Liddell Battery and Bayswater Ancillary Works

SSD8889679 – MOD 3 Offset Staging and Minor Amendments

Document revision history

Date	Version	Author	Comments
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DATE	Prepared	Approved	Comments
07/05/2025	H Chavda	M Nettlefold	
	Land and Approvals Specialist	Land and Approvals Manager	
			

Executive Summary

AGL Macquarie (AGLM) owns and operates the Bayswater Power Station, which is approved to generate up to 2,740 megawatts (MW). On 8 March 2022, AGLM received development consent under the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the Liddell Battery and Bayswater Ancillary Works Project. This project is classified as a State Significant Development (SSD) under application number SSD 8889679 ("the consent"). The environmental impact statement (EIS) for the project was prepared by Jacobs in 2021 (Jacobs, 2021).

AGL Macquarie (AGLM) proposes to modify the consent under Section 4.55 (1A) of the EP&A Act. The proposed modification seeks to:

- correct a transcription error in the consent to accurately reflect the offset credits requirements as assessed and presented in the approved Biodiversity Development Assessment Report (BDAR).
- adjust the staging allocation of biodiversity offset credits, to align with the project's staged construction schedule and operational requirements of the site. The modification does not alter the disturbance area which determined the offset credit requirements, or the total biodiversity offset credits required. Accordingly, the proposed adjustment to the staging of offset credits is not expected to result in any changes to the project's environmental impacts.
- include minor amendments to the configuration of the emergency diesel generator power supply.
- inclusion of temporary blast walls around the perimeter of the existing operational transformer yards, to mitigate risks to people and plant.

The modification consists of minor adjustments to the management and sequence of retiring the biodiversity offsets, and alterations to existing operational infrastructure. The modifications will not substantially alter the development or result in significant or altered environmental impacts.

Under Section 4.55 of the EP&A Act, a consent authority may modify a State Significant Development (SSD) consent, provided the modified development remains substantially the same as the originally approved development. Given the minor nature of the proposed modification, it falls within the scope of Section 4.55 (1A) of the EP&A Act. The modification does not change the objectives of the Approved Project, the project area, or the ongoing operation of the site. All elements of the modification will have minimal environmental impact.

Contents

1. Introduction

1.1. Background

AGL Macquarie Pty Ltd (AGLM) owns and operates Bayswater Power Station, which is approved to generate up to 2,740 megawatts (MW), along with the now-closed 2,000 MW Liddell Power Station, the 50 MW Hunter Valley Gas Turbines, and associated ancillary infrastructure.

AGLM has publicly announced its intention to transition towards a low-carbon future and respond to the National Energy Market (NEM) and customer requirements. Bayswater will continue to be operated through to 2030-33 to support the transition of the NEM toward net-zero emissions and then is intended to be retired. AGLM has committed to closing all coal fired generation assets in its portfolio by 2050. To facilitate the transition, AGLM progressed an application for the Liddell Battery and Bayswater Ancillary works to facilitate the efficient, safe and reliable continuation of electricity generating works from the Bayswater and Liddell sites which included; the addition of a grid connected Battery Energy Storage System (BESS), decoupling works to separate the Liddell Station from the ongoing operation of Bayswater, and a number of ancillary upgrades at Bayswater Power Station to ensure the efficient ongoing operation until end of life.

On 8 March 2022, AGLM received development consent under the EP&A Act for the Liddell Battery and Bayswater Ancillary Works Project. This project, designated as State Significant Development (SSD) under application number SSD 8889679 ("the consent"), was supported by an environmental impact statement (EIS) prepared by Jacobs in 2021.

AGLM now proposes to modify the consent under Section 4.55 (1A) of the EP&A Act. The proposed modification seeks to correct a transcription error in the credit offset requirements in the consent and adjust the staging allocation of biodiversity offset credits. Specifically, the offset credits required for the Bayswater Ancillary Works (BAW) component of the project are proposed to be allocated across multiple stages to better align with both immediate operational requirements of the Bayswater Power Station and with the delivery of the multiple ancillary infrastructure projects included as part of the BAW.

The proposed modification also includes minor configuration changes to the emergency power system. The reconfiguration aims to improve power reliability during outages, ensuring uninterrupted operation in critical areas.

Temporary blast walls are also included in this proposed modification. The blast walls will consist of double stacked shipping containers around the existing transformer yard at the power station to provide blast protection to people and plant, to mitigate against any increased risk from operating aging transformer bushings.

1.2. The Site and Surrounds

Liddell and Bayswater are located approximately 15 kilometres (km) south-east of Muswellbrook, 25 km north-west of Singleton and approximately 165 km north-west of Sydney. The total area of the AGLM landholding is approximately 10,000 hectares (ha), including the Ravensworth rehabilitation area, Lake Liddell and surrounding buffer lands.

The Project is located within an area dominated by mining and power generation. The locality is heavily influenced by industrial activity. Local land use is dominated by large-scale infrastructure associated with Bayswater and Liddell and open cut mining activities at Ravensworth Mine Complex, Mount Arthur Coal, Hunter Valley Operations, Liddell Coal Mine and Maxwell project. Previously cleared agricultural land for the purposes of grazing largely surrounds the AGLM landholding. The nearest sensitive receiver is located at Jerrys Plain, approximately 700 meters (m) to the south of the Project site.

The New England Highway runs between Liddell and Bayswater, with access from the highway provided by means of a dedicated road network designed to service the power station. The Northern Railway Line runs to the east of the AGLM landholding

The majority of the AGLM landholding has been previously disturbed during the construction and operation of Liddell and Bayswater.

1.3. Approved Project

The project as approved (Approved Project) includes the following individual aspects, which are shown in **Figure 1**:

- **Decoupling works:** Alternative network connection arrangements for the Liddell 33 kilovolt (kV) switching station that provides electricity to infrastructure required for the ongoing operation of Bayswater and associated ancillary infrastructure and potential third-party industrial energy users.

