.7.2, there are 497 staff currently employed at the existing Out Street Processing facility. As a result, there will be an estimated increase of 679 associated with the processing and rendering operations at full operation. Baiada currently have a training and skills program for the benefit of staff. These programs will be expanded to recruit, train and accredit staff for the additional roles and positions at the facility.

Based on the operations of similar processing plants, the anticipated shifts, number of staff and nominal start / times for the workforce is shown in Table 6 below. While these factors provide a reasonable idea of the quantum and nature of staffing for the site, these forecasts are subject to change based on the final operational details, equipment selections, and other factors.

**Table 6: Proposed Processing Plant Staff Attendance**

SHIFT	NUMBER OF STAFF	NOMINAL START TIME	NOMINAL END TIME
Line 1 Live Birds	100	0:00	12:00
Line 2 Live Birds	100	6:00	19:00
Line 1 Processing (Day)	165	4:00	15:00
Line 2 Processing (Day)	165	4:00	15:00
Line 1 Processing (Afternoon)	165	14:00	1:00
Line 2 Processing (Afternoon)	165	14:00	1:00
Tray Pack (Day)	100	4:00	15:00

SHIFT	NUMBER OF STAFF	NOMINAL START TIME	NOMINAL END TIME
Tray Pack (Afternoon)	100	13:00	1:00
Rendering (Morning)	9	6:00	15:00
Rendering (Afternoon)	6	14:00	23:00
Rendering (Night)	6	22:00	7:00
Administration	65	7:00	18:00
Loading Dock (Day)	15	6:00	15:00
Loading Dock (Night)	15	15:00	6:00
<b>TOTAL POSITIONS</b>	<b>1176</b>		

## 2.7 INFRASTRUCTURE PROVISION AND UPGRADES

### 2.7.1 Urban Infrastructure

As a result of the proposed development, it is anticipated upgrades to existing services connections will be required including, water supply, sewer discharge and high voltage electricity connections. As outlined above, trunk mains for these services are already provided within the Oxley Highway road reserve and upgrade of the reticulated network is not expected to be necessary to service the development.

The design of new connections will be undertaken during the detailed design phase of the project in accordance with the relevant approvals and necessary agreements sought from the relevant infrastructure providers.

## 3 CONSULTATION

In accordance with Schedule 2, Section 3(1) of the *Environment Planning & Assessment Regulation 2000*, a request for the Secretary's Environmental Assessment Requirements (SEARs) was submitted to the Department of Planning and Environment on 6 June 2018. The SEARs were received by the Applicant on 2 July 2018 and are included as **Appendix 7**.

The Secretary's Environmental Assessment Requirements (SEARs) requested that the Applicant consult with the relevant Local and State government authorities, service providers and community groups, and address any issues they raise in the EIS. The surrounding landowners and occupiers that are likely to be impacted by the proposal were recommended to be consulted. The SEARs also requested that details of the consultation that has been carried out and issues raised must be included in the EIS.

This section outlines the consultation activities undertaken to inform the scope of this Environmental Impact Statement.

### 3.1 GOVERNMENT DEPARTMENTS AND AGENCIES

An overview of the extent of consultation undertaken with Government Departments and Agencies is provided below.

- A Planning Focus Meeting was held in Tamworth on 1 June 2018 and was attended by representatives from Tamworth Regional Council (TRC), Department of Planning and Environment (DPE), Department of Primary Industries (DPI), Environmental Protection Agency (EPA);
- Submission of a Request for the SEARs (dated 6 June 2018) with the Department of Planning and Environment in accordance with Schedule 2, Section 3(1) of the *Environment Planning & Assessment Regulation 2000*;
- In preparing the SEARs, the Department of Planning forwarded the Request for the SEARs and consulted with the following departments, requesting each Department's EIS Requirements:
  - Environment Protection Agency (EPA);
  - Office of Environment and Heritage (OEH);
  - Roads and Maritime Services (RMS); and
  - Tamworth Regional Council (TRC).
- A response was provided by the Department of Planning and Environment to PSA Consulting on 2 July 2018 and included responses from each of the agencies identified above. A copy of the SEARs is included as **Appendix 7**.
- A further response was provided by the Department of Planning and Environment to PSA Consulting on 25 January 2019 regarding the ancillary child care component of the proposed development. A copy of this response is provided as **Appendix 7**.

Following receipt of the SEARs, further consultation was undertaken with the following agencies, local governments and the local community:

- Submission of a Request for EIS Requirements to the Civil Aviation Safety Authority (CASA) on 6 August 2018;
- Submission of a Request for EIS Requirements to the NSW Health/Hunter New England Local Health District on 21 August 2018;
- Submission of a Request for EIS Requirements to Essential Energy on 21 August 2018;
- Submission of a Request for EIS Requirements to WaterNSW on 21 August 2018.

Responses from the above agencies were received as follows:

- A response was received from CASA on 20 August 2018 and is included in **Appendix 7**;
- A response was received from WaterNSW on 22 August 2018 which confirms that "whilst WaterNSW manages certain functions under the Water Management Act 2000 our current operating licence does not include these functions for State Significant Developments. These functions currently lie within the recently created Natural Resources Access Regulator (NRAR)". As such, comment was sought from the Natural Resources Access Regulator (NRAR) on 22 August 2018.
- A response was received from NRAR on 20 September 2018, which indicated that the NRAR is not in a position to respond to the request for input into the EIS, but that the Department would provide advice on the EIS through the consultation on the EIS once released; and

- A response was received from NSW Health/Hunter New England Local Health District on 2 October 2018 and is included in **Appendix 7**; and
- A response was not received from Essential Energy.

### 3.1.1 Secretary's Environmental Assessment Requirements

The key environmental planning issues that were raised in the SEARs are identified in Table 7. All of the requirements including both the issues outlined by the Secretary's Environmental Assessment Requirements and issues raised by relevant groups and individuals have been considered and addressed in the EIS.

**Table 7: Secretary's Environmental Assessment Requirements**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<b>General Requirements</b>	<p>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. The EIS must include:</p> <ul style="list-style-type: none"> <li>• A detailed description of the proposed development including <ul style="list-style-type: none"> <li>○ Need for the development</li> <li>○ Justification for the development and the suitability of the site</li> <li>○ Likely staging of the development</li> <li>○ Likely interactions between the development, the existing rendering plant, and other existing and proposed developments in the vicinity for the site, including the Tamworth Regional Airport and other nearby animal processing facilities.</li> <li>○ Integration of operations, including a clear description of the decommissioning of Baiada's existing processing facility in Tamworth</li> <li>○ Preparation of plans of an proposed works</li> <li>○ Details of any proposed consolidation or subdivision of land</li> </ul> </li> <li>• Detail how the proposal is consistent with strategic planning objectives of the <i>New England North West Regional Plan 2036</i> (Department of Planning and Environment, 2017)</li> <li>• Consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments</li> <li>• A list of any approvals that must be obtained under the <i>Local Government Act 1993</i>, the <i>Roads Act 1993</i>, or any other Act or law before the</li> </ul>	<p>The EIS has been prepared in accordance with the <i>Environmental Planning and Assessment Regulation 2000</i>.</p>	<p>Section 2 Section 4 Section 5 Section 6</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>development may lawfully be carried out</p> <ul style="list-style-type: none"> <li>• Details of how the proposal would interact with any existing development consents/approvals applicable to the site</li> <li>• Consideration of key issues identified by Government agencies (see Attachment 2)</li> <li>• A risk assessment of the potential environmental impacts of the development identifying key issues for further assessment</li> <li>• A detailed assessment, where relevant, of the key issues below, and any other potential significant issues identified in the risk assessment, must include: <ul style="list-style-type: none"> <li>○ A description of the existing environment, using adequate baseline data</li> <li>○ Consideration of potential cumulative impacts due to other development in the vicinity</li> <li>○ Measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing an significant risks to the environment</li> <li>○ Consideration of issues raised at the Planning Focus Meeting</li> <li>○ A consolidation summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS</li> </ul> </li> </ul>		
<p><b>Capital Investment Value</b></p>	<p>The EIS must be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> <li>• A detailed calculation of the capital investment value (CIV) of the proposal (as defined in clause 3 of the Environmental Planning and Assessment Regulation200), including details of all assumptions and components from which the CIV calculation is derived</li> <li>• A close estimate of the jobs that will be created by the development during the construction and operational phases</li> <li>• Certification that the information provided is accurate at the date of preparation</li> </ul>	<p>Capital Investment Summary</p>	<p>Section 2.5 Appendix 6</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<p><b>KEY ISSUES – The EIS must include an assessment of the potential impacts of the proposal (including cumulative impacts) and develop appropriate measures to avoid, mitigate, manage and/or offset these impacts. The EIS must address the following specific matters:</b></p>			
<p><b>Community and stakeholder engagement</b></p>	<p>Including:</p> <ul style="list-style-type: none"> <li>• A detailed community and stakeholder engagement strategy identifying who and how stakeholders will be engaged in the process.</li> <li>• A report detailing how the issues raised and how they have been addressed including any changes to the proposal.</li> <li>• Details of proposed engagement activities throughout the construction and operation of the development.</li> </ul>	<ul style="list-style-type: none"> <li>• EIS Consultation Report</li> </ul>	<p>Section 3 Appendix 8</p>
<p><b>Air quality and odour</b></p>	<p>Including:</p> <ul style="list-style-type: none"> <li>• A quantitative odour and air quality impact assessment in accordance with the relevant Environment Protection Authority (EPA) guidelines. This assessment must include: <ul style="list-style-type: none"> <li>○ An investigation and assessment of odour impacts on all identified and potential receivers including, but not limited to, the adjacent rural residences and the Tamworth Regional Airport.</li> <li>○ An assessment of the cumulative air quality and odour impacts of the development, taking into account existing and proposed livestock intensive industries in the surrounding area</li> <li>○ Evidence or appropriate meteorological data for use in air dispersion modelling, using real meteorological data where possible</li> <li>○ Inclusion of ‘worst case’ emissions scenarios and sensitivity analyses</li> <li>○ A contingency plan to address unpredicted operational odour impacts</li> <li>○ A description and appraisal of air quality and odour impact monitoring emission control techniques and mitigation measures.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality Report has been prepared by The Odour Unit.</li> <li>• Identification of existing and proposed odour requirements.</li> <li>• Identification of appropriate odour mitigation and management actions.</li> </ul>	<p>Section 4.7 Section 4.8 Appendix 9</p>
<p><b>Transport and road traffic</b></p>	<p>Including:</p> <ul style="list-style-type: none"> <li>• A quantitative traffic impact assessment prepared in accordance with the relevant Council, Austroads and Roads and Maritime Services guidelines</li> <li>• Details of all daily and peak traffic and</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic Impact Assessment undertaken by TTPP.</li> <li>• Identification of existing road network, traffic conditions and</li> </ul>	<p>Section 4.10 Appendix 10</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>transport movements likely to be generated during construction and operation of the development, including a description of haul routes, vehicle types, vehicle access routes and potential queuing impacts</p> <ul style="list-style-type: none"> <li>• An assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic modelling</li> <li>• Detailed plans of the proposed layout of the internal road network and parking on site, in accordance with the relevant Australian Standards</li> <li>• Swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site</li> <li>• Plans for any proposed road upgrades, infrastructure works or new roads required for the development, including the proposed driveway connecting to Armstrong Street via Workshop Lane</li> <li>• An assessment of the potential impacts of the development upon surrounding public transport services</li> <li>• Details of any utility services which will need to be located within or across the Oxley Highway.</li> </ul>	<p>parking conditions.</p> <ul style="list-style-type: none"> <li>• Identification of appropriate mitigation and management actions.</li> </ul>	
<p><b>Soils and Water</b></p>	<p>Including:</p> <ul style="list-style-type: none"> <li>• An accurate description of operational water demands, a breakdown of water supplies (including any water licensing or approval requirements, a description of measures to minimise water use and evidence of an adequate and secure water supply</li> <li>• A detailed site water balance</li> <li>• Details of erosion, sediment, stormwater and leachate control during construction</li> <li>• A description of surface, groundwater and stormwater management systems, including on site detention, surface water diversions, flood impact mitigation and measures to treat or reuse water.</li> <li>• An assessment of potential surface water, flooding and groundwater impacts, including impacts on nearby waterbodies, surrounding properties, any licensed water user, landholder</li> </ul>	<ul style="list-style-type: none"> <li>• Stormwater Management Report</li> <li>• Contaminated Land Report</li> <li>• Waste Water Treatment Project Proposal Report</li> </ul>	<p>Section 4.2 Section 4.3 Section 4.6 Appendix 11 Appendix 12 Appendix 17</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>rights or groundwater dependent ecosystems</p> <ul style="list-style-type: none"> <li>• A description and appraisal of impact mitigation, management, maintenance and monitoring measures.</li> </ul>		
<b>Waste and wastewater management</b>	<p>Including:</p> <ul style="list-style-type: none"> <li>• Identification and classification of waste streams that would be generated at the site in accordance with the Waste Classification Guidelines (EPA, 2014)</li> <li>• A description of waste handling, transport, identification, storage, processing and disposal measures</li> <li>• A description of proposed management and disposal of wastewater, leachate and effluent</li> <li>• Details on containment and monitoring or wastewater and waste streams</li> <li>• The measures that would be implemented to ensure the proposed development is consistent with the aims, objectives and guidelines outlined in the NSW Waste Avoidance and Resource Recovery Strategy 2014-21</li> <li>• A description and appraisal of waste impact mitigation, contingencies and management</li> </ul>	<ul style="list-style-type: none"> <li>• Current and proposed waste generation, reuse, recycling and disposal processes will be maintained.</li> <li>• Current and proposed Hazardous Substance and Chemical Storage and Handling Practices will be maintained.</li> </ul>	<p>Section 4.2 Section 4.6 Section 4.14 Appendix 12 Appendix 17</p>
<b>Biodiversity</b>	<p>Including:</p> <ul style="list-style-type: none"> <li>• Accurate prediction of any vegetation clearing on site or for any road upgrades</li> <li>• An assessment of the proposal in accordance with the Biodiversity Assessment Method (BAM) including the potential impacts on any threatened species, populations, endangered ecological communities or their habitats and groundwater dependent ecosystems</li> <li>• Details of weed management during construction and operation in accordance with existing State, regional or local weed management plans or strategies</li> <li>• A detailed description of the measures to avoid, minimise, mitigate and offset biodiversity impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Biodiversity Development Assessment Report</li> </ul>	<p>Section 4.5 Appendix 13</p>
<b>Heritage</b>	<p>Including:</p> <ul style="list-style-type: none"> <li>• An assessment of Aboriginal and non-Aboriginal heritage items and values of the site and surrounding area in accordance with the relevant Office of</li> </ul>	<ul style="list-style-type: none"> <li>• Aboriginal Cultural Heritage Assessment Report</li> </ul>	<p>Section 4.4 Appendix 14</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	Environment and Heritage guidelines		
<b>Animal welfare, bio-security and disease management</b>	Including: <ul style="list-style-type: none"> <li>• Details of how the proposed development would comply with relevant codes of practice and guidelines</li> <li>• Details of any potential bio-security impacts to landowners and properties located along primary haulage routes</li> <li>• Details of all bio-security and disease control measures</li> <li>• A detailed description of the contingency measures that would be implemented for the mass disposal of livestock in the event of a disease outbreak</li> </ul>	<ul style="list-style-type: none"> <li>• Description of operations</li> </ul>	Section 4.16 Section 4.17 Appendix 19 Appendix 20
<b>Noise and vibration</b>	Including: <ul style="list-style-type: none"> <li>• A quantitative noise and vibration impact assessment in accordance with the relevant EPA guidelines</li> <li>• A description of all potential noise and vibration sources during construction and operation, including traffic noise along primary haulage routes</li> <li>• A description of noise and vibration monitoring, management and mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>• Acoustic Impact Assessment</li> <li>• As a result of set back distances to sensitive receptors, significant vibration impacts are not expected during the construction and operation phases.</li> </ul>	Section 4.9 Appendix 15
<b>Hazards and risk</b>	Including: <ul style="list-style-type: none"> <li>• The Environmental Impact Statement must include a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33- Hazardous and Offensive Development and Applying SEPP 33 (Department of Planning, 2011), with clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development</li> <li>• Should the preliminary risk screening indicate that the development is “potentially hazardous”, a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6, ‘Hazard Analysis’ (Department of Planning, 2011) and Multi-Level Risk Assessment (Department of Planning, 2011).</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical use and storage</li> </ul>	Section 4.15 Section 4.15.4
<b>Contamination</b>	Including: <ul style="list-style-type: none"> <li>• A detailed assessment of the extent and nature of any contamination at the site</li> </ul>	<ul style="list-style-type: none"> <li>• Contamination Report</li> </ul>	Section 4.6 Appendix 12

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<ul style="list-style-type: none"> <li>Conceptual site model detail the potential risks to human health and the environmental receptors in the vicinity of the site.</li> </ul>		
<b>Visual Impacts</b>	<p>Including:</p> <ul style="list-style-type: none"> <li>A description of the visual catchment and visual impacts including lighting impacts on surrounding receivers and public areas</li> <li>An appraisal of visual impact mitigation measures</li> <li>Details of proposed landscaping works.</li> </ul>	<ul style="list-style-type: none"> <li>Description of the Project (including building)</li> <li>Landscaping Plan</li> </ul>	<p>Section 2.4 Section 4.13 Appendix 3 Appendix 5</p>
<b>Social and economic</b>	<p>Including:</p> <ul style="list-style-type: none"> <li>The preparation of a social impact assessment, which: <ul style="list-style-type: none"> <li>Identifies and analyses the potential social impacts of the development from the point of view of the affected community and other relevant stakeholders may expect to experience the project</li> <li>Considers how potential environmental impacts (such as traffic, odour and noise) may affect people’s way of life, community, access, health, surroundings, and livelihoods</li> <li>Includes mitigation measures for likely negative impacts, and enhancement measures for likely positive impacts</li> <li>Details how social impacts will be monitored and managed over time</li> </ul> </li> </ul> <p>An analysis of any potential economic impacts of the development, including a discussion of any potential economic benefits to the community.</p>	<ul style="list-style-type: none"> <li>Social and Economic Assessment</li> </ul>	<p>Section 4.11 Section 4.12 Appendix 16</p>
<b>Infrastructure</b>	<p>Including:</p> <ul style="list-style-type: none"> <li>Including details of any upgrade or extension to existing services infrastructure required to accommodate the proposed development (e.g. electricity supply)</li> </ul>	<ul style="list-style-type: none"> <li>Description of proposed works</li> </ul>	<p>Section 1.9 Section 2.7</p>
<b>Contributions</b>	<p>Including:</p> <ul style="list-style-type: none"> <li>Including a consideration of Tamworth Regional Council’s Section 94A (Indirect) Development Contributions Plan 2013 and/or details of any Voluntary Planning Agreement.</li> </ul>	<ul style="list-style-type: none"> <li>Consideration of TRC’s Section 94A Development Contributions plan</li> </ul>	<p>Section 2.5</p>

### 3.1.1.1 SEARS Additional Requirements

The Department issued SEARs on the proposed development on 2 July 2018. In addition to the key issues set out in the SEARs, the Department requested that the following matters be included in the Environmental Impact Statement in relation to the proposed childcare facility:

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
Child Care Facility	Details of separation distances and best management practices with respect to amenity impacts (noise and odour) on the proposed childcare facility	<ul style="list-style-type: none"> <li>Air Quality Report</li> <li>Acoustic Impact Report</li> </ul>	Section 4.7 Section 4.9 Appendix 9 Appendix 15
	Demonstration that the proposed childcare facility is consistent with the requirements of the Building Code of Australia and <i>State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017</i>	<ul style="list-style-type: none"> <li>Assessment of the development against the SEPP</li> </ul>	Section 4.1.4.4

### 3.1.2 NSW Environment Protection Authority

The NSW EPA provided written advice (dated 21<sup>st</sup> June 2018) outlining key information requirements to be included as part of the EIS which was included as part of the SEARs. Table 8 identifies these requirements and where they are addressed within the EIS.

**Table 8: NSW EPA Requirements**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
Environmental impacts of the project	Impacts related to the following environmental issues need to be assessed, quantified and reported on: <ul style="list-style-type: none"> <li>Air Issues - Air quality including odour and dust generation</li> <li>Noise and vibration</li> <li>Waste including hazardous materials and radiation                             <ul style="list-style-type: none"> <li>General waste – disposal options</li> <li>Hazardous materials and radiation if relevant</li> </ul> </li> <li>Water and Soils                             <ul style="list-style-type: none"> <li>Sediment and Erosion controls</li> <li>Possible contaminated land.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Air Quality Report</li> <li>Identification of existing and proposed odour requirements.</li> <li>Identification of appropriate odour mitigation and management actions.</li> <li>Acoustic Impact Assessment</li> <li>Current and proposed waste generation, reuse, recycling and disposal processes will be maintained.</li> <li>Current and proposed Hazardous Substance and Chemical Storage and Handling Practices will be maintained.</li> <li>Contamination Report</li> <li>Stormwater</li> </ul>	Section 4.7 Section 4.8 Section 4.9 Section 4.13 Appendix 9 Appendix 11 Appendix 12 Appendix 15

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
		Management Report	
<b>Licensing requirements</b>	<p>The development is a scheduled activity under the <i>Protection of the Environment Operations Act 1997</i> (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted.</p> <p>The EIS should address the requirements of Section 45 of the POEO Act, determine the extent of each impact, and provide sufficient information to enable the EPA to determine appropriate limits for the EPL.</p>	<ul style="list-style-type: none"> <li>• Further Approvals and Licences required</li> </ul>	Section 6
<b>Air quality</b>	<p>The EIS should provide an Air Quality Impact Assessment which:</p> <ul style="list-style-type: none"> <li>• Is prepared in accordance with the EPA's "Approved Methods and Guidance for the Modelling &amp; Assessment of Air Pollutants in NSW". The AQIA must describe the methodology used and any assumptions made to predict the impacts.</li> <li>• Assess potential emissions at all stages of the proposal, including during commissioning of the covered anaerobic lagoons.</li> <li>• Justify the level of assessment undertaken on the basis of risk factors, including but not limited to: <ul style="list-style-type: none"> <li>○ proposal location;</li> <li>○ characteristics of the receiving environment; and</li> <li>○ type and quantity of pollutants emitted.</li> </ul> </li> <li>• Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited to: <ul style="list-style-type: none"> <li>○ meteorology and climate;</li> <li>○ topography;</li> <li>○ surrounding land-use; receptors; and</li> <li>○ ambient air quality.</li> </ul> </li> <li>• Describe the proposal in detail as well as a thorough emissions inventory as described in the Approved Methods.</li> <li>• Account for cumulative impacts associated with existing emission</li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality Report</li> <li>• Identification of existing and proposed odour requirements.</li> <li>• Identification of appropriate odour mitigation and management actions.</li> </ul>	<p>Section 4.7</p> <p>Section 4.8</p> <p>Appendix 9</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>sources as well as any currently approved developments linked to the receiving environment.</p> <ul style="list-style-type: none"> <li>• Demonstrate the proposal’s ability to comply with the relevant regulatory framework, specifically the <i>Protection of the Environment Operations (POEO) Act 1997</i> and the <i>POEO (Clean Air) Regulation 2010</i>.</li> <li>• Particular consideration should be given to section 129 of the POEO Act concerning control of “offensive odour” with associated modelling and consideration of impacts on surrounding residential receivers.</li> <li>• Detail emission control techniques/practices that will be employed by the proposal, and how those techniques and practices will be maintained to make sure that relevant criteria and statutory requirements are met at all times.</li> </ul>		
<p><b>Noise and vibration</b></p>	<p>The following matters are to be addressed:</p> <ul style="list-style-type: none"> <li>• Construction noise in accordance with <i>Interim Construction Noise Guideline</i></li> <li>• Vibration from all activities on the premises (including construction and operation) in accordance with <i>Assessing Vibration: a technical guideline</i></li> <li>• Noise from all industrial activities (including on site vehicle movements and private haul roads) in accordance with <i>Noise Policy for Industry</i></li> <li>• Noise from increased traffic on public roads generated by the proposed development in accordance with <i>NSW Road Noise Policy</i></li> </ul>	<ul style="list-style-type: none"> <li>• Acoustic Impact Assessment</li> <li>• As a result of set back distances to sensitive receptors, significant vibration impacts are not expected during the construction and operation phases.</li> </ul>	<p>Section 4.9 Appendix 15</p>
<p><b>Waste, chemicals and hazardous materials and radiation</b></p>	<ul style="list-style-type: none"> <li>• Identify, characterise and classify all waste, including waste intended for re-use or recycling: <ul style="list-style-type: none"> <li>○ that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste</li> <li>○ that is proposed to be disposed of to an offsite location, including proposed quantities of waste and disposal locations</li> <li>○ that will be accepted at the site for</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Current and proposed waste generation, reuse, recycling and disposal processes will be maintained.</li> <li>• Current and proposed Hazardous Substance and Chemical Storage and Handling Practices will be maintained.</li> </ul>	<p>Section 4.14 Section 4.15 Section 4.17</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>processing.</p> <p><b>Note:</b> All waste must be classified in accordance with the EPA's <i>Waste Classification Guidelines</i></p> <ul style="list-style-type: none"> <li>• Commit to retaining all sampling and classification results for the life of the project to demonstrate compliance with the <i>Waste Classification Guidelines</i></li> <li>• Provide details of how waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.</li> <li>• Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment, including demonstration that the proponent will meet: <ul style="list-style-type: none"> <li>○ the EPA's requirements for notification and waste tracking</li> <li>○ relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions.</li> </ul> </li> <li>• Outline contingency plans for any event that that may result in environmental harm, such as mass bird death, treatment plant failure, excessive stockpiling of waste, waste volumes generated in excess of the storage capacity available on-site.</li> <li>• Demonstrate that all waste generated during the events outlined in 5.5 will be dealt with appropriately. Identify appropriate regional waste facilities and demonstrate that they have lawful capacity to accept all waste potentially generated by such an event.</li> </ul>		
Soils	<ul style="list-style-type: none"> <li>• Assess potential impacts on soil and land resources, guided by <i>Soil and Landscape Issues in Environmental Impact Assessment</i> (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:</li> </ul>	<ul style="list-style-type: none"> <li>• Contamination Report</li> </ul>	Section 4.6 Appendix 12

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<ul style="list-style-type: none"> <li>○ Soil erosion and sediment transport – see 6.2.5.</li> <li>○ Urban and regional salinity – guidance in the Local Government Salinity Initiative booklets which includes <i>Site Investigations for Urban Salinity</i> (DLWC, 2002).</li> <li>● Describe the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Where required, add any specific assessment requirements relevant to the project.</li> <li>● Demonstrate that any soil contamination will be identified before starting earthworks, including possible firefighting foam chemicals from the adjacent airport, and that any identified contamination will be managed in accordance with relevant guidelines in Attachment B.</li> </ul>		
<p><b>Water</b></p>	<p><b>Note:</b> The EPA understands that no operational discharges are proposed to water as treated wastewater will be discharged to sewer through a trade waste agreement. If other discharges are proposed to water, the EPA can provide supplementary requirements for assessment.</p> <ul style="list-style-type: none"> <li>● Describe the proposal including locations of all intakes and discharges, volumes, water quality and frequency of all water discharges.</li> <li>● Provide a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.</li> <li>● If onsite irrigation is proposed, assess any proposed on-site irrigation using the <i>Environmental guidelines: Use of effluent by irrigation</i> (DEC, 2004)</li> </ul>	<ul style="list-style-type: none"> <li>● Assessment of the potable water use and wastewater treatment</li> <li>● Stormwater Management Report</li> <li>● Waste Water Treatment Plant Project Proposal Report</li> </ul>	<p>Section 4.2 Section 4.3 Appendix 11 Appendix 17</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<ul style="list-style-type: none"> <li>• Describe how stormwater will be managed both during and after construction, including measures to minimise transport of pollutants from vehicles and mobile plant on the site.</li> <li>• Outline sediment and erosion control measures to minimise disturbance of land, minimise water flow through the site and to filter, trap or detain sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.</li> <li>• Provide details of how stormwater and runoff will be managed to minimise pollution, including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during construction and operation phases of the project. The EA should show the location of each measure to be implemented. The proponent should consider the guidelines <i>Managing urban stormwater: soils and construction</i>, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC2008) as well as control measures such as: <ul style="list-style-type: none"> <li>○ Sediment traps</li> <li>○ Diversion banks</li> <li>○ Sediment fences</li> <li>○ Bunds (earth, hay, mulch)</li> <li>○ Geofabric liners</li> <li>○ Other control measures as appropriate.</li> </ul> </li> </ul>		
<p><b>EPA Statutory Requirements</b></p>	<p>The EIS should confirm that the proposed activity is listed in Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act) and will therefore require an Environment Protection Licence from EPA.</p>	<ul style="list-style-type: none"> <li>• Further Approvals and Licences required</li> </ul>	<p>Section 6</p>

### 3.1.3 NSW Transport Roads & Maritime Services

The NSW RMS provided written advice (dated 21<sup>st</sup> June 2018) outlining key information requirements to be included as part of the EIS which was included as part of the SEARs. Table 9 identifies these requirements and where they are addressed within the EIS.

**Table 9: NSW Transport Roads & Maritime Services Requirements**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<p><b>Traffic and Transport Study</b></p>	<p>Roads and Maritime requests that the Environmental Assessment be supported by a Traffic Impact Assessment (TIA) prepared by a suitably qualified person in accordance with the Austroads Guide to Traffic Management Part 12, the complementary Roads and Maritime Supplement and RTA Guide to Traffic Generating Developments. The TIA is to address the following;</p> <ul style="list-style-type: none"> <li>• The impact of the proposed development on the road network with consideration for a 10 year design horizon.</li> <li>• The volume and distribution of traffic generated by the proposed development.</li> <li>• Background traffic data, including current traffic counts and relevant growth rates.</li> <li>• Sight distance measurements at site access locations and affected intersections.</li> <li>• Proposed site access arrangements including concept designs for any proposed upgrade on the state road network in accordance with Austroads Guide to Road Design Part 4A.</li> <li>• Details of proposed improvements to any affected intersections, including concept designs for any proposed upgrade to the state road network in accordance with Austroads Guide to Road Design Part 4A.</li> <li>• Details of servicing and parking arrangements, including swept paths for the largest vehicle requiring access to the site.</li> <li>• Impact on public transport (public and school bus routes).</li> <li>• Connectivity for active transport modes such as walking and cycling.</li> <li>• Impacts of road traffic noise and dust generated along the primary haul route/s.</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic Impact Assessment</li> <li>• Identification of existing road network, traffic conditions and parking conditions.</li> <li>• Identification of appropriate mitigation and management actions.</li> </ul>	<p>Section 4.10 Appendix 10</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>Should Council wish to condition the preparation of a Code of Conduct for haulage operators, this could include, but not be limited to;</p> <ul style="list-style-type: none"> <li>a. A map of the primary haulage routes highlighting critical locations.</li> <li>b. Safety initiatives for haulage through residential areas, school zones and along school bus routes.</li> <li>c. An induction process for vehicle operators and regular toolbox meetings.</li> <li>d. A complaint resolution and disciplinary procedure.</li> <li>e. Any community consultation measures for peak haulage periods.</li> </ul> <p>Where road safety concerns are identified at a specific location along the identified haulage route/s, Roads and Maritime suggests that the TIA be supported by a targeted Road Safety Audit undertaken by suitably qualified persons.</p> <p>The current Austroads Guidelines, Australian Standards and Roads and Maritime Supplements are to be adopted for any proposed works on the classified road network.</p> <p>The Developer would be required to enter into a 'Works Authorisation Deed' (WAD) with Roads and Maritime for any works deemed necessary on the classified State road network. The developer would be responsible for all costs associated with the works and administration for the WAD.</p> <p>Any driveway, internal manoeuvring areas, parking and servicing areas should be designed in accordance with AS2890.</p> <p>Consideration should be given to the safe separation of service vehicles, light vehicles and pedestrians. All service vehicles must enter and leave the site in a forward manner.</p> <p>All proposed advertising signage will need to be consistent with the <i>State Environmental Planning Policy No. 64 – Advertising and Signage</i> and the current <i>Transport Corridor Outdoor Advertising and Signage Guidelines</i>.</p>		

### 3.1.4 NSW Office of Environment and Heritage

The NSW Office of Environment and Heritage (OEH) provided written advice (dated 21<sup>st</sup> June 2018) outlining key information requirements to be included as part of the EIS which was included as part of the SEARs. Table 10 identifies these requirements and where they are addressed within the EIS.

