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Environmental Assessment Report

s75W Modification

Replacement 'Oakburn' Rendering Plant

29 November 2013
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Replacement Rendering Plant
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Revision History

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
2	29 November 2013	FINAL	Sarah Stirling	David Ireland

General Disclaimer

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1 INTRODUCTION

PSA Consulting has been engaged by Baiada (Tamworth) Pty Ltd to prepare this Environmental Assessment Report seeking Modification of Development Approval (DA53/97) in accordance with S75W of the Repealed Part 3A of *Environmental Planning and Assessment Act 1979* under the transitional arrangements (Section 6A).

In 1998 Development Consent was granted by the Department of Urban Affairs and Planning for the staged development of an integrated poultry processing complex (DA53/97). The following stages were approved as part of the approved Oakburn Processing Complex:

- **Stage 1 Protein Recovery Plant (Constructed)**
    - The rendering plant was the only component of the approved complex that has been constructed to date and was in operating in accordance with the Development Consent prior to the fire.
- **Stages 2 - 4 Integrated Poultry Processing Plant (Un-constructed)**

It is important to note that this modification relates to the solely to the replacement rendering plant (Stage 1) and does not seek to alter the remaining Stages 2 – 4. Stages 2 – 4 remain subject to the Approved EIS and existing condition or approval.

Until recently, Baiada operated the Stage 1 rendering plant on the subject site which was dedicated to processing poultry industry by-products including feathers, blood, offal, heads, feet, fat, bone and poultry mortalities associated with the company's operations in the Tamworth region. The products produced by the facility included poultry meal, tallow and various types of protein meal.

On the 27th September 2013, the existing rendering plant was completely destroyed by fire. As a result the facility is no longer operational or salvageable. This Modification Application seeks approval for the urgent development of a replacement facility.

Since the approval of the original Rendering Plant (in 1997), there have been significant changes in both the rendering industry and the market for rendered product. Due to the advent of Bovine Spongiform Encephalopathy (BSE) in Europe, there has been additional emphasis placed on food safety issues, even for animal feed. Poultry products being of non-ruminant origin have gained new markets in high quality applications such as pet food and aquaculture feed while there has been a concurrent move away production of poultry feed.

The changes in the industry have placed the following demands on rendered products:

- The quality of products is required to be very high to meet customer demands and must be made from fresh raw materials that have been processed quickly to prevent degradation.
- Best available technology is required to control the processing of raw material to meet customer specifications.
- Segregation of raw materials within separate categories is now required to meet customer specifications. For example, poultry mortalities have to be processed separately from fresh poultry offal destined to make rendered products for pet food.

To meet these industry demands, the proposed replacement Rendering Plant will be designed using new technology and the latest operational specifications. In this regard the replacement plant will house two separate processing zones. One zone will contain rendering lines that will process fresh material and produce high quality product, while the second zone will contain meat rendering lines that will process mortalities and produce a lower quality product.

The loss of the Rendering Plant on site has had significant flow on impacts on Baiada's Tamworth operations (currently processing up to 90,000 birds/day), with fresh offal currently having to be transported out of the region for processing at a significant cost. Accordingly, Baiada's intent is to redevelop the site as soon as possible to ensure that the flow on impacts and costs are minimised.

It is important to note that the replacement facility will not change the amount of material processed or produced on site compared to the current operation. However some change to the location, layout and operation of the rendering plant will occur to ensure compliance with contemporary standards and customer demands. There will also be no alteration to the number of truck movements entering or exiting the site compared to what was the current operation.

The proposed design will facilitate more efficient rendering operations on the site to those that were part of the damaged Oakburn Rendering Plant and will secure Baiada's ongoing operations and long term investment in the greater Tamworth Region.

This Modification Application provides details of the current conditions on the site and its surrounds in Section 2 and describes the proposed modifications in Section 3. Section 4 undertakes a planning assessment of the potential changes in environmental effects of the proposed modification in accordance with the Environmental Planning and Assessment Act 1979 (EP&A Act). Conclusions and recommendations are provided in Section 5.

1.1 Site Details

Address	Oxley Highway, Tamworth, NSW
Property Description	Lot 100 on DP1097471
Registered Owner	Baiada Poultry (Tamworth) Pty Limited
Applicant	Baiada Poultry (Tamworth) Pty Limited
Local Authority	Tamworth Regional Council
TLEP Zoning	RU1 – Primary Production *Tamworth Regional Local Environmental Plan 2010*
Total Site Area	Approximately 57.6 Ha
Existing Approved Use	Integrated Poultry Processing Plant including: Protein Recovery Facility (Rendering Plant)
Proposed Modification	Replacement of fire damaged rendering plant

1.2 The Applicant

The proponent of this application is Baiada (Tamworth) Pty Limited (Baiada). Baiada is a privately owned Australian company which provides premium quality poultry products throughout Australia. Baiada's operations include Broiler & 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) and 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 Queensland, South Australia, New South Wales (including Tamworth) Victoria, and Western Australia. Baiada have a current employee base of approximately 6,000 people.

Baiada's Tamworth district operations are vertically integrated and include the following:

- Grandparent and Parent Breeder Farms;
- Broiler Farms;
- Chicken Hatcheries;
- Feedmill;
- Livestock Administration Office;
- Contract Growers;
- Processing Plant; and
- The Oakburn Protein Recovery Plant.

2 SITE AND SURROUNDS

2.1 Site Location

The subject site is known as "Oakburn" and is identified as Lot 100 on DP1097471, parish of Murroon and County of Parry. The site has an area of approximately 57.6Ha and is located to the north of the Tamworth Airport, and approximately 7.5km North West of the Tamworth Central Business District. The site location is shown in Figure 1.

Figure 1: Site Aerial (SixMaps, 2013)

2.2 Site Surrounds

The subject site is located adjacent to an existing industrial estate located to the south, and within a livestock and food processing hub. Surrounding land use activities include:

- A beef processing facility (abattoir) operated by *Cargill Australia Limited*, located on the eastern side of Phoenix Street over 1300m south east of the subject site;
- A lamb processing facility (abattoir) operated by *Peel Valley Exporters*, located on the western side of Phoenix Street over 1100m south east of the subject site;
- Oakburn Park Raceway (motor sports complex) located on the corner of the Oxley Highway and Bowlers Lane over 800m from the rendering plant;
- Bellata Gold Pasta flour mill located on Bowlers Lane over 1100m north of the rendering plant; and
- Baiada's Bowlers Lane poultry broiler farms, located on the northern side of Bowlers Lane.

The nearest residence is located approximately 1km to the north of the site, along Bowler's Lane. Figure 2 illustrates the subject site in relation to surrounding development.

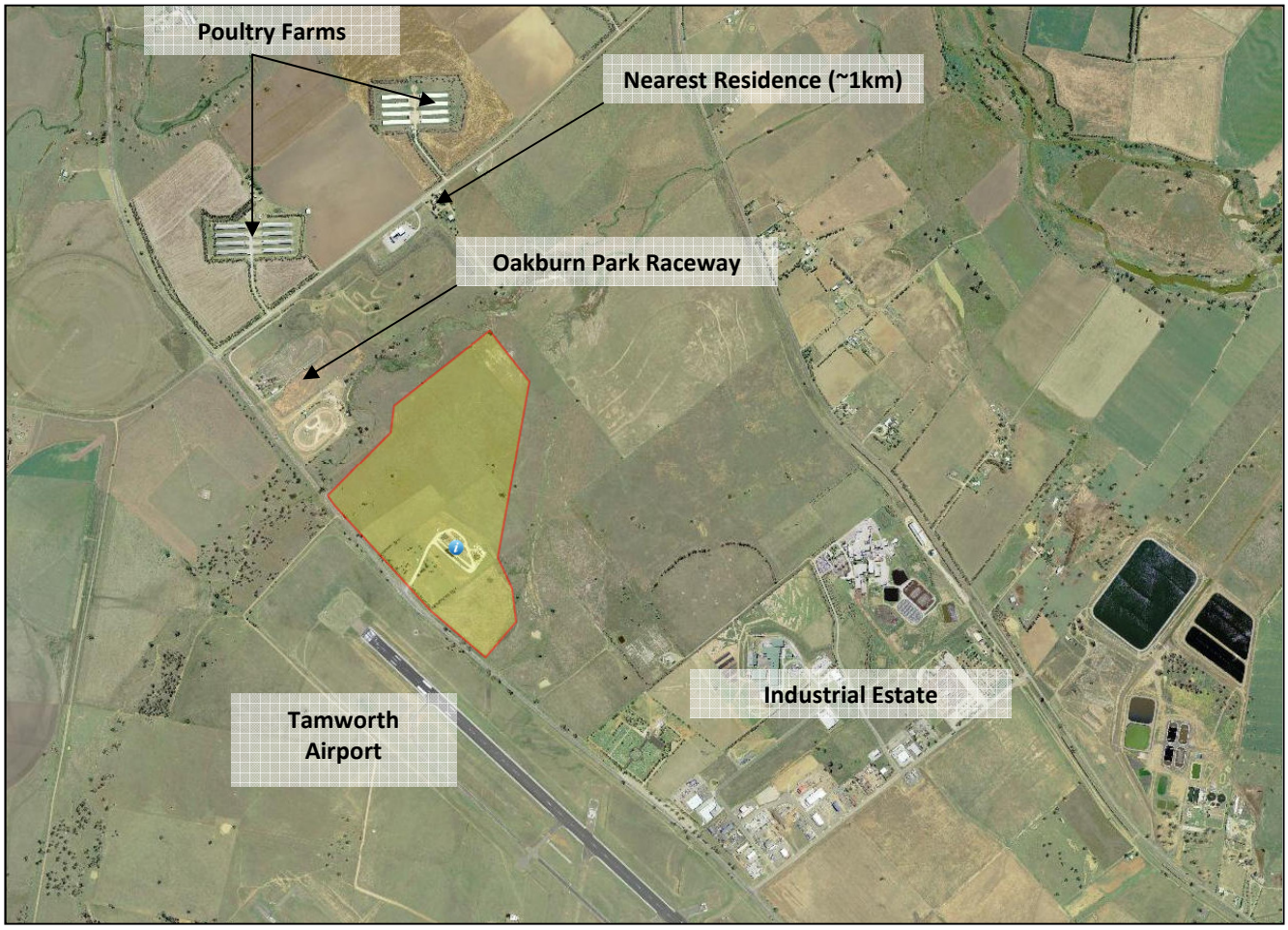

Figure 2: Site Surrounds (SixMaps, 2013)

2.3 Site History

The Oakburn Protein Recovery (Rendering Plant) activities on the site were originally approved in February 1998 by the Department of Urban Affairs and Planning (now Department of Planning) as Stage 1 of the Integrated Poultry Processing Plan Development Consent (DA53/97). Since the original approval, a number of modifications to the original Development Approval were approved in 1999 and again in 2009.