- **The Battery:** A grid connected Battery Energy Storage System (BESS) with capacity of up to 500 MW and 2 GWh.

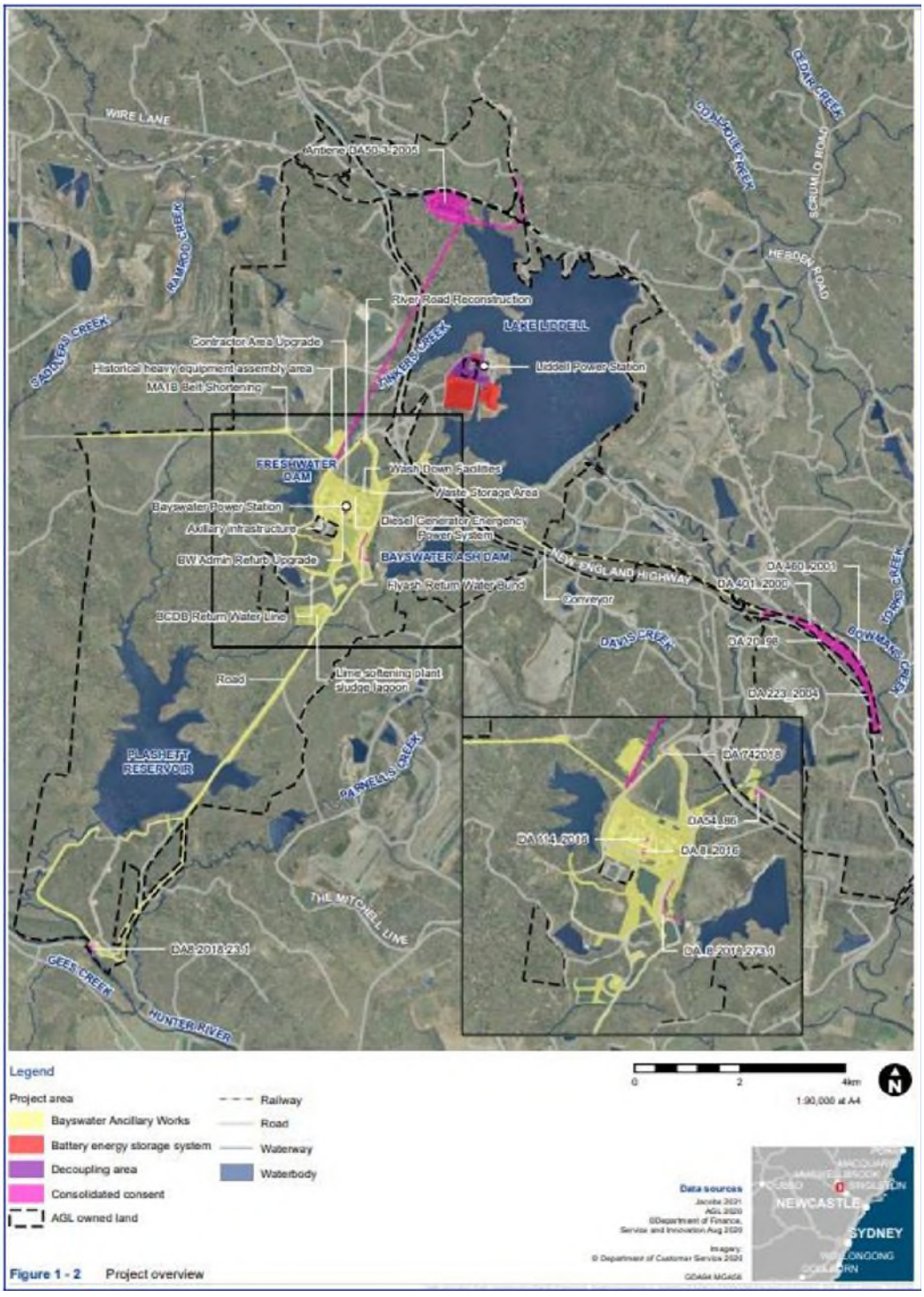
- **Bayswater Ancillary Works (BAW):** Works associated with the ongoing operation of Bayswater which includes (but is not limited to), upgrades to ancillary infrastructure such as pumps, pipelines, conveyor systems, roads and assets to enable maintenance, repairs, replacement, expansion or demolition.

A number of development consents were also surrendered and consolidated as part of the Approved Project.

A modification to the development consent SSD 8889679 was approved on the 27 February 2024 (Mod 1) which restaged the required biodiversity offset credits. The reallocation of the credits was solely related to the delivery of the BESS, creating a standalone stage of offset credits related to the BESS and removing those associated with the ongoing operation and maintenance works at Bayswater.

A second modification (Mod 2) was approved on 11 April 2025 to provide for the construction of a 330kV overhead transmission line, which due to ongoing design refinements was required to run outside the approved project boundary. The modification provided an adjustment to the approved project area to facilitate the transmission line and associated easement.

Figure 1 Approved Project Overview



1.4. Purpose of this Report

This Modification Report has been prepared to accompany an application under section 4.55 (1A) of the EP&A Act to modify Development Consent SSD-8889679. The proposed modification is seeking approval to correct a transcription error in the credit requirements between the BDAR and adjust the staging allocation of biodiversity offset credits, as outlined in Condition B11 Table 1 Ecosystem Credit Requirements. Specifically, the modification seeks to redistribute the offset credits required for stages 2, 3 and 4 associated with the Bayswater Ancillary Works across multiple stages to better align with project delivery schedules and ongoing operational requirements.

The modification also seeks to provide for minor amendments to the configuration of the emergency diesel generator power supply and inclusion of blast wall protection around existing transformer yards.

The purpose of this report is to provide a description of the proposed modification, the statutory context and an assessment of potential environmental impacts in accordance with relevant statutory requirements.