**Table 10: NSW Office of Environment and Heritage Requirements**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<p><b>Aboriginal Cultural Heritage</b></p>	<ul style="list-style-type: none"> <li>The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the project and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional branch officers.</li> <li>Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.</li> <li>Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.</li> </ul>	<ul style="list-style-type: none"> <li>Aboriginal Cultural Heritage Assessment Report</li> </ul>	<p>Section 4.4 Appendix 14</p>
<p><b>Biodiversity</b></p>	<ul style="list-style-type: none"> <li>Biodiversity impacts related to the proposed project are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017 the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation</li> </ul>	<ul style="list-style-type: none"> <li>Biodiversity Development Assessment Report</li> </ul>	<p>Section 4.5 Appendix 13</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>Regulation 2017 (s6.8) and Biodiversity Assessment Method, unless OEH and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values.</p> <ul style="list-style-type: none"> <li>• The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.</li> <li>• The BDAR must include details of the measures proposed to address the offset obligation as follows; <ul style="list-style-type: none"> <li>• The total number and classes of biodiversity credits required to be retired for the development/project;</li> <li>• The number and classes of like-for-like biodiversity credits proposed to be retired;</li> <li>• The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;</li> <li>• Any proposal to fund a biodiversity conservation action;</li> <li>• Any proposal to conduct ecological rehabilitation (if a mining project);</li> <li>• Any proposal to make a payment to the Biodiversity Conservation Fund.</li> <li>• If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.</li> </ul> </li> <li>• The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.</li> <li>• The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016.</li> </ul>		
<p><b>Historic heritage</b></p>	<ul style="list-style-type: none"> <li>• The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics,</li> </ul>	<ul style="list-style-type: none"> <li>• Aboriginal Cultural Heritage Assessment Report</li> </ul>	<p>Section 4.4 Appendix 14</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:</p> <ul style="list-style-type: none"> <li>○ outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996),</li> <li>○ be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council’s Excavation Director criteria),</li> <li>○ include a statement of heritage impact for all heritage items (including significance assessment),</li> <li>○ consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and</li> <li>○ where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.</li> </ul>		
<p><b>Water and soils</b></p>	<ul style="list-style-type: none"> <li>● The EIS must map the following features relevant to water and soils including: <ul style="list-style-type: none"> <li>○ Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).</li> <li>○ Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).</li> <li>○ Wetlands as described in s4.2 of the Biodiversity Assessment Method.</li> <li>○ Groundwater.</li> <li>○ Groundwater dependent ecosystems.</li> <li>○ Proposed intake and discharge locations.</li> </ul> </li> <li>● The EIS must describe background conditions for any water resource likely to be affected by the project, including:</li> </ul>	<ul style="list-style-type: none"> <li>● Stormwater Management Report</li> <li>● Contaminated Land Report</li> </ul>	<p>Section 4.3 Section 4.6 Appendix 11 Appendix 12</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<ul style="list-style-type: none"> <li>○ Existing surface and groundwater.</li> <li>○ Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.</li> <li>○ Water Quality Objectives (as endorsed by the NSW Government) including groundwater as appropriate that represent the community's uses and values for the receiving waters.</li> <li>○ Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.</li> <li>○ Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions</li> <li>● The EIS must assess the impacts of the project on water quality, including: <ul style="list-style-type: none"> <li>○ The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the project protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.</li> <li>○ Identification of proposed monitoring of water quality.</li> <li>○ Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan)</li> </ul> </li> <li>● The EIS must assess the impact of the project on hydrology, including: <ul style="list-style-type: none"> <li>○ Water balance including quantity, quality and source.</li> <li>○ Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.</li> <li>○ Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.</li> <li>○ Impacts to natural processes and</li> </ul> </li> </ul>		

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).</p> <ul style="list-style-type: none"> <li>○ Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.</li> <li>○ Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.</li> <li>○ Identification of proposed monitoring of hydrological attributes.</li> </ul>		
<p><b>Flooding and coastal hazards</b></p>	<ul style="list-style-type: none"> <li>● The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including: <ul style="list-style-type: none"> <li>○ Flood prone land.</li> <li>○ Flood planning area, the area below the flood planning level.</li> <li>○ Hydraulic categorisation (floodways and flood storage areas).</li> <li>○ Flood hazard</li> </ul> </li> <li>● The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.</li> <li>● The EIS must model the effect of the proposed project (including fill) on the flood behaviour under the following scenarios: <ul style="list-style-type: none"> <li>○ Current flood behaviour for a range of design events as identified in 14 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.</li> </ul> </li> <li>● Modelling in the EIS must consider and document: <ul style="list-style-type: none"> <li>○ Existing council flood studies in the</li> </ul> </li> </ul>	<p>The site is not located within the flood planning area (as mapped in the Tamworth Regional Local Environmental Plan 2010).</p> <p>The site is not located within a coastal area and therefore is not subject to coastal hazards.</p>	<p>N/A</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>area and examine consistency to the flood behaviour documented in these studies.</p> <ul style="list-style-type: none"> <li>○ The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.</li> <li>○ Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories.</li> <li>○ Relevant provisions of the NSW Floodplain Development Manual 2005.</li> <li>● The EIS must assess the impacts on the proposed project on flood behaviour, including: <ul style="list-style-type: none"> <li>○ Whether there will be detrimental increases in the potential flood affection of other properties, assets and infrastructure.</li> <li>○ Consistency with Council floodplain risk management plans.</li> <li>○ Consistency with any Rural Floodplain Management Plans.</li> <li>○ Compatibility with the flood hazard of the land.</li> <li>○ Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.</li> <li>○ Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.</li> <li>○ Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.</li> <li>○ Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.</li> <li>○ Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be</li> </ul> </li> </ul>		

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>discussed with the NSW SES and Council.</p> <ul style="list-style-type: none"> <li>○ Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES.</li> <li>○ Any impacts the development may have on the social and economic costs to the community as consequence of flooding.</li> </ul>		

### 3.1.5 NSW Department of Industry

NSW Department of Industry provided written advice (dated 21<sup>st</sup> June 2018) outlining key information requirements to be included as part of the EIS which was included as part of the SEARs. Table 11 identifies these requirements and where they are addressed within the EIS.

**Table 11: NSW Department of Industry Requirements**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<b>ANIMAL WELFARE</b>	<p>The development should consider and meet or exceed the following standards:</p> <ul style="list-style-type: none"> <li>• Model Code of Practice for the Welfare of Animals - Livestock at Slaughtering Establishments (2002); and</li> <li>• Model Code of Practice for the Welfare of Animals - Land Transport of Poultry (2006).</li> <li>• Any other industry best practices that are developed/conducted but not yet codified.</li> </ul>	<ul style="list-style-type: none"> <li>• Description of operations</li> </ul>	Section 4.16
<b>BIOSECURITY</b>	<p>Consideration of a biosecurity response to deal with identified risks as well as contingency plans for any failures.</p>	<ul style="list-style-type: none"> <li>• Description of operations</li> </ul>	Section 4.17
<b>AMENITY IMPACTS (ODOUR AND VISUAL)</b>	<p>Amenity impacts should be assessed and any necessary mitigation measures described and illustrated. The assessment should consider the image of all intensive animal industries present with in the area and along the Oxley Highway which may contribute to a cumulative negative perception of intensive animal industries. As far as practical the proposal should demonstrate adequate measures to contribute to a positive perception of intensive animal industries.</p>	<ul style="list-style-type: none"> <li>• Air Quality Report</li> <li>• Identification of existing and proposed odour requirements</li> <li>• Identification of appropriate odour mitigation and management actions</li> </ul>	<p>Section 4.7</p> <p>Section 4.8</p> <p>Appendix 9</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<b>CONSULTATION</b>	Demonstration of genuine engagement with the community to explain the broader context of the commencement and final success of this development. The assessment should outline issues raised and modifications or mitigation measures undertaken as a result of consultation.	<ul style="list-style-type: none"> <li>• Consultation Report</li> </ul>	Section 3 Appendix 8
<b>WATER</b>	<p>The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.</p> <ul style="list-style-type: none"> <li>• A detailed and consolidated site water balance.</li> <li>• Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.</li> <li>• Proposed surface and groundwater monitoring activities and methodologies.</li> <li>• Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the DPI Water Guidelines for Controlled Activities on Waterfront Land (2012) and the relevant Water Sharing Plans</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment of the potable water use and wastewater treatment</li> <li>• Stormwater Management Report</li> <li>• Waste Water Treatment Plant Project Proposal Report</li> </ul>	Section 4.2 Section 4.3 Appendix 11 Appendix 17

### 3.1.6 NSW Health/Hunter New England Local Health District

The NSW Health/Hunter New England Local Health District provided written advice (dated 26 September 2018) outlining the key requirements to be included as part of the EIS. **Table 12** identifies these requirements and where they are addressed within the EIS.

**Table 12: NSW Health/Hunter New England Local Health District**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<b>ODOUR</b>	<ul style="list-style-type: none"> <li>• A quantitative cumulative odour impact assessment for all poultry processing stages and adjacent livestock processing industries using the relevant Environment Protection Authority (EPA) guidelines.</li> <li>• An investigation and assessment of odour impacts on all identified and potential receivers including the adjacent industries,</li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality Report</li> <li>• Identification of existing and proposed odour requirements.</li> <li>• Identification of appropriate odour mitigation and management actions.</li> </ul>	Section 4.7 Section 4.8 Appendix 9

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>race course and the Tamworth Regional Airport.</p> <ul style="list-style-type: none"> <li>• A contingency plan to address unpredicted operational odour impacts.</li> <li>• Appraisal of odour impact monitoring, emission control techniques and mitigation measures.</li> </ul>		
<b>AIR QUALITY</b>	<ul style="list-style-type: none"> <li>• A quantitative assessment of the cumulative air quality impacts of the development, taking into account existing and proposed livestock-intensive industries in the surrounding area.</li> <li>• Use of appropriate meteorological data for air dispersion modelling, using real meteorological data where possible and inclusion of 'worse case' emission scenarios and sensitivity analyses.</li> <li>• A description and appraisal of air quality impact monitoring, emission control techniques and mitigation measures, including methane gas, from the anaerobic waste water lagoons and Sequence Batch Reactors.</li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality Report</li> <li>• Identification of existing and proposed odour requirements.</li> <li>• Identification of appropriate odour mitigation and management actions.</li> </ul>	<p>Section 4.7</p> <p>Section 4.8</p> <p>Appendix 9</p>
<b>WASTEWATER</b>	<ul style="list-style-type: none"> <li>• A quantitative assessment of the cumulative wastewater impacts from the existing fat rendering plant and proposed processing plant.</li> <li>• An assessment and description of mitigation measures for stormwater, surface and groundwater and flooding impacts including potential fats from the processing plant and oils from the car park.</li> <li>• Potential impacts and management of spills from the wastewater lagoons in the event of flooding.</li> <li>• Potential impacts and management of accidental leachate/leakage from the wastewater lagoons.</li> <li>• Suitability and feasibility of recycling the treated water for irrigation purposes in accordance with the <i>Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1)</i>.</li> <li>• Rehabilitation of the existing DAF System.</li> </ul>	<p>The site is not located within the flood planning area (as mapped in the Tamworth Regional Local Environmental Plan 2010).</p> <ul style="list-style-type: none"> <li>• Assessment of the potable water use and wastewater treatment</li> <li>• Stormwater Management Report</li> <li>• Waste Water Treatment Plant Project Proposal Report</li> </ul>	<p>N/A</p> <p>Section 4.2</p> <p>Section 4.3</p> <p>Appendix 11</p> <p>Appendix 17</p>
<b>WASTE MANAGEMENT</b>	<ul style="list-style-type: none"> <li>• A quantitative assessment, control and management of potential waste including chemical and oily waste from the processing plant.</li> <li>• Management of general waste from the</li> </ul>	<ul style="list-style-type: none"> <li>• Current and proposed waste generation, reuse, recycling and disposal processes will be maintained.</li> </ul>	<p>Section 4.13</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	business.		
<b>HAZARDOUS SUBSTANCES AND CHEMICALS</b>	<ul style="list-style-type: none"> <li>An indicative list of gases, chemicals and hazardous substances to be used and their storage arrangements.</li> <li>Establishing hazardous materials management priorities based on hazardous analysis of risky operations.</li> <li>Spill management strategy.</li> </ul>	<ul style="list-style-type: none"> <li>Current and proposed Hazardous Substance and Chemical Storage and Handling Practices will be maintained.</li> </ul>	Section 4.14
<b>BIOSECURITY</b>	<ul style="list-style-type: none"> <li>Assessment and contingency measures to control and prevent introduction and spread to infectious agents from birds.</li> <li>Emergency management procedures in the event that bird infectious diseases are identified (e.g. avian flu).</li> <li>Management of dead and moribund birds.</li> <li>Cleaning methods and management of wastewater from cleaning equipment and trailers.</li> </ul>	<ul style="list-style-type: none"> <li>Description of operations</li> </ul>	Section 4.16 Section 4.17
<b>VECTOR CONTROL</b>	<ul style="list-style-type: none"> <li>Assessment and management of vectors particularly flies and mosquitoes.</li> </ul>	<ul style="list-style-type: none"> <li>Description of operations</li> </ul>	Section 4.16 Section 4.17

## 3.2 TAMWORTH REGIONAL COUNCIL

Tamworth Regional Council provided written advice (dated 21<sup>st</sup> June 2018) outlining key information requirements to be included as part of the EIS which was included as part of the SEARs. Table 13 identifies these requirements and where they are addressed within the EIS.

A formal request to the Tamworth Regional Council was made on 7<sup>th</sup> June 2018 requesting Council identify any additional matters that Council would like addressed within the EIS. A response from Council was received on 21 June 2017 and requested that the EIS address the items shown in Table 13.

**Table 13: Tamworth Regional Council Requirements**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<b>PUBLIC NOTIFICATION</b>	<ul style="list-style-type: none"> <li>The public notice should be placed in the Northern Daily Leader.</li> <li>The EIS should be displayed for public perusal at Tamworth Regional Council.</li> <li>Public notification should include the provision of all documentation on USBs or CDs to any person who requests a copy, at the locations where the EIS is displayed.</li> </ul>	<ul style="list-style-type: none"> <li>Consultation Report</li> </ul>	Section 3.4 Appendix 8
<b>GENERAL</b>	<ul style="list-style-type: none"> <li>The application should detail any public consultation, including any issues identified by the public and the manner in which the</li> </ul>	<ul style="list-style-type: none"> <li>Consultation Report</li> <li>Traffic Impact Assessment</li> </ul>	Section 2.4 Section 3.1 Section 3.2

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>issues have been addressed prior to the submission of the application.</p> <ul style="list-style-type: none"> <li>• Details of proposed vehicular access arrangements for the subject facility should be provided.</li> <li>• Details of any existing structures to be demolished or retained should be provided.</li> <li>• Details regarding any vegetation retention/removal are to be provided for the site as well as details regarding any proposed landscaping works.</li> <li>• Full operational details are to be provided with regard to the poultry processing facility, with reference to future intended operations at the existing facility located at Out Street, West Tamworth (Lot 24 DP 832149)</li> <li>• Contributions pursuant to section 94 of the Environmental Planning and Assessment Act 1979 should be levied in accordance with the Tamworth Regional Council Section 94A (Indirect) Development Contributions Plan 2013.</li> <li>• Approvals will be required pursuant to section 68 of the Local Government Act 1993 to carry out water supply work, sewerage work and operate a system of sewerage management from Council as the Water Supply Authority.</li> <li>• Potential biosecurity impacts on landowners and properties located along the haulage routes arising from heavy vehicle movements to/from the facility need to be fully addressed.</li> <li>• The provisions of the Tamworth Regional Local Environmental Plan 2010 with regard to the proximity to the airport and the risk of bird strike need to be addressed. The Civil Aviation Safety Authority (CASA) should be consulted in this regard prior to the submission of the application.</li> <li>• Tamworth Regional Airport also needs to be considered as an odour receptor with regard to odour from the subject facility and any proposed mitigation measures.</li> </ul>	<ul style="list-style-type: none"> <li>• Details of the proposed development</li> <li>• Biodiversity Development Assessment Report</li> <li>• Further Approvals and Licences required</li> <li>• Description of operations</li> <li>• Consultation with the Tamworth Regional Council, Tamworth Regional Airport and the CASA</li> <li>• Details of landscape planting</li> </ul>	<p>Section 3.3 Section 4.10 Section 4.4 Section 6 Appendix 8 Appendix 10 Appendix 13</p>
<p><b>TRAFFIC AND ACCESS</b></p>	<p>With regard to the construction of any new access driveways to the site, an approval will be required pursuant to section 138 of the Roads Act 1993 from the Roads Authority (Council or RMS) for any works undertaken within the road reserve.</p>	<ul style="list-style-type: none"> <li>• Traffic Impact Assessment</li> <li>• Further Approvals and Licences required</li> </ul>	<p>Section 4.10 Section 6 Appendix 10</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<ul style="list-style-type: none"> <li>The estimated traffic volumes contained in the EIS should be separated into day time and night time movements. Clear identification as to the definition of a vehicle "movement" is to be provided i.e. does each "movement" constitute a single movement either to or from the site? Or does it include both?</li> <li>A Traffic Impact Assessment (TIA) report, including traffic movements into and out of the site, is to be provided as part of the EIS. The report needs to fully address vehicle movements (including trucks, cars, etc) both in and out of the site on a 24 hour/7 day a week basis and should also consider existing, proposed and predictive (when running at full capacity with all farms operational in the cluster area) traffic volumes. Proposed haulage routes to/from the facility are also to be clearly identified in the report.</li> <li>The Traffic Impact Assessment report should address the relevant RMS, AUSTRROADS, and Council guidelines/standards.</li> </ul>		
<p><b>ODOUR AND BIRD ATTRACTANT</b></p>	<p>The proposed location of the facility falls within a 3 kilometre radius of the airport. Under Guideline C of the National Safeguarding Airports Framework which is nationally accepted &amp; recognised guide for risk management and planning around airports the facility is deemed a risk as a birdlife attractant. This facility is close to the main precision and the only lit/night operations runway at Tamworth with all types of prop and jet engine aircraft utilising this runway 24 hours each day. The introduction of CAE Oxford's international pilot training at Tamworth means there will be a potential increase in night flying. This poses a significant risk of bird strike and potential catastrophic consequence in the event of aircraft impacting the runway or its approaches, causing death. The Guidelines and Framework were developed, approved and adopted by a committee consisting of National and State Planning and Transport Department executives, CASA, a representative of the Australian Local Government Association, and aviation groups including the Australian Airports Association. The Wildlife Hazard Working Group who developed the Guideline C in relation to Bird Hazards also had representatives from CASA, ATSB (Australian Transport Safety Bureau), Airservices Australia, airlines, airports and a Wildlife Consultancy Provider.</p> <p>The Airport Master Plan also identifies a number</p>	<ul style="list-style-type: none"> <li>Consultation with the Tamworth Regional Council, Tamworth Regional Airport and the CASA</li> <li>Air Quality Report</li> <li>Identification of existing and proposed odour requirements</li> <li>Identification of appropriate odour mitigation and management actions</li> <li>Assessment against the National Airports Safety Framework</li> </ul>	<p>Section 3.1 Section 3.2 Section 3.3 Section 4.7 Section 4.17 Appendix 9</p>

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	<p>of hangar sites which would be downwind of the predominant wind direction which is predominantly from the NW-SW direction and that is why the ILS (Instrument Landing System) is located on the main 30R runway direction. Given that there are plans for this Western Code E &amp; F hangar precinct it would be unwise to provide an odour affected site. Despite similar assurances of nil/minimal odour the airport is also periodically affected by odours from the Baiada processing facility's rendering plant.</p> <p>The airport is identified as a major economic driver for the Tamworth region and is a strategic asset in the North West Economic Development Plan. It would be unwise to position any facilities without appropriate odour and bird attractant mitigation measures to reduce threats to the airport's current operations and future developments.</p>		

### 3.3 OTHER AGENCIES

#### 3.3.1 CASA

The Civil Aviation Safety Authority (CASA) provided a written response to a request for input into the EIS on 20 August 2018. **Table 14** identifies these requirements and where they are addressed within the EIS.

**Table 14: CASA Requirements**

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
<b>NATIONAL AIRPORTS SAFEGUARDING FRAMEWORK</b>	<ul style="list-style-type: none"> <li>The Consent Authority should consider the information included in the National Airports Safeguarding Framework. In particular, the approval process should consider elements of the design that may not adequately prevent the attraction of birds to the airport, or cause birds to transit flight paths associated with the airport.</li> </ul>	<ul style="list-style-type: none"> <li>Response to the National Airports Safeguarding Framework</li> </ul>	Section 4.18

### 3.4 COMMUNITY CONSULTATION

The SEARs included the requirement for the proponent to undertake "effective and genuine community consultation". In response, the Comms Team was engaged by the Applicant to develop and execute a Community Consultation Action Plan. The Community Consultation Action Plan was prepared to guide communication and engagement activities across the local community and with specific stakeholders, in and around the proposed processing plant. A copy of the Community Consultation Report prepared by the Comms Team is provided as **Appendix 8** and provides a detailed account of the activities undertaken and response provided. An overview is provided below.

#### 3.4.1 Community Consultation Activities

Community consultation is a key requirement of the EIS process and ensures the community are provided sufficient information regarding a proposed development and given adequate opportunity to consider the potential impacts and raise any concerns they may have.

**Table 15** outlines the communication and engagement activities undertaken by The Comms Team in order to consult with the neighbouring residents and business owners and broader community. Copies of all communications materials (letters, flyers, media release etc) are provided in the Community Consultation Report prepared by the Comms Team and included as **Appendix 8**.

**Table 15: Community Consultation Activities**

ACTIVITY / TOOL	TIMING
<p>A letter and flyer was sent to 14 immediate neighbours and sensitive receivers shown as a red dot in <b>Figure 11</b>.</p> <p>The material provided project information, consultation team contact details and an offer to meet personally with the project team.</p>	21 November 2018
<p>A media release provided to Northern Daily Leader and ABC New England North West.</p> <p>The media release provided project information and the consultation team phone number and email.</p> <p>In response to the Media Release an article was published in the Northern Daily Leader on 24 November 2018 and an interview between Baiada Managing Director Simon Camilleri and Kelly Fuller (ABC New England North West) was broadcast on 23 November 2018.</p>	22 November 2018
<p>Comms Team management of the consultation phone number and email.</p>	23 November – 14 December 2018
<p>A Print Advertisement (1/4 page) was placed in Northern Daily Leader.</p> <p>The advertisement provided project information and the consultation team phone number and email.</p>	24 November 2018
<p>A printed flyer was distributed to residents and businesses within project area shown in yellow in <b>Figure 13</b>.</p> <p>The flyer was distributed to approximately 1800 properties and provided project information and the consultation team phone number and email.</p>	26 November – 30 November 2018
<p>One on One meetings with the project team were offered to interested residents and businesses within the project area, and other stakeholders or community members with an interest.</p> <p>Note: No stakeholders responded to the meeting offer, therefore meetings were not held.</p>	<p>Planned Meeting Dates</p> <p>10 December – 12 December 2018</p>

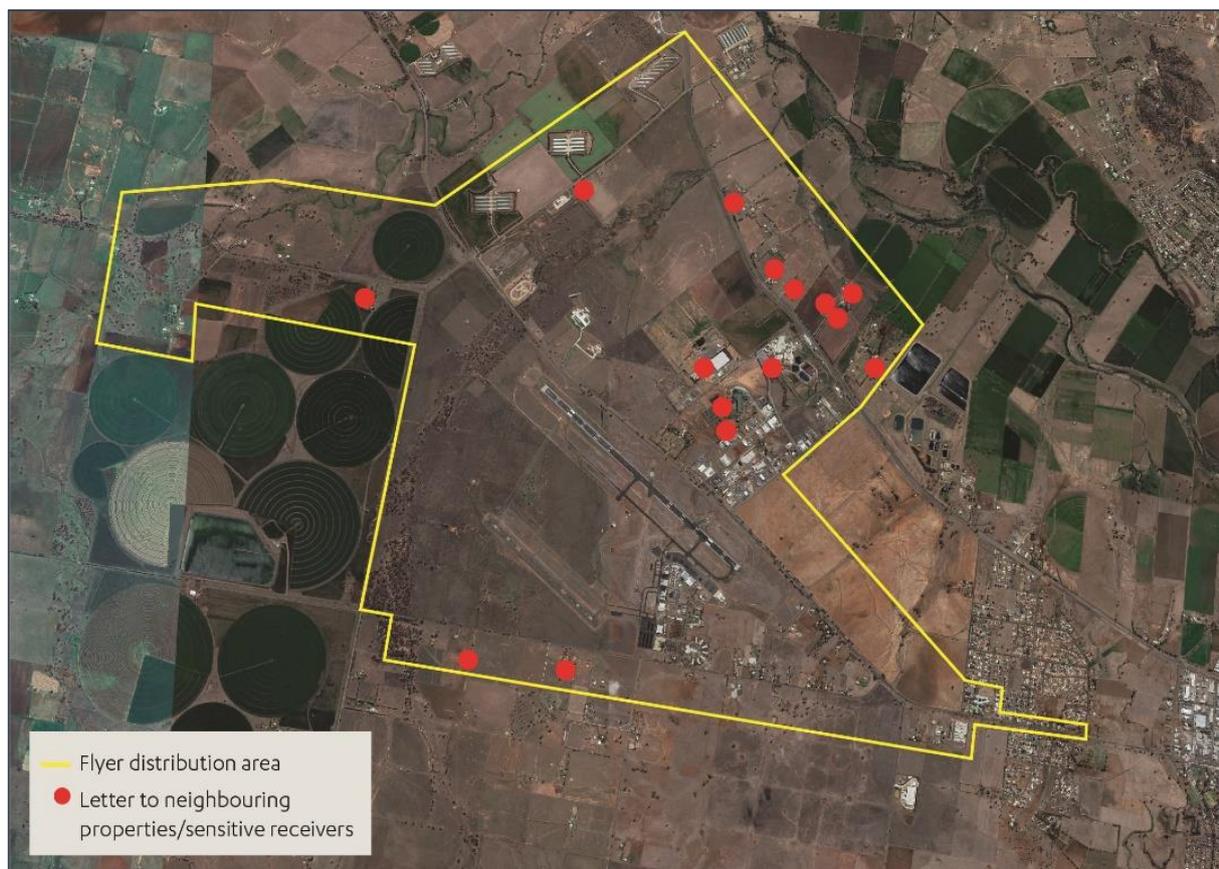


Figure 13: Flyer Distribution Area (The Comms Team, 2019)

### 3.4.2 Summary of Community Responses

In response to the above community consultation activities, the following responses were received (see Table 16).

Table 16: Community Responses

DATE	STAKEHOLDER	FEEDBACK
27 November 2018	Local Resident (name withheld)	<ul style="list-style-type: none"> <li>Seeking general project information. Resident is a solicitor in Tamworth. Enquiring on behalf of his clients with skills/resources that may be of value to the project</li> </ul>
27 November 2018	Local Resident (name withheld)	<ul style="list-style-type: none"> <li>Seeking confirmation of plant location and whether the existing motorsports complex will be removed and replaced with a new facility.</li> </ul>
29 November 2018	Local Resident (name withheld)	<ul style="list-style-type: none"> <li>Highly supportive of the project as his business depends on the poultry industry</li> </ul>
6 December 2018	Australasian Meat Industry Employees Union (AMIEU)	<ul style="list-style-type: none"> <li>Highly supported of the project and the employment opportunities it provides for Local people, especially young people.</li> </ul>

### 3.4.3 Community Consultation Outcomes

At the completion of the consultation process, the Comms Team concluded that *“The process undertaken was thorough and enabled a genuine opportunity for consultation. Stakeholders were provided with multiple channels to receive information and provide feedback. Those located nearby were provided with direct communication and an invitation to meet with the project team”*.

There appears to be general interest in the project and the activities undertaken increased community awareness about the proposed development. However, the project team received no requests from stakeholders or neighbours for face-to-face meetings and received very few email or phone enquiries. The few enquiries received were either to seek additional project information or convey support for the proposed development. No project-specific issues were raised.

This is potentially due to the history of the project, the existing approvals attached to the site and the development of this area as a key food production hub. Baiada also has an established presence in the community and it is likely considered a desirable outcome that operations move from the existing facility in town, to a larger, more suitable location.”

### **3.4.4 Engagement Activities for Construction and Operational Phases**

#### **3.4.4.1 Construction**

During construction, the applicant will prepare and publish on their website, regular construction updates. This will provide the general public with up to date information on the project status which is easily accessible. The nearest residents to the site will be provided with a project update at key stages throughout construction and be provided with contact details for the construction manager who can be contacted as required.

Baiada will also prepare and implement a construction management plan to ensure the potential impacts associated with the construction phase are appropriately mitigated and managed. The construction management plan will include the requirements for project updates and a procedure for receipt of feedback from the community and provision of a response.

#### **3.4.4.2 Operational Phase**

Ongoing consultation during the operational phase of the project will not be undertaken. However, the Environmental Management Plan prepared for the site will include a standard process for receipt of enquiries, questions and complaints, handling, responding and recording. The example Environmental Management Plan attached as **Appendix 18** includes these procedures.

## **3.5 PUBLIC NOTIFICATION**

In accordance with Part 4 of the *Environmental Planning and Assessment Act 1979*, the EIS will be publicly notified during which time the general public will be invited to make comment and forward submissions to the Consent Authority (Department of Planning and Environment) in relation to the proposed development. Advertising will occur for a minimum period of 30 days.

## 4 ASSESSMENT OF ENVIRONMENTAL IMPACTS

### 4.1 STATUTORY PLANNING ASSESSMENT

#### 4.1.1 State Significant Development

In accordance with s8(1) and Schedule 1 3(a) *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, development for the purpose of Agricultural produce industries and food and beverage processing that has a Capital Investment Value (CIV) of more than \$30 million is declared to be State Significant Development for the purpose of the *Environmental Planning and Assessment Act 1979*. As the CIV for the project is \$208,545,901, the development is classified as a State Significant Development.