On the 27th September 2013, the existing rendering plant was completely destroyed by fire and is no longer operational or salvageable (see Figures 3 and 4).

The remaining damaged buildings and structures on site are currently being demolished. It is important to note that the waste water treatment plant was not damaged and remains available to treat waste water generated by the new replacement rendering plant.

The complete damage of the Rendering Plant on site has had significant flow on impacts on Baiada's Tamworth operations, with fresh offal currently being transported out of the region for processing at alternate rendering plants at a significant cost and at a detriment to the quality of the product due to longer transportation times prior to processing. Accordingly, Baiada's needs to construct the replacement plant as soon as possible to ensure that the flow on impacts and costs are minimised.

Figure 3: View of Damaged Rendering Plant from West

Figure 4: View of Damaged Rendering Plant from North

2.4 Existing Development Consent

As outlined above, in 1998 Development Consent was granted by the Department of Urban Affairs and Planning for the staged development of an integrated poultry processing complex (DA53/97). The following stages were approved as part of the approved Oakburn Processing Complex:

- **Stage 1 Protein Recovery Plant (Constructed)**
    - The rendering plant was the only component of the approved complex that has been constructed to date and was in operating in accordance with the Development Consent prior to the fire.
- **Stages 2 - 4 Processing Plant:** The following processing operations were approved as part of a large integrated processing building located between the rendering plant and the Oxley Highway:
    - **Stage 2 processed products plant:** Used to process chicken meat that has been fleshed off the carcass into various items for the fast and convenience food markets. The type of products produced in this plant will include chicken nuggets, marinated chicken portions, kebabs, etc.
    - **Stage 3 deboning plant:** Used to disassemble chicken carcasses into the pieces required for the various value adding needs. The type of products produced in this plant will include discrete chicken portions such as wings, fillets and drumsticks, as well as meats to be processed through the Stage 2 Further Processed Products Plant.
    - **Stage 4 processing plant:** A state-of-the-art purpose built facility designed specifically to process poultry meat. It will be largely automated, using highly mechanised operations.

It is important to note that this modification relates to the solely to the replacement rendering plant (Stage 1) and does not seek to alter the remaining Stages 2 – 4. Stages 2 – 4 remain subject to the Approved EIS and existing condition or approval.

3 PROPOSED MODIFICATION

3.1 Overview

Modification of the approved development is requested from Department of Planning (The Consent Authority) to facilitate the replacement of the destroyed rendering plant to enable operations to be re-established as soon as possible.

The proposed modification includes the following aspects:

- Relocation of the facility approximately 200m north to an unconstrained section of the site;
- Establishment of new internal access road, branching off the existing one, to enable vehicular access to the replacement facility; and
- Construction of a replacement facility with the same processing capacity (a maximum of 120 tonnes of rendered product a week) as the existing approved facility, but with the following differences:
    - The provision of two separate processing zones for different by-products; and
    - Ancillary structures and operations including; a tank and evaporation area for the offal line, boiler house, biofilter, administration and amenities block, weighbridge and two material load out bays;
    - New stormwater detention basin to ensure compliance with contemporary standards; and
    - Connection of the replacement facility to the existing waste water treatment plant as approved by Tamworth Regional Council.

3.2 Transitional Arrangements

The Oakburn Rendering Plant was originally approved by the Department of Urban Affairs and Planning in 1998 under Part 3A 'Major Infrastructure and other projects' of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Since the repeal of Part 3A from the EP&A Act, any Modifications to Part 3A project approvals are subject to the Transitional Arrangements. Accordingly, the Development Application seeks a modification under Section 75W of the repealed Part 3A as granted under Schedule 6A (3C) of the EP&A Act.

Section 75W states:

> *"(2) The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required of the project as modified will be consistent with the existing approval under this part.*
>
> *(3) The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.*
>
> *(4) The Minister may notify the approval (with or without conditions) or disapprove of the modification.*
>
> *(7) This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan".*

The proposed modifications are considered to result in substantially the same development as justified in the following points:

- The replacement plant will not increase production rates or throughput;
- The existing Waste Water Treatment Plant was not damaged and will be used for the replacement plant;
- The replacement plant will have a higher level of odour capture (point source collection) compared to the current plant and is located further away from a number of sensitive receptors resulting in lower expected odour impacts compared to current facility;
- The result of the odour dispersion modelling for the proposed replacement rendering plant and bio-filter operations demonstrates compliance with the 5.2ou and 7ou criteria at all identified surrounding sensitive receptors, including the nearest one 'Abbeylands' a rural residence receptor located approximately 1.2km to the north. The modelling

demonstrates that both the 5.2ou and 7ou odour footprints for both the replacement rendering plant and the related bio-filter are wholly contained within the Applicant's property.

- Stormwater management on the site will comply with contemporary standards (Stormwater Management Plan has been prepared by J. Wyndham Prince and is attached as Appendix 2);
- It is not anticipated that any adverse noise emissions or amenity impacts on the immediately surrounding sensitive receptors are expected, and the replacement plant will comply with the limits prescribed under the Existing Environmental Protection Licence and Conditions of Approval;
- There will be no change in staff numbers (11), traffic generation, or hours of operation on the site; and
- The modification relates to the solely to the replacement rendering plant (Stage 1) and does not seek to alter the remaining Stages 2 – 4. Stages 2 – 4 remain subject to the Approved EIS and existing condition or approval.

Preliminary discussions with the Department of Planning have identified the compliance of the proposed replacement of the Oakburn Rendering Plant with the criteria for a Section 75W Modification Application under Schedule 6A – Transitional Arrangements of the *Environmental Planning and Assessment Act 1979*.

3.3 Description of Replacement Facility

The replacement is located on the existing site, approximately 200m to the north-west of the damaged rendering plant on land that is unencumbered by previous earthworks and infrastructure installation. The location of the replacement rendering plant in comparison to the existing location is shown in Figure 5 below.

Detailed development plans of the proposed redevelopment are attached as *Appendix 1*.

Figure 5: Proposed location of redeveloped rendering plant

The design of the replacement rendering plant reflects current best practice. The replacement rendering plant will have a Gross Floor Area (GFA) of 6,496m^2 and a maximum height of approximately 16.5m above ground level. The building will be constructed out of precast concrete wall panels and metal roof sheeting with some variation to create visual interest.

The new rendering line will utilise similar boiler, services, odour capture and treatment systems and processes of the approved rendering plant, but will incorporate more efficient best practice processes and operations where applicable to reduce the potential environmental impacts of the facility, compared to the approved facility, especially in relation to odour and noise.

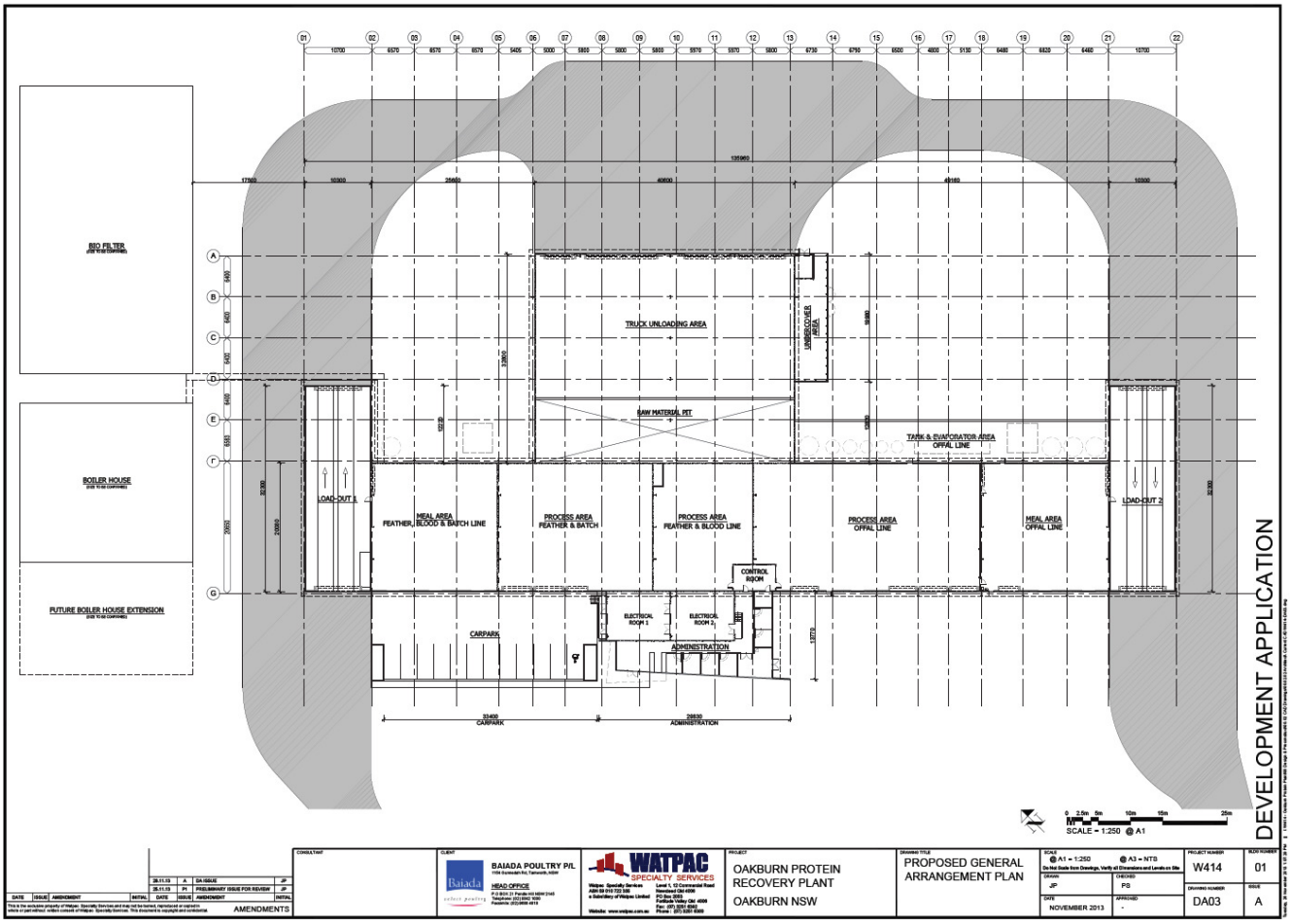

Figure 6: Proposed layout of rendering plant redevelopment

The replacement plant will be segregated into three distinct processing areas and ancillary related operations as identified below.