2. Strategic Context

2.1. Strategic Planning Considerations

The strategic context for the project has not altered form that presented in the EIS (Jacobs 2021), which is copied below:

The strategic context for the Project is wholly related to the context of AGLM within the NEM. Bayswater and Liddell are currently important contributors of reliable and dispatchable power into the NEM. This importance has been highlighted by the recent approval of the Bayswater Turbine Efficiency Upgrade project which was assessed as CSSI and recognised:

- Bayswater as being the second largest coal-fired power station in Australia producing approximately 15,000 GWh of electricity a year, which is enough to power 2 million homes

- Strengthening the energy security and reliability of the east coast electricity market.

The planned retirement of Liddell presents both a need within the NEM for new sources of dispatchable electricity and other network services, and an opportunity within the site to take advantage of the significant transmission network connection infrastructure associated with Liddell's existing connection.

The proposed Battery will provide storage and firming capacity to the NEM as well as additional services to assist grid stability including frequency control ancillary services. AGLM has publicly announced both an intention to transition towards a low-carbon future and respond to NEM and customer requirements. The Decoupling works forming part of this Project are intended to facilitate the separation of Bayswater from Liddell ahead of the planned closure of Liddell in 2023.

The BAW works are required to provide essential upgrades and maintenance to ensure the aging plant can continue to operate as efficiently as is possible up until end of life of the Bayswater Power station, currently scheduled for 2030-2033.

The proposed modification does not alter the strategic objectives of the Approved Project. The modification will allow for effective staging of the retirement of the biodiversity offset credits, more reflective of operational requirements and the scheduling of the ancillary infrastructure works required as part of the BAW. The modification also allows for a minor reconfiguration of the emergency diesel generator power system, to better support the ongoing operation of the Power Station in the event of a state wide black out, and the inclusion of temporary blast walls for additional safety measures for people and plant in the unlikely event of a failure of transmission infrastructure.

2.2. Need for the proposed modification

2.2.1. Re - Staging of biodiversity offset credits

The proposed modification seeks to adjust the staging of biodiversity offset credits outlined in Condition B11 Table 1 of the consent SSD8889679, without altering the approved disturbance area or the total offset credits required for retirement. The adjustment is required to better reflect areas required for scheduled project delivery of the BAW, and to allow for ongoing operational requirements.

The Stage 4 credit requirements, for example, currently cover a number of projects as outlined as part of the BAW works, including the brine concentrator return pipeline works, contractor area formalisation, ancillary infrastructure upgrades, as well as a number of areas which require access for essential operational works. The delivery of these projects has now been refined. Not all projects are required to be delivered at the same time – therefore not all the credits provided for under Stage 4 are required to be retired at the same time. As it is currently staged, however there is no ability to undertake a component of the project or access sites for immediate operational requirements, without an obligation to retire all the credits outlined in Stage 4.

By adjusting the staging of the retirement of the ecosystem credit arrangement, it allows the retirement of areas as they are required. In addition, by deferring the need to secure biodiversity credits for areas which are not currently required it will allow the ongoing retention of native vegetation on the sites until it is identified that these areas are required for project or operational requirements. This approach will result in a strategy that better reflects immediate project and operational needs but may also allow for the ongoing retention of areas that may not be required, as projects and operational needs are continually refined.

During the reallocation process it was noted that there was an error in the number of offset credits transcribed across to the consent. The modification also seeks to correct this discrepancy prior to reallocation, to ensure that offset obligations are accurately reflected as they were assessed and presented in the BDAR.

2.2.2. Emergency diesel generator power system

Bayswater Power Station was designed to have two emergency diesel generators. The purpose of these generators is to prevent catastrophic damage to the turbines and generators in the event of a Statewide blackout by providing emergency power in conjunction with the emergency power batteries which can provide emergency power for 2 hours.

The original diesel generators are now redundant with the cost to repair and maintain these legacy units not considered viable due to age of the units, damage incurred over their operational life and the availability of parts to repair and maintain. To mitigate the risks associated with a state-wide black out, two 415V package generators (Caterpillar XQ2000) have been procured and connected directly onto the 415V Diesel Generator Switchboards at the 1/2 end and 3/4 end respectively to provide the necessary emergency power. These units are not capable of switching from end to end and are only capable of providing emergency power to the ends they are connected to.

The risk of statewide black out is increasing with ageing NSW coal fired power stations coming to end of life and delays in the roll out of solar and wind projects coupled with more frequent extreme weather events. In the event of a statewide blackout, AGLM will not be able to safely run down the units without relying on two in service generators. AGLM also has no black start capability without external supply (from TransGrid). Two Diesel Generators are required for 100% availability to keep essential systems operating whilst waiting for this external power source. Historically, AGLM have not been able to guarantee 100% availability with just two units due to breakdowns and the inability to switch ends in the event of one unit failing, thus the need for a third, interconnected diesel generator that is capable of switch from 1/2 to 3/4 end is required.

This represents a minor reconfiguration to the originally assessed emergency diesel generator power system as presented in the Approved Project.

2.2.3. 500KV Yard Blast Wall Installation

The 500KV Yard Blast Wall Installation Project at Bayswater Power Station is a safety initiative prompted by the use of oil-impregnated porcelain (OIP) bushings on Units 3 and 4 generator transformers, which differ from the site standard of resin-impregnated bushings (RIP). Although a formal exemption has been granted to retain the existing OIP bushings through to station closure in 2033, AGL Macquarie (AGLM) is implementing additional protective measures to mitigate the associated operational risk. The installation of blast walls using double-stacked shipping containers around the perimeter of the Unit 3/4 500KV transformer yard, will provide additional safety measures to people and plant in the unlikely event of a failure of the bushings on the 500kV transformers.

The project involves relocating 20 existing 20ft containers from the Unit 1/2 transformer area, inspecting and refurbishing them where necessary, and supplementing them with 24 new A-grade 40ft containers to ensure complete perimeter coverage. These containers will serve as a physical blast barrier, significantly reducing potential risks to personnel and critical plant assets.