Under section 4.5(a) of the *Environmental Planning and Assessment Act 1979*, the Minister is the Consent Authority for State Significant Development, unless the Independent Planning Commission has been declared to be the consent authority.

Under the State and Regional Development SEPP (Part 2, 8A), the Independent Planning Commission is the consent authority in the following circumstances:

- An objection from the relevant council is made;
- At least 25 people lodge objection submissions; or
- Political donations are made by the Applicant.

#### 4.1.2 Designated Development

The development also falls within the scope of Designated Development under *Item 22 Livestock Processing Industries* of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*. However, in accordance with 4.10(2) of the *Environmental Planning and Assessment Act 1979* designated development does not include state significant development despite any such declaration.

#### 4.1.3 New England North West Regional Plan

The *New England North West Regional Plan 2036* is a 20 year blueprint for the future for the New England North West Region prepared by the NSW State Government. The vision for the region contained in the plan includes the following statements which align with the core objectives of the proposed development:

- *Growth in agriculture, agribusiness, livestock meat production, mineral resource development, renewable energy, health and education is providing jobs and supporting thriving local communities.*
- *Primary production, intensive agriculture and food processing sectors take advantage of the rich soils and climate.*
- *Strategically located, with close links between some of Australia's fastest growing areas – South East Queensland, Newcastle and Sydney - is attracting industry investment.*

Communities are well connected, attractive, healthy, safe and prosperous. They are places with a strong sense of community identity, resilience and respect for country. People access a range of employment opportunities, housing choices, vibrant events and festivals and high quality education, health, recreational and other community services.

Development of the Oakburn Processing Plant closely aligns with the vision for the region as it will support significant growth in agriculture, agribusiness and livestock meat production. The processing plant will provide the basis and impetus for significant expansion of the entire poultry cluster in the region leading to growth in employment and local spending to support the poultry industry.

The Regional Plan also recognises that the food processing sector is rapidly expanding and will drive economic prosperity and jobs growth. The poultry industry around Tamworth is specifically supported as adding to the “*diversity of the agricultural economy, promotion of value adding opportunities and creating employment*” (p13).

The plan has identified four (4) specific goals for the region, which are:

- Goal 1 – A strong and dynamic regional economy
- Goal 2 – A healthy environment with pristine waterways
- Goal 3 – Strong infrastructure and transport networks for a connected future

- Goal 4 – Attractive and thriving communities

An assessment of the proposed development's contribution towards achieving these goals is provided below.

The Plan recognises that agricultural production from the region accounts for 17.5 per cent of the State's gross agricultural value and that the Region is also NSW's highest value producer region for livestock meat. The poultry industry (including eggs) contributed \$139 million (or 13%) of the Region's gross value of agricultural commodities produced as well as \$126 million or 14% of the gross value of the Region's livestock meat industry.

With respect to **Goal 1 – A strong and dynamic regional economy**, it is noted the plan supports the expansion of agribusiness and food processing sectors in Direction 1, with specific reference to the Poultry Industry as follows:

*“Large livestock and food processing facilities, such as abattoirs and milling operations, can leverage changing global population and food consumption trends. Potential expansion of these sectors is demonstrated by the already growing poultry sector around Tamworth, Gunnedah and Liverpool Plains. A strategic approach to intensive agriculture and food processing will avoid land use compatibility issues and protect the long-term viability of their operations, while also facilitating opportunities for expansion across different rural sectors and communities.”*

With respect to Direction 2, the Plan states *“The New England North West can maximise opportunities associated with growing global connectivity and international trade agreements. By harnessing new markets presented through these processes, the entire supply chain can benefit, including transport infrastructure and facilities such as silos, abattoirs and saleyards, supporting secondary processing facilities, and transport and logistics industries.”*

Consistent with Goal 1, the proposed development will support significant growth of the livestock and food processing sectors as well as the larger supply including agriculture (grain supply), livestock farming and supporting contractors. The processing plant will provide the basis and impetus for significant expansion of the entire poultry cluster in the region leading to growth in employment and local spending to support the industry. Secondary businesses within the supply chain, particularly those associated with the transport and logistics as well as grain production will also benefit from the broader expansion of poultry cluster.

Direction 9 of Goal 1 requires the coordination of growth in the cities of Armidale and Tamworth. The Tamworth Regional City Growth Precincts Plan (see **Figure 14**) identifies the subject site and surrounding area as a Future Industrial Investigation Area. This designation reflects the changing nature of the land uses between the Glen Arntey Industrial Estate and Bowlers Lane which is being progressively developed as a hub for major processors and related industries. The proposed Oakburn Processing Plant aligns with the long term strategic planning intent of the New England North West Regional Plan.

With respect to Goal 2, Goal 3 and Goal 4, the proposed development is consistent with these goals as:

- **Goal 2 – A healthy environment with pristine waterways:** The development has been subject to a rigorous assessment of potential environmental impacts and will be constructed and operated in a manner consistent with the applicable environmental standards. The proposed development is not expected to have significant negative impacts on the ecological health of the receiving environment.
- **Goal 3 – Strong infrastructure and transport networks for a connected future:** The proposed development can be efficiently connected to all necessary infrastructure networks that are necessary to service a modern processing facility. Where necessary, new connections to the infrastructure networks are to be provided in accordance with the relevant standards. The site is well located to take advantage of major transport networks which enable transport of products from the region to major national markets. As shown in **Figure 15**, the major roads in and around Tamworth (including the Oxley Highway) are identified as part of the Agricultural Freight network, with the movement of poultry specifically identified as a key agricultural commodity.
- **Goal 4 – Attractive and thriving communities:** The proposed development will significantly increase direct and indirect employment within the Tamworth region, and facilitate expansion and investment of in the broader poultry cluster. The Oakburn Processing will be an efficient and modern facility that adopts best practice equipment and methodologies, reinforcing the areas reputation as a high quality food production hub.

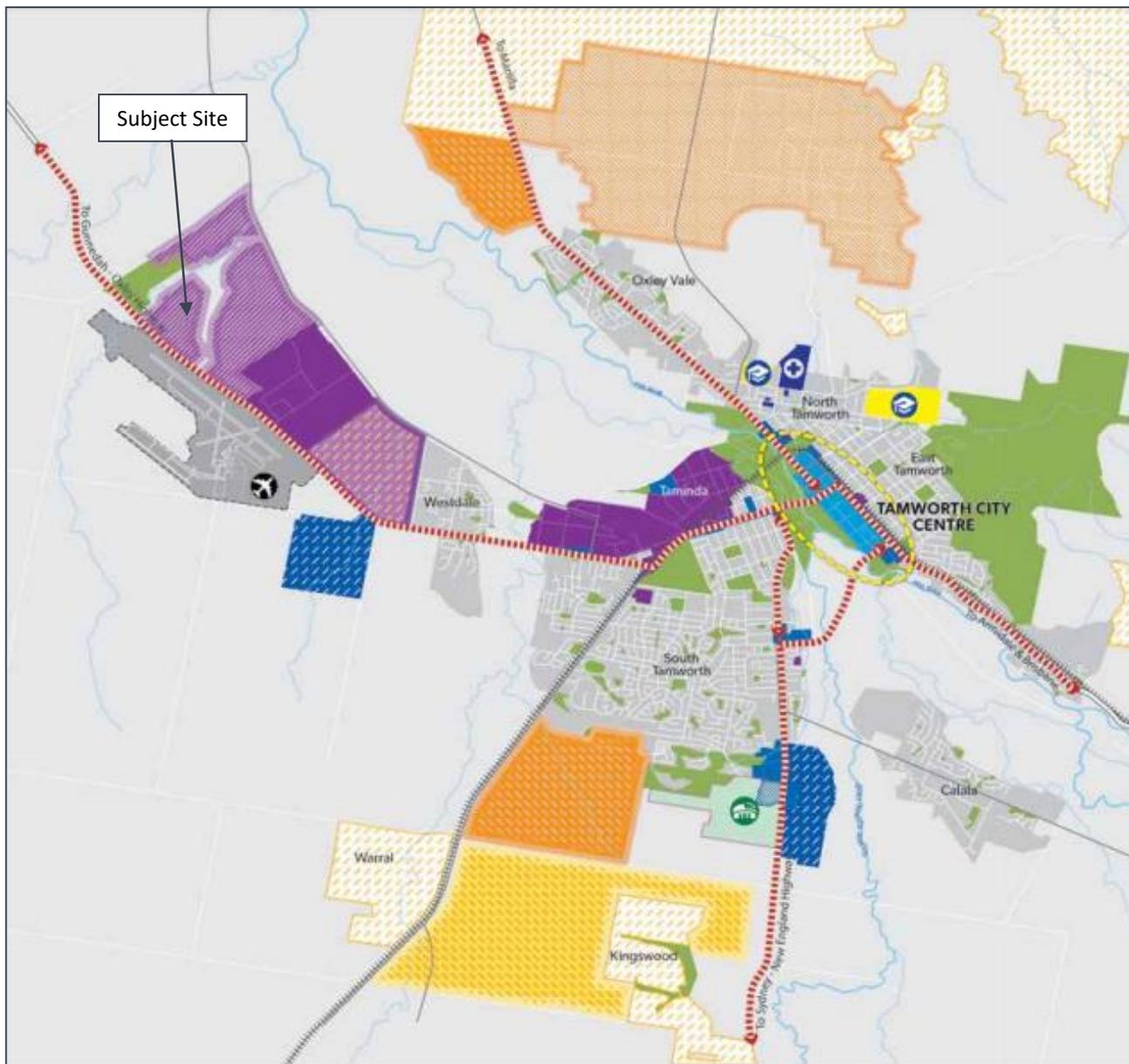


Figure 7: Tamworth Regional City Growth Precincts



Figure 14: Tamworth Regional City Growth Precincts (Department of Planning and Environment, 2017)

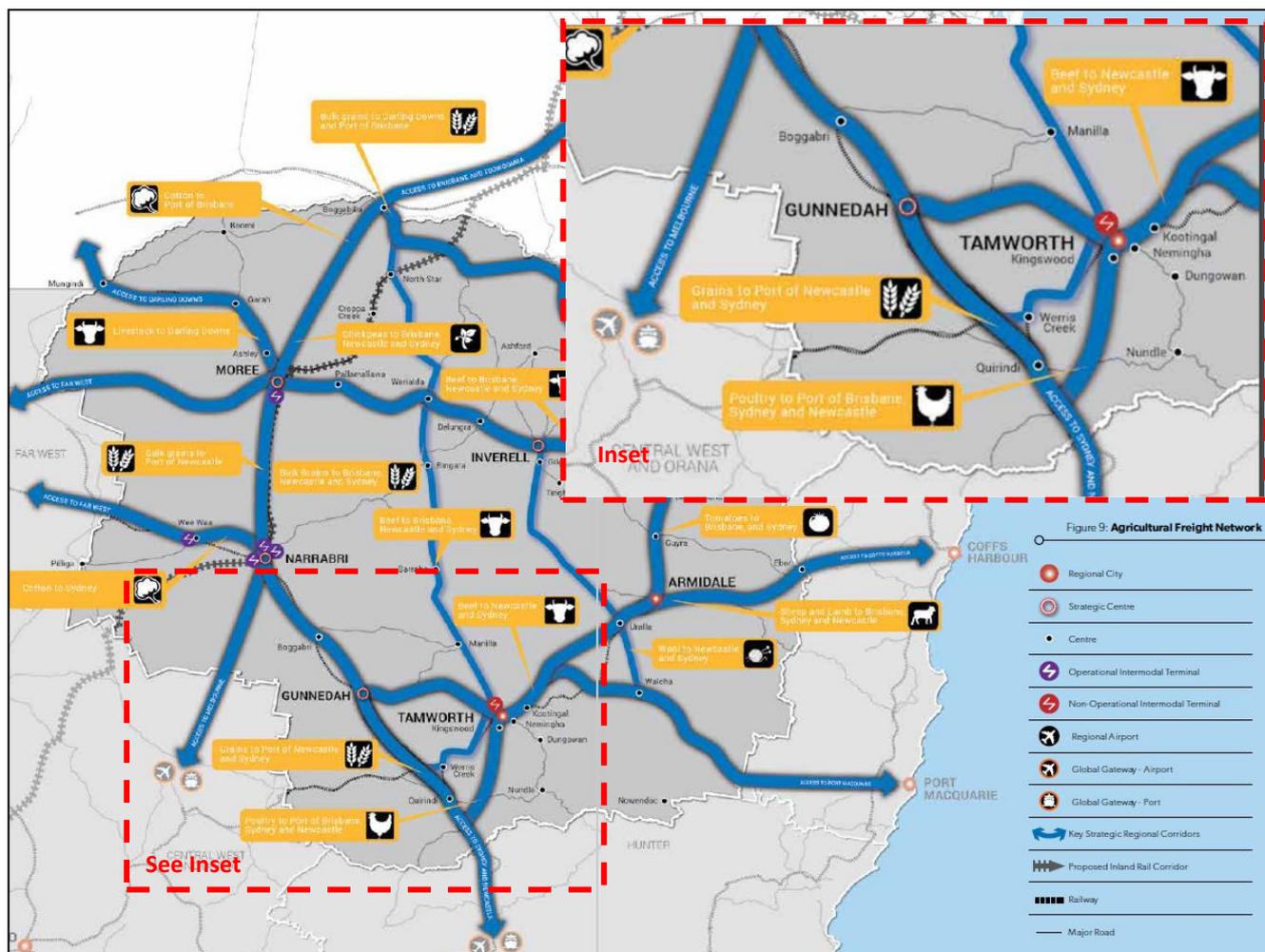


Figure 15: Agricultural Freight Network (Department of Planning and Environment, 2017)

#### 4.1.4 State Environmental Planning Policies

##### 4.1.4.1 SEPP No. 33 Hazardous and Offensive Development

In accordance with the requirements of *State Environmental Planning Policy 33 (SEPP33)*, a screening of storage volumes of dangerous goods has been undertaken (see **Section 4.14**). Based on the screening test, a Preliminary Hazard Analysis is not considered to be required for this Development Application of the following reasons:

- the quantity of dangerous goods to be stored on site does not exceed the amounts listed in the General Screen Threshold Quantities (Table 3 Applying SEPP33);
- the cumulative and peak vehicle movements do not exceed those listed in the Transportation Screening Thresholds (Table 2 Applying SEPP33);
- separation distances from the between the location of dangerous goods storage and residential development is greater than the distance of the consequences of a possible hazardous incident; and
- the technical and management safeguards available to mitigate hazards involving dangerous substances are considered to be sufficient to avoid significant risk to human health or life, property and the biophysical environment.

Further, while the development could possibly be defined as potentially offensive industry under SEPP 33, it is considered that adequate measures will be in place to manage the impacts. The odour and noise assessments undertaken as part of this EIS for this project demonstrate that adequate measures will be put in place to mitigate the odour and noise impacts to an acceptable level or one which does not exceed the relevant criteria.

#### 4.1.4.2 SEPP Infrastructure (2007)

Under SEPP Infrastructure (2007) the development is identified as traffic generating development as it is and industry which is greater than 5000m<sup>2</sup> in area and has an access road located within 90m of a State Road (Oxley Highway). Accordingly, referral to the RMS is required. It is important to note that while the existing connection to the Oxley Highway will be retained as a visitor access and for secondary (emergency) purposes, it is proposed that all operational traffic associated with the development will access the site via Workshop Lane and the new access driveway.

#### 4.1.4.3 SEPP No. 55 Remediation of Land

In accordance with the requirement of SEPP No. 55 a Contaminated Site Investigation has been undertaken in accordance with NSW Environment Protection Authority (EPA) Guidelines. The investigation involved an assessment of previous land use and identification of potential contamination. The objective of the investigation was to determine whether contamination existed within the Investigation Area and whether this may impact on the proposed or future land use.

The Contaminated Site Investigation is included as **Appendix 12**. The investigation concluded that the development site does not contain contaminated land that would impact construction of the Oakburn Processing Plant or pose an unacceptable risk to human health or the surrounding environment.

#### 4.1.4.4 SEPP (Educational Establishments and Child Care Facilities) 2017

The proposed development will include an ancillary child care space which will provide care options for children of workers at the processing plant. Child care places will not be provided to members of the general public. While the internal layout of the child care space is subject to future detailed design, the proposal plans provide a total of 260m<sup>2</sup> of Child Care Space, which is anticipated to accommodate approximately 60m<sup>2</sup> of storage, toilets, changing rooms, staff amenities and administration and 200m<sup>2</sup> of indoor child care space. A designated outdoor area will also be provided immediately adjacent to the child care space on the northern side of the administration building.

The SEPP requires compliance with the *Education and Care Services National Regulation* Section 107 for indoor space and section 108 for outdoor space. Section 108 requires 3.25m<sup>2</sup> of indoor space per child at the centre and section 107 requires 7m<sup>2</sup> of outdoor space per child. With consideration of the space available, the centre can accommodate a maximum of 62 children with a minimum of 434m<sup>2</sup> of outdoor space.

Additional child care requirements outlined in the SEPP and *Education and Care Services National Regulation* include (but are not limited to) the following elements:

- Premises, furniture and equipment to be safe, clean and in good repair;
- Sufficient furniture, materials and appropriate equipment is provided;
- Laundry facilities (or access to laundry facilities) are to be provided;
- Adequate age appropriate toilet, washing and drying facilities are to be provided in a safe and convenient location;
- The facility is to be well ventilated, have adequate natural light, and be maintained at an appropriate temperature;
- Sufficient administration space is provided;
- Nappy changing facilities are provided;
- Child proof fencing to be provided;
- The outdoor space provides children with access to the natural environment (trees, sand etc.);
- The outdoor space is well shaded; and
- The premises are designed to facilitate supervision.

Compliance with these matters will be finalised as part of the detailed design of the facility and compliance with the National Quality Framework, the Education and Care Services National Regulation and all other standards can be conditioned accordingly.

#### 4.1.4.5 SEPP (Rural Lands) 2008

The proposed development promotes the Rural Planning Principles outlined in Section 7 of the SEPP. In particular, the development involves the provision of a processing plant which will form the basis for significant and investment in the regional poultry cluster in and around Tamworth. The development involves an expansion of an existing rural industry and will not limit the operation of other rural operations in the local area.

#### 4.1.4.6 Other SEPPs

An assessment of the development against the remaining SEPPs is provided in **Table 17** below.

**Table 17: Applicability of other SEPPs**

SEPP	APPLICABILITY
SEPP No 1—Development Standards	<b>Not Applicable</b> – the application does not rely upon SEPP 1 to vary the relevant development standards.
SEPP No 19—Bushland in Urban Areas	<b>Not Applicable</b> – the development will not impact upon bushland in urban areas.
SEPP No 21—Caravan Parks	<b>Not Applicable</b> – the development does not involve a caravan park.
SEPP No 30—Intensive Agriculture	<b>Not Applicable</b> – the development does not involve intensive agriculture.
SEPP No 36—Manufactured Home Estates	<b>Not Applicable</b> – the development does not involve manufactured home estates.
SEPP No 44—Koala Habitat Protection	<b>Not Applicable</b> – the development will not impact upon any koala habitat.
SEPP No 47—Moore Park Showground	<b>Not Applicable</b> – the development is not located in proximity to the Moore Park Showground.
SEPP No 50—Canal Estate Development	<b>Not Applicable</b> – the development does not involve canal estate development.
SEPP No 52—Farm Dams and Other Works in Land and Water Management Plan Areas	<b>Not Applicable</b> – the development does not involve farm dams or other works within a Land and Water Management Plan.
SEPP No 62—Sustainable Aquaculture	<b>Not Applicable</b> – the development does not involve sustainable aquaculture.
SEPP No 64—Advertising and Signage	<b>Not Applicable</b> – the development will not require any new advertising or signage.
SEPP No 65—Design Quality of Residential Apartment Development	<b>Not Applicable</b> – the development does not involve residential apartment development.
SEPP No 70—Affordable Housing (Revised Schemes)	<b>Not Applicable</b> – the development does not involve affordable housing.
SEPP (Affordable Rental Housing) 2009	<b>Not Applicable</b> – the development does not involve affordable rental housing.
SEPP (Building Sustainability Index: BASIX) 2004	<b>Not Applicable</b> – the development does not involve residential development.
SEPP (Coastal Management) 2018	<b>Not Applicable</b> – the development is not located in the coastal zone.
SEPP (Exempt and Complying Development Codes) 2008	<b>Not Applicable</b> – the development is not classified as exempt or complying development.
SEPP (Housing for Seniors or People with a Disability) 2004	<b>Not Applicable</b> – the development does not involve housing for seniors or people with a disability.
SEPP (Kosciuszko National Park—Alpine Resorts) 2007	<b>Not Applicable</b> – the development is not located in the Kosciuszko National Park.
SEPP (Kurnell Peninsula) 1989	<b>Not Applicable</b> – the development is not located in the Kurnell Peninsula

SEPP	APPLICABILITY
SEPP (Mining, Petroleum Production and Extractive Industries) 2007	<b>Not Applicable</b> – the development is not for mining, petroleum production and extractive industries.
SEPP (Miscellaneous Consent Provisions) 2007	<b>Not Applicable</b> – the development does not involve a temporary structure, subdivision of land, demolition of a building or work or fire alarm communication link works.
SEPP (Penrith Lakes Scheme) 1989	<b>Not Applicable</b> – the development is not located within proximity to the Penrith Lakes.
SEPP (State Significant Precincts) 2005	<b>Not Applicable</b> – the development is not located in a State Significant Precinct.
SEPP (Sydney Drinking Water Catchment) 2011	<b>Not Applicable</b> – the development is not located in the Sydney drinking water catchment.
SEPP (Sydney Region Growth Centres) 2006	<b>Not Applicable</b> – the development is not located in a Sydney region growth centre.
SEPP (Three Ports) 2013	<b>Not Applicable</b> – the development is not located in any three ports.
SEPP (Urban Renewal) 2010	<b>Not Applicable</b> – the development is not located in an urban renewal precinct.
SEPP (Vegetation in Non-Rural Areas) 2017	<b>Not Applicable</b> – the development is located in a rural area.
SEPP (Western Sydney Parklands) 2009	<b>Not Applicable</b> – The development is not located in the Western Sydney Parklands.
SEPP (Western Sydney Employment Area) 2009	<b>Not Applicable</b> – The development is not located in the western Sydney Employment Area.

#### 4.1.5 Tamworth Local Environmental Plan 2010

##### 4.1.5.1 Zoning and Permissibility

Under the *Tamworth Regional Local Environmental Plan 2010*, the subject site is located in the RU1 Primary Production Zone. The existing and proposed development falls under Tamworth LEP definition of **Livestock Processing Industry** which means “*a building or place used for the commercial production of products derived from the slaughter of animals (including poultry) or the processing of skins or wool of animals, derived principally from surrounding districts, and includes abattoirs, knackeries, tanneries, woolscours and rendering plants.*”

In accordance with clause 3 of the Tamworth LEP development of a Livestock Processing Industry located in the Primary Production Zone (RU1) is identified as development that is **Permitted with Consent**.

The ancillary access road (via Workshop Lane) also traverses land included in the Special Activities (SP1) and Environmental Management (E3) zones. While a Livestock Processing Industry is identified as prohibited development within these zones, Section 4.38 (3) of the *Environmental Planning and Assessment Act 1979* provides that development consent may be granted for State Significant Development, despite the development being partly prohibited by an Environmental Planning Instrument (EPI). Accordingly the presence of the access road within these zones does not result in the development becoming prohibited.

The objectives for the RU1 Primary Production Zone are as follows:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To permit subdivision only where it is considered by the Council to be necessary to maintain or increase agricultural production*
- *To restrict the establishment of inappropriate traffic generating uses along main road frontages*

- To ensure sound management of land which has an extractive or mining industry potential and to ensure that development does not adversely affect the extractive industry
- To permit development for purposes where it can be demonstrated that suitable land or premises are not available elsewhere

The site is located in food production hub which contains a number of major rural industries including a livestock exchange, beef abattoir, lamb abattoir, flour mill, other industrial operations and intensive animal husbandry. As such, the existing, approved and proposed use of the site is considered to be a complementary land use to the surrounding area and adjoining zones. Further, the development of the Oakburn Poultry Processing Plant will support expansion of primary industry enterprises across the region.

As demonstrated in this EIS, the proposed development has been subject to a rigorous environmental assessment which confirms the project can be undertaken in a manner which minimise potential conflict with adjoining zones and sensitive receptors. Similarly the Traffic Impact Assessment has demonstrated that the proposed access arrangements and development traffic can be suitably and safely accommodated within the existing network. As such the proposed development is considered to comply with the objectives of the zone.

#### 4.1.6 Tamworth Development Control Plan 2010

An assessment of the development against the applicable Tamworth Development Control Plan (DCP) provisions is provided in **Table 18**.

**Table 18: Industrial Development Controls**

GUIDELINES	COMPLIANCE
<b>Industrial Development Controls</b>	
Building Setbacks	
<ul style="list-style-type: none"> <li>• Street setback must be a minimum of 5m.</li> <li>• No concession for secondary frontage.</li> <li>• Street setback must be landscaped.</li> <li>• A reduced landscaped setback, to a minimum of 3 metres, is permitted where car parking is provided immediately behind the landscaped area.</li> <li>• Side and rear setbacks to meet BCA requirements.</li> </ul>	<p><b>Complies.</b></p> <p>The proposed development will be setback greater than 5m from Oxley Highway. Substantial landscape planting is also proposed included formal plantings and gardens in and around the processing plant and screening vegetation alongside the access roads, internal manoeuvring areas and along the Oxley Highway Frontage. A Landscape Concept Plan has been prepared by Site Image and is included as <b>Appendix 4</b>.</p>
Design	
<ul style="list-style-type: none"> <li>• Building elevations to the street frontage or where visible from a public road, reserve, railway or adjoining residential area are to incorporate variations in façade treatments, roof lines and building materials.</li> <li>• Low scale building elements such as display areas, offices, staff amenities are to be located at the front of premises and constructed in brick or finished concrete or light weight cladding.</li> <li>• Roofing materials should be non-reflective where roof pitch is greater than 17 degrees or visible from a public road.</li> </ul>	<p><b>Complies.</b></p> <p>The proposed building is well setback from all public roads frontages and will have a low built form. Regardless, the processing plant will be a modern, industrial building featuring high quality materials consistent with the established rendering plant on the site.</p> <p>The design of the building orients the low scale administration building towards the front of the site, breaking up the built form and creating a clear staff and visitor entrance to the facility.</p>
Utilities and Services	
<ul style="list-style-type: none"> <li>• Servicing strategy required to demonstrate the availability and feasibility of providing water, sewer and stormwater services</li> </ul>	<p><b>Complies.</b></p> <p>The development is currently serviced with</p>

GUIDELINES	COMPLIANCE
<p>appropriate for the scale and nature of development</p> <ul style="list-style-type: none"> <li>• Applications must demonstrate adequate provision for storage and handling of solid wastes.</li> <li>• Liquid Trade Waste Application and facilities are required where liquid wastes (excluding domestic waste from a hand wash basin, shower, bath or toilet) are to be discharged to Council’s sewerage system.</li> <li>• Detention of stormwater may be required.</li> <li>• Onsite stormwater capture and reuse shall be provided for maintenance of landscaping. Storage tanks shall be appropriately located and screened. <b>NB</b> – reuse facilities shall not form part of stormwater calculations.</li> <li>• Buildings and structures are to be located clear of utility infrastructure.</li> <li>• For sewer mains, structures are to be located a minimum of one metre plus the equivalent invert depth from the centreline of the main. See Council Policy “Excavating/Filling or Building Adjacent to or Over Existing Sewer Mains” for further detail.</li> <li>• The developer is responsible to consult with Essential Energy, natural gas and a telecommunications carrier regarding the provision of services</li> </ul>	<p>all necessary infrastructure, such as water, sewer, power, gas and stormwater.</p> <p>Where necessary, new connections will be provided in accordance with the applicable standards</p> <p>A Stormwater Management Plan (SMP) has been prepared by MPN Consulting (refer to <b>Appendix 11</b>) which confirms stormwater runoff will be collected and conveyed in a new internal stormwater pit, pipe and open channel network, prior to discharge to three separate treatment/detention basins in accordance with Council’s standards.</p>
<b>Landscaping</b>	
<ul style="list-style-type: none"> <li>• Landscaping is required: <ul style="list-style-type: none"> <li>○ In the front 5m of street setback;</li> <li>○ Side and rear setbacks where visible from public place or adjoining residential area; and</li> <li>○ Areas adjacent to building entrances and customer access points</li> </ul> </li> <li>• Landscaping or shade structures shall be provided in outdoor car parking areas where &gt;10 spaces are required, to provide shading and soften the visual impact of large hard surfaces</li> <li>• Landscaping shall comprise only low maintenance, drought and frost tolerant species.</li> </ul>	<p><b>Complies</b></p> <p>Landscaping will be provided as shown on the landscaping plan (<b>Appendix 5</b>), which includes a variety of plant species throughout and around the car parking area, access road and new building.</p>
<b>Fencing</b>	
<ul style="list-style-type: none"> <li>• Open work or storage areas visible from a public place or street must be fenced by masonry materials or pre-coloured metal cladding of minimum 2m height. Fencing to be located behind the building setback.</li> <li>• Security fencing must be also located behind the building setback area except when of a decorative nature to be integrated in the landscaped area.</li> </ul>	<p><b>Complies</b></p> <p>The processing facility will be securely fenced with public access to the site restricted in accordance with strict biosecurity measures.</p>
<b>Traffic and Access</b>	
<ul style="list-style-type: none"> <li>• A Traffic Assessment is required to demonstrate the adequacy of: <ul style="list-style-type: none"> <li>○ Road network,</li> <li>○ Geometric design for intersections, including pavement impacts,</li> <li>○ Site access</li> <li>○ Loading/unloading facilities, and</li> <li>○ Safe on-site manoeuvring areas relative to the design vehicle</li> </ul> </li> <li>• Unsealed vehicle movement areas are not acceptable due to environmental management impacts.</li> </ul>	<p><b>Complies</b></p> <p>A Traffic Impact Assessment has been undertaken by TTPP (refer to <b>Appendix 10</b>) which demonstrates the proposed access arrangements, on-site manoeuvring and parking arrangements are fit for purpose. Further, the TIA also demonstrates the use will not create unacceptable impact on the existing road network.</p>