Raw Material Area (1,332m^2): The raw material area is where the incoming raw material is stored prior to processing. This will include an enclosed storage bin with surge capacity to store raw material if a rendering line is temporarily out of service. Raw material from the poultry processing operations will be conveyed by enclosed pipe direct to the proposed rendering lines and will be processed promptly in accordance with customer requirements and current standards.

Process and Meal Milling Area (2,308m^2): The processing area includes the cooking / heat treatment process, the phase separation process and the poultry oil (tallow) refining process. The meal milling area is where the poultry meal is ground down to the size specification required.

Poultry Meal Storage Area and Load Out (2 x 333m^2): The Poultry meal storage area is where meal is stored prior to shipping and load out. Meal bins will be located in this area adjacent to truck loading areas to enable effective loading of processed meal product, onto trucks, ready to be dispatched off site.

Tallow Storage Tank and Evaporation Area (324m^2): Storage of produced tallow in tanks adjacent to the offal line prior to shipping.

Boiler House: The boiler house will house a boiler and back up boiler that use natural gas to produce the high pressured steam required for the rendering process. The boiler house will be located in a standalone building to reduce the amount of high heat and fire hazard areas within the rendering plant.

Biofilter: The air extracted from the rendering process area will be pumped through to the biofilter which will filtrate and purify using natural microorganisms to remove any bacteria and fungi particles in the air and to reduce odour levels.

Waste Water Treatment Plant (Existing): The existing waste water treatment plant on site was not damaged in the fire event on 27th September 2013 and is proposed to be utilised to treat the resultant waste water from the replacement rendering plant.

Electrical Rooms 1 & 2: Two electrical rooms will be located adjacent to the processing areas of the replacement rendering facility, and will house the electrical plant required for the rendering processes.

Administration: Eight rooms will be provided in the proposed administration area that will provide office and meeting room space for staff associated with the rendering plant operations. While the existing office was not destroyed, the distance to the new plant means that it can no longer be used by processing staff. The existing office will be utilised by staff operating the waste water treatment plant and those associated with general property maintenance.

3.4 Traffic, Access and Parking

To allow for vehicle access to the replacement rendering plant, a new access road and staff car parking area is proposed, branching off the existing loop road. The access road will provide a one way loop road around the replacement facility, providing appropriate access to all required aspects of the facility for all required vehicle types.

A new staff car park providing 12 parking spaces (including 1 disabled car parking space) is proposed to be constructed adjacent to the administration area of the replacement facility. This parking area will provide ample space for the 11 processing staff working at the rendering plant over 2 shifts.

3.5 Flooding and Stormwater Management

The replacement rendering plant is located outside of the flood management area (shown as blue in Figure 7) determined by Tamworth Regional Council. Freeboard of 3.63 m provided is greater than the required 0.5 m to the finished floor level of the development.

Figure 7: Flood Management Area and ANEF Contours (Tamworth Regional Council 2013)

A Stormwater Management Plan (SWMP) for the replacement facility has been prepared by J. Wyndham Prince in accordance with Tamworth regional Council's Development Control Plan and is attached as *Appendix 2*. The SWMP details the investigations undertaken and presents the results of the stormwater detention and water quality design to support the proposed replacement rendering plant.

To comply with Council's requirements, a new treatment train is proposed which approach that includes a swale and bio-retention rain garden as treatment measures. The structural elements include:

- Two gross pollutant traps;
- One (1) grassed swale 115 metres long;
- One (1) grassed swale 60 metres long; and
- Detention basin with a total detention storage volume 420m3.

Provision of the proposed detention basin will ensure that peak post development discharges are restricted to less than the pre-development levels. The proposed Stormwater Management Strategy for the developed site provides a basis for the detailed design and development of the construction drawings to ensure that the environmental, urban amenity, engineering and economic objectives for stormwater management and site discharge are achieved.

3.6 Waste Water Treatment

The existing waste water treatment plant (WWTP) was not damaged by the fire, and is proposed to be used to treat the resultant waste water from the replacement rendering plant.

Hydroflux Industrial Pty Ltd waste water engineers have reviewed the existing treatment plant, the proposed rendering lines and have confirmed that *"Given the relatively new age of the wastewater treatment plant (3 ½ years), the design life of >20years and the predicted flow and loads being simular we have no hesitation in confirming that the wastewater treatment plant is sufficient to appropriately treat the wastewater generated by the new rendering plant."* A copy of this correspondence is provided as *Appendix 3*.

4 LIKELY IMPACTS OF DEVELOPMENT

This section provides an environmental assessment of the proposal using the relevant heads of consideration under Section 79c(1) (b) – (e) of the EP&A Act.

4.1 Odour Impact Assessment

The Odour Unit Pty Limited (TOU) was engaged by the Applicant to undertake a Level 3 Odour Impact Assessment in relation to the replacement rendering plant (see *Appendix 4*). The aim of the Assessment was to determine the likely odour impacts generated by the proposed replacement facility.

The EPA guidelines for odorous impacts of gaseous process emissions are not designed to satisfy a 'zero odour impact criteria', but rather to minimise the nuisance effect to acceptable levels of these emissions to a large range of odour sensitive receptors within the local community.

To assess the impact, TOU used AUSPLUME Version 6 odour dispersion model. AUSPLUME is the approved dispersion model recommended by the OEH and is used to project downwind ground level concentrations of air contaminants by taking into consideration various factors including:

- Odour emissions data - odour emission rate and source dimensions;
- Site specific meteorology;
- Geophysical impact (topography); and
- Building wake effects.

For the study, the air contaminant was odour, and ground level concentrations in odour units (ou) were projected.

The Odour Impact Assessment for this project was carried out in accordance with the methods prescribed by the NSW EPA. Based on the NSW EPA classification of population densities, the Odour Performance Criteria (OPC) adopted for this dispersion modelling and odour impact assessment study was **5.2ou** for the residential dwellings along Wallamore Road, (an estimated 24 residents), and **7ou** (ground level concentration) elsewhere within the modelled domain.

As a result of the replacement of the destroyed rendering plant with a new modern design incorporating improved point source odour capture, the Odour Impact Assessment, has determined that the net contribution to regional background odour should at the very least be completely offset. Therefore, the cumulative impact with background odour from similar nearby industries has not been considered in this assessment.

As outlined in the attached Odour Impact Assessment, TOU have experienced through many odour sampling, testing and downwind surveys that certain classifications of sources had discrete and different odour character emissions. This effect has been repeatedly experienced at rendering plants by TOU assessors during downwind surveys. As a result it was concluded that the biofilter and rendering plant odour characters do not combine in the atmosphere, but remaining as discrete odours, such that minimal cumulative or additive odour effects occur. For this reason the odour impact assessment treats the biofilter and rendering plant as separate, non-cumulative impacts.

The result of the odour dispersion modelling for the proposed replacement rendering plant and bio-filter operations (Figure 8 & Figure 9) demonstrates compliance with the 5.2ou and 7ou criteria at all identified surrounding sensitive receptors, including the nearest one 'Abbeylands' a rural residence receptor located approximately 1.2km to the north. The modelling demonstrates that both the 5.2ou and 7ou odour footprints for both the replacement rendering plant and the related bio-filter are wholly contained within the Applicant's property.