3. Description of Modification

3.1. Proposed modification overview

The proposed modification seeks to correct and amend the staging allocation of biodiversity offset credits, as outlined in Condition B11 Table 1 of the consent, without altering the approved disturbance area or the total required offset credits to be retired. Offset credits allocated for the Bayswater Ancillary Works, currently allocated across stages 2, 3 and 4, are proposed to be reallocated.

3.2. Staging of biodiversity offset credits

A Biodiversity Development Assessment Report (BDAR) (Jacobs, 2021) was prepared as part of the Environmental Impact Statement (EIS) and later revised before being appended to the Response to Submissions Report (RTS) (Jacobs, 2021a). The revised BDAR established staging for the retirement of biodiversity offset credits, which, following consultation with the Department of Planning and Environment (DPE), were incorporated into Condition B11 and Table 1 of the consent.

The proposed modification seeks to:

1) correct a transcription error identified between the BDAR and the consent, to accurately reflect the offset obligations as assessed and presented in the BDAR – See Table 1.

Table 1 Summary of the transcription error between BDAR and the Consent

Vegetation Community Ecosystem Credits	Credit Required (BDAR)	Credit Required (Consent discrepancy)
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Moderate	38	38
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Rehabilitation	186	186
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Native Grassland No 22	22	22
1731 Swamp Oak - Weeping Grass grassy riparian forest of the Hunter Valley – Moderate_Good	7	18
1692 Bull Oak grassy woodland of the central Hunter Valley -Moderate	17	82
1071 Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin - Moderate	82	7
Species Credits		
Delmar impar/Striped legless lizard	279	279
Myotis mascropus/Southern Myotis	196	196

The error appears to be an administrational error or oversite. The correction identified has been incorporated into the future staging proposed below. Table 2 illustrates the approved Stages 1-5 as per the consent highlighting the discrepancy (marked in red).

2) Reallocate the biodiversity offset credits in stage 2, 3 and 4 for Bayswater Ancillary Works. The proposed rearrangement of the biodiversity offset credit provided in stages 2, 3 and 4 are outlined in Table 3. The restaging of the biodiversity offset credits will provide greater flexibility in managing projects included as part of the BAW and also in undertaking operational activities at Bayswater Power Station. This approach ensures that priority works can proceed without impacting ongoing

operations while allowing the deferral of offset credit requirements associated with project components that are not yet scheduled for commencement.

Table 1 of the consent in Condition B11 is proposed to be amended to align with Table 3 below, reflecting a revised staging arrangement for current Stages 2, 3, and 4. Appendix 1 further details revised offset staging and Appendix 2 illustrates the updated biodiversity offset staging maps for the Project area.

Table 2 Approved Stages 1-5 as per consent with discrepancy (marked in red)

Vegetation Community	Credits Required					
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Total
Ecosystem credits						
Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Moderate	-	-	-	38	-	38
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Rehabilitation	-	-	34	128	24	186
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Native Grassland	-	21	0	1	-	22
1731 Swamp Oak - Weeping Grass grassy riparian forest of the Hunter Valley - Moderate-Good	-	8	0	9	1	18
1692 Bull Oak grassy woodland of the central Hunter Valley – Moderate-Good	-	37	11	34	-	82
1071 Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion - Moderate	-	1	0	6	-	7
Species credits						
Southern myotis	-	44	21	107	24	196
Striped legless lizard	1	31	27	202	18	279

Table 3 Revised staging arrangement for current Stages 2, 3, and 4

Vegetation Community	Credit Required							
Ecosystem credit	Stage 1	Stage 2A	Stage 2B	Stage 3A	Stage 3B	Stage 4	Stage 5	Total
Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Moderate		9			7	22		38
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Rehabilitation		7			1	154	24	186
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Native Grassland						22		22

Vegetation Community	Credit Required							
Ecosystem credit	Stage 1	Stage 2A	Stage 2B	Stage 3A	Stage 3B	Stage 4	Stage 5	Total
1731 Swamp Oak - Weeping Grass grassy riparian forest of the Hunter Valley - Moderate-Good		1				6		7
1692 Bull Oak grassy woodland of the central Hunter Valley – Moderate-Good				10		7		17
1071 Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion - Moderate		40				42		82
Species credits								
Southern myotis		44	107	21			24	196
Striped legless lizard	1	6	10	15	15	214	18	279

3.3. Emergency diesel power system

The EIS for the Approved Project identified that the current emergency diesel generator power required replacement with a new system. The new system was to include three 415V diesel generators with two located outside the existing diesel generator building that would connect to the existing 6.6kV network. The emergency diesel generators would operate in the event of emergency loss of power and are otherwise tested on a routine basis.

Due to ongoing design refinement, the configuration of the emergency power system has now been amended to include two 415 V diesel generators located within the plant and a new 6.6kV diesel generator located outside and adjacent to the existing diesel generator building that would connect to the existing 6.6 kV network. The third 6.6 kV generator provides additional flexibility and capacity into the emergency power system in the event of a loss of power.

Although there is change in the configuration of the emergency system, there is no alteration to the construction activities as originally presented and assessed in the EIS. Construction works, align with those presented in the EIS and include the installation of the proposed generator to be staged over 2 months with 5 sub-contracting companies. These include civil contractor, electrical contractor, lifting team, commissioning team and design consultant (construction support). Construction hours will be Monday to Friday, 7:00am-5:00pm.

There are also no changes to ongoing operational requirements as outlined in the EIS which consisted of ongoing monthly load testing and maintenance to ensure the reliability of backup power during outages. Routine inspections will be conducted to verify system performance, including load balancing, energy storage efficiency, and infrastructure integrity.

Figure 2 Indicative location of the emergency power system (generator)

Figure 3 Representative image of the 6.1kV generator

3.4. 500KV Yard Blast Wall Installation

The EIS for the Approved Project included the consolidation of a number of development approvals including DA 8/2016 – Blast Wall into the consent.