GUIDELINES	COMPLIANCE														
<ul style="list-style-type: none"> <li>All vehicles must be able to enter and exit the site in forward direction.</li> <li>Manoeuvring areas within the development must be designed to accommodate a B99 vehicle under AS2890.1 Parking Facilities Off Street Parking.</li> <li>Swept paths for a B99 vehicle must be shown on plans prepared to accompany the DA.</li> <li>Site access not permitted:               <ul style="list-style-type: none"> <li>Close to traffic signals, intersection or roundabouts with inadequate sight distances;</li> <li>Opposite other large developments without a median island;</li> <li>Where there is heavy and constant pedestrian movement on the footpath;</li> <li>Where right turning traffic entering the site may obstruct through traffic</li> </ul> </li> <li>The number of access points from a site to any one street frontage is limited to 1 egress</li> <li>Driveways must be provided in accordance with <i>AS280.1 Parking Facilities</i>.</li> </ul>															
<b>Parking</b>															
<table border="1" data-bbox="180 1048 887 1756"> <thead> <tr> <th>Land Use</th> <th>Parking</th> </tr> </thead> <tbody> <tr> <td>Industrial Retail</td> <td>1 per 45m<sup>2</sup> GFA*</td> </tr> <tr> <td>Industrial</td> <td>1 per 75m<sup>2</sup> GFA OR 1 space per 2 employees WHICHEVER IS GREATER</td> </tr> <tr> <td>Transport / Truck Depot</td> <td>Space for each vehicle present at peak time onsite and driver parking</td> </tr> <tr> <td>Vehicle Body Repair Workshop or Repair Station</td> <td>1 per 40m<sup>2</sup> GFA OR 3 spaces per workshop bay WHICHEVER IS GREATER</td> </tr> <tr> <td>Warehouses</td> <td>1 per 300m<sup>2</sup> GFA OR 1 space per employee WHICHEVER IS GREATER</td> </tr> <tr> <td>Other</td> <td>Based on predicted peak vehicle use.</td> </tr> </tbody> </table> <p>*GFA – refer to dictionary in Tamworth Regional Local Environmental Plan 2010 for definition</p> <ul style="list-style-type: none"> <li>Portion of customer parking to be provided convenient to the public entrance</li> </ul>	Land Use	Parking	Industrial Retail	1 per 45m <sup>2</sup> GFA*	Industrial	1 per 75m <sup>2</sup> GFA OR 1 space per 2 employees WHICHEVER IS GREATER	Transport / Truck Depot	Space for each vehicle present at peak time onsite and driver parking	Vehicle Body Repair Workshop or Repair Station	1 per 40m <sup>2</sup> GFA OR 3 spaces per workshop bay WHICHEVER IS GREATER	Warehouses	1 per 300m <sup>2</sup> GFA OR 1 space per employee WHICHEVER IS GREATER	Other	Based on predicted peak vehicle use.	<p><b>Complies</b></p> <p><i>Tamworth Regional Development Control Plan 2010</i> requires that car parking at light or heavy industry developments be provided at the greater of one space per 75m<sup>2</sup> GFA or one space per two employees. On this basis, the processing plant requires a minimum of 632 spaces based on the proposed 47,348m<sup>2</sup> GFA or 588 spaces based on the total of 1,176 employees. The proposed provision of 820 car parking spaces therefore exceeds the requirements of the DCP and is satisfactory. It is recommended that eight to sixteen spaces be designated for people with a disability, representing one to two per cent of the total number of spaces provided.</p>
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Other	Based on predicted peak vehicle use.														
<b>Loading/Unloading Facilities</b>															
<ul style="list-style-type: none"> <li>Adequate space and facilities are required to be provided wholly within the site.</li> <li>Loading and delivery bays must be designed to allow vehicles to</li> </ul>	<p><b>Complies</b></p> <p>The proposed processing facility has been design to allow for the movement of heavy</p>														

GUIDELINES	COMPLIANCE
<p>enter and exit the site in a forward direction.</p> <ul style="list-style-type: none"> <li>• Loading bay(s) must be sited to avoid use for other purposes such as customer parking or materials storage and be line marked and signposted.</li> </ul>	<p>vehicles for the purpose of loading/unloading and to ensure entry and exit from the site occurs in a forward direction. Unloading of live birds will occur on the western side of the building with the facilities designed for trucks to reverse and deliver live bird modules before processing occurs. Upon the completion of processing packaging and distribution will occur at the eastern end of the building. Loading/unloading facilities have been located to minimise interaction with car parking for staff and visitors.</p>
<b>Outdoor Signage</b>	
<ul style="list-style-type: none"> <li>• Single Occupant industrial site; <ul style="list-style-type: none"> <li>○ One free standing advertisement within the 5m landscaped setback; and</li> <li>○ One advertisement integrated within the façade of the building, but no higher than the building roof line.</li> </ul> </li> <li>• Multiple unit industrial site <ul style="list-style-type: none"> <li>○ One index board near site entrance or within 5m landscaped setback; and</li> <li>○ One advertisement integrated within</li> </ul> </li> </ul>	<p><b>Complies</b></p> <p>Signage will be compliant with the outdoor signage requirements. Appropriate conditions can be included within any approval.</p>

**Table 19: Other Types of Development Controls**

GUIDELINES	COMPLIANCE
<b>Other Types of Development Controls</b>	
<b>Parking</b>	
<ul style="list-style-type: none"> <li>• Parking must be provided as per the Schedule in Appendix 1.</li> <li>• Where calculation of parking spaces required results in a fraction of a space, the total required number of spaces will be the next highest whole number.</li> <li>• Parking and traffic requirements will be based on consideration of: <ul style="list-style-type: none"> <li>○ Likely peak usage times</li> <li>○ The availability of public transport</li> <li>○ Likely demand for off street parking generated by the development;</li> <li>○ Existing traffic street network; and</li> <li>○ Efficiency of existing parking provision in the location</li> </ul> </li> <li>• Comply with AS2890.1 Parking Facilities Off Street Car Parking and AS2890.6 Parking Facilities Off Street Parking for People with a Disability</li> <li>• Manoeuvring areas within the development must be designed to accommodate a B99 vehicle under AS2890.1 Parking Facilities Off Street Parking.</li> <li>• Where existing premises are being redeveloped or their use changed, the following method of calculation shall apply:- <ol style="list-style-type: none"> <li>a) Determine the parking requirements of the previous or existing premises in accordance with any existing development consent</li> </ol> </li> </ul>	<p><b>Complies</b></p> <p><i>Tamworth Regional Development Control Plan 2010</i> requires that car parking at light or heavy industry developments be provided at the greater of one space per 75m<sup>2</sup> GFA or one space per two employees. On this basis, the processing plant requires a minimum of 632 spaces based on the proposed 47,348m<sup>2</sup> GFA or 588 spaces based on the total of 1,176 employees. The proposed provision of 820 car parking spaces therefore exceeds the requirements of the DCP and is satisfactory.</p> <p>It is recommended that eight to sixteen spaces be designated for people with a disability, representing one to two per cent of the total number of spaces provided.</p> <p>The Traffic Report (refer to <b>Appendix 10</b>) states “<i>The peak demand for staff car parking would occur in the early afternoon, at 698 spaces, based on the travel patterns of staff described in Section 3.4.2. The proposed provision of 820 car parking spaces on the</i></p>

GUIDELINES	COMPLIANCE
<ul style="list-style-type: none"> <li>b) Determine the parking requirement of the proposed development in accordance with Appendix A;</li> <li>c) Subtract the number of spaces determined in (a) from the number of spaces calculated in (b)</li> <li>d) The difference calculated in (c) represents the total number of parking spaces to be provided either in addition to the existing on-site car parking or as a cash-in-lieu contribution to Council where applicable.</li> </ul>	<p><i>site would therefore accommodate the expected peak parking demand within the site, and is satisfactory”.</i></p>
<b>Landscaping</b>	
<ul style="list-style-type: none"> <li>• Location and grouping of plant types shall be multi-functional providing privacy, security, shading and recreation functions.</li> <li>• Landscaping or shade structures shall be provided in outdoor car parking areas where &gt;10 spaces are required, to provide shading and soften the visual impact of large hard surfaces.</li> <li>• Landscaping shall comprise low maintenance, drought and frost tolerant species.</li> </ul>	<p><b>Complies</b> Landscaping will be provided as shown on the landscaping plan (<b>Appendix 5</b>), which includes a variety of plant species throughout and around the car parking area, and surrounding access road and new building.</p>
<b>Outdoor Lighting</b>	
<ul style="list-style-type: none"> <li>• All developments shall demonstrate compliance with AS4282 Control of Obtrusive Effects of Outdoor Lighting.</li> <li>• Sweeping lasers or searchlights or similar high intensity light for outdoor advertising or entertainment, when projected above the horizontal is prohibited.</li> <li>• Illuminated advertising signs should be extinguished outside of operating hours, or 11pm, whichever is earlier.</li> </ul>	<p><b>Complies</b> All outdoor lighting has been designed to comply with AS4282. No lasers, searchlights, or high intensity lights are proposed.</p>
<b>Outdoor Advertising/Signage</b>	
<ul style="list-style-type: none"> <li>• Where there is potential for light spill to adjoining properties, all illuminated signage shall be fitted with a timer switch to dim or turn off by 11pm each night</li> <li>• Signage must comply with SEPP 64 – Advertising and Signage Schedule 1 Assessment Criteria.</li> <li>• “Special promotional advertisements” may be installed in accordance with clause 25 of SEPP 64 – Advertising and Signage provided that the sign does not compromise any Public Art or the integrity of the space in which it is located in the main streets, public parks and gardens and major venues across the region’s city, towns and villages.</li> <li>• Advertising in rural zones may only: <ul style="list-style-type: none"> <li>○ Advertising facility, activity or service located on the land; or</li> <li>○ Direct travelling public to a tourist facility or building or place of scientific historical or scenic interest within the area. Cannot include names of proprietary products or services or sponsoring businesses. Each sign must be sited a minimum distance of 1km from each other.</li> </ul> </li> <li>• External illumination to signs must be top mounted and directed downwards.</li> <li>• The following types of signs are not acceptable: <ul style="list-style-type: none"> <li>○ Portable signs within public footways and road reserves including variable message signs, A Frame and Sandwich Boards;</li> <li>○ Outdoor furniture (including chairs, bollards and umbrellas) advertising products such as coffee, alcohol or soft drink;</li> </ul> </li> </ul>	<p><b>Complies</b> Signage will be compliant with the outdoor signage requirements. Appropriate conditions can be included within any approval.</p>

GUIDELINES	COMPLIANCE
<ul style="list-style-type: none"> <li>○ A roof sign or wall sign projecting above the roof or wall to which it is affixed; ○ Flashing or intermittently illuminated signs;</li> <li>○ Advertisements on parked motor vehicles or trailers (whether or not registered) for which the principal purpose is for advertising;</li> <li>○ Signs fixed to trees, lights, telephone or power poles;</li> <li>○ Signs which could reduce road safety by adversely interfering with the operation of traffic lights or authorized road signs;</li> <li>○ Any sign which would in the opinion of Council, be unsightly, objectionable or injurious to the amenity of the locality, any natural landscape, public reserve or public place;</li> <li>○ Numerous small signs and advertisements carrying duplicate information; and</li> <li>○ Overhead banners and bunting, except in the form of temporary advertisement.</li> </ul>	
<b>Farm Stay Accommodation</b>	
<ul style="list-style-type: none"> <li>• Details of the activities offered should accompany the Development Application which must include some farm related activities.</li> <li>• Guests are restricted a maximum of 14 days per visit.</li> </ul>	<p><b>Not Applicable</b></p> <p>There is no Farm Stay Accommodation proposed as part of this development application.</p>
<b>Bushfire Prone Land</b>	
<ul style="list-style-type: none"> <li>• The plans prepared to accompany a DA located in a bushfire prone area, being land that is identified on a map certified by the Rural Fire Service, must illustrate the required Asset Protection Zone (APZ).</li> <li>• DAs for development located in a bushfire prone area must be accompanied by either a Bushfire Attack Level Self Assessment (BAL) or a Bushfire Planning and Design Report (BPAD).</li> <li>• Where the DA is accompanied by a BPAD report, Council’s bushfire assessment fee will not be applicable.</li> </ul>	<p><b>Complies</b></p> <p>A search of the NSW Rural fire services bushfire prone land mapping tool identifies that subject site is not identified as bushfire prone. However, all measures have been taken to ensure that the threat of bushfire is minimised through the design and landscaping of the facility.</p>

**Table 20: Environmental Controls**

GUIDELINES	COMPLIANCE
<b>Environmental Controls</b>	
<b>Environmental Effects</b>	
<ul style="list-style-type: none"> <li>• The application documentation shall identify any potential environmental impacts of the development and demonstrate how they will be mitigated. These impacts may relate to: <ul style="list-style-type: none"> <li>○ Traffic</li> <li>○ Flood liability</li> <li>○ Slope</li> <li>○ Construction impacts</li> <li>○ Solid and Liquid Waste</li> <li>○ Air quality (odour and pollution)</li> <li>○ Noise emissions</li> <li>○ Water quality</li> <li>○ Sustainability</li> </ul> </li> </ul>	<p><b>Complies</b></p> <p>Specialist reports accompanying this development application identify the potential environmental impacts of the proposed development. These reports have been summarised in the Environmental Impact Statement and are listed below:</p> <ul style="list-style-type: none"> <li>• Survey and Earthworks Assessment</li> <li>• Economic and Social Impact Assessment</li> <li>• Cultural Heritage Assessment</li> <li>• Waste Water Assessment</li> <li>• Stormwater Assessment</li> <li>• Noise Assessment</li> </ul>

GUIDELINES	COMPLIANCE
	<ul style="list-style-type: none"> <li>Contaminated Land Report</li> <li>Odour Impact Assessment</li> <li>Traffic Impact Assessment</li> </ul>
<b>Soil and Erosion Control</b>	
<ul style="list-style-type: none"> <li>Runoff shall be managed to prevent any land degradation including offsite sedimentation.</li> <li>Reference shall be made to the NSW Governments Managing urban stormwater: soils and construction, Volume 1 (available from Landcom), commonly referred to as “The Blue Book”.</li> <li>Cut and fill will be minimised and the site stabilised during and after construction.</li> <li>Arrangements in place to prompt revegetation of earthworks to minimise erosion.</li> </ul>	<p><b>Complies</b></p> <p>A Stormwater Management Plan (SMP) has been prepared by MPN Consulting which will be adhered to at all times and includes erosion and sediment control measures (refer to <b>Appendix 11</b>). Stormwater quality and quantity will be carefully managed during the operation and construction phases, to levels required by Tamworth Regional Council and Industry Best Management Practice.</p>
<b>Vegetation</b>	
<ul style="list-style-type: none"> <li>Development design shall accommodate the retention of any significant trees and vegetation</li> </ul>	<p><b>Complies</b></p> <p>The development will retain the significant vegetation on the site as per the Biodiversity Development Assessment Report (refer to <b>Appendix 13</b>). Where intrusion into these areas is unavoidable, appropriate offsets will be applied in accordance with the <i>Biodiversity Conservation Act 2016</i>.</p>
<b>Waste Management</b>	
<ul style="list-style-type: none"> <li>General waste storage and collection arrangements shall be specified.</li> </ul>	<p><b>Complies</b></p> <p>The site will be serviced by a contracted refuse collection company.</p>
<b>Noise</b>	
<ul style="list-style-type: none"> <li>Where relevant, applications are to contain information about likely noise generation and the method of mitigation.</li> </ul>	<p><b>Complies</b></p> <p>The acoustic impact assessment has been completed and concludes that the operation and construction of the processing plant will not cause any long term excessive environmental noise at any sensitive receivers (Refer to acoustic impact assessment report <b>Appendix 15</b>).</p>
<b>Geology</b>	
<ul style="list-style-type: none"> <li>The design process must give consideration to the potential impact of erosive soils, saline soils, soils of low wet strength, highly reactive soils and steep slopes and document how these constraints are addressed.</li> </ul>	<p><b>Complies</b></p> <p>No highly erosive, saline or reactive soils have been identified which would constrain development of the site.</p>
<b>Landscaping Poultry Farms</b>	
<ul style="list-style-type: none"> <li>A cash bond or bank guarantee to the value of \$1500 per shed and valid for a period of 5 years, must be submitted to Council prior to issue of a Construction Certificate.</li> </ul>	<p><b>Not Applicable</b></p> <p>The proposed development is not a Poultry Farm.</p>

**Table 21: Industrial Standards**

GUIDELINES	COMPLIANCE
<b>Industrial Standards</b>	
1.19 Design	
<ul style="list-style-type: none"> <li>Industrial development should enhance the character and appearance of Tamworth's Industrial areas by ensuring each development has an attractive appearance to the street with provision for landscaping</li> <li>Careful site planning and the provision of adequate environmental safeguards is required to minimise impacts of industrial development</li> <li>Industrial development proposed in close proximity to non-industrial uses must be compatible on both visual and operational grounds</li> <li>Buildings should be designed to be energy efficient through the use of insulation, correct orientation on the site, passive solar design and other energy saving technologies</li> </ul>	<p><b>Complies</b></p> <p>Significant landscaping will be provided throughout the site, including around the building, through the car park and along the access roads.</p>
1.20 Setbacks	
<ul style="list-style-type: none"> <li>To ensure that adequate area is available at the front of buildings to accommodate satisfactory landscaping, access, parking and manoeuvring of vehicles</li> <li>To reduce the visual impact of development on the streetscape</li> <li>The optimum setback from the street frontage must be determined having regard to the following factors: <ul style="list-style-type: none"> <li>Provision of landscaped area generally a minimum depth of 5m</li> <li>Provision of car parking facilities, particularly for customers in a visible location;</li> <li>Building height, bulk and layout</li> <li>The nature and needs of the industrial activity; and</li> <li>The general streetscape</li> </ul> </li> </ul>	<p><b>Complies</b></p> <p>Significant setbacks have been incorporated into the design of the building to ensure that adequate area for landscaping, access, parking and manoeuvring of vehicles is provided for.</p>
1.20 Setbacks	
<ul style="list-style-type: none"> <li>Landscaping should improve the visual quality and amenity of Tamworth's industrial areas through low maintenance landscape treatment of development sites.</li> <li>Natural buffer should be provided between development in industrial land and adjoining or adjacent non-industrial land uses.</li> <li>Planting must be provided in scale with the height and bulk of the building</li> <li>Landscaping must be provided on side and rear setbacks where visible from a public place or adjoining residential area.</li> </ul>	<p><b>Complies</b></p> <p>Landscaping will be provided as shown on the landscaping plan (<b>Appendix 5</b>, which includes a variety of plant species throughout and around the car parking area, access road and new building.</p>
1.22 Parking and Access	
<ul style="list-style-type: none"> <li>Adequate off-street parking must be provided to maintain the existing levels of service and safety on the road network</li> <li>Parking areas, loading bays and access driveways must be functional in design</li> <li>Parking areas should be visually attractive and constructed, designed and situated so as to encourage their sage use.</li> <li>Kerb, gutter and road shoulder between the lip of the gutter and the edge of the existing bitumen seal, footway formation and paving and associated road drainage must be constructed for the full frontage of the site</li> <li>Access driveways across the footpath should be hard sealed, consisting of either concrete, asphaltic concrete, paving blocks, or</li> </ul>	<p><b>Complies</b></p> <p>The traffic report (refer to <b>Appendix 10</b>) confirms the following:</p> <ul style="list-style-type: none"> <li><i>The proposed provision of staff car parking is expected to meet the requirements of the processing plant staff and visitors.</i></li> <li><i>Some minor amendments are recommended to the staff car park to ensure compliance with the Australian Standard with regard to speed control in the staff car park</i></li> </ul>

GUIDELINES								COMPLIANCE
other approved material • Access and parking arrangements must comply with the								<p><i>and on the driveway to the car park, and to provide parking for people with a disability. Such amendments may be appropriately addressed by means of a condition of consent requiring compliance with the relevant Standards.</i></p> <ul style="list-style-type: none"> <li><i>The layout of the internal road network and car parking is generally satisfactory for the vehicles expected to use it. It is recommended that the internal T-intersection between the staff car park access road and the weighbridge access road be designed as a standard priority T-intersection to reflect the dominant traffic flow.</i></li> </ul>
	Type	Entry Width (m)	Width	Exit Width (m)	Minimum separation of driveways (m)	Splay at kerblines	Kerb Return Turnout Radius (m)	
Light vehicles	1	3-9		Combined	NA	0.5	-	
	2	6-9		Combined	NA	1	-	
	3	6		4-6	1-3	1	2.9	
	4	6-8		6-8	1-3	1	2.9	
	5	Direct feed from a controlled intersection via a public roadway						
Heavy Vehicles	6	8-10		8-10	3	1	2-9	
	7	10-12		10-12	3	1	2-9	
<ul style="list-style-type: none"> <li>Loading areas must be designed to ensure that standard design vehicles can manoeuvre into and out of all loading areas without causing conflict to the movement of traffic or pedestrian safety</li> <li>Any vehicle entering or leaving the driveway must be visible to approaching vehicles and pedestrians.</li> <li>Driveway access to a major road should be avoided where possible</li> </ul>								

**Table 22: Other Development Standards**

GUIDELINES		COMPLIANCE
<b>Other Development Standards</b>		
1.32 Outdoor Lighting		
<ul style="list-style-type: none"> <li>Temporary lighting for a period not exceeding 28 days in one calendar year may receive exemption from the controls.</li> <li>Search lights, laser source lights or any similar high-intensity light will only be permitted in emergencies by police and fire personnel or at their direction, or for meteorological data gathering purposes</li> <li>Lighting selection and location should improve safety and reduce crime and fear.</li> </ul>	<p><b>Complies</b></p> <p>No search lights, laser source lights or high-intensity lights are proposed as part of the development application. The proposed development will incorporate standard lighting which will improve the overall safety and reduce the risk of criminal activity occurring.</p>	
1.33 Outdoor Advertising Signage		
<ul style="list-style-type: none"> <li>New buildings are to integrate designated signage areas within the building form.</li> <li>Size, colour and design compatible with the building to which they relate and its streetscape.</li> <li>Signage should be clear, simple and concise. In some instances, graphic symbols may be more effective than words.</li> <li>Where more than one shop or business within a building, signs should be coordinated in height, shape, size and colour.</li> <li>Signs should not dominate their surroundings.</li> <li>Advertisements should be designed and located so that they do not obscure driver's views of other cars, trains, pedestrians, traffic signals and traffic signs.</li> <li>Advertisements should not resemble road signs in colour, shape, layout to wording in any way that may confuse motorists.</li> </ul>	<p><b>Complies</b></p> <p>Signage will be compliant with the outdoor signage requirements. Appropriate conditions can be included within any approval.</p>	

GUIDELINES	COMPLIANCE
<ul style="list-style-type: none"> <li>• Awning sign must:               <ul style="list-style-type: none"> <li>○ erected horizontal to the ground and at no point less than 2.6m from the ground;</li> <li>○ not project beyond the awning;</li> <li>○ securely fixed by metal supports.</li> </ul> </li> <li>• Fascia sign must not:               <ul style="list-style-type: none"> <li>○ project above or below the fascia or return end of the awning to which it is attached;</li> <li>○ not to extend more than 300mm from the fascia or return end of the awning.</li> </ul> </li> <li>• External light source must be at least 2.6m above the ground if the sign projects over a public road.</li> <li>• Flush wall sign:               <ul style="list-style-type: none"> <li>○ the area of the sign shall not exceed 20% of the area of the wall on which it is fixed or painted;</li> <li>○ not project above or beyond the wall to which it is attached;</li> <li>○ face of the sign must be parallel to the wall on which it is attached.</li> </ul> </li> <li>• Pole or pylon sign must be a minimum of 2.6m above the ground.</li> <li>• Projecting wall sign must be:               <ul style="list-style-type: none"> <li>○ minimum height of 2.6m above the ground;</li> <li>○ erected at right angles to the wall of the building to which it is attached.</li> </ul> </li> <li>• Top hamper sign must not:               <ul style="list-style-type: none"> <li>○ extend more than 200mm beyond any building alignment;</li> <li>○ extend below the head of the doorway or window to which it is attached.</li> </ul> </li> </ul>	
<b>Brothels and Restricted Premises</b>	
<ul style="list-style-type: none"> <li>• A brothel must be sited so that arrivals/departures of staff and clients late at night will not cause the disruption to the amenity of the neighbourhood.</li> <li>• Any advertising shall be discrete.</li> <li>• Adequate car parking shall be provided for staff and clients.</li> </ul>	<p><b>Not Applicable</b></p> <p>There are no brothels or restricted premises proposed as part of this development application.</p>

**Table 23: Environmental Standards**

GUIDELINES	COMPLIANCE
<b>Environmental Standards</b>	
<b>1.44 Vegetation</b>	
<ul style="list-style-type: none"> <li>• Existing trees may be removed from the proposed building footprint where it can be shown there is no acceptable alternative design.</li> <li>• All trees removed must be replaced by comparable native and mature trees.</li> <li>• Non-native plants may be used where they are shown to be non-invasive and pivotal to the overall amenity of the development.</li> </ul>	<p><b>Complies</b></p> <p>Landscaping will be provided as shown on the landscaping plan (<b>Appendix 5</b>), which includes a variety of plant species throughout and around the car parking area, access road and new building.</p> <p>The development will retain the significant vegetation on the site as per the Biodiversity Development Assessment Report (refer to <b>Appendix 13</b>). Where</p>

GUIDELINES	COMPLIANCE
	intrusion into these areas is unavoidable, appropriate offsets will be applied in accordance with the <i>Biodiversity Conservation Act 2016</i> .

## 4.2 POTABLE WATER USE AND WASTEWATER TREATMENT

Recognising climate change, seasonal variability and the development’s dependence on the availability of potable water, Baiada proposes the use of proven technology to treat water following its use within the process, rendering a substantial volume suitable for reuse on site. Baiada have benefited from a long relationship with Hydroflux Industrial Pty Ltd (“Hydroflux”) and have engaged them as subject matter experts to apply suitable technology to this application. The concept design for this facility is presented in the report included in **Appendix 17**.

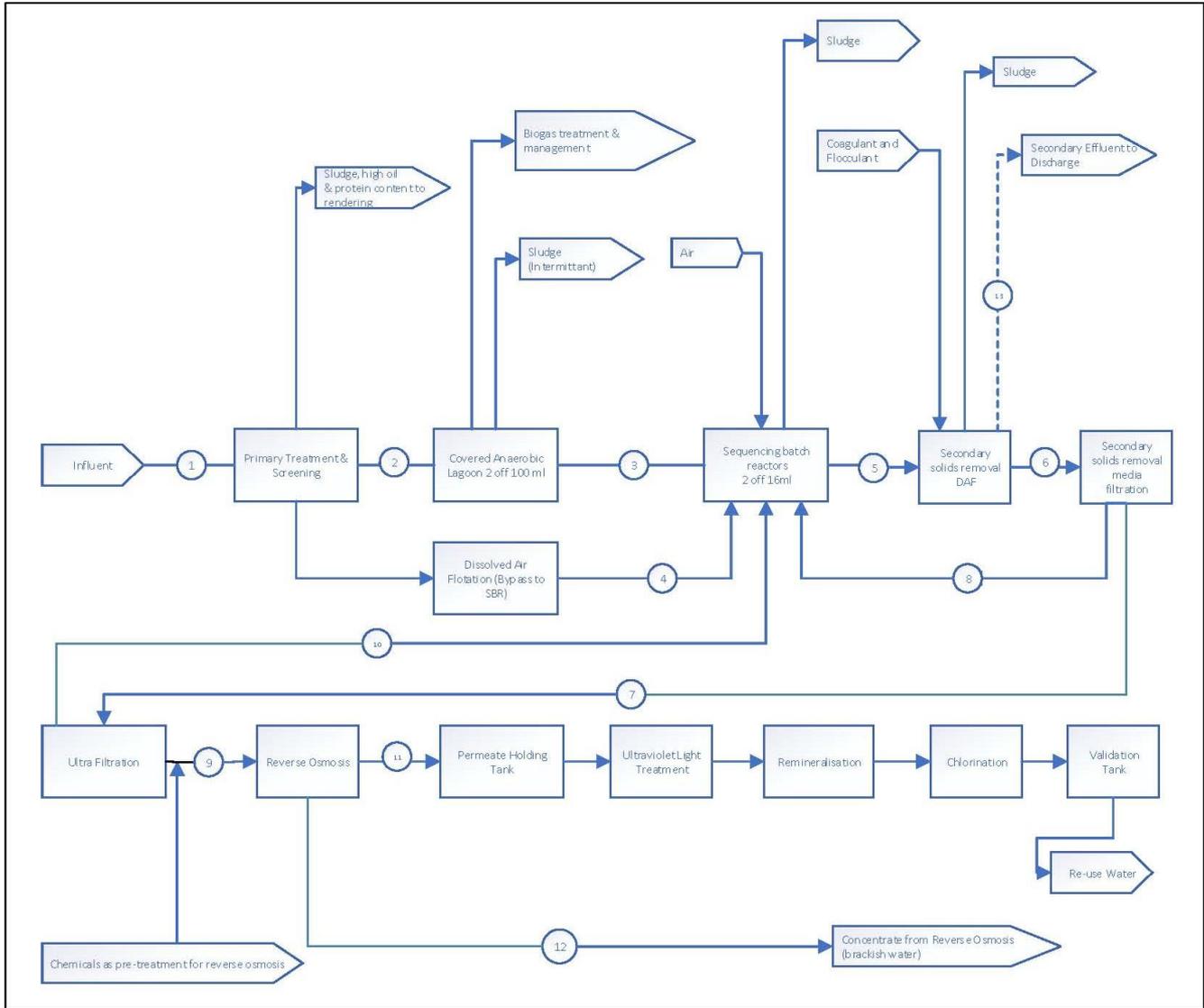
### 4.2.1 Consumption of Potable Water and Re-use within Process

The existing Out Street processing plant is currently utilising an average of 2ML per processing day. Based on current estimates and comparison with Baiada’s Hanwood Processing Plant in Griffith, at full operation, the Oakburn Processing Plant will consume up to 8ML of potable water per processing day. It is important to note, that as the development of the Oakburn processing plant will result in the cessation of operations at Out Street, the net increase in potable water demand will be approximately 6ML per processing day.

However, in order to limit the water demand associated with the facility, Baiada are proposing to implement an Advanced Water Treatment Plant which will treat 100% of the water used, and deliver approximately 75% (6ML), back to a potable standard for re-use within the processing plant. As such, the overall water consumption of the facility is expected to be comparable to the current Out Street Processing Plant.

### 4.2.2 Conceptual Process Design

The concept design for the Oakburn Processing Plant involves a Wastewater Treatment Plant (WWTP) followed by Advanced Water Treatment Plant (AWTP). Both the Wastewater Treatment and the Advanced Water Treatment plants employ known technology which is in service throughout the world, including two poultry processing plant in Australia. A process flow diagram is provided in **Figure 16** and an overview provided below.



o Table 1 - Concept Design Mass Balance

Stream Description	Stream #	Volumetric Flow m <sup>3</sup> /day	COD mg/L	BOD mg/L	TN mg/L	TKN mg/L	TP mg/L	TSS mg/L	TDS mg/L
Raw Influent	1	8,000	3,970.0	2,380.0	210.0	210.0	40.0	1,300.0	1,400.0
CAL Feed	2	6,500	3,970.0	2,380.0	210.0	210.0	40.0	1,300.0	1,400.0
CAL Effluent	3	6,500	794.0	476.0	210.0	210.0	40.0	500.0	1,400.0
CAL Bypass to SBR	4	1,500	3,176.0	1,904.0	210.0	210.0	40.0	1,040.0	1,400.0
SBR Influent	3,4,6,8	9,750	1,043.8	618.2	175.2	174.1	32.9	522.9	1,400.0
SBR Effluent	5	9,750	50.0	20.0	20.0	14.0	26.9	200.0	1,400.0
DAF Effluent	6	9,750	~30.0	~10.0	~16.0	~10.0	~0.5	~30.0	1,400.0
MMF Effluent	7	8,750	~10.0	~5.0	~16.0	~10.0	~0.5	~5.0	1,400.0
MMF Backwash	8	1,000	~205.0	~53.8	~16.0	~10.0	~0.5	~248.8	1,400.0
UF Effluent	9	8,000	~5.0	~2.5	~16.0	~10.0	~0.5	~0.5	1,400.0
UF Backwash	10	750	~63.3	~31.7	~16.0	~10.0	~0.5	~53.0	1,400.0
RO Permeate	11	6,000	-	-	-	-	-	-	50.0
RO Concentrate	12	2,000	<300	<60	<75	<50	<10	<30	~5,450.0
Secondary Effluent Discharge	13	UP TO 50% OF INFLUENT FLOW	<50	<20	<20	<15	<5	<30	~1,400.0

Figure 16: Process Flow Diagram (Hydroflux, 2019)

The wastewater from the poultry processing facility will initially be treated in the WWTP in a conventional manner, using primary and secondary treatment processes. This will reduce the concentrations of primary solids, biodegradable nutrients, and anaerobic treatment will provide a source of biogas, which can be combusted, the heat recovered to generate steam, hot water or electricity. The proposed technology uses a Covered Anaerobic Lagoon (CAL) to reduce

COD, followed by a Sequencing Batch Reactor (SBR) designed to remove residual COD and reduce Nitrogen to target levels.