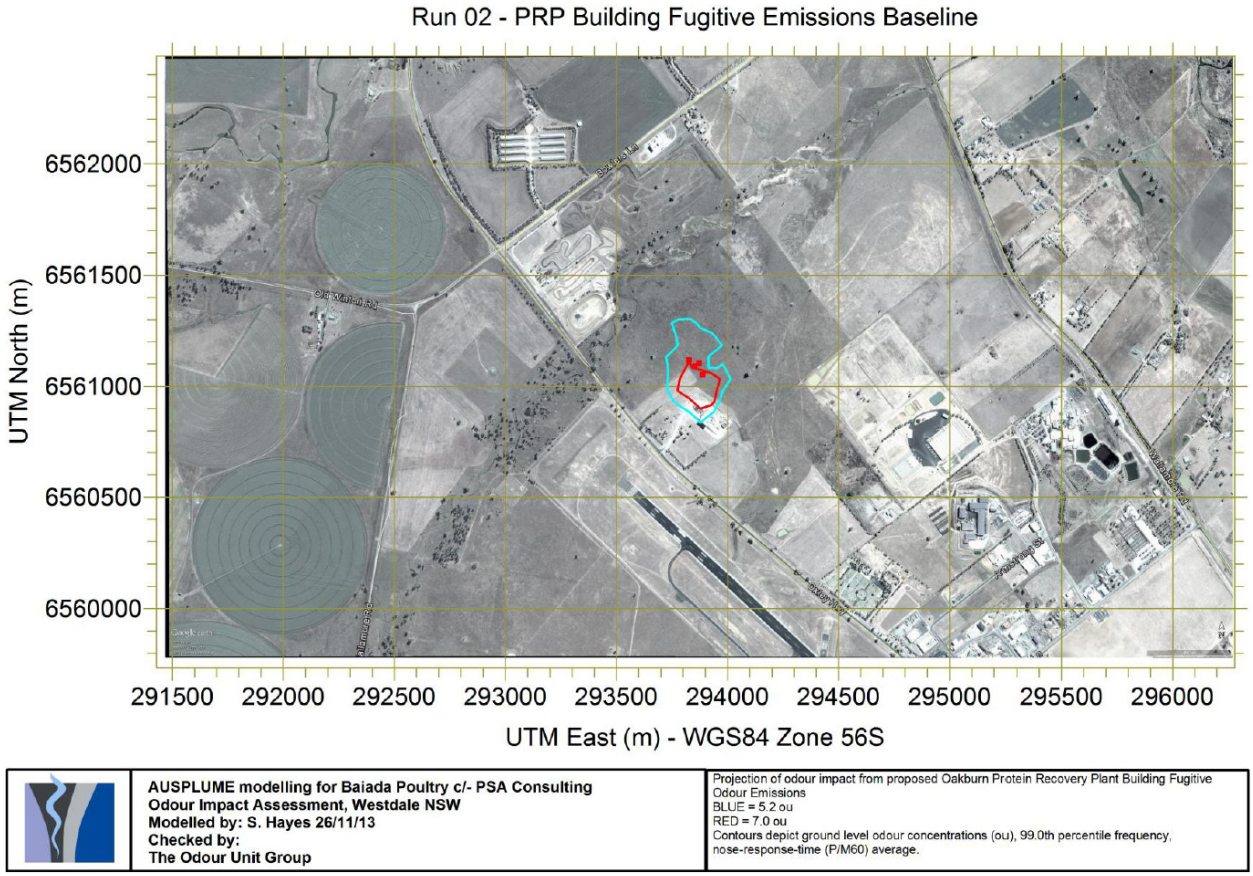

Figure 8: Replacement Rendering Plant Projected Odour Impact

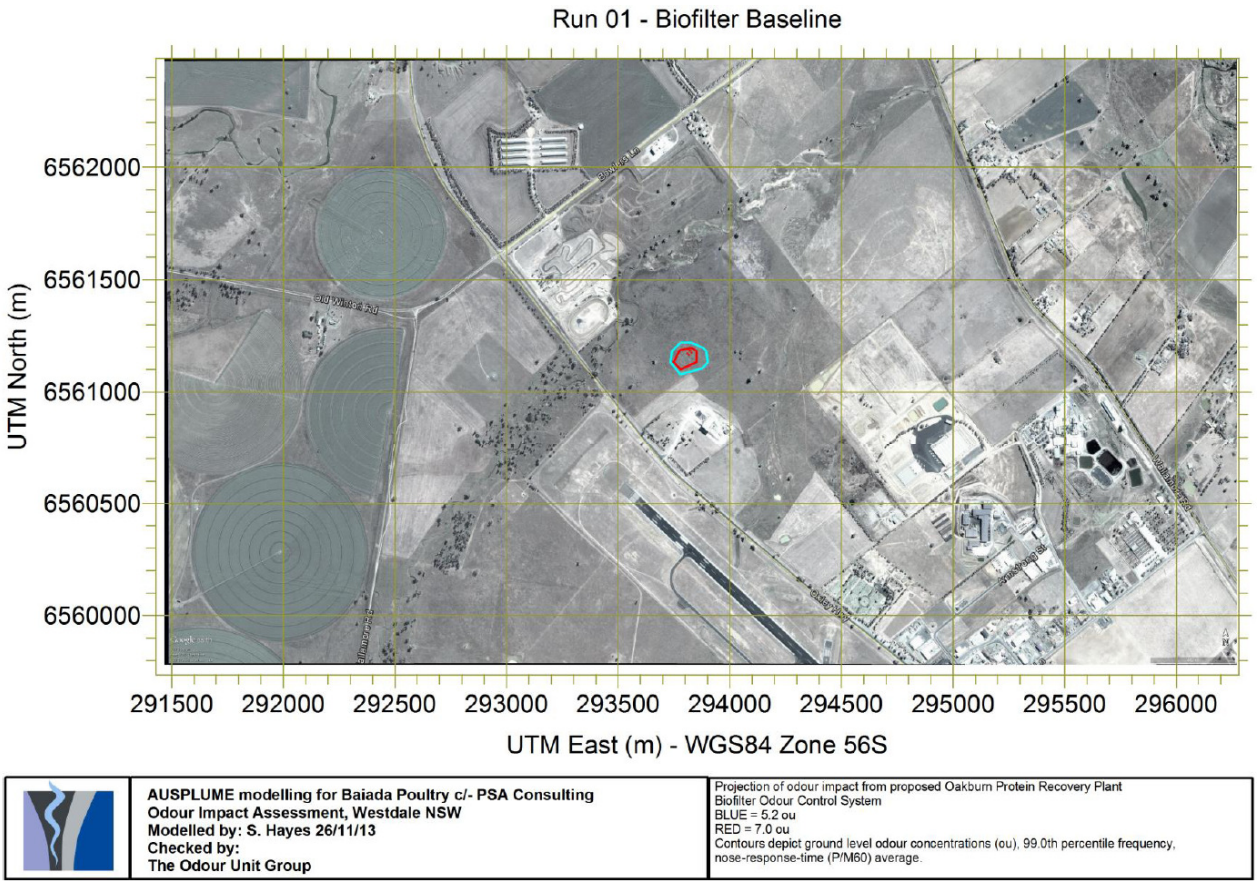

Figure 9: Biofilter Projected Odour Impact

4.2 Natural Environmental Impacts

4.2.1 Visual Amenity

The proposed development will be of a similar design and scale of the destroyed rendering plant. The subject site is large and located within a predominately rural area and rural industrial area which accommodates a number of large scale processing plants. The replacement rendering plant is setback 350m from the Oxley Highway, and the retention of existing vegetation between the proposed building and the road will further reduce the visual amenity impact of the proposed development. Regardless of its low visual intrusion, the replacement plant will be constructed with high quality materials and finishes. Accordingly, the replacement facility is not anticipated to impact on visual amenity.

4.2.2 Water Quality

The replacement plant is to incorporate bunding and internal waste water collection drains to any water from processing areas is directed to trade waste and separated the external stormwater treatment areas. Stormwater from the 'clean' external areas will be treated by the new stormwater management arrangements as described in Section 3.5 to ensure no impact on water quality or upstream / downstream worsening effect.

4.2.3 Flora and Fauna

There has been significant modification and disturbance of the natural environment present on the site to facilitate the past agricultural pursuits and other intensive land use activities conducted on the site. As shown in Figure 10, the locality is highly modified and has been almost entirely cleared of woody vegetation. The highly modified nature of the site, ongoing maintenance and the lack of trees limit the potential for significant flora and fauna habitat on site.

Figure 10: Site Aerial (Six Maps, 2013)

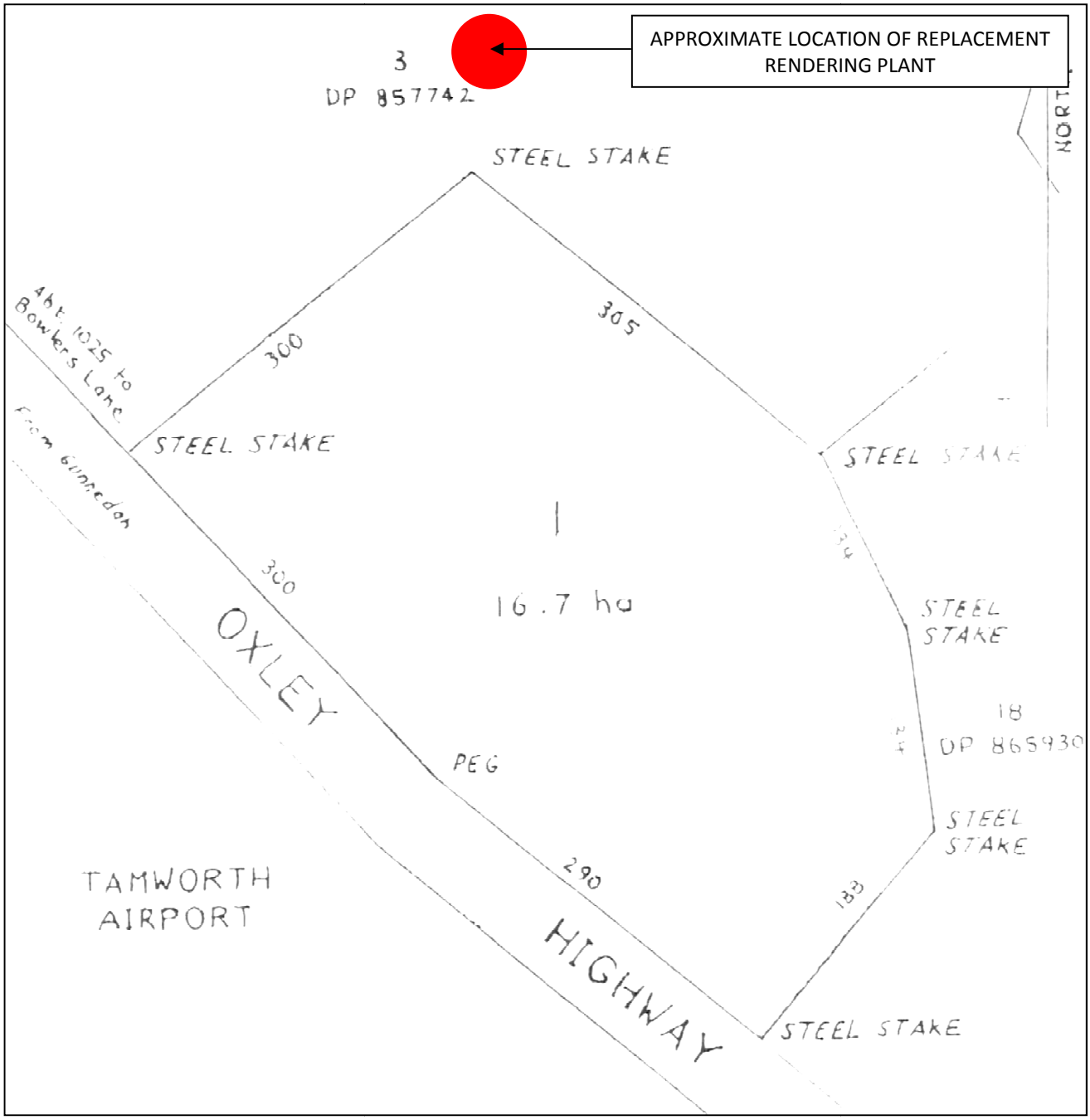

Figure 11: Extent of Flora and Fauna Survey undertaken by AEIA, July 1997

As part of the original Development Application (July 1997), a flora and fauna survey was undertaken by *Arnhem Environmental Impact Assessors* (attached as Appendix 9) over the original development site (see Figure 11). While the replacement plant is located just outside of the original survey area the environmental and ecological characteristics of the site are similar and it is considered that the findings or the original survey would be indicative of the replacement plant site.

The major findings of the original survey include:

- Structurally, the vegetation is heavily grazed grassland with a few remnant native trees;
- No threatened species, other than the grass *Bothriochloa biloba*, is present on the site. An 8 part Test under Section 5A of the *EPAA* concluded that the development would not have a significant impact on the grass species; and
- The site is well suited for the proposed development.