A need has now been identified to provide additional blast protection to people and plant around the porcelain bushings at Unit 3 and 4 generator transformers. The additional protection will allow these bushings to remain in service until the end of station life and provide additional protection in the unlikely event of a failure. The blast wall will consist of temporary double-stacked shipping containers forming a perimeter barrier around the Unit 3/4 500KV transformer yard.

Dependent on final design it is anticipated that approximately 20 refurbished 20ft containers will be relocated from the Unit 1/2 transformer area and an additional 24 A-grade 40ft containers will be configured to ensure full perimeter protection. The use of shipping containers allows for a practical and cost-effective solution while ensuring compliance with safety requirements. This change introduces a flexible and robust approach to mitigating transformer fault risks, in line with the station's operational life plan through to 2033.

Figure 4 Indicative configuration of the temporary shipping container to form a blast wall

4. Statutory Context

There has been no change to the relevant statutory context since the preparation and exhibition of the Liddell Battery and Bayswater Ancillary Works Environmental Impact Statement (EIS) in March 2021. The project remains permissible with consent under the *State Environmental Planning Policy (Transport and Infrastructure) 2021* and is classified as State Significant Development (SSD) under the *State Environmental Planning Policy (Planning Systems) 2021*, requiring assessment under Part 4, Division 4.7 of the EP&A Act.

4.1. Approval Pathway

Under section 4.55 of the EP&A Act, an applicant may seek approval to modify a SSD development consent at any time. These modifications may be necessary to improve the design of the project or to vary the conditions of consent.

The proposed modification is considered to be appropriately assessed under subsection (1A) - Modifications involving minimal environmental impact. Where a consent authority may, on application being made by the applicant or any other person entitled to act on consent granted by the consent authority, and subject to and in accordance with the regulations, modify the consent if:

(a) it is satisfied that the proposed modification is of minimal environmental impact, and

(b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and

(c) it has notified the application in accordance with—

(i) the regulations, if the regulations so require, or

(ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and

(d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.

Due to the minor nature of the modifications proposed, it is considered that Section 4.55 (1A) of the EP&A Act is applicable.

5. Engagement

AGLM briefed representatives from DPHI during a site visit on 17 February 2025, providing an overview of a number of proposed modifications, including the need to reallocate the biodiversity offset stages to better support the delivery of projects as described in the approved BAW works and also to support ongoing operational requirements of the site. A further briefing was subsequently provided on March 31 2025 to discuss the proposed modification. AGLM also commenced discussions with BCD on 20 March 2025 on the requirements of the biodiversity management plan for the BAW works and it is anticipated that the consultation process will be ongoing.

6. Assessment of Impacts

6.1. Restaging of the biodiversity offset obligations

The BDAR as approved nominated stages for the retirement of the biodiversity offset credits and these were, in consultation with DPHI, included into Condition B11 Table 1 Ecosystem Credit Requirements.

AGLM proposes to reallocate the staging of the offset credit requirements to better align with revised project delivery as part of the BAW works and also to better facilitate immediate operational and maintenance requirements at the Bayswater Power Station.

During a review of the offset credit requirements a transcription error was identified between the BDAR and the offset credit requirements in the consent. AGLM are therefore also proposing to correct the offset requirements, so they accurately reflect those identified and assessed as part of the BDAR.

The following changes are summarised in Table 3, which is proposed to replace the Table outlining the Ecosystem Credit Requirements in Condition B11.

Although the changes alter the number of credits associated with each stage there is no change in the total offset credits as assessed and required in the BDAR. The modification is simply an administrational reallocation of the existing offset requirements.

As such there is no alteration in the overall environmental impacts as assessed and endorsed through the BDAR.

6.2. Reconfiguration of the emergency power system and installation of a blast wall

A qualitative assessment was undertaken of the potential impacts from the proposed modification on a range of other environmental factors, as outlined in Table 4. Only relevant environmental aspects are considered below, noting the modification proposed is considered to be a minor alteration to the previously approved components that form part of the Stage 3 BAW works.

Table 4 Impact Assessment

Environmental factor	Potential change in impact	Potential impacts relative to the Approved Project
Hazards and Risks	Nil	*Emergency Power System* The proposed modification would not introduce new dangerous goods to be stored on-site. The change includes the ongoing running of an existing 415V generator until end of life of the power station with an additional 6.6KV Although the configuration of the generators is altered, hazards and risks associated with the generators are unchanged. The system is enclosed and

Environmental factor	Potential change in impact	Potential impacts relative to the Approved Project
		will have appropriate fire protection system implemented by an accredited fire services provider. *Blast Wall* The blast wall will not introduce new hazardous materials and will ultimately reduce potential risk in the unlikely event that the bushings on the 500kV transformer fail. Overall, the proposed modification would not introduce new hazards and risks beyond those already managed within the site.
Noise and Vibration	Nil	*Emergency Power System* The diesel generators are within an operational power station and a locality heavily influenced by industrial activities. The nearest sensitive receiver is the Lake Liddell Recreation Area, and the nearest residential receiver is the Lake Liddell Recreation Area owner's residence, approximately 4 km north of the proposed modification. *Blast Wall* Noise and vibrational impacts from the installation of the blast wall are considered minor, the containers will be transported via trucks and installed via cranes similar to the installation of the generator. The blast wall will not contribute to operational noise. Overall, given the distance to the nearest sensitive receivers and the existing industrial noise environment of an operational power station, no significant noise impacts are expected.
Traffic and Transport	Minor	*Emergency Power System* The proposed diesel generators will need to be transported to the site and craned into position. The previously approved 415V generators were also required to be transported and craned into position. The alteration to the configuration is not anticipated to cause additional traffic impacts beyond that considered and assessed in the EIS. *Blast Wall* The transport of the containers will be both internally from the site, as some containers are to be relocated and refurbished on site, along with the importation of an additional 24 shipping containers. The associated traffic movements are considered to be within the movements generally assessed as part of the Bayswater Ancillary Works, which assessed up to 50 two-way heavy vehicle movements a day (Jacobs 2021)). In summary, some additional heavy vehicle movements will be introduced to import the generator and the containers, however these traffic movements