The wastewater is then introduced to secondary solids removal. The secondary solids removal process step is required to remove the suspended solids generated during biological treatment and is then passed through a filtration media. 100% of outflows of this process now flow into AWTP. This systems utilises multi-media filtration (MMF) and ultra-filtration (UF), Reverse Osmosis, ultraviolet sterilisation, remineralisation, chlorination and validation storage tanks.

The waste water is passed into the AWTP and treated by the MMF and UF systems, then treated by low-pressure Reverse Osmosis (RO) to reduce the levels of dissolved solids. Following additional treatment, the RO permeate will be suitable for re-use. Additional treatment will consist of: chlorination, ultraviolet light and remineralisation. This system will be designed to meet and exceed the re-use water quality standards including the log reduction values (LVR) of pathogens, as laid out in:

- NSW Food Authority – Water Reuse Guideline – May 2008
- NSW Government – Management of private recycle water schemes – May 2008
- NSW Department of Primary Industries – Recycled Water Management Systems – May 2015
- Australian Government – NHMRC – NRMCC – Australian Drinking Water Guidelines 6 - 2011

A RO concentrate stream will also be produced; this stream will have a high concentration of dissolved salts, and is intended to be discharged to the municipal sewer to be shandied with other reticulated sewer and treated at the Westdale Sewer Treatment Plant (STP).

This discharge to the sewer will be subject to a Trade Waste Agreement with Tamworth Regional Council. The Applicant has met with Tamworth Regional Council (TRC) officers with respect to the terms of agreement who have advised that, while having concerns with receiving inflows with a higher than normal concentration of dissolved salts into the Westdale STP, TRC is committed to working with Baiada on a workable solution.

It is also noted that Baiada is researching the use of peracetic acid as an alternative to chlorination which may reduce the TDS in the concentrated stream.

Further details in relation to the design and operation of the Waste Water Treatment regime to be implemented on the site are provided in **Appendix 17**.

## 4.3 STORMWATER MANAGEMENT

A Stormwater Management Plan (SMP) has been prepared by MPN Consulting to support the proposed processing plant and is attached as **Appendix 11**. The aim of the SMP is to:

- Prevent or minimise adverse social or environmental impacts from stormwater runoff originating from the proposed development;
- Achieve acceptable levels of stormwater runoff quality and quantity; and
- Identify stormwater quantity and quality best management practice for the site and demonstrate that water quantity and quality impacts will be minimised in receiving waters.

The SMP covers both the operational phase and the construction phase.

### 4.3.1 Methodology

To assess and design for the management of stormwater quantity for the proposed development, a DRAINS computer model was used to calculate the stormwater runoff quantity for the existing and post development conditions.

With respect to stormwater quality, a MUSIC computer modelling program developed by the Co-operative Research Centre for Catchment Hydrology was used to predict the performance of the proposed stormwater treatment train. The pollutants modelled in MUSIC were Total Suspended Solids (TSS), Total Phosphorus (TP) and Total Nitrogen (TN). In the absence of specific Water Quality Objectives from Tamworth Regional Council, industry standard pollutant reduction targets have been adopted.

### 4.3.2 Operational Phase

The site includes two main sub-catchments, identified as Catchment A (West) and B (East), respectively. Stormwater runoff will be collected and conveyed via a new internal stormwater pit, pipe and open channel network, prior to

discharge to two separate treatment / detention basins. From the basins, stormwater will discharge via overland flow across the site boundaries as per existing condition. Litter baskets will be fitted to the new field inlet pits to capture gross pollutants.

The Catchment A detention basin has a total storage capacity of 7,770m<sup>3</sup> and will be located near the Northern end of the site. The Catchment B basin has a total storage capacity of 2,500m<sup>3</sup> and is proposed on the South Eastern side of the existing Rendering Plant. Stormwater runoff from other smaller catchments will be collected in grassed swales prior to discharge across the site boundaries via overland flow as per existing condition. The basins are shown on the plans included in **Appendix 11**.

#### 4.3.2.1 Stormwater Quantity

As a result of the proposed stormwater management regime, there will be no worsening of stormwater runoff from the site, compared to existing conditions during the critical stormwater events. Further detail is provided in Section 5.3.2 of the Stormwater Management Plan in **Appendix 11**.

#### 4.3.2.2 Stormwater Quality

In order to achieve the pollutant load reduction targets for the development, it is proposed to use natural treatment methods to treat the runoff prior to discharge from the site. Stormwater runoff from Catchments A and B will be treated by gross pollutant traps prior to discharge into the swales and detention basins. Stormwater runoff from the smaller sub-catchments will be treated by swales. The resulting percentage based load reductions at the site outlets exceeds the target water quality objectives for TSS, TP, TN and Gross Pollutants.

With respect to other potential stormwater pollutants the following treatment methods are proposed:

- **Litter** - Rubbish bins will be located within the development buildings and car parks for use by staff and visitors. As a result of this and with the installation of the GPTs and swales, levels of litter exiting the site via stormwater are expected to be negligible.
- **Hydrocarbons** - Hydrocarbons will be digested and processed by soil microorganisms within the swales and attachment to vegetation where biological breakdown of the hydrocarbons can occur. Hydrocarbons will also be captured within the GPTs.
- **Surfactants** - If car or truck washing occurs on site it will be within a bunded area where surfactants will be captured and treated prior to discharging into the stormwater network.
- **Heavy Metals** - Heavy metals in stormwater runoff generally become attached to fine sediment. The swales will remove the majority of this fine sediment. The removal of the fine sediment should effectively remove most of the heavy metals in the runoff.
- **Pathogen/Faecal Coliforms** - Domestic animals within the development will be under the control of their owners at all times and the owners will be expected to clean up after them. Wash down water from bird storage areas will be directed to the on-site WWTP and not be allowed to enter the stormwater system. Internal processing areas are also separated from the stormwater system.

#### 4.3.3 Construction Phase (Sediment and Erosion Control)

A range of erosion and sediment control measures are proposed to be implemented to the release of contaminated stormwater by ensuring compliance with the *Protection of the Environment Operations Act 1997*. The construction contractor shall be responsible for the implementation and maintenance of the erosion and sediment control measures through the duration of construction activities which may include appropriate control measures such as sediment fences, sediment traps, pollution containment devices (e.g. sandbags), stormwater diversion and other control equipment such as containment bunds, hay bales and the like. A detailed Sediment and Erosion Control Plan will be prepared for approval prior to commencement of construction and can be conditioned accordingly.

## 4.4 CULTURAL HERITAGE ASSESSMENT

A Cultural Heritage Assessment has been undertaken by Everick Heritage Consultants to support the proposed new processing plant at Oakburn. The results of this assessment have been collated into a report which is attached as **Appendix 14**. The following section provides an outline of the methodology, results and recommendations found in the report.

#### 4.4.1 Methodology

The methods used for this assessment are in compliance with the Office of Environment and Heritage (OEH) 'Code of Practice for Archaeological Investigation of Aboriginal objects in New South Wales' (2010) and the following legislation:

- *National Parks and Wildlife Act 1974* (NSW)
- *Environmental Planning and Assessment Act 1979* (NSW)
- *Heritage Act 1977* (NSW)
- Local Environmental Plans and Development Control Plans

Both desktop and physical site inspections were undertaken as part of the assessment, along with liaison with the Tamworth Local Aboriginal Land Council (Tamworth LALC).

#### 4.4.2 Assessment Results

As a result of the desktop study and field inspection the following conclusions were established with Sites Officer Christopher Fermor of the Tamworth LALC.

- No Indigenous cultural heritage sites or objects were identified within the lands subject to the Baiada Pty Ltd Oakburn Development Application.
- It is understood that site previously identified with the Project Area have been subject to salvage under a AHIP.
- Consultation with Tamworth LALC through the Sites Officer found no places or desktop history of Aboriginal 'intangible' cultural heritage on the site or association with spiritual or mythological stories or places elsewhere.
- The Project Area was found to be highly disturbed in a manner which constitutes 'disturbance' within the meaning of the Due Diligence Code and is consistent with the Due Diligence Code.
- The high degree of disturbance with regular slashing over the proposed Processing Plant including carpark and roads has allowed for high levels of ground visibility and extensive areas where the surface is clearly visible, which lead to a high degree of confidence in the effectiveness of the survey and the conclusion as to the absence of Aboriginal cultural heritage.
- Due to the effectiveness of the survey it is believed that there are no areas considered to contain potential archaeological deposits of significant Aboriginal heritage, such that they warrant additional archaeological investigation or in-situ conservation as a heritage protection zone.
- The proposed route of the Workshop Lane easement has been positioned to avoid any channelling of the Boltons Creek tributary thus diminishing the likelihood of encountering subsurface Aboriginal objects such as artefacts.

There were no items of historic heritage found during the site inspection.

#### 4.4.3 Recommendations

The report provided the following additional recommendations:

- 1) **Additional Investigation** - Having consideration for the extent of historic ground disturbance and the results of the previous and current archaeological investigation, it is not considered that test pit excavations would result in a significant change to the outcomes of the cultural heritage assessment.
- 2) **Aboriginal Objects Find Procedure** –It is recommended that if suspected Aboriginal material has been uncovered as a result of development activities within the Project Area:
  - a. work in the surrounding area is to stop immediately;
  - b. a temporary fence is to be erected around the site, with a buffer zone of at least 10 meters around the known edge of the site;
  - c. an appropriately qualified archaeological consultant is to be engaged to identify the material; and
  - d. If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).

Further, it is recommended that Aboriginal sites monitors from Tamworth LALC are engaged to support the Finds Procedure for the initial ground works as they affect the topsoil with the potential to contain Aboriginal Objects.

- 1) **Aboriginal Human Remains** – It is recommended that all works should halt in the unlikely event that Human Remains are found. Once the site is cordoned off the nearest police station should be contacted in conjunction with the Tamworth LALC and the OEHL Regional Office. If no investigation is sought and the remains are of Aboriginal origin then the Aboriginal community and OEHL should be consulted as to how the remains are to be dealt with. Work may resume once all parties are in agreement.
- 2) **Notifying the OEHL** – If Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to be registered as Sites on the AHIMS, managed by the OEHL.
- 3) **Conservation Principles** – It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEHL and the Aboriginal community.

## 4.5 ECOLOGICAL IMPACT ASSESSMENT

In accordance with the SEARs and Section 7.9 of the NSW *Biodiversity Conservation Act 2016* (BC Act), a Biodiversity Development Assessment Report (BDAR) has been prepared for the project by Cumberland Ecology. A copy of the report is included in **Appendix 13**. The BDAR has been undertaken in accordance with the Biodiversity Assessment Method (BAM).

The purpose of the BDAR is to document the findings of an assessment undertaken for the Project in accordance with Stage 1 (Biodiversity Assessment) and Stage 2 (Impact Assessment) of the BAM. The development footprint assumed for the BDAR includes all areas of disturbance with an additional 10m buffer surrounding the development to account for any encroachment of construction activities into adjacent land.

Specifically, the objectives of this BDAR are to:

- Identify the landscape features and site context (native vegetation cover) within the subject land and assessment area;
- Assess native vegetation extent, Plant Community Types (PCTs), Threatened Ecological Communities (TECs) and vegetation integrity (site condition) within the subject land;
- Assess habitat suitability for threatened species that can be predicted by habitat surrogates (ecosystem credits) and for threatened species that cannot be predicted by habitat surrogates (species credit species);
- Identify potential prescribed biodiversity impacts on threatened species;
- Describe measures to avoid and minimise impacts on biodiversity values and prescribed biodiversity impacts during project planning;
- Describe impacts to biodiversity values and prescribed biodiversity impacts and the measures to mitigate and manage such impacts;
- Identify the thresholds for the assessment and offsetting of impacts, including:
  - Impact assessment of potential entities of serious and irreversible impacts (SAIL);
  - Impacts for which an offset is required;
  - Impacts for which no further assessment is required;
  - Describe the application of the no net loss standard, including the calculation of the offset requirement.

### 4.5.1 Methodology

A number of databases were utilised during the preparation of the BDAR, including:

- OEHL BioNet Atlas;
- OEHL Threatened Biodiversity Data Collection;
- OEHL BioNet Vegetation Classification database;
- Commonwealth Department of the Environment and Energy (DoEE) Species Profile and Threat Database;
- DoEE Protected Matters Search Tool (PMST); and
- DoEE Directory of Important Wetlands in Australia.

This BDAR also utilised the and/or spatial data from the following documents:

- OEH Hunter Native Vegetation Mapping - Hunter Greater Version 4 3855 (2012); and
- Namoi CMA GDE Mapping (SKM 2010).

The site was subject to detailed surveys by Cumberland Ecology to complete the BDAR. Vegetation surveys included vegetation mapping, identification of Plant Community Types (PCTs), completion of 13 BAM plots, targeted threatened flora searches, targeted threatened fauna surveys, as well as assessment of vegetation patches against the Final Determinations for various Threatened Ecological Communities (TECs).

#### 4.5.2 Native Vegetation

The site was subject to detailed surveys by Cumberland Ecology to complete the BDAR. Vegetation surveys included vegetation mapping, identification of Plant Community Types (PCTs), completion of 13 BAM plots, targeted threatened flora searches, targeted threatened fauna surveys, as well as assessment of vegetation patches against the Final Determinations for various Threatened Ecological Communities (TECs).

Native vegetation was calculated to occupy approximately 4.8% of the specific subject land and includes a single plant community type in two broad condition states that align to PCT 599 - Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion. The remaining land within the subject land comprises exotic dominated pasture, garden beds and cleared land.

It is important to note that of the two broad condition states (vegetation zones) of PCT 599 occurring within the subject land, one consists of planted immature natives with the other occurring as scattered remnant and regrowth areas. This planted vegetation zone is not considered to comprise a naturally occurring vegetation community and technically does not conform to a PCT. Nonetheless, for the purpose of this BDAR, this vegetation community has been assigned to what is considered to be the best-fit PCT based on the dominant planted natives. The native vegetation zones are shown in **Figure 17** below.

The remnant and regrowth portion of PCT 599 has been assessed as conforming to the Threatened Ecological Community White Box Yellow Box Blakely's Red Gum Woodland (Box Gum Woodland) listed under the *Biodiversity Conservation Act*. This vegetation does not conform to the EPBC listing of White Box Yellow Box Blakely's Red Gum grassy woodland and derived native grassland due to the either the lack of mature trees within the patch size, the patch size not having a predominantly native understorey, or where it does have one it lacks the requisite 12 native non-grass understorey species and is <2 ha in size.

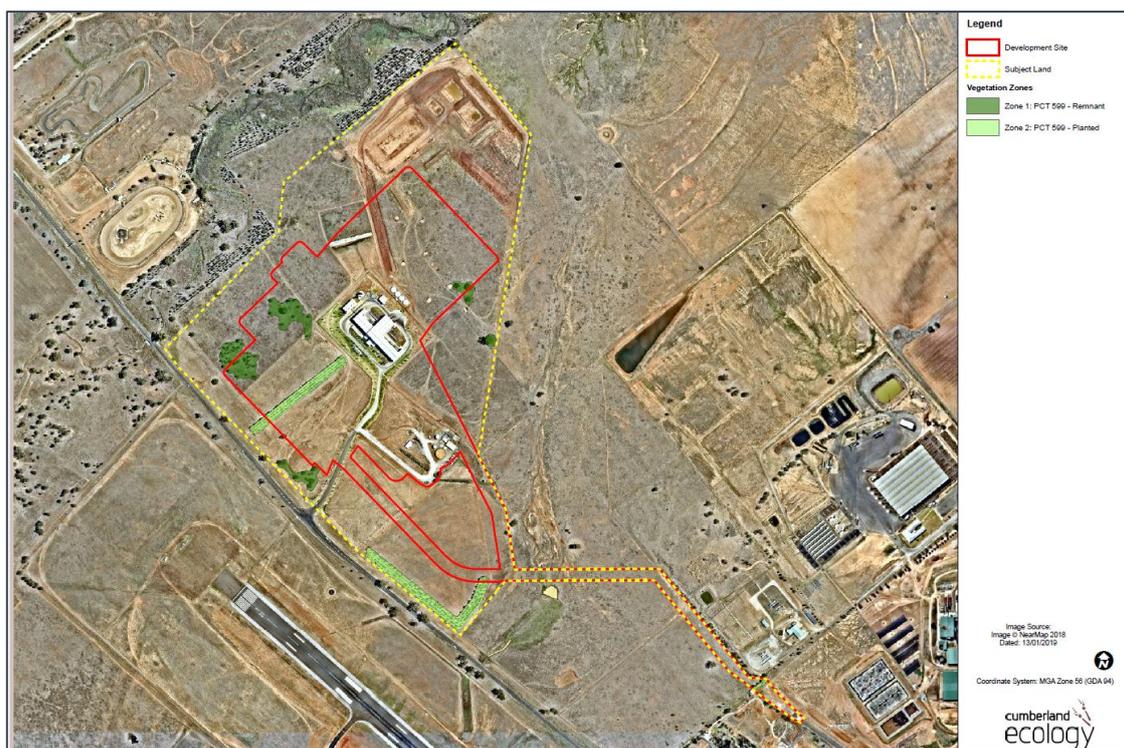


Figure 17: Vegetation Zones

### 4.5.3 Threatened Species

The BAM Calculator generates a list of species credit species requiring assessment utilising a number of variables. The predicted ecosystem credit species for the two vegetation zones within the subject land produced a list of 10 ecosystem credit species, 13 species credit species and seven joint ecosystem/species credit species. No ecosystem credit species were removed from further assessment. Of the 13 species credit species, three were removed from further assessment. Surveys were undertaken for all remaining species credit species. None of these species were recorded within the subject land, and none are considered likely to occur.

### 4.5.4 Avoid and Minimise Impacts

A number of measures to avoid and minimise impacts of the development have been applied during the design process of the final development layout. These include avoidance of portions of the native vegetation where feasible, limiting impacts to the Peel River Tributary and ensuring the development site is outside the 30m buffer applied to Boltons Creek. In order to conserve these areas and the biodiversity they support, the proposed development has been designed to avoid impacts to these areas as much as possible.

Although some areas of Box Gum Woodland TEC will be removed as part of the proposed development, the vegetation is in low condition and has little connectivity to the larger tract of the community across Gunnedah Road. Nevertheless, a patch adjacent to the existing site entrance with the highest number of mature trees and the most diverse native understorey will be retained, along with portions of the other scattered patches that occur throughout the subject land.

Alignment of the proposed Workshop Lane access has also been designed to minimise direct impacts to the Category 1 stream to the east of the subject land, by placement of the crossing closest to the stream end point.

### 4.5.5 Impact Assessment

#### 4.5.5.1 Direct Impacts

Approximately 0.83 ha of the 1.41 ha of Box Gum Woodland TEC and approximately 0.51 ha of the 1.45 ha of planted natives will be removed under the proposed development. The remaining ~0.58 ha and ~0.94 ha, respectively, will be retained within the subject land. The remainder of the vegetation to be removed consists of exotic dominated pasture and gardens beds that do not constitute a recognised ecological community.

Two large *Eucalyptus melliodora* hollow-bearing trees that contain hollows ranging from small to large in size, one stick nest and the habitat associated with the native vegetation will be directly impacted under the proposed development. Four hollow-bearing trees and over half the native vegetation within the subject land will be conserved. Overall, the removal of these habitat features are considered to have only minor implications for fauna species due to the highly modified and degraded ecological context they are within and the high mobility of the species likely to utilise these habitats.

#### 4.5.5.2 Indirect Impacts

Indirect impacts associated with the project include:

- Inadvertent impacts on adjacent habitat or vegetation;
- Reduced viability of adjacent habitat due to noise, dust or light spill; and
- Inadvertent impacts to hydrological processes.

While no groundwater dependent ecosystems are mapped within the subject land, it is recognised that riparian along Boltons Creek and the Peel River Tributary could have some root access to alluvial groundwater.

### 4.5.6 Mitigation Measures

The following measures will be undertaken to mitigate impacts to native vegetation and habitat during and prior to construction:

- Appropriate Timing of construction works;
- Delineation of clearing areas;
- Pre-clearance surveys;
- Sedimentation control measures; and
- Weed management.

Vehicle Strike is the only uncertain impact likely to be relevant to the Project. Management of vehicle strike will be through implementation of signage, speed limits and lighting along Workshop Lane.

#### 4.5.7 Serious and Irreversible Impacts

One Serious and Irreversible Impact (SAIL) entity, the Box Gum Woodland TEC, will be impacted under the proposed development. The proposed removal of approximately 0.83 ha of Box Gum Woodland TEC that occurs within the development site as a number of scattered and small isolated patches is unlikely to have any impact on the long-term survival of the TEC. The area surrounding the vegetation comprises vast areas of agricultural or industrial land use and the occurrence of these small, isolated and degraded patches is unlikely to contribute to these in any measureable way.

The removal of ~0.83 ha of Box Gum Woodland TEC will not increase the isolation of any important areas of the TEC however it is expected to marginally increase the fragmentation. The TEC is currently lacking in substantial connectivity to other areas of the EEC and removal of the areas within the development site would contribute little, if any, to the persistence of the larger tract of the TEC along Boltons Creek and across Gunnedah to the south. The impacts to Box Gum Woodland TEC, which is a SAIL entity, are not considered to be significant.

#### 4.5.8 Offset Liability

As the project includes the removal of some areas of native vegetation, offsets are required in the form of ecosystem credits. This assessment indicated that the removal of the native vegetation within the subject land requires a total of 20 ecosystem credits for PCT 599. A suite of other PCTs could be utilised to offset this PCT under the offset rules.

#### 4.5.9 Conclusion

Based on the assessment undertaken by Cumberland Ecology, the report concludes that the implementation of the proposed mitigation and offsetting measures, it is considered that the impacts of this project on biodiversity, in particular on Box Gum Woodland will be minimal and can be appropriately managed.

## 4.6 CONTAMINATION ASSESSMENT

### 4.6.1 Overview

A detailed Contaminated Site Assessment Report (refer to **Appendix 12**) was prepared by SMK Consultants to determine if there was any contamination on the subject site. The investigation took into consideration the characteristics of the site, historical land uses and adjoining land uses when analysing potential sources of contamination.

### 4.6.2 Adjoining Land Uses

None of the adjoining land uses identified in the report were considered to have a potential impact on the development area, other than Lot 101 which will accommodate the proposed access road. This is due to its exposure to drainage from the central part of the runway area of Tamworth Regional Airport.

### 4.6.3 Conceptual Site Model

A conceptual site model (CSM) has been developed to provide an understanding of potential site contamination throughout the investigation area and surrounds.

#### 4.6.3.1 Potential Contamination Sources

A range of potential sources of contamination have been identified on the subject site which have been found from historic uses on the site, imported fill, onsite infrastructure, storage and use of chemicals, parking of light vehicles and adjoining industry.

### 4.6.4 Laboratory Results and Analysis

Four soil samples and one sediment sample were obtained from across the Investigation Area. A description of five samples location is shown in **Figure 18**.

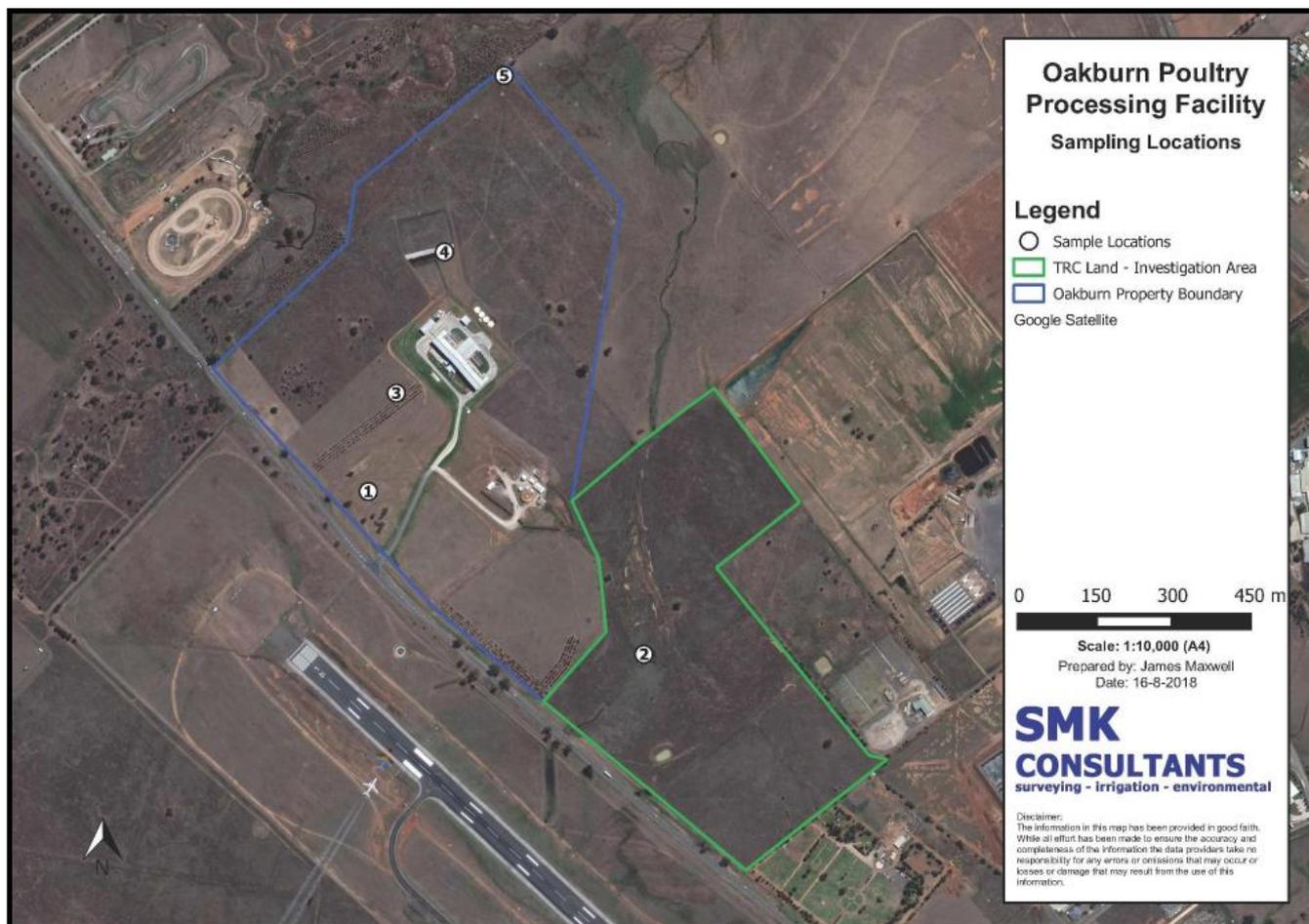


Figure 18: Soil Sample Locations (SMK Consultants, 2019)

#### 4.6.5 Assessment

A comprehensive table comparing Heavy Metals and Pesticides Soil Analysis against the General Threshold Criteria can be found in the report in **Appendix 12**. The key findings are presented below.

##### 4.6.5.1 Heavy Metals in Soil

No elevated concentrations of the tested heavy metals were identified. These results from the soil sampling are considered consistent with standard background levels and significantly below adopted NEPM health investigation thresholds.

##### 4.6.5.2 Pesticides in Soil

Soils were analysed for a suite of organochlorine and organophosphorus based pesticides. All analytes returned results beneath the laboratory's limit of reporting. The results suggest that there were no pesticide contamination present. Pesticide screening included a range of more common pesticides used in agriculture and industrial activity.

##### 4.6.5.3 PFAS in Sediment

PFAS was identified within one sediment sample, taken from a shallow stock dam located on the unnamed gully to the east of the development area and within Lot 101. The concentration identified is well below the human health screening criteria and ecological screening criteria for direct and indirect toxicity. Given that the Tamworth airport has been identified by NSW EPA as a PFAS contaminated site, it is considered to be the likely origin of the trace PFAS levels detected.

This sediment sample was taken upstream of the proposed access road across Lot 101. The preliminary access route crosses the gully but plans available at the time on this report indicate that the small gully dam would remain. The gully below the dam site is being eroded and therefore lacks silt deposition areas similar to the gully dam.

The concentration of PFAS in the sediment sample is significantly below published threshold levels. The level of PFAS present in the sediment sample provides an indication that at some stage, this chemical has washed off the airport facility.

#### 4.6.5.4 PFAS in Surface Water and Groundwater

Tamworth Regional Council have provided notification of a recent NSW EPA investigation of groundwater and surface waters from properties surrounding the Tamworth Airport, including the proposed development site. The notification states that no PFAS contamination has been identified at this time. As such, no further investigation was considered necessary at this point in time.

It is recommended that the developer remain in contact with Tamworth Regional Council to ensure they are updated on any ongoing investigations and results for the PFAS investigations associated with the Tamworth Regional Airport and surrounds.

#### 4.6.6 Conclusion

This investigation did not identify any contamination of concern within the property boundary of the “Oakburn” Development site.

PFAS was detected within the watercourse sediment of Lot 101 to the east of the processing site. The PFAS was identified at a concentration below adopted investigation threshold levels for human health or ecological screening. The PFAS chemicals are considered at trace levels in the sediment retained in a small gully dam within the adjoining Council land. This trace PFAS concentration is considered most likely to occur onsite because of lateral migration from the upstream registered PFAS contaminated site, mainly the Tamworth Regional Airport. This migration pathway is not expected to impact directly upon the proposed poultry plant development site. No physical contact pathways are present between the gully and the development site, other than during a period where the proposed access road would be constructed.

Based on the methodology adopted for this investigation, the development site does not contain contaminated land that would impact construction of the Oakburn Processing Plant or pose an unacceptable risk to human health or the surrounding environment.

## 4.7 ODOUR IMPACT ASSESSMENT

An Odour Impact Assessment (OIA) has been prepared by The Odour Unit (TOU) to assess the potential impact of the development in terms of odour and dust. This assessment is included as **Appendix 9**.

### 4.7.1 Odour Emission Sources

The OIA identifies the following potential odour emission sources from the Oakburn processing plant:

- Waste Water Treatment Plant (WWTP) – Stages 1 (approved) and 2 (proposed);
- The Protein Recovery Plant and associated Biofilter;
- The Processing Plant Live Bird Ventilation; and
- The Processing Plant Ventilation Ducts from various components of the operation.