A current search of the *National Parks and Wildlife Service – Atlas of NSW Wildlife* was undertaken to identify any additional threatened species have been recorded to have been sighted within or near the subject site. As evident from

the search reports (see Appendix 10), two threatened fauna species has been recorded within a 10km^2 area around the site including :

- The Eastern False Pipistrelle in December 2005 on Boltons Creek, just west of the Oxley Highway; and
- The Black Falcon in June 2005, just north east of the Council operated waste water treatment facility off Wallamore Road.

The location of these recordings in relation to the subject site is identified in Figure 12.

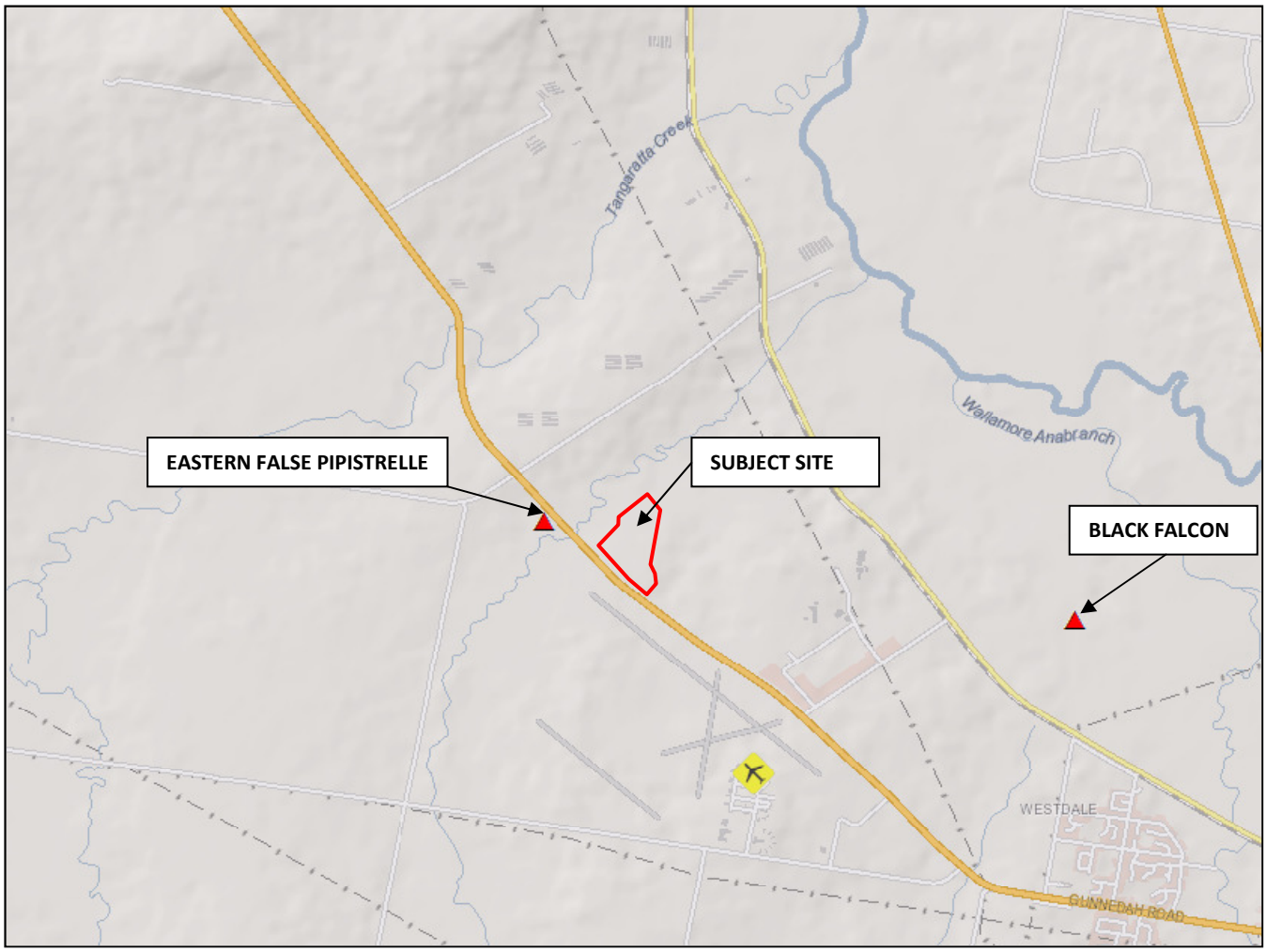

Figure 12: Threatened Fauna Species Recordings (NSW BioNet Atlas, 2013)

A Protected Matters Search performed on the Australian Department of the Environment website was undertaken to ascertain if any matters of national environmental significance protected under the *Environmental Protection & Biodiversity Conservation Act 1999* (EPBC) are identified as applicable or related to the subject site. The resultant EPBC Protected Matters Report (Appendix 10) identified the following:

- Two threatened ecological communities were identified as communities *likely to occur within the area*:
    - Critically Endangered Natural grasslands on basalt and fine textured alluvial plains of northern New South Wales and southern Queensland; and
    - Critically Endangered White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.
- Two threatened ecological communities were identified as communities that *may to occur within the area*:
    - Critically endangered New England Peppermint Grassy Woodlands; and
    - Endangered Weeping Myall Woodlands.
- 17 threatened species, comprising of 5 bird species, the Murray Cod, the Booroolong Frog, 4 mammal species, 5 plant species, and 1 reptile species were identified that may or are likely to occur within the area; and

- 10 migratory bird species were identified that may or are likely to occur within the area.

The location of the replacement rendering plant is adjacent to the destroyed plant and approved Integrated Processing Facility which has been historically cleared of any significant vegetation. Due to the high level of previous and ongoing disturbance and the relatively small footprint of the replacement plant (approximately 2ha and 3.5% of the site area), it is considered that the replacement rendering plant is highly unlikely to contain any flora or fauna of significance.

4.2.4 Waste Management

The existing waste management strategies for the current rendering plant on site will be used for the replacement rendering plant. With the amount of material processed and produced on site to remain the same as what is currently undertaken and approved, the existing waste management strategy is considered suitable and appropriate for the proposed development. Waste from the construction period will be re-cycled where possible or disposed of in accordance with Council requirements.

4.3 Built Environmental Impacts

The proposal seeks consent for a replacement rendering plant on site. All extensions are contained within the existing property and maintain the appropriate setbacks.

4.3.1 Noise Impacts

4.3.1.1 Existing Noise Limits

Since commencing operations on the site, the rendering plant has not received a single noise complaint and is not considered to be a high noise emitting use. The existing noise limits for the premises as outlined within the existing Environmental Protection Licence (EPL), number 7566, are as follows:

L2.1 Noise from the premises must not exceed:

a) An LA10 (15 minute) noise emission criterion of 5dB(A) above background level LA (90) dB(A) (7am to 6pm) Monday to Friday and 7am to 1pm Saturday; and

b) An LA10 (15 minute) noise emission criterion of 5dB(A) above background level LA(90) dB(A) during the evening (6pm to 10pm) Monday to Friday; and

c) At all other times, an LA10 (15 minutes) noise emission criterion of 5dB(A) above background level LA (90) dB(A), except as expressly provided by this licence.

L2.2 Noise from the premises is to be measures or computed at within one metre of the boundary of any residential premises or any other noise sensitive area to determine compliance with condition L2.1. 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character.

4.3.1.2 Previous Noise Impact Assessments

Reverb Acoustics were engaged in 2007 to undertake a noise impact assessment to identify potential noise impacts associated with the following Oakburn Processing Plant modifications that were approved in 2009:

- Amendment to the layout of the poultry processing complex to cater for improved technology and advanced operating procedures; and
- Raise the kill capacity of the Stage 4 Processing Plant from 750,000 birds per week to 1,000,000 birds per week.

A copy of this Noise Impact Assessment Report is contained within Appendix 7.

The Noise Impact Assessment Report identified the nearest sensitive residential receptors as identified in Figure 13 and as listed below:

- Girraween: Old Winton Road, 1700m west of the site;
- Abbeylands: Bowler's Lane, 1200m north of the site; and
- The Billabong: Wallamore Road, 1600m east of the site.

No residences or other sensitive receptors are located within the immediate vicinity of the site with the closest residence located 1km to the north (Abbeylands). It the noted that the nearest residence is located adjacent to the flour mill, 500m North East of the a flour mill, 700m north east of the speedway and 1km north east of the Oxley Highway demonstrating a high level of existing exposure to closer and louder noise sources compared to the replacement rendering plant.

In the Reverb Acoustic Report , background noise level measurements were conducted as part of the preparation of the Noise Impact Assessment in January 2007. Measurements were conducted at Abbeylands and the Billabong, which were undertaken when the rendering plant on the site was operational. A Rating Background Level (RBL) was calculated from Assessment Background Levels (ABL's), for the day, evening, and night periods, according to the procedures described in the DECCW Industrial Noise Policy and as detailed in AS1055:1997.