Environmental factor	Potential change in impact	Potential impacts relative to the Approved Project
		are considered minor and can be appropriately managed through existing environmental management plans associated with the BAW.
Biodiversity	Nil	No additional vegetation clearing is required for the installation of emergency diesel generator power system or the blast walls. Both of the sites are located within existing sealed and/or disturbed operational areas with no identified native vegetation.
Contamination	Nil	The modification does not involve substantive ground disturbance and therefore, it is not expected to result in any new potential soil or contamination impacts.
Aboriginal heritage	Nil	The proposed modification would not require additional ground disturbance outside the approved project area and is, therefore, not expected to impact any Aboriginal heritage items.
Waste	Nil	No new waste streams will be introduced from this proposed change, compared to those considered and assessed as part of the EIS.
Water	Minor	*Emergency Power System* The proposed reconfiguration is located in a sealed area with no stormwater drains. The generator is self-bunded and has a double-skinned fuel tank to reduce the risk of any spills or leaks. The proposed refueling method will be via the nearby diesel pipeline with a suitable manifold and controlled refueling system. The reconfiguration is not anticipated to introduce substantive increases in the risk of pollution of water as compared to the emergency power system as considered and assessed in the EIS. *Blast Walls* The proposed temporary containers to form the blast wall will not have any impact on water movement on the site. Any potential construction-related risks to water will be managed with standard environmental management measures.

7. Justification and Conclusion

The proposed modification aims to correct the biodiversity offset credit requirements, so they accurately reflect those assessed and presented in the BDAR, adjust the staging allocation of biodiversity offset credits and update the configuration of the emergency diesel generator power system and include a temporary blast wall around existing transformer infrastructure at the power station.

The proposed modifications are considered to be minor with no increase in environmental impacts, no increase in the approved project's workforce, operational hours, anticipated traffic movements, or noise. The modification does not alter the land use or operational scope of the Approved Project. A qualitative assessment of environmental factors has determined that the modification would result in minimal environmental impact compared to the approved project, justifying its approval under Section 4.55(1A) of the EP&A Act.

The proposed modifications represent an essential refinement to the Approved Project. Given the minor nature of these changes and their alignment with the project's broader objectives, approval under Section 4.55(1A) of the EP&A Act is considered appropriate.

8. References

Jacobs 2021 *Liddell Battery and Bayswater Ancillary Works Project Environment Impact Statement* (EIS) prepared for AGL Macquarie Pty Ltd, March 2021 NSW.

Jacobs 2021a *Liddell Battery and Bayswater Ancillary Works Project Environment Impact Statement – Response to Submissions* prepared for AGL Macquarie Pty Ltd, July 2021 NSW

EMM 2023 *Liddell Battery and Bayswater Ancillary Works Modification 1 – Biodiversity Offset Staging*, prepared for AGL Macquarie, December 2023, NSW

Appendix 1 - Biodiversity Offset Staging Modification -Liddell Battery and Bayswater Ancillary Works

Biodiversity Offset Staging Modification

Liddell Battery and Bayswater Ancillary Works

25004733.001A

17/04/2025

KLEINFELDER
Bright People. Right Solutions.

Suite 3, 240-244 Pacific Highway,
Charlestown, NSW 2290

Phone: +61 2 4949 5200

Biodiversity Offset Staging Modification

Liddell Battery and Bayswater Ancillary Works

Kleinfelder Project: 25004733.001A

Kleinfelder Document: NCA25R180513

Prepared for:
AGL Macquarie Pty Ltd

New England Highway
Muswellbrook NSW 2333

Prepared by:
Kleinfelder Australia Pty Ltd

Suite 3, 240-244 Pacific Highway, Charlestown, NSW 2290
Phone: +61 2 4949 5200
ABN: 23 146 082 500

Document Control:

Version	Description	Date	Author	Technical Review	Peer Review
0.1	Draft for client review	09/04/2025	Fig Forest	Rob Townsend	Brad Deane
0.2	Update following client comment	17/04/2025	Fig Forest	Rob Townsend	Brad Deane

TABLE OF CONTENTS

TABLES

FIGURES

1 INTRODUCTION

1.1 BACKGROUND

AGL Macquarie (AGLM) owns and operates the Bayswater power station (Bayswater) which is approved to generate up to 2,740 megawatt (MW), the 2,000 MW Liddell power station (Liddell, now closed) and the 50 MW Hunter Valley Gas Turbines and associated ancillary infrastructure systems.

AGLM received development consent on the 8 March 2022 under the ***Environmental Planning and Assessment Act 1979*** (EP&A Act) for the Liddell Battery and Bayswater Ancillary Works Projects (the project). The project is a State Significant Development (SSD), application number SSD 8889679 (the consent) for which an Environmental Impact Statement (EIS, Jacobs 2021a) was prepared. The consent also includes a consolidated version of the consent of the original determination instrument, with a modification report titled "Liddell Battery and Bayswater Ancillary Works Modification 1 – Biodiversity Offset Staging" prepared by EMM dated December 2023.

This report serves two purposes. Firstly, to identify and correct an error in the credit requirement described by the consent. Secondly to present the restaging of credit requirements to accompany a staging modification application by AGLM.