### 4.7.2 Odour Dispersion Modelling

Modelling was undertaken using CALPUFF Modelling System (including CALPUFF Version 7.2.1, CALMET Version 6.5.0 and CALPOST Version 7.1.0). CALPUFF is a multi-layer, multi-species, non-steady-state puff dispersion model that is able to simulate the effects of time and space-varying meteorological conditions on pollutant transport.

CALMET is a meteorological model that produces three dimensional gridded wind and temperature fields to be fed into CALPUFF. The primary output from CALPUFF is hourly pollutant concentrations evaluated at gridded and/or discrete receptor locations. CALPOST processes the hourly pollutant concentration output to produce tables at each receptor and contour plots across the modelling domain.

### 4.7.3 Odour Emission Sources and Assumptions

Data used for the Odour Impact Assessment was sourced from on-site measurements and operation of similar facilities including:

- TOU site-specific sampling from the live bird storage area at Baiada's Out Street processing plant on 8 August 2018.
- Odour emission rate data collected by TOU on 16 November 2011 from Baiada's Hanwood poultry processing facility was used for modelling the ventilation ducts.
- The WWTP area sources, except for the covered anaerobic lagoons were modelling using data collected from the Baiada Hanwood WWTP. For the proposed CALs, an odour emission rated was derived from TOU's database.
- Fugitive odour emissions from the rendering plant have been calculated from actual measurements collected from the building by TOU on 8 August 2018.

Odour samples were collected using point, volume and area source sampling techniques in accordance with the NSW EPA requirements.

#### 4.7.4 Odour Impact Assessment Results

Based on the NSW EPA classification of population densities, the Impact Assessment Criterion adopted for the Odour Impact Assessment Study was 5.0ou, 99.0<sup>th</sup> percentile with one second nose-response time averaging at the nearest sensitive receptors. All on-site odour sources have been assessed and modelled as a cumulated impact and separately grouped by origin including the Protein Rendering Plant, Processing Plant and the Waste Water Treatment Plant. It is noted that the Odour emissions from the rendering plant biofilters was included as a worst-case scenario despite being a treated emission.

Modelling of the proposed development identified the cumulative site odour impact (odour footprint) at the NSW EPA Impact Assessment Criteria (IAC) of 5ou. This is shown in **Figure 19**.

The processing plant modelled alone shows clear compliance with the NSW EPA odour IAC of 5ou. Sensitivity testing also demonstrates, as a worst-case scenario, that the live bird shed would have to emit up to three times the amount of odour before the processing plant odour footprint begins to encroach upon the Oakburn Park Raceway property.

The results also show that the proposed WWTP is compliant with the NSW EPA odour IAC under the assumption that SBR night-time filling would be avoided. As a worst-case scenario, the SBR was set to the highest 'fill' emission rate during daytime hours but in practise the fill phase should only take approximately one hour.

With use of the biofilter emissions and fugitive odour emissions calculated from actual measurements collected from the rendering plant, the modelling demonstrates compliance with the odour IAC.

The cumulative 5ou contour encroaches beyond the site boundary marginally to the north and marginally to the south, but does not cover any sensitive receptors. Therefore, TOU has identified that the proposed processing plant is unlikely to cause adverse odour impacts under normal conditions within the assumptions made in their assessment.

The odour report confirms that adverse odour impacts are unlikely to occur with respect to the childcare assuming that it operates for 12 hours per day (6am-6pm) under normal conditions. The odour report confirms to further reduce the risk of adverse odour impact upon the child care centre, inclusion of activated carbon filters into the design of the indoor ventilation system could be considered. Landscaping around the boundary of the outdoor play could be incorporated in the design to help mitigate odour impacts.

Regardless of this finding, TOU recommends the preparation and implementation of an Odour Management Plan for the site to prevent or minimise the potential for odour generation through a hierarchy of controls, in the form of, but not limited to, engineered, administration and/or management practices. Odour Management will form part of a comprehensive Environmental Management Plan prepared for the site. An example EMP from Baiada's Hanwood Processing Plant is included as **Appendix 18**.

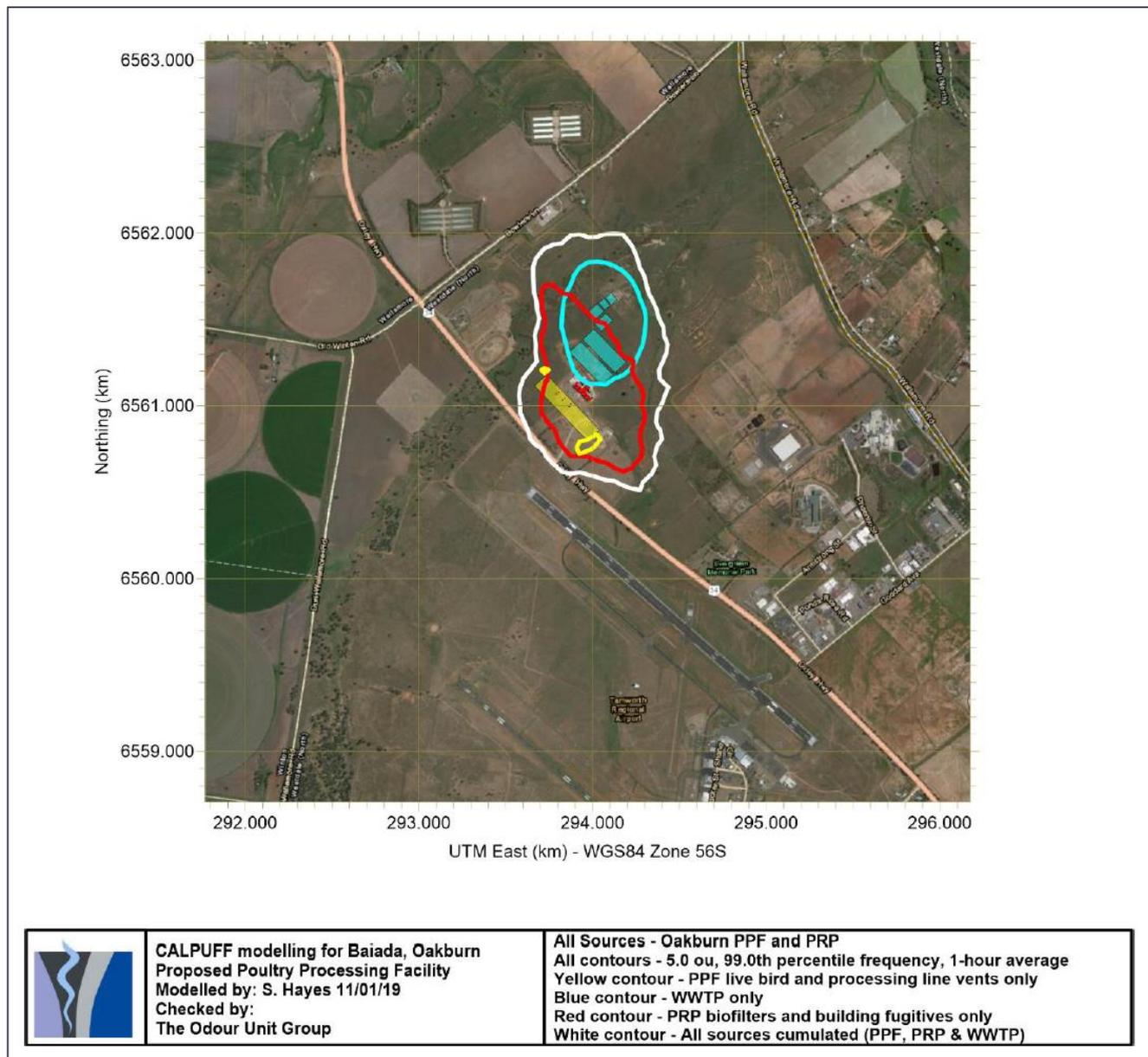


Figure 19: Projected ground level odour concentration - All sources

## 4.8 DUST IMPACT ASSESSMENT

As outlined in Section 1.5 of the Odour Impact Assessment (**Appendix 8**), based on TOU's experience with poultry processing facilities across Australia, processing, rendering and wastewater sources are high in moisture and low in particulate emissions and as such, dust emissions are unlikely to be problematic. It is inferred from the low odour concentrations measured from live bird storage at the Out Street facility that the particulate levels will be correspondingly low given the accepted nexus between odour and dust across many industries.

Accordingly, dust is expected to be a low risk for the following reasons:

- the nature of all processing, rendering and wastewater sources of the proposed facility are not high risk (compared with, for example, feed mills);
- the sealing of site carparks and roadways; and
- the large separation distance to the nearest rural residential dwelling, being located over 1.1 km to the north of the processing plant structure, and the rest being over 1.5 km away.

In response to these factors, a quantitative assessment of is not considered necessary in this instance.

## 4.9 NOISE IMPACT ASSESSMENT

A detailed assessment has been undertaken by Reverb Acoustics to assess the proposed development against the relevant acoustic criteria (refer to Appendix 15). A summary of the acoustic assessment is provided below.

### 4.9.1 Methodology

Attended background noise level monitoring was conducted at residential receivers during the site visits on 28-29 August 2016 and July 2018 to update the data. High wind/rain periods excluded prior to analysis, including the Rating Background Level's (RBL's) which were calculated from Assessment Background Levels (ABL's), for the day, evening and night periods, according to the procedures described in the EPA's National Pollutants Inventory (NPI) and as detailed in Australian Standard AS1055-1997, "Acoustics - Description and Measurement of Environmental Noise, Part 1 General Procedures".

The detailed methodology undertaken by Reverb is provided in by **Appendix 15**. In summary, the methodology utilised the following:

- For road traffic, the EPA approved US Environment Protection Agency's Intermittent Traffic Noise guidelines;
- For site activities, noise levels produced by activities/equipment associated with the existing rendering plant were measured during the site visit on 20 July 2016 and/or sourced from the Reverb library of technical data. Noise levels produced by the processing plant were measured at Baiada's existing processing plant facilities in Tamworth and Griffith; and
- For construction activities, noise and vibration levels produced by plant and machinery to be used on the site have been sourced from manufacturer's data and/or the Reverb library of technical data.

### 4.9.2 Existing Acoustic Environment

The nearest residential receivers identified during visits to the site are as follows and shown in **Figure 20**:

- R1. Girrawheen: Old Winton Road, 1700m west of the site.
- R2. Abbeylands: Bowler's Lane, 1100m north of the site.
- R3. The Billabong: Wallamore Road, 1600m east of the site.
- R4. Various Residences: New Winton Road (south of airport), 2500m south of the site.



Figure 20: Sensitive Receptors (Reverb Acoustics, 2019)

**Table 24: Summary of Noise Monitoring Results, dB(A) (Reverb Acoustics, 2019)**

Background L90			Ambient Leq		
Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am	Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am
Girrawheen					
30	30	31	52	52	46
Abbeylands					
34	32	32	54	52	47
The Billabong					
36	33	32	57	54	47
New Winton Road (south of airport)					
33	31	29	54	55	43

#### 4.9.3 Noise Criteria

**Table 25** sets out the relevant criteria for each component of potential noise source:

**Table 25: Relevant Noise Criteria and Sources**

POTENTIAL ACOUSTIC IMPACT	SOURCE OF CRITERIA
Road Traffic Noise Criteria	EPA's NSW Road Noise Policy (RNP)
Site Operation (Planning Noise Levels)	EPA's National Pollutant Inventory (NPI)
Child Care Centre	The Association of Australian Acoustic Consultant's (AAAC's) document, <i>"Technical Guideline Child Care Centre Noise Assessment"</i>
Maximum Noise Level Event Assessment – Sleep Arousal	EPA's National Pollutant Inventory (NPI)
Construction Noise	NSW Environment Protection Authority's (EPA's) Interim NSW Construction Noise Guideline (ICNG)

#### 4.9.4 Assessment Results

##### 4.9.4.1 Received Noise Levels – Site Noise

The results from the acoustic report shows that site operations are predicted to be compliant with the criteria at The Billabong, Girrawheen, and residences along New Winton Road (airport south). However, under adverse weather conditions exceedances of 5-7dB(A) are predicted at Abbeylands during the night and evening.

The Reverb acoustic model shows that activities and equipment associated with the Live Bird area (trucks, fork lifts, ventilation fans) are responsible for the exceedances. Several noise control options were investigated with the most economical option detailed below:

- Erect acoustic mound or wall 2400mm above finished ground level along the west side of the Live Bird Module/Shelter areas.

As shown in **Table 26**, Compliance with the criteria is predicted at Abbeylands during neutral and adverse weather conditions, once the above recommended noise control modifications are complete.

**Table 26: Received Noise Levels Propagated to Nearest Residential Receivers – Noise Control in Place**

RECEIVER	Received Noise Levels, dB(A),Leq		
	NEUTRAL CONDITIONS (DAY)	3m/SEC WIND SOURCE TO REC (DAY/EVENING)	3°C/100m INVERSION (NIGHT)
Girrawheen	33	35	35
Abbeylands	35	38	37
The billabong	32	37	36
Airport south	21	26	24

Criteria:

Girrawheen Day=40, Evening=35, Night=35. Abbeylands Day=40 Evening=37 Night=37

The Billabong Day=41 Evening=38 Night=37 New Winton Rd Day=40 Evening=36 Night=35

#### 4.9.4.2 Received Noise Levels – Short-term Events

Noise levels from short term events such as truck movements have the potential to interrupt the sleep of nearby neighbours in the early hours of the morning. Nearest residential receivers are approximately 1100 metres from the site, with loudest events producing <40dB(A), Lmax at the residential facade, which is below the maximum noise level event limit of 52dB(A),max. Noise from short-term noise events are therefore acceptable and no further noise control is required for these sources.

It should be acknowledged that mobile plant is generally well shielded from residential receivers by intervening structures and buildings on the site and received noise is expected to be substantially lower than Reverb’s predictions indicate.

#### 4.9.4.3 Road Traffic

Results from the acoustic report show that noise levels from cars and trucks travelling to and from the site, for existing and proposed operations, along the Oxley Highway are compliant with the RNP day and night criteria for all residences.

The RNP also recommends that the increase in road traffic noise levels due to redevelopment of an existing land use development not exceed 12dB(A) during the day and night for freeways and arterial roads. As can be seen by the results in the above Tables, the relative increase due to the development is not expected to be more than 8.8dB(A) during the day and 9.7dB(A) at night and considered acceptable.

#### 4.9.4.4 Site Child Care Centre

The proposed child care centre will be located on the south side of the processing building. The centre will include indoor areas (i.e. play areas, cot rooms, amenities, etc) and an outdoor play area. Potential noise sources that may impact upon the child care centre are dominated by the closest items of equipment or activity. In this case, only vehicle movements in the carpark (cars driving, reversing, car doors) are noise sources of concern. Long-term monitoring conducted by Reverb Acoustics at the entrance to busy carparks, reveals that average noise levels are as high as 62dB(A),Leq, which is 7dB(A) above the criteria for child care centre outdoor play areas. As such, an acoustic fence will be required at the perimeter of the outdoor area.

The acoustic fence will provide the added advantage of shielding internal areas of the child care centre from intruding industrial noise. The difference between external and internal noise levels is typically 15dB(A) when windows are open for ventilation, for masonry structures. Therefore, based on an external noise level of <55dB(A) with the acoustic fence in place, satisfactory noise levels are expected within indoor areas of the child care centre. To be conservative, Reverb recommends that acoustic windows are installed in cot rooms.

#### 4.9.4.5 Predicted Noise Levels – Construction Plant and Equipment

Received noise produced by anticipated construction activities have all been found to be compliant with the relevant criteria, with the exception of hammering, which exceed the day Noise Affected criteria of **45dB(A),Leq**.

Whilst other construction methods have been considered, these are not considered feasible. As a result, other strategies have been recommended.

#### 4.9.5 Recommendations

A number of noise control recommendations have been outlined in the Acoustic Report, as follows:

##### 4.9.5.1 Noise Control Recommendations - Operation

1. An acoustic mound or barrier 2400mm above FGL is to be erected along the west side of the Live Bird Module/Shelter areas. An acoustic barrier is one which is impervious from the ground to the recommended height, and is typically constructed from lapped and capped timber, Hebel Power Panel, earthen mound, or a combination of the above. No significant gaps should remain in the barrier to allow the passage of sound below the recommended height. Other construction options are available if desired, providing the mound or wall is impervious and of equivalent or greater surface mass than the above construction options. Also see Appendix B for mound/wall location.
2. The site may operate 24 hours day. Monday to Sunday
3. All access roads should be kept in good condition, i.e. no potholes, etc.
4. Trucks and other machines should not be left idling for extended periods unnecessarily. Machines found to produce excessive noise compared to industry best practice should be removed from the site or stood down until repairs or modifications can be made.
5. A regular maintenance schedule should be adopted for all mobile and fixed plant items. Items found producing high noise should be stood down until repairs are completed.
6. A noise monitoring program, during commissioning, or in the early life of the site is recommended. This program will verify our predictions and in the unlikely event that complaints may arise, enable noise control strategies to be implemented, where required. A typical noise monitoring program may consist of the following:
  - Initial commissioning attended monitoring during the day, evening and night at potentially affected residential receivers, i.e. Girrawheen, Abbeylands, The Billabong, New Winton Road (south of airport).
  - Subsequent bi-annual monitoring at the above locations.
  - In the event of any non-compliance(s), provide Noise Reduction Program for the site and additional compliance monitoring at completion of works, or
  - If compliance is verified reduce to annual monitoring at receivers.

Noise management actions will be incorporated in the EMP.

##### Site Child Care Centre

7. An acoustic fence 1800mm above FGL is to be erected at the perimeter of the child care centre outdoor area. Acceptable forms of construction include Colorbond, lapped and capped timber, Hebel Powerpanel, masonry, or a combination of the above. No significant gaps should remain in the fence to allow the passage of sound below the recommended height. Other construction options are available if desired, providing the fence or wall is impervious and of equivalent or greater surface mass than the above construction options.
8. Windows to the Cot Rooms must be upgraded to achieve an acoustic rating of Rw32. This can typically be achieved with the use of laminated glass and Q-Lon seals at sliders.
9. Consideration should be given to installing ceiling fans to supplement air conditioning.

##### 4.9.5.2 Noise Control Recommendations – Construction

###### Noise Monitoring Program

We recommend that attended noise monitoring should be carried out at commencement of each process/activity that has the potential to produce excessive noise. Attended monitoring offers the advantage of immediate identification of noise exceedances at the receiver and ameliorative action required to minimise the duration of exposure. Unattended long-term monitoring only identifies a problem at a later date and is not recommended.

###### Acoustic Barriers/Screening

To minimise noise impacts during construction, early work should concentrate on grading and levelling the areas in unshielded locations. In the event of complaints arising from residents, we offer the following additional strategies for consideration:

- Place acoustic enclosures or screens directly adjacent to stationary noise sources such as compressors, generators, drill rigs, etc.

#### **Consultation/Complaints Handling Procedure**

The construction contractor should analyse proposed noise control strategies in consultation with the Acoustic Consultant as part of project pre-planning. This will identify potential noise problems and eliminate them in the planning phase prior to site works commencing.

Occupants of adjacent properties should be notified of the intended construction timetable and kept up to date as work progresses, particularly as work changes from one set of machines and processes to another. In particular, occupants should understand how long they will be exposed to each source of noise and be given the opportunity to inspect plans of the completed development. Encouraging resident understanding and "participation" gives the local community a sense of ownership in the development and promotes a good working relationship with construction staff. Programming noisy activities (such as earthworks) outside critical times should be considered.

We recommend that construction noise management strategies should be implemented to ensure disruption to the occupants of nearby buildings is kept to a minimum. Noise control strategies include co-ordination between the construction team and residents to ensure the timetable for noisy activities does not coincide with sensitive activities.

The site manager/environmental officer and construction contractor should take responsibility and be available to consult with community representatives, perhaps only during working hours.

Response to complaints or comments should be made in a timely manner and action reported to the concerned party.

All staff and employees directly involved with the construction project should receive informal training with regard to noise control procedures. Additional ongoing on the job environmental training should be incorporated with the introduction of any new process or procedure. This training should flow down contractually to all sub-contractors.

#### **Equipment Selection**

All combustion engine plant, such as generators, compressors and welders, should be carefully checked to ensure they produce minimal noise, with particular attention to residential grade exhaust silencers and shielding around motors.

Trucks and other machines should not be left idling unnecessarily, particularly when close to residences. Machines found to produce excessive noise compared to industry best practice should be removed from the site or stood down until repairs or modifications can be made. Framing guns and impact wrenches should be used sparingly, particularly in elevated locations, with assembly of modules on the ground preferred.

#### **4.9.6 Conclusion**

A noise impact assessment has shown that providing recommendations detailed in this report are implemented, noise levels from the upgraded site will be compliant with the EPA's NPI requirements at all nearby residential receivers during the day, evening and night, for neutral and worst-case atmospheric conditions. Noise emissions from activities associated with the site will be either within the criteria or generally below the existing background noise level in the area for the majority of the time.

Considering the abundance of industrial/commercial premises already in the area and relatively constant traffic on nearby roads, noise generated by the site may be audible at times but not intrusive at any nearby residence. Since the character and amplitude of activities associated with the site will be similar to those already impacting the area, it will be less intrusive than an unfamiliar introduced source.

During construction the total impact at each receiver is related to the received noise level and the duration of excessive noise. Generally, construction noise will comply with the criteria, however, during major construction activities some exceedances may occur. However, nearby neighbours should accept some periods of high noise, considering the relatively short-term nature of louder construction activities.

To reduce the impact in the area during construction, we recommend that louder construction activities, should be completed with the minimum of undue delay. In any case, all reasonable attempts should be made to complete significant noisy activities within as short a time as possible.

As previously stated, construction activities that produce higher noise for a shorter period are often more desirable than alternate construction techniques that produce lower noise for a much longer period.

Construction activities should generally be restricted to the nominated hours. If construction does occur outside the standard hours, it is vital that the local community be informed of the construction timetable with letter drops, meetings, etc.

In conclusion, operation and construction of the Oakburn site will not cause any long term excessive environmental noise at any residential properties. We therefore see no acoustic reason why the proposal should be denied.

## 4.10 TRAFFIC IMPACT ASSESSMENT

Transport Planning Partnership (TPPP) has carried out a Traffic Impact Assessment (TIA) for the proposed processing plant. This assessment is attached as **Appendix 10**. The TIA reviews the existing traffic and conditions on the roads surrounding the site and assesses the potential impacts of the expected traffic generation on these roads.

### 4.10.1 Methodology

The impact of the processing plant traffic on the operation of intersections has been assessed by TPPP using SIDRA INTERSECTION software.

### 4.10.2 Existing Environment - Traffic

A detailed breakdown of the existing traffic generation is provided in the TIA (refer to **Appendix 10**). The estimated average daily distribution of the vehicle trips generated by the existing rendering plant are summarised in **Table 27**.

The peak hourly vehicle trip generation of the existing rendering plant is therefore estimated at approximately 11 vehicles per hour in the mid-afternoon, with a lower peak in the morning of approximately eight vehicles per hour.

**Table 27: Existing Daily Rendering Plant Traffic Distribution Summary (vehicles per day)**

LOCATION	LIGHT VEHICLE TRIPS	HEAVY VEHICLE TRIPS	TOTAL VEHICLE TRIPS
Rendering Plant Access Road	30	70	100
Oxley Highway West of Rendering Plant	2	10	12
Appleby Lane North of Oxley Highway	0	2	2
Oxley Highway East of Rendering Plant	28	60	88
Country Road South of Oxley Highway	0	2	2
Jewry Street North of Gunnedah Road	12	20	32
Duri Road South of Gunnedah Road	12	20	32
Bridge Street North of Gunnedah Road	10	38	40
Bridge Street North of Out Street	6	0	6

\*A trip is a one way movement, a vehicle arriving then departing generates two vehicle trips on the road network.

### 4.10.3 New Vehicle Access via Armstrong Street

The processing plant is proposed to have its access via Armstrong Street and Goddard Lane. Vehicles travelling to and from the site would therefore be able to travel via either Oxley Highway or Wallamore Road to access Goddard Lane.

#### 4.10.4 Proposed Development Traffic Generation

The number and types of heavy vehicles expected to be generated by the proposed processing plant has been estimated by Baiada as shown in **Table 28**.

**Table 28: Proposed Processing Plant Daily Heavy Vehicle Trip Generation**

MOVEMENT TYPE	TYPE OF VEHICLE	TRUCKS PER DAY	TRIPS PER DAY
Live Birds Delivery	B-double	84	168
Finished Product Dispatch	Large rigid or semitrailer	70	140
Rendering Raw Material	Semitrailer or B-double	20	40
Finished Rendered Material	Large rigid	10	20
General deliveries and waste collection	Small rigid, large rigid or semitrailer	20	40
<b>TOTAL</b>		<b>204</b>	<b>408</b>

\*A trip is a one way movement, a truck arriving then departing generates two vehicle trips.

##### 4.10.4.1 Total Processing Plant Vehicles

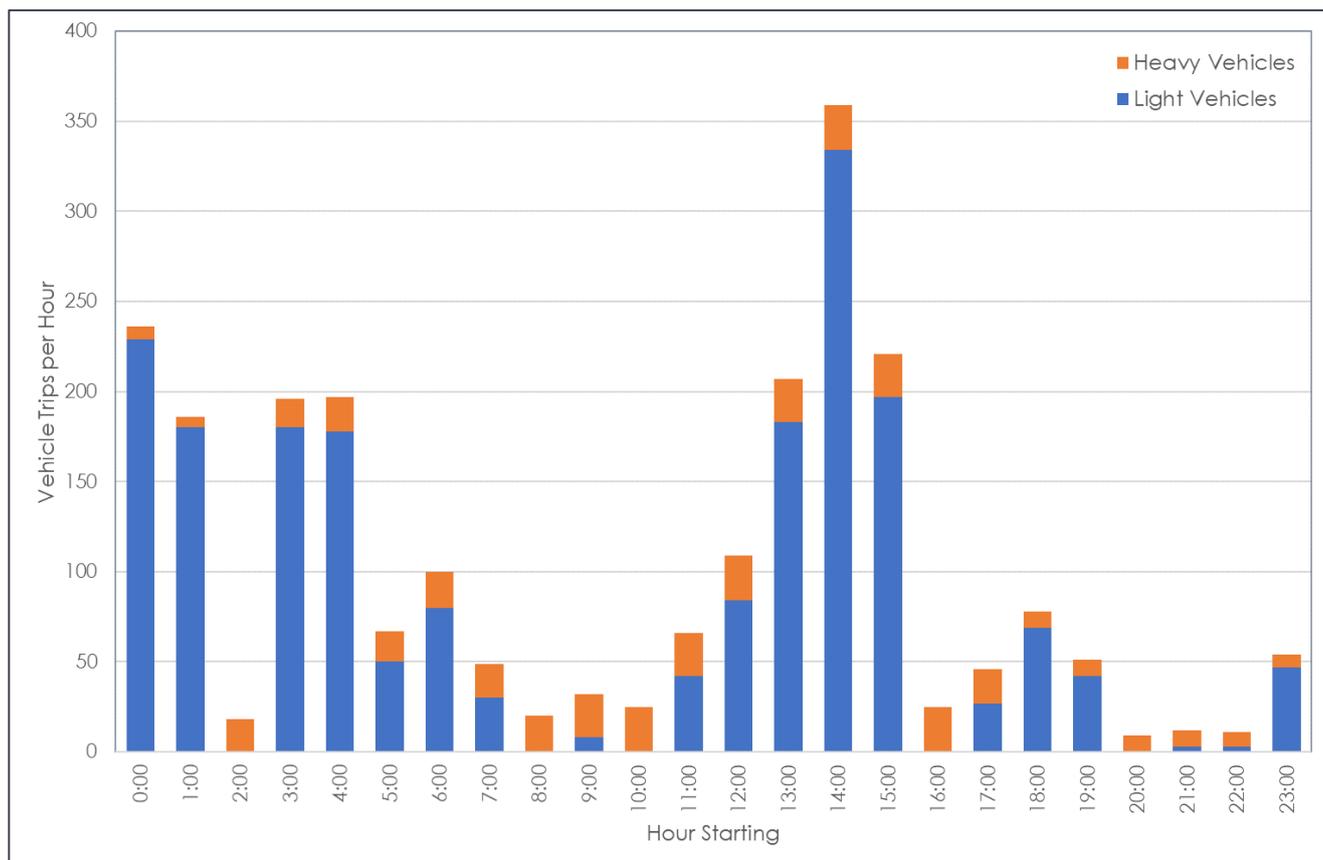
The peak hourly vehicle trip generation of the existing rendering plant is therefore estimated at approximately 11 vehicles per hour in the mid-afternoon, with a lower peak in the morning of approximately eight vehicles per hour. The estimated average daily distribution of the vehicle trips generated by the existing rendering plant are summarised in **Table 29**.

**Table 29: Proposed Processing Plant Traffic Distribution Summary (vehicles per day)**

LOCATION	LIGHT VEHICLE TRIPS	HEAVY VEHICLE TRIPS	TOTAL VEHICLE TRIPS
Processing Plant Access Road	1966	408	2374
Armstrong Street West of Goddard Lane	1966	408	2374
Goddard Lane North of the Oxley Highway	1178	408	1586
Goddard Lane South of Wallamore Road	788	0	788
Oxley Highway West of Goddard lane	58	236	294
Appleby Lane North of Oxley Highway	0	64	64
Oxley Highway West of Appleby Lane	58	172	230
Oxley Highway East of Goddard Lane	1120	172	1292
Country Road South of Oxley Highway	0	4	4
Duri Road South of Gunnedah Road	560	108	668
Bridge Street North of Gunnedah Road	560	60	620
Wallamore Road West of Goddard Lane	40	0	40
Wallamore Road East of Goddard Lane	748	0	748
Jewry Street North of Wallamore Road	748	0	748

\*A trip is a one way movement, a vehicle arriving then departing generates two vehicle trips on the road network.

Based on expected operational patterns, the spread of vehicle trips expected to be generated by the proposed processing plant, to and from the site has been determined and is presented in **Figure 21**.



**Figure 21: Processing Plant Hourly Traffic Generation (TTPP,2018)**

The busiest periods for traffic generation of the proposed processing plant would occur in the early afternoon, with up to 359 vehicle trips per hour between 2:00pm and 3:00pm, and in the middle of the night, with up to 236 vehicle trips per hour between midnight and 1:00am. As shown, heavy vehicle traffic is spread across the 24 period with the peaks in traffic generation associated with expected shift changes.

The typical on-street peak hours on road serving the site occur between 8:00 am and 9:00 am, and between 4:00 pm and 5:00 pm which correspond with low volumes of traffic from the processing plant as staff would not be arriving or departing at those times.

#### 4.10.5 Future Baseline Traffic Conditions

It is generally expected that growth in traffic will occur on the road network over time. Assessment reveals that with an assumed growth rate of 2% the level of service experienced by drivers on Oxley Highway near the site would remain satisfactory if the rendering plant were to continue operating with background traffic growth.