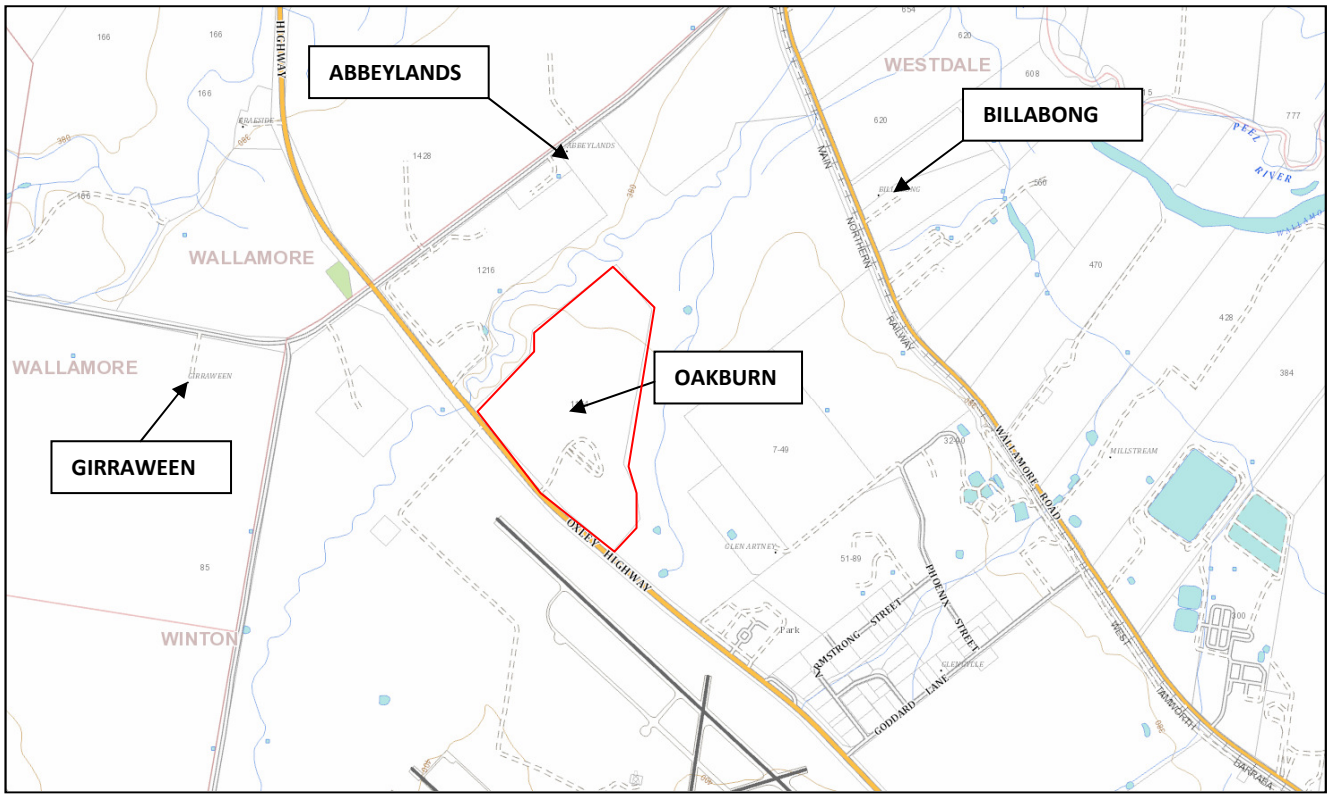

Figure 13: Noise Sensitive Receptors

Table 2 identifies very low calculated RBLs with little variation during the day, evening and night periods.

Table 1: Summary of Noise Monitoring Results

BACKGROUND L90			AMBIENT LEQ		
Day 7am – 6pm	**Evening 6pm – 10pm**	**Night 10pm – 7am**	**Day 7am – 6pm**	**Evening 6pm – 10pm**	**Night 10pm – 7am**
Girraween					
30	30	31	52	52	46
Abbeylands					
32	31	29	48	46	46
The Billabong					
38	34	32	57	54	47
	62dB(A),Leq(15hr)		55dB(A),Leq(9hr)	20m from Oxley Highway	

The applicable base noise criteria operations at Oakburn, as identified within the Noise Impact Assessment are specified in Table 2. Where the existing traffic noise levels were at least 10dB above the Acceptable Noise Level (ANL), the high traffic amenity criterion was applied.

Table 2: Base Level Noise Objectives

PERIOD	INTRUSIVENESS CRITERION	AMENITY CRITERION
Girraween		
Day	**35** (30+5)	50
Evening	**35** (30+5)	45
Night	**35** (30+5) *	40
Abbeylands		
Day	**37** (32+5)	50
Evening	**36** (31+5)	45
Night	**35** (30+5) **	40
The Billabong		
Day	**43** (38+5)	50
Evening	**39** (34+5)	45
Night	**37** (32+5)	40
Receiver Type: Rural		

**Page 5 of the DEC's Application Notes – NSW Industrial Noise policy recommends that the intrusive noise level for evening be set no greater than the intrusive noise level for daytime and the intrusive noise level for night be set no greater than the intrusive noise level for evening.*

***Section B1.3.3 of the INP states that when the existing background level is below 30dB(A), the rating background noise level is set to 30dB(A).*

The results of the Noise Impact Assessment identified that the operation of integrated processing plant (Stages 1 -4) would not exceed the specified noise levels at all nearby sensitive receptors under neutral and noise enhancing atmospheric conditions with no specific noise control in place.

Table 3: Received Noise Levels - No Noise Control

	DURING OPERATION - RECEIVED NOISE LEVELS, DB(A),LEQ		
Residential Receiver	**Neutral Conditions (Day/Evening/Night)**	**3m/sec Wind Source to Rec (Day/Evening)**	**3°C/100m Inversion (Night)**
Girraween	24	27	26
Abbeylands	28	34	30
The Billabong	18	25	22

4.3.1.3 Noise Impact of Replacement Rendering Plant

Based on the results of the previous Noise Impact Assessment, the replacement rendering plant is not anticipated to exceed the existing Environmental Protection License Noise Limits or result in significant changes to the noise emission of the integrated processing plant when completed. This is based on the following considerations:

- Since commencing operations on the site, the damaged rendering plant had not received a single noise complaint and is not considered to be a high noise emitting use;
- The nearest receptor to the replacement site are located approximately 1000m to the North and in close proximity to a number of high noise emitting land uses and the Oxley Highway;
- The predicted noise level findings of the 2007 Assessment were for the operation of the entire processing plant and complied with the project specific noise levels without mitigation requirements;
- As a result of additional industrial development in the areas background noise levels and traffic noise has likely increased;

- The construction of the previous rendering plant at the time of the Noise Impact Assessment 2007 was predominantly sheet metal walls with no lining or acoustic treatment measures whereas the replacement rendering plant will be constructed with precast concrete walls and metal roof sheeting which has a much higher acoustic rating; and
- Modern processing equipment, boilers and plant are to be installed which have a higher level of acoustic treatment compared to the previous equipment.

As a result of assessment of the considerations it is not anticipated that any adverse noise emissions or amenity impacts on the immediately surrounding sensitive receptors are expected, and the replacement plant will comply with the limits prescribed under the:

- Existing Environmental Protection Licence (number 7566); and
- Condition 28, Schedule 2 of the Conditions of Development Consent in relation to the original approval.

4.3.2 Waste Water Treatment Plant

As mentioned previously, the existing waste water treatment plant (WWTP) was not damaged by the fire, and is proposed to be used to treat the resultant waste water from the replacement rendering plant.

The existing WWTP process uses screening followed by DAF and an aerobic process to treat waste water generated by rendering processes undertaken on the site. A Development Application was lodged in 2008 to upgrade the WWTP to its current design. The Development Application, including all related appendices details the design loads of the existing WWTP and waste water hydraulic and BOD loads, and has been provided in *Appendix 8* of this report (in particular refer to the AJM Environmental Services Report contained within *Appendix 3*).

As outlined within the AJM report, the existing WWTP has been designed to accommodate a flow of 250KL/day and a BOD: N: NH3 loading of 3000: 350: 350 respectively. The final effluent quality from the current WWTP system complies with the targets specified and compared to Tamworth Regional Council requirements as outlined in Table 4.

Table 4: Final Effluent Water Quality

ANALYTE	TAMWORTH REGIONAL COUNCIL REQUIREMENTS	TARGET MG/L
Ammonia	50	50
BOD	600	500
O&G	100	80
TKN	100	80
Total P	20	20
SS	600	500
TDS	1000	1000

Haarslev Industries, the proposed provider of the replacement rendering equipment have confirmed that the quality of the raw waste water generated by the new rendering lines will be in the order of 5% cleaner than that which is currently being delivered to the on-site treatment plant. Accordingly, the existing for assessment of the ability of the existing plant to treat the projected waste water, current characteristics are considered appropriate.

In this regard, Hydroflux Industrial Pty Ltd waste water engineers have reviewed the existing treatment plant, the proposed rendering lines and have confirmed that *"Given the relatively new age of the wastewater treatment plant (3 ½ years), the design life of >20years and the predicted flow and loads being similar we have no hesitation in confirming that the wastewater treatment plant is sufficient to appropriately treat the wastewater generated by the new rendering plant."* A copy of this correspondence is provided as *Appendix 3*.

4.3.3 Stormwater Management

A Stormwater Management Plan (SWMP) for the replacement facility has been prepared by J. Wyndham Prince in accordance with Tamworth regional Council's Development Control Plan and is attached as *Appendix 2*. The SWMP

details the investigations undertaken and presents the results of the stormwater detention and water quality design to support the proposed replacement rendering plant.

To comply with Council's requirements, a new treatment train is proposed which approach that includes a swale and bio-retention rain garden as treatment measures. The structural elements consist of:

- Two gross pollutant traps;
- One (1) grassed swale 115 metres long;
- One (1) grassed swale 60 metres long; and
- Detention basin with a total detention storage volume 420m3.

Provision of the proposed detention basin will ensure that peak post development discharges are restricted to less than the pre-development levels. The proposed Stormwater Management Strategy for the developed site provides a basis for the detailed design and development of the construction drawings to ensure that the environmental, urban amenity, engineering and economic objectives for stormwater management and site discharge are achieved.

4.3.3.1 Water Quality

The water quality analysis was undertaken using the model MUSIC (Model for Urban Stormwater Improvement Conceptualisation) version 5 (CRCCH - 2005). This water quality modelling software was developed by the Cooperative Research Centre (CRC) for Catchment Hydrology, which is based at Monash University and was first released in July 2002.

The model provides a number of features relevant for the development:

- It is able to model the potential nutrient reduction benefits of gross pollutant traps, constructed wetlands, grass swales, bio-retention systems, sedimentation basins, infiltration systems and it incorporates mechanisms to model stormwater re-use as a treatment technique;
- It provides mechanisms to evaluate the attainment of water quality objectives;

In absence of specific modelling guidelines available from Council, the following industry standard pollution reduction targets were adopted.

Table 5: Pollution Reduction Targets

POLLUTANT	REDUCTION TARGET
Total Phosphorous (TP)	65% reduction of average annual load
Total Nitrogen (TN)	45% reduction of average annual load
Suspended Solids (TSS)	85% reduction of average annual load for particles 0.5 mm or less
Gross Pollutants	90% retention of material greater than 5mm

The MUSIC modelling was undertaken to demonstrate that the stormwater management system proposed for the development will result in reductions in overall post-development pollutant loads and concentrations being discharged from the proposed development and that these discharges comply with the above target objectives. The total annual pollutant loads derived from the MUSIC model for the proposed development at the point of discharge (i.e. at the Basin Outlet) are shown in Table 6.

Table 6: MUSIC Modelling Results

Pollutant	Total Developed Source Nodes	Minimum Reduction Required	Total Residual Load from Site	Total Reduction Achieved	Total Reduction Achieved
	(kg/year)	(kg/year)	(kg/year)	(kg/year)	(%)
TSS	2930	2491	435	2495	85.2%
TP	3.55	2.31	0.72	2.833	79.8%
TN	21.2	9.5	5.91	15.29	72.1%
Gross Pollutants	283	255	0.0	283	100%

The performance of the proposed water quality management strategy for the site shows that the treatment train proposed will meet standard industry reduction targets for TSS, TP, TN and Gross Pollutants.