1.2 INFORMATION REVIEWED

The following sources of information were reviewed as part of this assessment:

- EIS (Jacobs, 2021a)
- BDAR (Jacobs, 2021b; Jacobs, 2021c)
- Development Consent (SSD 8889679) and the Conditions of Approval (CoA) (DPE, 2022)
- EIS - Response to submissions (Jacobs, 2021c)
- Stage 3 BAW revised footprint (EMM 2023)
- Technical Memorandum - Bayswater Ancillary Works – Stage 3 Biodiversity Offset Pathway Forward (EMM 2023)
- BAW Stage 3 Biodiversity Credits Breakdown (Jacobs, 2023b).
- Liddell Battery and Bayswater Ancillary Works Modification 1 - Biodiversity Offset Staging (EMM 2023)
- Development Consent (SSD 8889679) and the Conditions of Approval – MOD 1 (CoA) (DPE, 2022)
- Charge Quote Q00312-001 BCF Charge Report V7 December 2024
- GIS mapping layers of the project produced as part of the Biodiversity Development Assessment Report (Jacobs, 2021b; Jacobs, 2021c)

2 ADMINISTRATIVE ERRORS IN CONSENT - BIODIVERSITY OFFSET CREDITS

AGLM are aware of an administrative typographical error difference in the Biodiversity Offset Credit retirement requirements between the approved Biodiversity Development Assessment Report (BDAR) and the SSD 8889679 consent and consolidated consent: Mod 1, which requires correction.

A BDAR was produced for the original proposal:

- ***Liddell Battery, and Bayswater Ancillary Works Biodiversity Development Assessment Report. BAM data version 36; To be finalised*** (April 2021). Appendix H. Biodiversity credit report lists the ecosystem and species credits required to be retired.

This BDAR was updated as part of the Submissions Report to address issues raised by BCS:

- ***Liddell Battery, and Bayswater Ancillary Works Biodiversity Development Assessment. Report BAM data version 40***; Finalised and included the associated BAM credit reports identifying the credit liabilities (**Plate 1**) (July 2021).

A Development Assessment was undertaken and subsequent Development Consent approved as outlined below:

- Liddell Battery and Bayswater Ancillary Works State Significant Development Assessment SSD-8889679 March 2022.
- SSD-8889679 Instrument of Determination - Development Consent Section 4.38 of the ***Environmental Planning & Assessment Act 1979,*** 8 March 2022.

The Instrument of Determination - Development Consent was issued with transcription errors between line items of the following ecosystem credit retirements as shown in Table 1 of the document (**Plate 2**):

- 1731 Swamp Oak - Weeping Grass grassy riparian forest of the Hunter Valley - Moderate-Good (7 credits per credit report: 18 credits per error in consent)
- 1692 Bull Oak grassy woodland of the central Hunter Valley – Moderate-Good (17 credits per credit report: 82 credits per error in consent)
- 1071 ***Phragmites australis*** and ***Typha orientalis*** coastal freshwater wetlands of the Sydney Basin Bioregion – Moderate (82 credits per credit report: 18 credits per error in consent)

This error was again replicated at the following stages:

- Liddell Battery and Bayswater Ancillary Works Modification 1 - Biodiversity Offset Staging (**Plate 3**) (Jacobs 2023)
- Modification 1 of Liddell Battery and Bayswater Ancillary Works (SSD-8889679 Mod 1) Assessment Report
- Development Consent (SSD 8889679) **(Plate 2)** and the Conditions of Approval – MOD 1 (**Plate 4**)

2.1 ADDITIONAL CREDIT

EMM (2023) state the following regarding credit obligation variations between the original SDD and the approved modification "***without changing the approved disturbance area or the total offsets credits (828) that must be retired***." This statement is contradicted by the figure of 828 credits, which includes an additional credit (**Plates 3** and **4**) added to "1731 Swamp Oak - Weeping Grass grassy riparian forest of the Hunter Valley – Moderate - Good".

This additional credit was varied "..***because (the) revised disturbance area (Stage BAW) occurs within the approved project area, and a revised Biodiversity Assessment Method (BAM) Calculator was not necessary***." This later Ecosystem credit estimate was performed on a pro-rata basis with a "***proportionate credit number with a decimal number was rounded up to the next whole number to provide a whole credit value***" (Jacobs 2023). This additional credit has been applied in the modified consent.

The BAM Calculator does not currently have the functionality to undertake staged developments (per comms. BOS helpdesk 25/02/2025). It is unclear how this additional credit was determined "***without changing the approved disturbance area***" (Jacobs 2023), but this liability is not required by the Credit Summary Report submitted with the BDAR (Plate 1: Jacobs 2021b & c).

2.2 SUMMARY OF AMENDMENTS REQUIRED TO CORRECT ERRONEOUS CREDIT LIABILITIES

It has been identified that there are two separate errors that have been applied under the existing modified consent. These include:

1. It appears credit numbers have been assigned to the wrong line item PCT's:

    (a) PCT 1731 ***Swamp Oak -Weeping Grass grassy riparian forest of the Hunter Valley*** – Moderate – Good.
    (i) Consent requires 18 Credits.
    (ii) BDAR credit report requires 7 Credits.
    (iii) **Correction required:** Adjust consent conditions to the correct 7 credit liability.

    (b) PCT 1692 ***Bull Oak grassy woodland of the central Hunter Valley*** – Moderate - Good
    (i) Consent requires 82 Credits
    (ii) BDAR credit report requires 17 Credits
    (iii) **Correction Required:** Adjust consent conditions to the correct 17 credit liability.

    (c) PCT 1071 ***Phragmites australis*** and ***Typha orientalis*** coastal freshwater wetlands of the Sydney Basin Bioregion – Moderate
    (i) Consent requires 7 Credits
    (ii) BDAR requires 82 Credits
    (iii) **Correction Required:** Adjust consent conditions to the correct 82 credits.

2. There is also an error in the requirement of 18 credits vs 17 credits in regard to 1692 ***Bull Oak grassy woodland of the central Hunter Valley*** – Moderate-Good. An additional credit has been applied in the consent that is not required by the Credit Summary Report submitted with the BDAR as identified in Section 2.1 of this report.

    (a) **Correction Required:** Adjust consent conditions to the correct 17 credits for PCT 1692 Bull Oak grassy woodland of the central Hunter Valley – Moderate-Good.