#### 4.10.6 Impacts of Proposed Development

##### 4.10.6.1 Network Performance

Analysis of the resulting peak hour midblock levels of service expected with the proposed processing plant operating, together with an increase in background traffic at 2 percent per year over 10 years was undertaken by TTPP. The results demonstrate that the midblock level of service experienced by drivers is expected to remain satisfactory with the combined effects of background traffic growth and the processing plant traffic.

##### 4.10.6.2 Intersection Performance

It is noted that the traffic generation of the processing plant is forecast to be low during the on-street peak hours, with site-generated peaks occurring outside of the on-street peaks. The processing plant traffic would therefore make only a minor contribution to the on-street peak hour operating conditions of the key intersections, noting that intersections are typically the critical locations with respect to the capacity of the road network, due to the need for conflicting vehicles to occupy the same road space.

Regardless, to ensure a robust assessment of the future operating conditions, the analysis assumed that the peak volume of additional traffic resulting from the processing plant during the surveyed morning and afternoon periods (6am to 9am and 3pm to 7pm) would coincide with the surveyed peak volumes over those same periods. This will result in an overestimate of the future peak hour conditions, as those peaks are unlikely to coincide.

The SIDRA results demonstrate that with the traffic changes forecast to result from the processing plant, the key intersections would continue to operate at good levels of service. As noted, the forecasts assume a “worst case” in which the peak traffic generated by the processing plant would coincide with the on-street peak conditions, which is unlikely to occur. Nevertheless, the results indicate that sufficient capacity is available at the intersections under such conditions.

Analysis of the longer term peak hour operating conditions was also undertaken with the assumed coincidence of peak activity as above, and an increase in background traffic at 2 percent per year over 10 years. The results demonstrate that with the combined effects of background traffic growth and the processing plant traffic, the intersections are forecast to operate with satisfactory levels of service and spare capacity over the 10 year horizon.

The exception is the roundabout at Peel Street and Jewry Street, at which the baseline traffic demand is forecast to exceed capacity with the increase in background traffic. The analysis suggest that this additional capacity will be required in the future regardless of the presence of the processing plant. It is also understood that funding has been recently secured for upgrade of the roundabout which will provide additional capacity in this location.

#### **4.10.6.3 Car Parking and On-Site Manoeuvring**

*Tamworth Regional Development Control Plan 2010* requires that car parking at light or heavy industry developments be provided at the greater of one space per 75m<sup>2</sup> GFA or one space per two employees. On this basis, the processing plant requires a minimum of 632 spaces based on the proposed 47,348m<sup>2</sup> GFA or 588 spaces based on the total of 1,176 employees. The proposed provision of 820 car parking spaces therefore exceeds the requirements of the DCP and is satisfactory. It is recommended that eight to sixteen spaces be designated for people with a disability, representing one to two per cent of the total number of spaces provided.

The design of the staff car parking area has been reviewed with regard to Australian Standard 2890.1 (2004). The design meets or exceeds the minimum requirements of that Standard with regard to the dimensions of the parking bays, aisles and driveway access road. Due to the length of the aisles, TTPP has recommended that speed humps be provided in the car park in accordance with AS2890.1 to provide positive speed control.

The internal layout of the processing plant roadways was also assessed by TTPP for suitability by considering the swept paths of the heavy vehicles expected to use the site. The proposed road layouts are satisfactory for manoeuvring of those vehicles, subject to minor amendments to the kerblines near the northern end of the staff car park to ensure fire truck access is available through the car park if required.

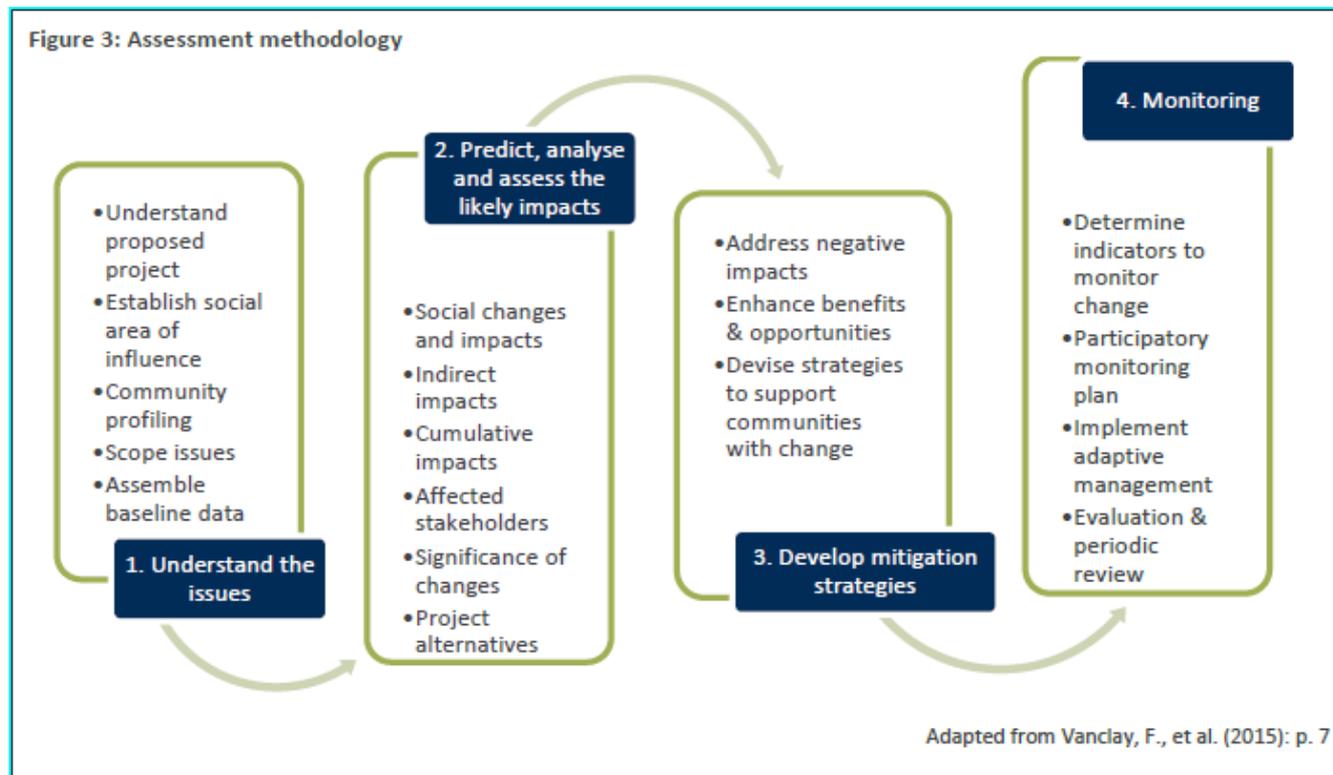
These recommendations have been taken into account in the final site plans included in **Appendix 3** in relation to fire vehicle access throughout will be accommodated during detailed design of the parking and truck movement areas.

## 4.11 ECONOMIC IMPACT ASSESSMENT

A Social and Economic Impact Assessment has been prepared by Hill PDA for the project (refer to **Appendix 16**).

### 4.11.1 Methodology

**Figure 22** outlines the methodology adopted by Hill PDA for this project.



**Figure 22: Methodology adopted for the SEIA (HillPDA, 2019)**

### 4.11.2 Economic Impact Assessment

HillPDA has undertaken an assessment of the economic impacts of the development (refer to **Appendix 16**). The HillPDA Assessment concludes that the proposed development is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures are implemented, however it was determined the project will generate significant, positive impacts, particular in relation to economic impacts.

### 4.11.3 Direct Economic Impacts

Baiada's processing and rendering activities within Tamworth are currently undertaken at Out Street and Oakburn respectively. The Out Street Processing Plant has a maximum capacity of 120,000 birds per day (840,000 per week). Current number of workers is 306 employees and 167 contractors and agency staff. The Oakburn Rendering Plant is current capped at 120 tonnes of finished product per and employs 21 staff working across three shifts. Subject to approval, construction and proved operation of the new processing plant, all of these positions will transfer to the new process plant.

Total staff at both locations is currently 494 with opportunity to increase processing capacity at the Out Street due to space and planning constraints. When fully operational the proposed Oakburn Processing Plant will employ around 1,176 workers which represents a net increase of 682 jobs over the base case.

### 4.11.4 Indirect impacts of the proposal

There are significant indirect impacts from production generally referred to as multiplier impacts. Multipliers refer to the level of additional economic activity generated by a source industry. There are two types of multipliers:

- Production induced: which is made up of:

- **First round effect:** which is all outputs and employment required to produce the inputs for construction; and
- **An industrial support effect:** which is the induced extra output and employment from all industries to support the production of the first round effect; and
- **Consumption induced:** which relates to the demand for additional goods and services due to increased spending by the wage and salary earners across all industries arising from employment.

#### 4.11.4.1 Indirect Employment Impacts

There are significant inputs to the processing – the most significant being the poultry farms which provide product to the processing plant. At present Baiada employs 1,029 workers in the local area, of which approximately half are working in Baiada operated farms including breeding and rearing farms and a small number of broilers. A further 18 workers work at the Tangaratta feedmill, 17 in distribution and 7 in sales and administration. 66 workers including 18 also managers work on the 17 contract broiler farms in the local area. The broiler farms grow the birds from day old chicks provided by Baiada’s hatchery and provide meat birds to the processing plant at processing weight.

In addition to these inputs Baiada uses specialised contractors to collect and transport the birds to the processing plant as well as transportation of feed and bedding material throughout the production cycle. That contractor currently employs 60 workers in the Tamworth area. Workers are involved in management, administration and the collection of live birds, maintenance of trucks and trailers and some fridge van work transporting finished product from Tamworth to Sydney. This contractor is currently operating approximately 20 truck and trailer combinations sets in the Region. These operations would obviously grow in a manner commensurate with the increase in production numbers associated with expansion of the processing plant.

In addition to the above, Baiada also requires various services and external inputs to production via other contractors and service providers. These would include plumbers, electricians, mechanics, gardeners and others required to ensure all facilities and operations are well maintained and operating smoothly.

The poultry processing industry is a strong component of the national economy employing 17,000 workers across Australia. The industry has strong linkages with other sectors, so its impacts on the economy go further than the direct contribution.

Based on ABS national input output tables HillPDA estimates that for each person employed in the meat processing business 1.05 jobs are generated providing first round or direct inputs to production. A further 0.9 jobs are provided in industrial support effects and 1.05 jobs are generated in consumption induced impacts. As such, HillPDA estimates that a net increase in 682 jobs will deliver an additional 2,039 jobs comprised of 1,323 jobs associated with the inputs to production and a further 716 jobs providing the goods and services demanded from the additional workers generated. In total every new job in poultry processing results in the creation of a further 3 jobs in support.

#### 4.11.4.2 Gross Value Added

Gross value added (GVA) of an industry refers to the value of outputs less the costs of inputs. It also measures the contribution that the industry makes to the country’s wealth or gross domestic product (GDP). The main components of GVA are workers remuneration, company profits and various company taxes including pay roll tax and the like. Total revenue from current operations is estimated at \$188m of which GVA is 24.33% amounting to \$46.0m. The estimated multiplier impacts on GVA for the proposed development are shown in **Table 30**.

**Table 30: Estimated multiplier impacts on GVA (\$m) Direct Effects**

	DIRECT EFFECTS	PRODUCTION INDUCED EFFECTS		CONSUMPTION INDUCED EFFECTS	TOTAL
		FIRST ROUND EFFECTS	INDUSTRIAL SUPPORT EFFECTS		
<b>Multipliers</b>	1	1.63	1.55	1.92	6.099
<b>Gross Value Added (\$m/ann)</b>	61.0	99.4	94.8	116.8	372.0

As shown, the multipliers are particularly high in first round effects. Most of this relate to the farming of poultry. Total indirect GVA is also particularly high – around five times higher than direct GVA.

Note that the multiplier effects are national, and not necessarily local. The ABS notes that “*care is needed in interpreting multiplier effects; their theoretical basis produces estimates which somewhat overstate the actual impacts in terms of output and employment.*” In particular they can leave the impression of additional economic activity when in reality the resources used in production including labour could have be put to an alternative use if the project did not proceed. Nevertheless, the estimates illustrate the high flow-on effects of poultry processing to the rest of the economy. Clearly, through its multipliers, poultry processing makes a high contribution to the economy that go well beyond its direct impacts.

#### 4.11.5 Economic Impacts from Construction

Baiada has advised that the total construction cost is expected to be around \$203m (in current 2019 dollars). Construction to the cost of \$203m would generate a further \$265m of activity in production induced effects and \$190m in consumption induced effects. Total economic activity generated by the construction of the proposed development would be \$658m (refer to **Table 31**).

**Table 31: Economic Impacts from Construction (HillPDA, 2019)**

	DIRECT EFFECTS	PRODUCTION INDUCED EFFECTS		CONSUMPTION INDUCED EFFECTS	TOTAL
		FIRST ROUND EFFECTS	INDUSTRIAL SUPPORT EFFECTS		
<b>Multipliers</b>	1	0.626	0.679	0.934	3.239
<b>Output (\$million)</b>	203	127	138	190	658

HillPDA calculates that every one million dollars of construction generates 2.15 full time positions over 12 months directly in construction on site. Based on the estimated cost of \$203m, approximately 438 job years would be directly generated. From the ABS 2015-16 ANA Input-Output tables HillPDA has calculated the multipliers for first round, industrial support and consumption induced effects of 0.74, 0.84 and 1.39 respectively for every job year in direct construction. Including the multiplier impacts the proposed development would therefore have potential to generate 438 direct job years and 1736 job years including induced effects during the period of construction (refer to **Table 32**).

**Table 32: Employment Multipliers (HillPDA, 2019)**

	DIRECT EFFECTS	PRODUCTION INDUCED EFFECTS		CONSUMPTION INDUCED EFFECTS	TOTAL
		FIRST ROUND EFFECTS	INDUSTRIAL SUPPORT EFFECTS		
<b>Multipliers</b>	1	0.741	0.839	1.384	3.965
<b>Employment No. per \$million</b>	2.154	1.597	1.808	2.981	8.540
<b>Total Job Years Generated</b>	438	325	367	606	1,736

#### 4.11.6 Regional Grain Supply

As outlined above, a key component in the development of the Tamworth region as a poultry cluster is the availability of local grain from farms in the region to produce poultry feed blends while minimising transport costs. As per current operations, grain for the expanded operation will be primarily sourced from the surrounding areas including Tamworth, Moree, Narrabri, Walgett and Gunnedah. The economic benefits from the increase in regional grain supply estimated to be 546,000 tonnes per year (~\$136.5m), are factored into the multipliers described above.

#### 4.11.7 Regional Broiler Farm Growth

To support the increase in processing of poultry within the region, significant increases in the supply of birds will be required. It is expected that around 300 additional poultry sheds will be required to service the ultimate capacity of the Oakburn processing plant. This growth is expected to occur via expansion of existing farms, as well as new farms located on suitable sites, located within a 2-hour drive of the Oakburn processing plant in accordance with animal welfare considerations. Expansion of broiler farms will be subject to identification and acquisition of suitable sites and the relevant statutory approvals being obtained by Applicants.

### 4.12 SOCIAL IMPACT ASSESSMENT

HillPDA has undertaken an assessment of the social impacts of the development (refer to **Appendix 16**). The findings of the social impact assessment reflect the findings of the detailed technical assessments undertaken in relation to the potential impacts on the development on sensitive receptors and the surrounding community. The HillPDA Assessment concludes that the proposed development is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures are implemented, however it was determined the project will generate significant, positive impacts, particular in relation to economic impacts.

### 4.13 VISUAL IMPACTS

The subject site is located within an established food processing hub, which has been identified by Council as an industry that is to be supported and encouraged. As such, the construction of a large processing plant in the site is consistent with community expectations for development on the site.

The existing rendering plant is a high quality industrial food processing facility and presents as a neat, clean and modern industrial site. The visual form of the proposed processing plan will adopt a similar style and quality as it and will present as a modern industrial building, with a modern administration centre at the front of the building. While the site will present as high quality, modern building to the surrounding public vantage points, significant landscaping and screening vegetation has also been utilised to soften built form and add visual interest to the site.

The visual impact of the processing plant be most prominent from the Oxley Highway, which is not a pedestrianised environment and the traffic utilising this road travels at 100km/hr. View of the facility will be broken up by the proposed landscaping treatments, including buffering vegetation along the site boundary. Based on the maximum height of the processing plant and the distance from the highway, screening trees with a height of 5m will screen the vast majority of the elevation to ensure the building will not dominate the landscape. As such, the proposed building is not expected to have an unacceptable impact in terms of visual impacts.

### 4.14 WASTE MANAGEMENT

The *NSW Waste Avoidance and Resource Recovery Strategy 2014–21* outlines the State's long term commitments and strategies to encourage resource recovery and prevent unnecessary wastes from being generated. The strategy includes 6 central strategy areas including:

- Avoid and reduce waste generation;
- Increase recycling;
- Divert more waste from landfill;
- Manage problem wastes better;
- Reduce litter; and
- Reduce illegal dumping.

Waste management is critical to the operation of an efficient and profitable processing plant. As on similar sites, the applicant will adopt measures to ensure that all waste generated from activities on the site are reused and recycled where practical or otherwise managed and disposed of in a manner that will not cause environment harm. Waste management actions for the site will be detailed in the Environmental Management Plan for the site. A copy of the EMS for Baiada's Hanwood Processing Plant in Griffith is attached as **Appendix 18** as an example of what will be prepared for Oakburn following approval, detailed design and operational planning. The Waste Management Actions and responsibilities are documented within the EMS, with an overview of what will be implemented at Oakburn provided

below. The actions have been prepared with consideration of, and accord with the intent of the *NSW Waste Avoidance and Resource Recovery Strategy 2014–21*.

#### 4.14.1 Solid and Packaging Waste

The major types of solid waste generated at the Hanwood Processing Plant are as follows:

- Ridged and flexible product packaging, plastic crate liners, and shrink wrap;
- Nylon carton and pallet strapping;
- Plastic product labels and label backing;
- Lunchroom and amenities waste;
- Empty chemical containers (return for reuse by the chemical supplier);
- Gloves / Aprons / Hairnets (cotton inner gloves are laundered and re-used);
- Process machinery consumable and maintenance parts (reconditioned or recycled where possible);
- Broken plastic tubs, crates and wooden pallets (recycled); and
- Cardboard cartons and general cardboard waste (recyclable).

All waste streams are recycled, reused or repurposed wherever possible and practical. Solid waste will be collected and stored in skip bins on site. In the case of recyclable plastics, paper and cardboard, these will be separated out and stored accordingly. The collection, handling and disposal will be competent and licensed contractors. Baiada has been a signatory to the National Packaging Covenant since September 2001 and the strengthened Australian Packaging Covenant in 2010 and is committed to initiatives that will reduce impacts on the environment and lead to sustainability through responsible corporate activities.

Baiada has prepared an Australian Packaging Covenant Action Plan which outlines the steps that the company will undertake to meet the expectations of the Covenant. All operations at the Oakburn Processing Plant will be undertaken in accordance with the principles of this covenant.

#### 4.14.2 Processing Wastes

A significant by-product stream is generated during the storage, slaughter and processing of poultry, including feathers, blood and offal. A majority of these by-products are separated and collected for rendering while some material is in suspension within the waste water. This stream is separated and combined with solids of the same type and transported to the rendering facility, where the material is rendered down into valuable protein based meals and oils. The screened water passes directly to the waste water treatment plant.

There is also an amount of faecal waste which accumulates during the on-site storage of live birds and the early stages of slaughtering. This material regularly collected and disposed of for beneficial use on cropping land by approved and competent contractors. All processing waste is collected and handled in accordance with strict procedures to ensure waste does not accumulate or putrefy on-site.

#### 4.14.3 Waste Water Production and Re-Use

As per Section 4.2 of this report, current estimates and processing technology indicate that, at full operation, the Oakburn Processing Plant will require up to 8 million litres of potable water per day which will generate some 7.2 million litres of trade waste water. This water will be treated using standard biological systems. There is a very small amount of solid material generated by this process. This solid material is biological in nature, with some trade elements (mostly phosphorus) and is suitable for the beneficial application to land.

Following the biological treatment and as an efficiency and sustainability measure, Baiada are proposing to implement an Advanced Water Treatment Plant which is designed to treat all water from the processing plant and recover of up to 6 million litres (75% of consumption) for re-use. The Advanced Water Treatment process uses ultra and micro filtration and reverse osmosis to removed dissolved solids from the water. This generates a stream of salt rich brine and is intended to be discharged to sewer for blending with Tamworth Council's municipal sewer stream and treatment at their STP. This discharge to the sewer will be subject to a Trade Waste Agreement with Tamworth Regional Council. It is also noted that Baiada is researching the use of peracetic acid as an alternative to chlorination which may reduce the TDS in the concentrated stream.

## 4.15 CHEMICAL USE AND STORAGE

### 4.15.1 Chemical Storage

Chemical handling and storage procedures will be undertaken in accordance with the Applicable Material Safety Data Sheets (MSDS), good manufacturing practice and all relevant Australian Standards. Chemical handling, use and storage procedures will also be documented in a comprehensive Environment Management Plan which will be prepared for the site.

As an example, **Table 33** provides a list of the chemicals used and stored at a similar processing plant operated by Baiada in Griffith, NSW which has approval to process up to 2.8 Million Birds / Week. The Oakburn Processing plan is expected to have a similar chemical storage and use profile.

The only significant difference between the sites is the storage of large quantities of Liquefied Natural Gas (LNG) at Oakburn due to the unreliable gas supply. The existing rendering plant has 240,000L of LNG stored on site equating to 122.4 tonnes or on site equating to 122.4 tonnes or 64,800m<sup>3</sup>. This storage is currently undertaken in accordance with the existing EPL (refer to **Appendix 2**). Baiada has advised that additional storage will not be required to service the processing plant beyond the storage already available on site.

**Table 33: Indicative Chemical Storage Volumes based on Hanwood Processing Plant**

TYPE	SUBSTANCE	UN NUMBER	QUANTITY	SEPP 33 Threshold Quantities
Roofed Store	Hypochlorite Solution (C8 PGIII)	1791	1,000L (1.2T)	50T
<b>Bulk Storage Tanks</b>	<b>Petroleum Gas Liquefied (C2.1)</b>	<b>1075</b>	<b>240,000L (122.4T)*</b>	<b>16m<sup>3</sup>/10T</b>
Bulk Tank x2	Ferric Sulphate (C8 PGIII)	1760	15,000L (19.5T)	50T
Roofed Store	Sodium Hydroxide Solution (C8 PGII)	1824	1,000L (1.5T)	25T
Roofed Store	Hypochlorite Solution (C8 PGIII)	1791	4,000L (6.0T)	50T
Roofed Store	Chlorite Solution (C8 PGII)	1908	2,000L (2.56T)	25T
Roofed Store	Sodium Hydroxide Solution (C8 PGII)	1824	2,000L (3.0T)	50T
Roofed Store	Hypochlorite Solution (C8 PGIII)	1791	2,000L (2.4T)	50T
Roofed Store	Sodium Hypochlorite Solution (C8 PGIII)	1791	400L (0.48T)	50T
Roofed Store	Sodium Hydroxide Solution (C8 PGII)	1824	400L (0.6T)	50T
Roofed Store	Sodium Hypochlorite Solution (C8 PGIII)	1791	2,400L (2.88T)	50T
Bulk Tank	Ammonia Anhydrous (C2.3)	1005	3,000L (2.05T)	5T
Bulk Tank	Ammonia Anhydrous (C2.3)	1005	1,200L (0.82T)	5T
Enclosed Refrigeration System	Ammonia Anhydrous (C2.3)	1005	1,200L (0.0009T)	5T
Enclosed Refrigeration System	Ammonia Anhydrous (C2.3)	1005	1,200L (0.0009T)	5T
Enclosed Refrigeration System	Ammonia Anhydrous (C2.3)	1005	1,200L (0.0009T)	5T
Enclosed Refrigeration System	Ammonia Anhydrous (C2.3)	1005	1,200L (0.0009T)	5T
Enclosed Refrigeration System	Ammonia Anhydrous (C2.3)	1005	1,200L (0.0009T)	5T
Roofed Store	Hypochlorite Solution (C8 PGIII)	1791	1,000L (1.2T)	50T

TYPE	SUBSTANCE	UN NUMBER	QUANTITY	SEPP 33 Threshold Quantities
Roofed Store	Hypochlorite Solution (C8 PGIII)	1791	1,000L (1.2T)	50T
Bulk Store	N2 Gas (C2.2)	1977	10,000L	N/A
Bulk Store	O2 Gas (C2.2)	1075	10,000L	N/A
Roofed Store	Sodium Hydroxide Solution (C8 PGII)	1824	2,000L (3.0T)	25T
Roofed Store	Sodium Hydroxide Solution (C8 PGII)	1824	1,000L (1.5T)	25T

\* Updated to reflect existing Oakburn operations.

#### 4.15.2 Chemical Transportation

Similarly, the screening thresholds for transport of dangerous goods, based on the Hanwood operation are outlined in *Table 2: Transportation Screening Thresholds of the Applying SEPP33 Hazardous and Offensive Development Application Guidelines* (January 2011). **Table 34** demonstrates that the vehicle movements on site containing dangerous goods are well below the thresholds set out in SEPP33.

**Table 34: Transportation of each Dangerous Good Class Measured Against SEPP33 Thresholds**

CLASS	SUBSTANCE	UN NUMBER	VEHICLE MOVEMENTS PER ANNUM	TABLE 2 THRESHOLDS
2.1	Petroleum Gas Liquefied	UN1075	156*	>500
2.3	Ammonia Anhydrous	UN1003	24	>100
8	Hypochlorite Solution	UN1791	234	>500
8	Sodium Hydroxide Solution/ Sodium Hydroxide	UN1824/ UN1823		

\*Updated to reflect existing Oakburn operations

#### 4.15.3 Separation Distances

The development site is located in a rural zone with very low density of residential dwellings. The nearest residential dwelling 'as the crow flies' is over 1km to the north of the site and the settlement (residential zoned area) is located along Marathon Street approximately 3.8km south east. These separation distances are considered to be extensive and capable of containing the consequences of any incident as a result of dangerous goods on site, from the nearby residential uses.

#### 4.15.4 SEPP33 Screening

In accordance with the requirements of *State Environmental Planning Policy 33 (SEPP33)*, a screening of storage volumes of dangerous goods was undertaken. The volumes stored and SEPP33 Threshold quantities are also documented in **Table 33**. Based on the screening test, a Preliminary Hazard Analysis is not considered to be required for this Development Application of the following reasons:

- with the exception of LPG, the quantity of dangerous goods stored on site does not exceed the amounts listed in the General Screen Threshold Quantities (Table 3 Applying SEPP33);
- the volume of LPG stored on the site will not increase and is consistent with the existing EPL for the site;
- the cumulative and peak vehicle movements do not exceed those listed in the Transportation Screening Thresholds (Table 2 Applying SEPP33);
- separation distances from the between the location of dangerous goods storage and residential development is greater than the distance of the consequences of a possible hazardous incident; and

- the technical and management safeguards available to mitigate hazards involving dangerous substances are considered to be sufficient to avoid significant risk to human health or life, property and the biophysical environment.

## 4.16 ANIMAL WELFARE

Baiada currently have in place a national Livestock Animal Welfare and Biosecurity Manual which contains a comprehensive biosecurity management program which will be applied to the site. A Copy of this Manual is included as **Appendix 19**. Baiada is committed to achieving high standards of bird welfare and the company understands that bird welfare and economic performance go hand-in-hand. As well as being in the bird's best interest, it makes sound economic sense to ensure that flocks are maintained in an environment in which they are safe, comfortable and free from injury or harm.

Baiada operate numerous facilities across the country where the highest level of animal care is demonstrated and maintained. The proposed plant will employ the latest technology for the collection of live birds, transportation and short term storage, unloading, stunning and slaughtering of poultry. All measures will be taken to best ensure these animals thermally comfortable, protected from injury and kept healthy. All measures will be taken to best ensure these animals are not subjected to avoidable stress, cruelty or harm.

Baiada has an approved Animal Welfare Policy (refer to **Appendix 20**), which states that Baiada will ensure that the treatment of all birds will be ethical and humanely treated throughout all stages of production. This will be achieved through providing animal husbandry, technical and veterinary advice is sought and implemented. Baiada will also use a scientific approach to welfare and comply with all legislation. They will seek to exceed these standards, where possible.

The conditions under which poultry are managed during their growing phase, transportation and slaughter are set down in several statutory and industry endorsed codes of practice designed to safeguard their health and welfare. In this regard, Baiada is committed to meet or exceed the standards of care detailed in the following Primary Industries Standing Committee documents:

- *Model Code of Practice for the Welfare of Animals - Land Transport of Poultry (2006)*; and
- *Model Code of Practice for the Welfare of Animals - Livestock at Slaughtering Establishments (2002)*.

## 4.17 BIOSECURITY

Baiada currently have in place a national Livestock Animal Welfare and Biosecurity Manual which contains a comprehensive biosecurity management program which will be applied to the site. A Copy of this manual is included as **Appendix 19**.

Bio-security will be managed in accordance with a Hazard Analysis and Critical Control Points (HACCP) Plan which will be developed for the site. The HACCP plan will identify hazards and risks that have the potential to compromise food safety and outlines the relevant risk management and mitigation procedures. The HACCP Plan will identify a range of specific food safety procedures, including the following critical actions in relation to bio-security:

- Live bird transport crates are thoroughly washed, sanitised, disinfected and dried before re-use;
- Road transport and live bird collection equipment is washed and disinfected at the completion of the collection cycle;
- Birds are grown then processed from the local growing region. Poultry is not usually transported to or from other growing regions, except in extenuating circumstances and with full control and management of Baiada's veterinary services and livestock management; and
- Staff members are restricted from keeping any avian species at their place of residence and must wear clean company provided uniform and personal protective equipment while on site.

While on site all staff are required to operate in accordance with a strict Personnel Hygiene Standard Operating Procedure (SOP).

### 4.17.1 Disease Outbreak Contingency Measures

As outlined in the Livestock Animal Welfare and Biosecurity Manual, in the unlikely event of a major disease outbreak in the Tamworth region, the Department of Primary Industry (DPI), EPA and Tamworth Regional Council will be contacted as

soon as the outbreak is suspected. In most instances, the DPI will assume control of the site and order appropriate procedures to be undertaken.

If disease is suspected, immediate measures will be implemented to lock down and isolate the infected farm site(s) and effect strict quarantine procedures to prevent the spread of the disease off the site.

If disease is confirmed, slaughter and disposal of birds will generally be undertaken in accordance with the instruction of the DPI. Typically, disposal of the bird carcasses and formites will be undertaken at the Oakburn Rendering Plant in preference to other options, such as on-farm burial, in-shed composting or disposal at an approved landfill site (local Tamworth landfill as agreed with Tamworth Regional Council).

## 4.18 NATIONAL AIRPORTS SAFETY FRAMEWORK

The National Airports Safeguarding Framework is a national land use planning framework that aims to:

- Improve community amenity by minimising aircraft noise-sensitive developments near airports; and
- Improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions through guidelines being adopted by jurisdictions on various safety-related issues.

An assessment has been undertaken in **Table 35** against the Framework in response to the request by CASA.