4.3.3.2 Water Quantity

A Water Quantity Assessment for this study has been undertaken using the XP-RAFTS modelling software package. The aim of this hydrological analysis is to establish the peak flows, considering both existing conditions and development of the site to determine the size of mitigation measures required to restrict developed case flows to existing levels.

The results of the hydrological modelling for the various development scenarios show that the proposed 420m^3 water quantity basin is adequate to manage the increase in stormwater runoff and ensure that development condition flows are restricted to below existing conditions. The design and location of the detention basin is included in the Stormwater Management Plan attached as *Appendix 2*.

4.3.4 Traffic, Access and Parking

Vehicle trips associated with the replacement plant are outlined in Table 7 and are entirely consistent with the previous vehicle movement numbers of the previous rendering plant.

Table 7: Existing and Proposed Vehicle Trip Numbers

MOVEMENT TYPE	VEHICLE TYPE	NUMBER OF TRIPS
Delivery		
Offal, feather and blood from processing plant	Heavy vehicle	9/day
Dead carcasses	Heavy vehicle	1/day
Waste from hatchery	Heavy vehicle	1/day
Chemical and courier	Heavy vehicle	2/week
Dispatch		
Bone meal	Heavy vehicle	1/week
Poultry meal	Heavy vehicle	3/week
Tallow	Heavy vehicle	4/week
Feather meal	Heavy vehicle	5/week
Staff		
Staff and Visitors	Private vehicle	9/day

The replacement plant will not result in any change to current traffic volumes or additional connections to the external road network. With respect to the replacement plant, provision has been made for all design vehicles to enter an exit the site in forward gear and conduct all necessary manoeuvres in a safe and efficient manner. All driveways, car-parks and manoeuvring areas will be designed and constructed in accordance with *AS2890.1 Parking Facilities*.

The modification will not result in changes to the amount of material currently processed or produced on site as this is entirely dependent on the processing rate at the existing Tamworth Processing Plant (currently 90,000 birds / day). In addition, no alterations to the number of truck movements entering or exiting the site are required. As such, compared to the current operation, there are considered to be no additional impacts in relation to the external road network.

The existing vehicular access to the Oakburn site from the Oxley Highway is via a bitumen sealed intersection. This intersection has been constructed in accordance with Condition 45 of the original development consent (DA553/97), which specified the road works required by the RTA for Stage 1 of the Oakburn Processing Complex (the rendering plant). All road works requirements under condition number 45 of the original development consent has been completed, and are not expected to change as a result of the proposed replacement rendering plant.

It is important to note that this modification relates to the replacement of Stage 1 only, and the additional traffic upgrades associated with the balance of the facility will not be changed.

4.3.5 Airport Safety

The maximum building height of 16.5m does not exceed the prescribed OLS (45m) for the adjacent Tamworth Airport (See Figure 14).

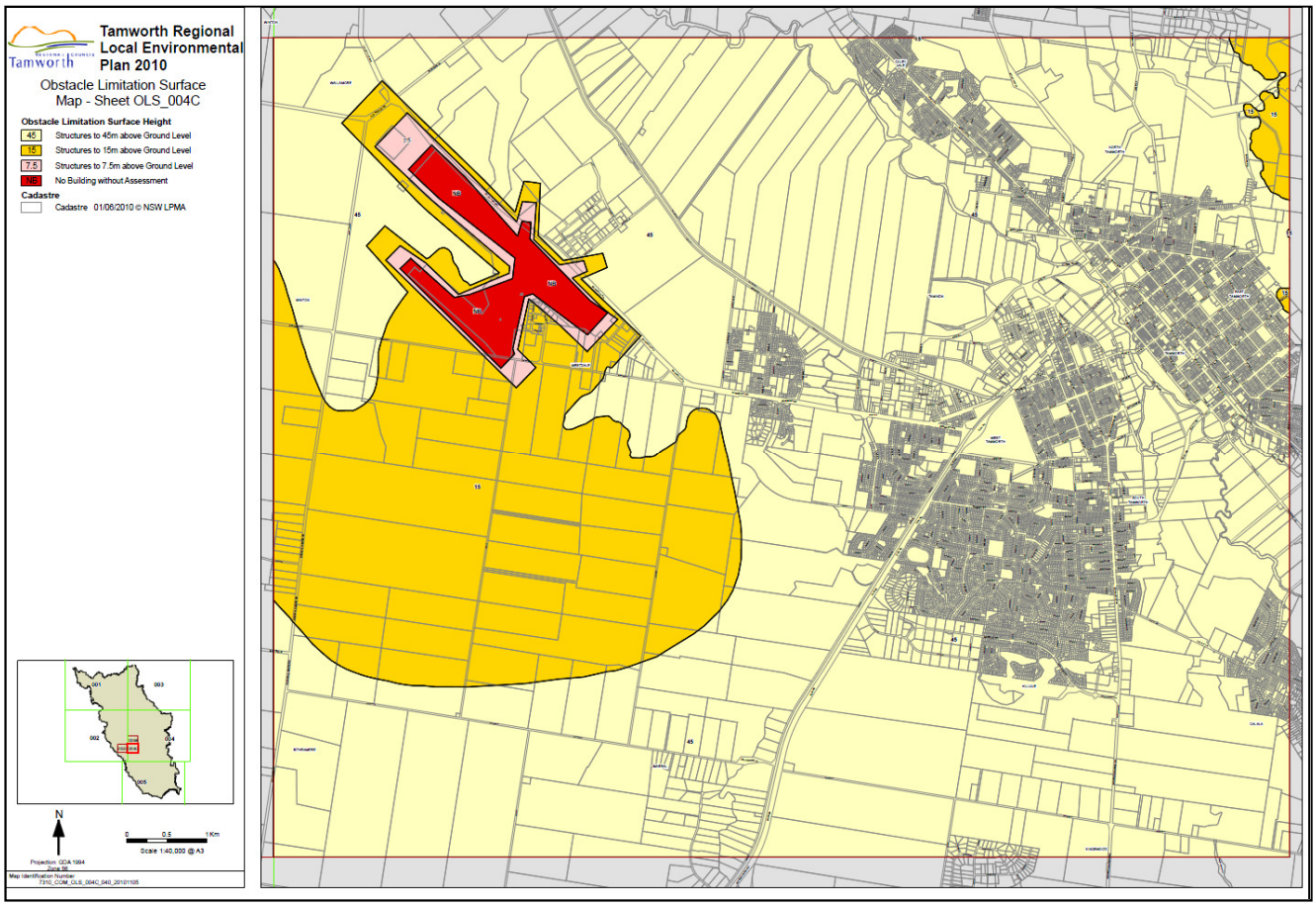

Figure 14: Obstacle Limitation Surfaces (Tamworth Regional Council 2013)

4.3.6 Cultural Heritage

As part of the original Development Application submitted in July 1997, an archaeological survey was undertaken by *Gaynor & Wilson Archaeological Consultants* (see Appendix 11) over the integrated processing plant site. The 1997 archaeological survey, identified two isolated Aboriginal stone artefacts namely:

- A broken retouched flake which had residues present on its surface. It was concluded that the material that made up the artefact, which was determine to be either very fine grained quartzite or a silcrete, is rare in artefact assemblages from the Tamworth region and therefore must have been imported into this area as they are no locally available; and
- An artefact manufactured from andesitic greywacke identified as being either an axe or an axe blank. Andesitic greywacke is locally available however raw material of the quality necessary for axe manufacture is limited in the landscape. It is likely that the raw material for this artefact was sources from the nearby Peel River 5 Aboriginal Axe Quarry.

The findings of the survey did not identify any constrain to development, however, recommendations and requirements and conditioned as part of the original Development Consent, the identified artefacts were collected from the site by the Aboriginal Land Council prior to the construction of the Stage 1 Rendering Plant.

The location of the replacement rendering plant is located immediately adjacent to the processing plant site and will was not specifically assessed, has similar geographic and topographic features to the adjoining assessment area. As such, it is considered that location of the replacement rendering plant will exhibit similar cultural heritage values to those identified within the 1997 archaeological survey. As such, additional cultural heritage assessment has not been undertaken however, and the site is not expected contain any constraints to the replacement rendering plant. The Applicant will act

in accordance with the conditions of approval and take the necessary steps to ensure compliance with the *National Parks and Wildlife Act 1974*, and other relevant statutes.

4.4 Local Environmental Plan

The proposed modification of a Rural Industry development is identified as being Permissible with Consent within the RU1 Primary Production zone under the *Tamworth Local Environmental Plan 2010*. The overall objectives for the RU1 Primary Production Zone are:

- *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 the fragmentation and alienation of resource lands.*
- *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 replacement rendering plant will ensure the continuation of approved primary industry on the site. Accordingly the modification is considered to be consistent with the overall objectives sought for the RU1 zone under the *Tamworth Local Environmental Plan 2010.*

4.5 Development Control Plans

The following tables demonstrate the compliance of the replacement rendering plant with the applicable Tamworth Development Control Plan provisions.

Table 8: Industrial Development Controls

ELEMENT	DEVELOPMENT CONTROL	APPLICANT'S RESPONSE
Building Setbacks	• Street setback must be a minimum of 5m. • No concession for secondary frontage. • Street setback must be landscaped. • A reduced landscaped setback, to a minimum of 3 metres, is permitted where car parking is provided immediately behind the landscaped area. • Side and rear setbacks to meet BCA requirements.	**Complies.** The replacement rendering plant is setback 336m from the Oxley Highway road frontage and over 250m to all other site boundaries. Existing landscape and tree planting is to be retained along the Oxley Highway and other areas of the site.
Design	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.	**Complies.** The replacement rendering plant will be constructed of high quality materials including tilt panel concrete walls and colorbond walls and roofing. Variations in colours on the facade will be adopted to add visual interest and reduce building bulk.
	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.	**Complies.** The staff amenities and administration building is located at the front of the replacement rendering plant and will be constructed of composite wall sheets and glass to visually separate it from the industrial component.