**Table 35: Assessment against the National Airports Safety Framework Guidelines**

FRAMEWORK SECTION	ASSESSMENT
<b>Guideline A – Measures for Managing Impacts of Aircraft Noise</b>	<ul style="list-style-type: none"> <li>• The proposed development involves the construction of an integrated poultry processing plant. As this is an industrial land use, the proposed development is not considered to be a sensitive land use which will be negatively impacted by noise associated with the operation of aircraft.</li> </ul>
<b>Guideline B – Managing the Risk of Building Generated Windshear and Turbulence at Airports</b>	<ul style="list-style-type: none"> <li>• The Obstacle Limitation Surface Mapping including in the <i>Tamworth Regional Local Environmental Plan 2014</i> show that land along the frontage of site is limited to 15m, while the balance of the site is restricted to 45m above ground level.</li> <li>• The proposed development has a maximum height of 26m within the 45m area and is limited to car parking and landscaping within the 15m area, no buildings which would create unsafe windshear or turbulence impacts are proposed.</li> <li>• The development complies with Section 7.6 of the <i>Tamworth Regional Local Environment Plan 2014</i>.</li> </ul>
<b>Guideline C – Managing the Risk of Wildlife Strikes in the Vicinity of Airports</b>	<ul style="list-style-type: none"> <li>• Potential bird attractors at the site include the processing and rendering plants, and the waste water treatment ponds.</li> <li>• The processing and rendering operations are largely internalised in accordance with food safety, bio-security and amenity considerations. As such, there are no product, by-products or wastes stored externally on the site in a manner that would attract birds and other wildlife.</li> <li>• The proposed Covered Anaerobic Lagoons (CALs) are entirely covered and as such do not attract waterfowl or other birds.</li> <li>• The Sequence Batch Reactors (SBRs) are activated a majority of the time and as such do not provided an attractive landing site for waterfowl or other birds.</li> <li>• The clear wells may accommodate standing water for periods of time and as such have been located in the northern end of the site, over 1.2km from the runway to minimise potential risks of bird</li> </ul>

FRAMEWORK SECTION	ASSESSMENT
	strike. While the clear wells are not expected to result in significant risks to aircraft operations, they can be covered with bird netting if requested by CASA.
<b>Guideline D – Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation</b>	<ul style="list-style-type: none"> <li>• Not Applicable – the development is not a wind turbine farm</li> </ul>
<b>Guideline E – Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports</b>	<ul style="list-style-type: none"> <li>• As the site is intended to operate up to 24 hours per day additional lighting will be required on site.</li> <li>• Lighting associated with the facility will be constructed in accordance with the limits of the Regulation 94 of the <i>Civil Aviation Regulations 1988</i> and can be conditioned accordingly</li> </ul>
<b>Guideline F – Managing the Risk of Intrusions into the Protected Airspace of Airports</b>	<ul style="list-style-type: none"> <li>• The Obstacle Limitation Surface Mapping including in the <i>Tamworth Regional Local Environment Plan 2014</i> show that land along the frontage of site is limited to 15m, while the balance of the site is restricted to 45m above ground level.</li> <li>• The proposed development has a maximum height of 26m within the 45m area and is limited to car parking and landscaping within the 15m area, no buildings which would create unsafe windshear or turbulence impacts are proposed.</li> <li>• The development complies with Section 7.6 of the <i>Tamworth Regional Local Environment Plan 2014</i>.</li> </ul>
<b>Guideline G – Protecting Aviation Facilities – Communication, Navigation and Surveillance</b>	<ul style="list-style-type: none"> <li>• As outlined above the propose development does not encroach into the OLS and complies with the requirements of Section 7.6 of the <i>Tamworth Regional Local Environment Plan 2014</i>.</li> </ul>
<b>Guideline H – Protecting Strategically Important Helicopter Landing Sites</b>	<ul style="list-style-type: none"> <li>• No Applicable – the development will not impact upon any helicopter landing site</li> </ul>

## 4.19 ENVIRONMENTAL MANAGEMENT

Baiada has implemented an Environmental Management System across approximately 30 company sites that are certified to AS/NZS/ISO 14001 Standard and is progressively bringing the remaining sites up to this standard. As per other processing plants, a detailed Environmental Management System for the Oakburn Processing Plant will be prepared which will be certified to AS/NZS/ISO 14001: 2004 Standard. A copy of the EMS for Baiada’s Hanwood Processing Plant in Griffith, NSW is attached as **Appendix 18** as an example of what will be prepared for Oakburn following approval, detailed design and operational planning.

Baiada has an extensive ISO14001 Certified Environmental Management System which guides all on-site actions on the site which and specifically addresses the following:

- Responsible operation of all aspects of the site;
- Management of Solid Wastes;
- Management of Liquid Wastes;
- Waste Water Environmental Management Plan;
- Prevention of Water Pollution;
- Use of Water and Energy;
- Prevention of Air Pollution;
- Management of Emergency Situations;
- Management of Other Environmental Issues;
- Management of Noxious Weeds.

The management actions undertaken will work in concert with the mitigation measures prescribed in this EIS to ensure that day to day operations are undertaken in an environmentally responsible and sustainable manner, risks are minimised and potential impacts are mitigated or appropriately managed.

## **4.20 QUALITY ASSURANCE**

All Baiada's current production and distribution facilities operate within an internal detailed Quality Assurance System. This system is applied to all relevant activities undertaken by Baiada including food processing, distribution, feed manufacturing, protein recovery, hatcheries and farming operations. These quality systems manage, maintain and control processes such as purchasing, training, product and production control and product traceability. There is also oversight from the New South Wales Food Authority, which is a government statutory authority, responsible for food safety and food labelling regulation.

Also, the Oakburn Processing Plant will be accredited to Safe Quality Food (SQF) 2000, a standard accepted by both domestic and international markets.

Baiada operate under HACCP (Hazard Analysis Critical Control Points) methodology and principles, a long standing system developed to be best ensure consistently safe product for human consumption. The HACCP system in operation at Baiada, and as would be applied to the Oakburn Plant, meets the certification standards for Codex Alimentarius (Alinorm 97/13A) which is an internationally recognised accreditation.

## 5 MANAGEMENT AND MITIGATION MEASURES

**Table 36** presents a summary of the impact management and mitigation measures proposed to be implemented in associated with the proposed development.

**Table 36: Management and Mitigation Measures**

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
<p><b>TRAFFIC</b></p>	<ul style="list-style-type: none"> <li>• Staff and processing plant traffic are to be directed to use the proposed driveway connecting to Workshop Lane.</li> <li>• Direct access to the Oxley Highway is to be maintained for visitors to the site and emergency access only.</li> <li>• 820 car parking spaces are to be provided on site with a minimum of 8 spaces be designated for people with a disability.</li> <li>• Car park design and line-marking is to be undertaken in accordance the Australian Standard 2890.1 (2004).</li> <li>• Due to the length of aisles, speed humps be provided in in accordance with AS2890.1 to provide positive speed control.</li> <li>• Detailed design of the car park to incorporate minor amendments to the kerb line near the northern end of the staff car park to ensure fire truck access is available through the car park if required.</li> <li>• The Internal T-intersection between the staff car park access road and the weighbridge access road be designed as a standard priority T-intersection to reflect the dominant traffic flow.</li> </ul>
<p><b>AIR QUALITY</b></p>	<ul style="list-style-type: none"> <li>• Filling of the SBR is to be programmed to take place outside of daylight hours where practical.</li> <li>• Prepare and implement an Odour Management Plan for the site to prevent or minimise the potential for odour generation through a hierarchy of controls, in the form of, but not limited to, engineered, administration and/or management practices.</li> <li>• Activated carbon filters are included in the indoor ventilation system could be considered.</li> <li>• Landscaping around the boundary of the outdoor play areas is to incorporated into the design to help mitigate odour impacts.</li> </ul>
<p><b>NOISE</b></p>	<p>Noise Mound/Barrier Adjacent to Live Bird Area</p> <ul style="list-style-type: none"> <li>• An acoustic mound or barrier 2400mm above FGL is to be erected along the west side of the Live Bird Module/Shelter areas.</li> </ul> <p>General Noise Control Recommendations</p> <ul style="list-style-type: none"> <li>• All access roads should be kept in good condition, i.e. no potholes, etc.</li> <li>• Trucks and other machines should not be left idling for extended periods unnecessarily. Machines found to produce excessive noise compared to industry best practice should be removed from the site or stood down until repairs or modifications can be made.</li> <li>• A regular maintenance schedule should be adopted for all mobile and fixed plant items. Items found producing high noise should be stood down until repairs are completed.</li> <li>• A noise monitoring program, during commissioning, or in the early life of the site is recommended. This program will verify our predictions and in the unlikely event that complaints may arise, enable noise control strategies to be</li> </ul>

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	<p>implemented, where required.</p> <p>Site Child Care Centre</p> <ul style="list-style-type: none"> <li>• An acoustic fence 1800mm above FGL is to be erected at the perimeter of the child care centre outdoor area.</li> <li>• Windows to the Cot Rooms must be upgraded to achieve an acoustic rating of Rw32. This can typically be achieved with the use of laminated glass and Q-Lon seals at sliders.</li> <li>• Consideration should be given to installing ceiling fans to supplement air conditioning.</li> </ul> <p>Noise Monitoring Program</p> <ul style="list-style-type: none"> <li>• Noise monitoring should be carried out at the commencement of each process/activity that has the potential to produce excessive noise.</li> </ul> <p>Acoustic Barriers/Screening</p> <ul style="list-style-type: none"> <li>• Place acoustic enclosures or screens directly adjacent to stationary noise sources such as compressors, generators, drill rigs, etc.</li> </ul> <p>Consultation/Complaints Handling Procedures</p> <ul style="list-style-type: none"> <li>• The construction contractor should analyse proposed noise control strategies in consultation with the Acoustic Consultant as part of project pre-planning.</li> </ul> <p>Equipment Selection</p> <ul style="list-style-type: none"> <li>• All combustion engine plant, such as generators, compressors and welders, should be carefully checked to ensure they produce minimal noise, with particular attention to residential grade exhaust silencers and shielding around motors, where necessary.</li> </ul> <p>Risk Assessment</p> <ul style="list-style-type: none"> <li>• A risk assessment should be undertaken for all noisy activities and at the change of each process.</li> </ul>
<p><b>ECOLOGICAL</b></p>	<p>Should any works need to be conducted within the Peel River Tributary, in order to minimise any impact to amphibians, works are to be:</p> <ul style="list-style-type: none"> <li>• Undertaken during the winter months when movement of amphibian species is not occurring; or</li> <li>• Undertaken during periods of no ephemeral pooling of water in the tributary; or</li> <li>• Undertaken after a pre-clearance inspection by a qualified ecologist determines no amphibian presence at that time.</li> </ul> <p><b>Preclearance Surveys:</b> In order to avoid impacts to fauna species during construction, pre-clearance surveys will be conducted in all areas that are required to be cleared.</p> <ul style="list-style-type: none"> <li>• Pre-clearing surveys will be undertaken ahead of clearing, to limit fauna injury and mortality and to identify habitat features to be relocated. Pre-clearance surveys will be conducted by suitably qualified ecologists and all fauna found during these surveys will be encouraged to move on or relocated by the ecologists in areas of similar habitat nearby that will not be impacted.</li> </ul> <p><b>Delineation of Clearing Areas:</b></p> <ul style="list-style-type: none"> <li>• Areas that require clearance will be flagged and clearly delineated by temporary fencing to ensure that no areas intended for conservation will be inadvertently cleared during the construction process.</li> </ul> <p><b>Weed Management:</b></p> <ul style="list-style-type: none"> <li>• Undertake, appropriate weed control activities in accordance with all state, regional and local weed management plans.</li> </ul>

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	<p><b>Pre-clearance Surveys (Structures):</b></p> <ul style="list-style-type: none"> <li>In order to mitigate or avoid impacts to fauna species, (In particular the Eastern Bentwing-bat) during demolition of structures, pre-clearance checks will be conducted of all human made structures proposed to be demolished prior to construction.</li> <li>Pre-clearance surveys will be conducted by suitably qualified ecologists and all fauna found during these surveys will be encouraged to move on or relocated by the ecologists in areas of similar habitat nearby that will not be impacted.</li> </ul> <p><b>Native vegetation:</b></p> <ul style="list-style-type: none"> <li>Provide an offset of a total of 20 ecosystem credits for PCT 599</li> </ul>
<p><b>CULTURAL HERITAGE</b></p>	<p><b>Aboriginal Objects Find Procedure:</b> If suspected Aboriginal material has been uncovered as a result of development activities within the Project Area:</p> <ul style="list-style-type: none"> <li>work in the surrounding area is to stop immediately;</li> <li>a temporary fence is to be erected around the site, with a buffer zone of at least 10 meters around the known edge of the site;</li> <li>an appropriately qualified archaeological consultant is to be engaged to identify the material; and</li> <li>If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)</i>.</li> </ul> <p><b>Aboriginal Human Remains:</b> In the unlikely event that Remains are found, all works should halt. Once the site is cordoned off the nearest police station should be contacted in conjunction with the Tamworth LALC and the OEH Regional Office. If no investigation is sought and the remains are of Aboriginal origin then the Aboriginal community and OEH should be consulted as to how the remains are to be dealt with. Work may resume once all parties are in agreement.</p> <p><b>Notifying the OEH:</b> If Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to be registered as Sites on the AHIMS, managed by the OEH.</p>
<p><b>STORMWATER</b></p>	<ul style="list-style-type: none"> <li>Provide all stormwater management treatment actions in accordance with the project Stormwater Management Plan prepared by MPN consulting engineers.</li> <li>During prior to commencement of construction, prepare and implement a detailed Erosion and Sediment Control Plan to ensure compliance with the <i>Protection of the Environment Operations Act 1997</i>.</li> </ul>
<p><b>WASTE</b></p>	<ul style="list-style-type: none"> <li>Prepare and implement a Site Based Waste Management Plan consistent with Baiada's Australian Packaging Covenant Action Plan.</li> </ul>
<p><b>CHEMICAL USE</b></p>	<ul style="list-style-type: none"> <li>Chemical handling and storage procedures will be undertaken in accordance with the Applicable Material Safety Data Sheets (MSDS) and all relevant Australian Standards.</li> </ul>
<p><b>CONSTRUCTION MANAGEMENT</b></p>	<p>The Construction Management Plan could address potential social impacts, including reducing stress and inconvenience to neighbouring businesses and residents, by</p> <ul style="list-style-type: none"> <li>Identifying construction vehicle traffic routes that minimise impacts to neighbours, as far as possible;</li> <li>Providing arrangements for parking of worker and construction vehicles on-site</li> <li>Storing all equipment on site;</li> <li>Identifying management practices to minimise and manage interruptions to traffic flows;</li> </ul>

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	<ul style="list-style-type: none"> <li>• Establishing practices to maintain traffic and pedestrian safety to local residents;</li> <li>• Minimising disruption proposed road closures, temporary traffic routes, loss of pedestrian or cyclist access or reversing manoeuvres;</li> <li>• Providing queueing space onsite for the standing of vehicles;</li> <li>• Providing clear signage to direct construction vehicles; and</li> <li>• Provide signage on site that provides a contact number for residents to direct enquiries and report incidents (e.g. theft or break and enter to the site while unattended), should they occur</li> </ul>
<p><b>ENVIRONMENTAL MANAGEMENT</b></p>	<ul style="list-style-type: none"> <li>• Prepare an implemented a detailed Environmental Management System for the Oakburn Processing Plant for certification in accordance with the AS/NZS/ISO 14001: 2015 Standard.</li> </ul>

## 6 APPROVALS AND LICENCES

This section addresses the approvals and licences that will be required as part of the Development Application.

### 6.1 ENVIRONMENT PROTECTION AUTHORITY

The EPA is identified as an Integrated Authority with respect to the proposed development as the proposal involves a Premise Based Activity identified in Section 43 (b) of the *Protection of Environmental Operations Act 1997*, namely *Schedule 1 Item 23 Livestock processing activities*. The applicant is required to seek a variation to the current Environmental Protection License (EPL) prior to an increase in rendering and commencement of production associated with this Development Application.

### 6.2 ROADS AND MARITIME SERVICES

In accordance with Section 104 of the *State Environmental Planning Policy (Infrastructure) 2007*, the Development Application must be referred to the RMS for comment as it involves development listed under Schedule 3 Traffic Generating Development.

### 6.3 OTHER APPROVALS

The following approvals and/or variations to existing licenses and approval are required prior to commencement of the use.

- Environmental Protection License Variation to cover the additional production and rendering volumes.
- Tamworth Regional Council approvals for works within Council road reserves, water and sewer works (s68 *Local Government Act 1991*).
- Construction Certificates and Occupation Certificates for all construction works.
- Obtain a NSW Food Authority License to cover changes to processing as required.
- Dangerous Goods Licences for proposed storage of dangerous goods.
- Tamworth Regional Council Trade Waste Agreement.

## 7 SUMMARY AND CONCLUSIONS

### 7.1 SITE SUITABILITY

In response to the projected demand for poultry products in nationally, Baiada foresee the need to increase the production capacity in the New South Wales region, and have identified the Tamworth Poultry Cluster as an ideal location for this. Without the benefit of the additional capacity, the proposed plant and associated infrastructure would bring, it is highly likely that there will be a significant shortfall in the availability of poultry products in Australia.

The poultry meat cluster within the Tamworth Region is the result of a number of crucial locational factors including the following:

- Access to large quantities of locally grown grain including wheat and canola (typically sourced from Tamworth, Moree, Narrabri, Walgett and Gunnedah);
- Proximity to key NSW markets (including Sydney) and South East QLD and direct access to the State road network;
- Ideal land types and topography for the construction of suitable shedding for poultry production;
- An ideal climate in terms of temperature and humidity for poultry production;
- Access to high quality water sources including bore water, dams, rivers and reticulated networks;
- Suitable sites for the location of poultry farms away from sensitive receptors and population centres; and
- Support from existing major investment in infrastructure covering all facets of the integrated business.

In order to expand operations in the region a new processing plant with additional production capacity is required.

Baiada obtained approval for construction of a new processing and rendering plant on the site in 1998. The rendering plant was completed in 2000 to meet market requirements for meals and oils, while the balance of the site was delayed following acquisition of a number of poultry businesses nationally which provided additional processing capacity, however the approval remains in force and effect.

The subject site is located approximately 7.5km north west of the Tamworth CBD, and north of the Glen Artney Lane Industrial Estate, within a growing livestock and food processing hub, which has been recognised by the New England North West Regional Plan as a Future Industrial Investigation Area.

The site been subject to multiple technical investigations which have a confirmed that there are no site based, biophysical, cultural or operational constraints which would limit physical development or operations proposed at the site. Further, technical assessments have also shown that the site is able to be adequately serviced by the necessary, supporting infrastructure including, water supply, waste water disposal, power and road networks.

With respect to potential amenity impacts, detailed investigations have been undertaken with respect to noise, odour, social and economic aspects with have shown the proposed development will operate within the relevant statutory criteria and will have positive economic impacts in terms of employment, capital expenditure and local spending on goods and services.

Accordingly the proposed site is considered to be an ideal location for the establishment of a poultry processing plant.

### 7.2 ALTERNATIVES TO THE PROPOSAL

Research undertaken by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) indicates that total chicken meat consumption in Australia has increased by an average of 5% per annum over the 10 years to 2022-23, representing 45% of the total meat consumption. This historical trend and projected increase in the consumption of chicken meat is project to continue to in Australia well beyond 2020.

In order to meet the predicted growth in demand for poultry meat products in Australia, significant expansion of the poultry industry is required. As Australia's largest producer of poultry products, Baiada has identified an opportunity and seeks to increase capacity to ensure supply will meet demand to avoid a shortfall. As such, maintaining current production levels (nationally) is not a viable option for Baiada (or the industry generally). If additional capacity can not be provided with the proposed plant in Tamworth, an alternate location would need to be expanded to cater for growth.

The alternatives to the proposed development include:

1. Maintain the existing operation at the Out Street Processing Plant and Oakburn Rendering Plant with no increase in processing capacity in the Tamworth region;
2. Construction and operation of the processing plant in accordance with the existing approval;
3. Construction of the processing plant in an alternate location within the Tamworth Region; or
4. Expanding operations in a different region or state.

These alternatives are considered in **Table 37** below.

**Table 37: Proposal Alternatives**

PROPOSAL ALTERNATIVE	DISCUSSION
<p><b>1. Maintain the existing operation at the Out Street Processing Plant and Oakburn Rendering Plant with no increase in capacity in the Tamworth region;</b></p>	<p>As demonstrated in this EIS, Tamworth and the New England Region provide a combination of critical factors which make it an ideal location for expansion of the current poultry cluster and a key focus area for Baiada’s existing and future operations. The processing and rendering plants are critical component of Baiada’s regional and national operations.</p> <p>In the event that production levels within Tamworth do not increase, Baiada would need to identify an alternate region of state for expansion of operations. This is not the preferred approach for Baiada as the Tamworth Region contains the best combination of factors which would contribute to the most efficient increase in production capacity.</p> <p>The consequence of not expanding would mean that region does not benefit from the significant increase in capital investment, employment and local expenditure as the entire cluster would need to increase threefold to service the ultimate production capacity proposed. This investment would take place in an alternate state.</p>
<p><b>2. Construction and Operation of the Oakburn Processing Plant in accordance with the existing Approval</b></p>	<p>As identified in this EIS, there is an existing approval (DA53/97) applicable to the site which would enable construction of a processing plant with the capacity to produce 1 million birds per week and rendering to create an average of 160T of finished produced per day. While construction of the plant could be undertaken, the capital investment would not be financially viable (in the order of \$120 Million), associated with the new processing plant compared to Out Street’s current processing volumes of 840,000 birds per week.</p> <p>Further, the approved processing plant was designed and based on the technology available 20 years ago. As such, construction of the processing plant as previously proposed would remove the opportunity to implement the best practice processing equipment and environmentally responsible designs proposed in this EIS.</p>
<p><b>3. Construction of the processing plant in an alternate location within the Tamworth Region; or</b></p>	<p>Construction of a new processing facility on an alternate site within Tamworth would require the identification and purchase of an alternate property as well as gaining all necessary approvals for development. An alternate site would not be co-located with the existing rendering plant which would decrease the efficiency of the operation and increase traffic movements on the local road network compares to the proposed operation.</p> <p>Further, it is considered very unlikely that an alternate site would be identified which had the same combination of factors which make Oakburn viable including:</p> <ul style="list-style-type: none"> <li>• Centrally located with respect to broiler farm locations;</li> <li>• Appropriate zoning within the applicable LEP and strategic support within New England North West Regional Plan;</li> <li>• No site based, biophysical, cultural or operational constraints;</li> </ul>

PROPOSAL ALTERNATIVE	DISCUSSION
	<ul style="list-style-type: none"> <li>• No operational or physical development constraints;</li> <li>• Adequate separation from sensitive receptors to avoid amenity impacts; and</li> <li>• Availability of all necessary, supporting infrastructure including, water supply, waste water disposal, power and road networks (including B-Double Routes).</li> </ul>
<p><b>4. Expanding operations in a different state.</b></p>	<p>In the event that production levels within Tamworth do not increase, Baiada would need to identify an alternate region of state for expansion of operations. This is not the preferred approach for Baiada as the Tamworth Region contains the best combination of factors which would contribute to the most efficient increase in production capacity.</p> <p>The most likely candidate for growth of Baiada's operations outside of Tamworth would be within South Australia which may have the capacity to accommodate additional livestock production and processing, but would require substantial capital investment beyond the construction of a processing plant similar to that in this proposal.</p> <p>Again the consequence of not expanding would mean that both the Tamworth region and State will not benefit from the significant increase in capital investment, employment and local expenditure associated with expansion of the entire poultry cluster.</p>

As demonstrated in Table 37 above, the alternatives to proposed development are financially unviable, unlikely to succeed or do not represent an efficient approach to expansion of poultry production in Australia in order to meet the forecast growth in demand. Further, as demonstrated within this EIS, the proposed development can be undertaken in a manner consistent with all applicable environmental and planning safe-guards and standards and as such, the project as proposed is clearly the best option.

## 7.3 JUSTIFICATION

In response to an increase in demand for their poultry products in Australia, Baiada is now seeking Development Consent for a new, integrated poultry processing plant at Oakburn. In accordance with Schedule 2, s7 1(f) of the *Environmental Planning and Assessment Regulation 2000*, justification of carrying out the proposed development is provided below.

### 7.3.1 Biophysical Considerations

Based on the assessments undertaken by the relevant technical specialists, it has been demonstrated that the proposed development can be undertaken in a manner consistent with the statutory obligations in relation to:

- Stormwater Management and Treatment;
- Ecological Impacts;
- Contamination;
- Acoustic Impact;
- Odour Impact;
- Cultural heritage Impact;
- Chemical use and Storage;
- Waste Management; and
- Water Use, Re-Use and Wastewater Treatment.

As such, it is considered that there are no bio-physical considerations which would preclude approval of the proposed development.

### 7.3.2 Economic Considerations

Total staff at both locations is currently 494 with no opportunity to increase processing capacity due to space and planning constraints. When fully operational the proposed Oakburn Processing Plant will employ 1,176 workers which represents a net increase from the development of 682 jobs over the base case.

Beyond the 682 direct jobs, HillPDA estimates that the development will deliver an additional 2,039 jobs comprised of 1,323 jobs associated with the inputs to production and a further 716 jobs providing the goods and services demanded from the additional workers generated. In total, every new job in poultry processing results in a further 3 jobs in support.

A total construction cost of around \$203m (in current 2019 dollars), will generate a further \$265m of activity in production induced effects and \$190m in consumption induced effects. Total economic activity generated by the construction of processing plant would be \$658m. HillPDA has also estimated that construction of the processing plant has the potential to generate 438 job years during the period of construction.

With over 546,000 tonnes per annum of grain required, a key component in the development of the Tamworth region as a poultry cluster is the availability of local grain from farms in the region to produce poultry feed blends while minimising transport costs. As per current operations, grain for the expanded operation will be primarily sourced from the surrounding areas including Tamworth, Moree, Narrabri, Walgett and the Gunnedah Regions.

To support the increase in processing of poultry within the region, significant increases in the supply of birds will be required. It is estimated that over 300 poultry sheds will be required to service the ultimate capacity of the Oakburn processing plant.

Accordingly, the project is considered to have a significant, positive economic impact.

### 7.3.3 Social Considerations

As noted above, the proposed development will increase investment, expenditure and employment opportunities within the Tamworth area which will have a positive social benefit. As shown in the various technical assessments undertaken, the processing plant can also be constructed and operated in a manner with minimal amenity or infrastructure impact to surrounding businesses or residents. As such, the project is considered to have a net positive social impact.

### 7.3.4 Principles of Ecologically Sustainable Development

A discussion of the proposal's compliance with the principles of Ecologically Sustainable Development is also provided in **Table 38**.

**Table 38: Principles of Ecological Sustainability**

PRINCIPLE	APPLICANTS RESPONSE
<p><i>(a) the precautionary principle, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:</i></p> <p><i>(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and</i></p> <p><i>(ii) an assessment of the risk-weighted consequences of various options,</i></p>	<p><b>Complies.</b> There are no threats of serious or irreversible environmental damage that have been identified as part of the detailed assessments undertaken with respect to the project. A number of mitigation, management and monitoring measures are also applied to the existing and proposed operation to ensure that it continues to perform in accordance with all relevant environmental standards.</p>
<p><i>(b) inter-generational equity, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,</i></p>	<p><b>Complies.</b> The proposed development will not result in the impacts that will reduce the health, diversity and productivity of the environment or reduce the potential benefits of future generations. Conversely, the proposed development will maximise the economic and operational efficiency of the site and support the broader growth and economic development associated with poultry production in the Tamworth region.</p>

PRINCIPLE	APPLICANTS RESPONSE
<p><i>(c) conservation of biological diversity and ecological integrity, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,</i></p>	<p><b>Complies.</b> The Biodiversity Development Assessment Report confirms that the development will have a minimal impact upon significant flora and fauna in the local area.</p> <p>Approximately, 0.83 ha of the 1.41 ha of Box Gum Woodland TEC and approximately 0.51 ha of the 1.45 ha of planted natives will be removed under the proposed development. The Box Gum Woodland TEC occurs within the development site as a number of scattered and small isolated patches and the proposed removal of a portion of the vegetation is unlikely to have any impact on the long-term survival of the TEC and is not considered by Cumberland Ecology to be significant. Regardless, the removal of the native vegetation within the subject land requires a total of 20 ecosystem credits for PCT 599.</p>
<p><i>(d) improved valuation, pricing and incentive mechanisms, namely, that environmental factors should be included in the valuation of assets and services, such as:</i></p> <p><i>(i) polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,</i></p> <p><i>(ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,</i></p> <p><i>(iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.</i></p>	<p><b>Complies.</b> Baiada has been a signatory to the National Packaging Covenant since September 2001 and the strengthened Australian Packaging Covenant in 2010 and is committed to initiatives that will reduce impacts on the environment and lead to sustainability through responsible corporate activities.</p> <p>Baiada has prepared an Australian Packaging Covenant Action Plan which outlines the steps that the company will undertake to meet the expectations of the Covenant. All operations at the Oakburn Processing Plant will be undertaken in accordance with this covenant.</p> <p>Wastes generated as part of the poultry processing operations consist of offal, blood and feathers. All of these “wastes” are valuable by-products and are pumped to the on-site rendering plant for the production of a range of rendered protein products.</p> <p>Based on current estimates and processing technology, at full operation, the Oakburn Processing Plant will require up to 8 million litres of potable water per day. In order to minimise consumption of potable supply, Baiada are proposing to implement a best practice Advanced Water Treatment Plant which is designed to treat up to 8 million litres of water per day and recover up to 6 million litres (75% of consumption) for re-use.</p>

In accordance with, Schedule 2, s7 1(f) of the *Environmental Planning and Assessment Regulation 2000*, the proposed development complies with the relevant statutory planning instruments and will not result in significant adverse environmental impacts on the receiving environment. The proposal capitalises on the existing investment in the site and supports the ongoing expansion of the broader poultry industry and economic development in the Tamworth Region. Where potential impacts have been identified, suitable mitigation and management measures have been implemented. Accordingly, approval of the proposed development is justified.

## 7.4 CONCLUSION

This Environmental Impact Statement has been prepared in accordance with the requirements of the relevant State and Local statutory planning requirements and assesses all relevant impacts of the proposed development. Where impacts have been identified, appropriate management and mitigation measures have been prescribed. Provided that the management and mitigation measures described in this EIS are adhered to, the proposed development is not predicted to result in unacceptable impacts on the receiving environment or local community. Accordingly, the development is recommended for Approval, subject to relevant and reasonable conditions.



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Director – Planning

PSA Consulting (Australia) Pty Ltd

2 July 2019

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**APPENDIX 14: ABORIGINAL CULTURAL HERITAGE  
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## APPENDIX 15: ACOUSTIC IMPACT REPORT

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# APPENDIX 17: WASTE WATER TREATMENT PROJECT PROPOSAL REPORT

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## **APPENDIX 18: EXAMPLE ENVIRONMENTAL MANAGEMENT PLAN**

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## **APPENDIX 19: NATIONAL ANIMAL WELFARE AND BIOSECURITY MANUAL**

**AP19**

## APPENDIX 20: ANIMAL WELFARE POLICY

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