ELEMENT	DEVELOPMENT CONTROL	APPLICANT'S RESPONSE
	Roofing materials should be non-reflective where roof pitch is greater than 17 degrees or not visible from a public road.	**Complies.** Roof has a low pitch of approximately 5^0 and is not easily visible from external vantage points.
Utilities and Services	Servicing strategy required to demonstrate the availability and feasibility of providing water, sewer and stormwater services appropriate for the scale and nature of development.	**Complies.** The site has access to all required urban infrastructure. Some extensions to connections are required to reach the replacement plant however, no upgrades to external networks are required to facilitate the replacement.
	Onsite stormwater capture and reuse shall be provided for maintenance of landscaping. Storage tanks shall be appropriately located and screened. NB – reuse facilities shall not form part of stormwater calculations.	**Complies.** A Stormwater Management Plan (SWMP) has been prepared by JWP Consulting engineers and is attached as *Appendix 2*. This report details the investigations and presents the results of the stormwater detention and water quality design to support the proposed replacement Rendering Plant.
	Buildings and structures are to be located clear of utility infrastructure	**Complies.** The replacement plant is not located within close proximity to utility infrastructure.
	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.	**Complies.** The replacement plant is not located within the minimum setback of any existing sewer mains.

Traffic and Access	• The Traffic Assessment is required to demonstrate the adequacy of:
	  ○ road network,
	  ○ geometric design for intersections, including pavement impacts,
	  ○ site access,
	  ○ loading/unloading facilities, and
	  ○ safe on-site manoeuvring for largest design vehicle
	  ○ wearing surfaces for access driveways, parking areas, loading/unloading facilities and associated vehicle manoeuvring areas relative to the design vehicle.
	• Unsealed vehicle movement areas are not acceptable due to environmental management impacts.
	• All vehicles must be able to enter and exit the site in forward direction.
	• Site access not permitted:
	  ○ Close to traffic signals, intersection or roundabouts with inadequate sight distances;
	  ○ Opposite other large developments without a median island;
	  ○ Where there is heavy and constant pedestrian movement on the footpath;
		Complies. The replacement plant will not result in any changes to existing traffic volumes or connections to the external road network.
		Internally, provision has been made for all design vehicles to enter an exit the site in forward gear and conduct all necessary manoeuvres in a safe and efficient manner.
		Driveways must be provided in accordance with *AS2890.1 Parking Facilities*.

ELEMENT	DEVELOPMENT CONTROL	APPLICANT'S RESPONSE
	○ Where right turning traffic entering the site may obstruct through traffic. • Separate signposted entrance and exit driveways are required for developments requiring more than 50 parking spaces or where development generates a high turnover of traffic. • The number of access points from a site to any one street frontage is limited to 1 ingress and 1 egress. Driveways must be provided in accordance with *AS2890.1 Parking Facilities*.	
Loading/ Unloading Facilities	• Adequate space and facilities are required to be provided wholly within the site. • Loading and delivery bays must be designed to allow vehicles to enter and exit the site in a forward direction. • 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.	**Complies.** Provision has been made for all design vehicles to enter an exit the site in forward gear and conduct all necessary manoeuvres in a safe and efficient manner.
Noise	Windows, doors and other wall openings shall be arranged to minimise noise impacts on residences where proposed within 400m of a residential zone.	**Complies.** No increase in noise generation is expected as a result of the proposed development. The replacement rendering plant is located approximately 1km south of the nearest residential dwelling and utilise new processing equipment with a higher level of inbuilt noise attenuation to reduce emissions. Further, the replacement plant will internalise more plant compared to the current operation increasing noise attenuation. As such, it is considered that risk of noise impacts on the surrounding area are considered low.
	External plant (generators, air conditioning plant etc.) shall be enclosed to minimise noise nuisance where adjoining residential area.	**Complies.** The site does not adjoin a residential area and is located approximately 1km away from the nearest residential dwelling.

Table 9: Environmental Controls

ELEMENT	DEVELOPMENT CONTROL	APPLICANT'S RESPONSE
Environmental Effects	The application documentation shall identify any potential environmental impacts of the development and demonstrate how they will be mitigated. These impacts may relate to: • Traffic • Flood liability • Slope • Construction impacts • Solid and Liquid Waste • Air quality (odour and pollution) • Noise emissions • Water quality • Sustainability	**Complies.** Section 4 of this SEE considers the potential impact of the proposed development in relation to construction impacts, waste, air quality, and water quality.

ELEMENT	DEVELOPMENT CONTROL	APPLICANT'S RESPONSE
Soil and Erosion Control	• Runoff shall be managed to prevent any land degradation including offsite sedimentation. • 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". • Cut and fill will be minimised and the site stabilised during and after construction. • Arrangements in place to prompt revegetation of earthworks to minimise erosion.	**Complies.** A Stormwater Management Plan (SWMP) has been prepared by JWP Consulting engineers and is attached as Appendix 2. This report details the investigations and presents the results of the stormwater detention and water quality design to support the proposed replacement Rendering Plant. The Stormwater Management Strategy consists of a treatment train approach that includes a swale and bio-retention rain garden as treatment measures. The structural elements proposed for the development consists of: • Two gross pollutant traps; • One (1) grassed swale 115 metres long; • One (1) grassed swale 60 metres long; and • Detention basin with a total detention storage volume 420m^3 Provision of the proposed detention basin will ensure that peak post development discharges are restricted to less than the pre development levels. Freeboard of 3.63 m provided is greater than the required 0.5 m to the finished floor level of the development. The proposed Stormwater Management Strategy for the developed site provides a clear basis for the detailed design and development of the construction drawings to ensure that the environmental, urban amenity, engineering and economic objectives for stormwater management and site discharge are achieved.
Vegetation	Development design shall accommodate the retention of any significant trees and vegetation.	**Complies.** No clearing of vegetation is proposed or required as part of this Modification Application.
Waste Management	General waste storage and collection arrangements shall be specified.	**Complies.** General waste storage and collection arrangements will not change from what currently exists on site.
Noise	Where relevant, applications are to contain information about likely noise generation and the method of mitigation.	**Complies.** No increase in noise generation is expected as a result of the proposed development. The replacement rendering plant is located approximately 1km south of the nearest residential dwelling and utilise new processing equipment with a higher level of inbuilt noise attenuation to reduce emissions. Further, the replacement plant will internalise more plant compared to the current operation increasing noise attenuation. As such, it is considered that risk of noise impacts on the surrounding area are considered low.
Geology	The design process must give consideration to the potential impact of erosive soils, saline soils, soils	**Complies.** The proposed development is to be located on relatively flat land. Some balance cut

ELEMENT	DEVELOPMENT CONTROL	APPLICANT'S RESPONSE
	of low wet strength, highly reactive soils and steep slopes and document how these constraints are addressed.	and fill will be required to create a level building platform and standard design and management practices will be implemented to ensure the risk of erosion is appropriately addressed during both the construction and operational phase.

4.6 The Public Interest

The proposal is not considered to result in any adverse environmental impacts on the natural environment or upon surrounding properties in terms of odour, noise, visual impacts, traffic generation, or privacy when identified mitigation and management measures are undertaken.

In determining whether the proposed replacement rendering plant is within the public interest, the following characteristics of the proposed development were considered:

- The proposed modification is for the replacement of a recently demolished rendering plant that was completely destroyed by fire;
- The loss of the Rendering Plant on site has had significant flow on impacts on Baiada's Tamworth operations (currently processing up to 90,000 birds/day), with fresh offal currently having to be transported out of the region for processing at a significant cost, and resulting in flow on impacts and costs; and
- The proposed replacement facility is designed to reflect best practice and include up-to-date technologies and is expected, as a result, to have less noise, odour and related impacts compared to the previous rendering plant that is being replaced.

The development is consistent with the nature of the rural locality and various rural industries located in proximity to the site, and will be operated in accordance with all relevant standards. The proposal is therefore considered to be in the public interest.

4.7 Any Matter Prescribed by the Regulations

The replacement rendering plant is identified as a premise-based activity under Schedule 1 of the *Protection of Environmental Operations Act 1997* and the Applicant currently holds an Environmental Protection License (License Number 7566). As the proposed development will not alter the existing and approved production or processing regimes it is not anticipated that significant variation to the Environmental License is required.

5 CONCLUSION

PSA Consulting has been engaged by Baiada (Tamworth) Pty Ltd to prepare this request for a Modification of Development Approval (DA53/97) in accordance with S75W of the Repealed Part 3A of *Environmental Planning and Assessment Act 1979* under the transitional arrangements (Section 6A).

Until recently, Baiada operated a rendering plant on the site dedicated to processing poultry industry by-products to produce a range of value adding products including tallow and various types of protein meal. On the 27th September 2013, the existing rendering plant was completely destroyed by fire. As a result, the facility is no longer operational or salvageable. This Modification Application seeks approval for the urgent development of a replacement facility.

The loss of the Rendering Plant on site has had significant flow on impacts on Baiada's Tamworth operations (currently processing up to 90,000 birds/day), with fresh offal currently having to be transported out of the region for processing at a significant cost. Accordingly, Baiada's intent is to redevelop the site as soon as possible to ensure that the flow on impacts and costs are minimised.

The proposed modifications are considered to result in substantially the same development to that which was approved based on the following considerations:

- The replacement plant will not increase production rates or throughput;
- The existing Waste Water Treatment Plant was not damaged and will be used for the replacement plant;
- The replacement plant will have a higher level of odour capture (point source collection) compared to the current plant and is located further away from a number of sensitive receptors resulting in lower expected odour impacts compared to current facility;
- The result of the odour dispersion modelling for the proposed replacement rendering plant and bio-filter operations demonstrates compliance with the 5.2ou and 7ou criteria at all identified surrounding sensitive receptors, including the nearest one 'Abbeylands' a rural residence receptor located approximately 1.2km to the north. The modelling demonstrates that both the 5.2ou and 7ou odour footprints for both the replacement rendering plant and the related bio-filter are wholly contained within the Applicant's property.
- Stormwater management on the site will comply with contemporary standards (Stormwater Management Plan has been prepared by J. Wyndham Prince and is attached as Appendix 2);
- It is not anticipated that any adverse noise emissions or amenity impacts on the immediately surrounding sensitive receptors are expected, and the replacement plant will comply with the limits prescribed under the Existing Environmental Protection Licence and Conditions of Approval;
- There will be no change in staff numbers (11), traffic generation, or hours of operation on the site; and
- The modification relates to the solely to the replacement rendering plant (Stage 1) and does not seek to alter the remaining Stages 2 – 4. Stages 2 – 4 remain subject to the Approved EIS and existing condition or approval.

Accordingly, it is recommended that the Department of Planning approve the proposed S75W modification application for the redevelopment of the approved rendering plant on site, subject to relevant and reasonable conditions.