The errors and required corrections will need to be notified in writing to DPHI and include consultation with BCS via the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW), to correct the error in the consent prior to the retirement of credits. The application for the retirement of credits will require the submission of both the consent and the Credit Summary Report alongside the Charge Quote Application form and they will need to align. It is noted that correction of an administrative error may require submission of a modification application pursuant to Section 4.55(1) (Modifications involving minor error, misdescription or miscalculation') of the EP&A Act.

3 PROPOSED STAGING MODIFICATION - CREDIT RETIREMENT OVERVIEW

Condition B11 of the Consent states:

> ***The Applicant may review and update the ecosystem and species credit requirements in Table 1 to reflect the final construction footprint and resulting extent and type of plant community types to be cleared. Amendments to the ecosystem and species credit requirements must be undertaken in consultation with BCS and approved by the Planning Secretary prior to the commencement of construction of the relevant offset stage.***

AGL are proposing to change the staging allocation of biodiversity offset credits as described in Table 1 of the Consent and Consolidated Consent: Mod 1, without changing the approved disturbance area or the total offsets credits that are required to be retired.

Under Section 4.55 of the EP&A Act, a consent authority may modify an SSD development consent, provided the development to which the consent as modified relates is substantially the same as the development for which the consent was originally granted. As it is a staging modification involving no additional environmental impact and of a minor nature, it is considered that Section 4.55 (1A) of the EP&A Act applies.

A map of the proposed staging is provided in **Figure 1**.

3.1 RESTAGING OF CREDITS METHODOLOGY

3.1.1 Ecosystem and Species Credit requirements

From GIS shapefiles provided by AGL, detailed estimates of on ground impacts for the proposed staging were calculated in metres square. The total number of ecosystem credits was divided by the total area in hectares of each vegetation zone listed in the BDAR to give credits per hectare figure. This method was also applied for species credits to give a credits per hectare figure.

For the new credits per staging figures, the credits per hectare figure was multiplied by the detailed estimates of on ground impacts of the proposed revised staging to give a figure rounded to a whole number.

3.2 REVISED OFFSET STAGING AND CREDIT RETIREMENTS FOR PROPOSED MODIFICATION

The following **Tables 4-1** and **4-2** specifies updated credit retirement staging based upon revised staging and area figures provided by AGLM, credit retirement obligations under the approved MOD-1 conditions of consent, original BDAR and Ecosystem and Species credits requirements retired already (BCF697 and BCF343) and corrections to the EMM rounding error.

Table 4-1: Revised staging species credit retirements

Species credits						
Staging names	Retired (formally Stage 1 and 5)	Stage 2A priority	Stage 2B	Stage 3A	Stage 3B	Stage 4
Southern myotis	24	44	107	21		
Striped legless lizard	19	6	10	15	15	214

Table 4-2: Revised staging ecosystem credit retirements

Ecosystem credits						
Staging names	Retired (formally Stage 1 and 5)	Stage 2A priority	Stage 2B	Stage 3A	Stage 3B	Stage 4
Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Moderate		9			7	22
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Rehabilitation	24	7			1	154
1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter – Native Grassland						22
1731 Swamp Oak - Weeping Grass grassy riparian forest of the Hunter Valley - Moderate-Good	1	1				6
1692 Bull Oak grassy woodland of the central Hunter Valley – Moderate-Good				10		8
1071 ***Phragmites australis*** and ***Typha orientalis*** coastal freshwater wetlands of the Sydney Basin Bioregion - Moderate		40				42
Credits per stage		57	0	10	8	254

Legend

- SSD-8889679 Footprint
- Native PCT - No Offset Required

Native PCT Offset Required

- Stage 2A
- Stage 2B
- Stage 3A
- Stage 4
- Retired

Species Impacts Offset Required

- Stage 2A
- Stage 2B
- Stage 3A
- Stage 3B
- Stage 4
- Retired

Metres
0 500 1,000 1,500 2,000 2,500

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
All Stages

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:
1

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

REFERENCES

BCF Charge Report V7 - December 2024. ***Charge Quote Q00312-001 BCF Charge Report V7 December 2024***

Department of Planning, Housing and Infrastructure 2024. ***State Significant Development Modification Assessment Report (SSD-8889679 Mod 1) February 2024 Modification 1 of Liddell Battery and Bayswater Ancillary Works (SSD-8889679 Mod 1) Assessment Report***

EMM Consulting Pty Ltd December 2023. ***Liddell Battery and Bayswater Ancillary Works Modification 1 - Biodiversity Offset Staging***

NSW Government 2022. ***Development Consent Section 4.38 of the Environmental Planning & Assessment Act 1979 Liddell Battery and Bayswater Ancillary Works Department of Planning and Environment SSD 8889679***

NSW Department of Planning and Environment March 2022. ***Liddell Battery and Bayswater Ancillary Works State Significant Development Assessment SSD-8889679***

Jacobs 2021a. ***Liddell Battery and Bayswater Ancillary Works Project Environmental Impact Statement IS334000 March 2021 AGL Macquarie Pty Limited***

Jacobs 2021b. ***Liddell Battery, and Bayswater Ancillary Works Biodiversity Development Assessment Report IS334000_BDAR | Rev April 2021 AGL Macquarie Pty Limited***

Jacobs 2021c. ***Liddell Battery, and Bayswater Ancillary Works Biodiversity Development Assessment Report IS334000_BDAR | Rev July 2021 AGL Macquarie Pty Limited***

[GIS mapping layers of the project produced as part of the Biodiversity Development Assessment Report (Jacobs, 2021a; Jacobs, 2021b; Jacobs 2021c)]

Jacobs 2023. ***Technical Memorandum Jacobs Group 22 November 2023 (Australia) Pty Ltd Final 1 Bayswater Ancillary Works – Stage 3 Biodiversity Offset Pathway Forward***

Kleinfelder 2021. ***Liddell Battery and Bayswater Ancillary Works Project (SSD-8889679) - RFI***

Appendix 2 – Revised mapping of the biodiversity offset staging

Legend

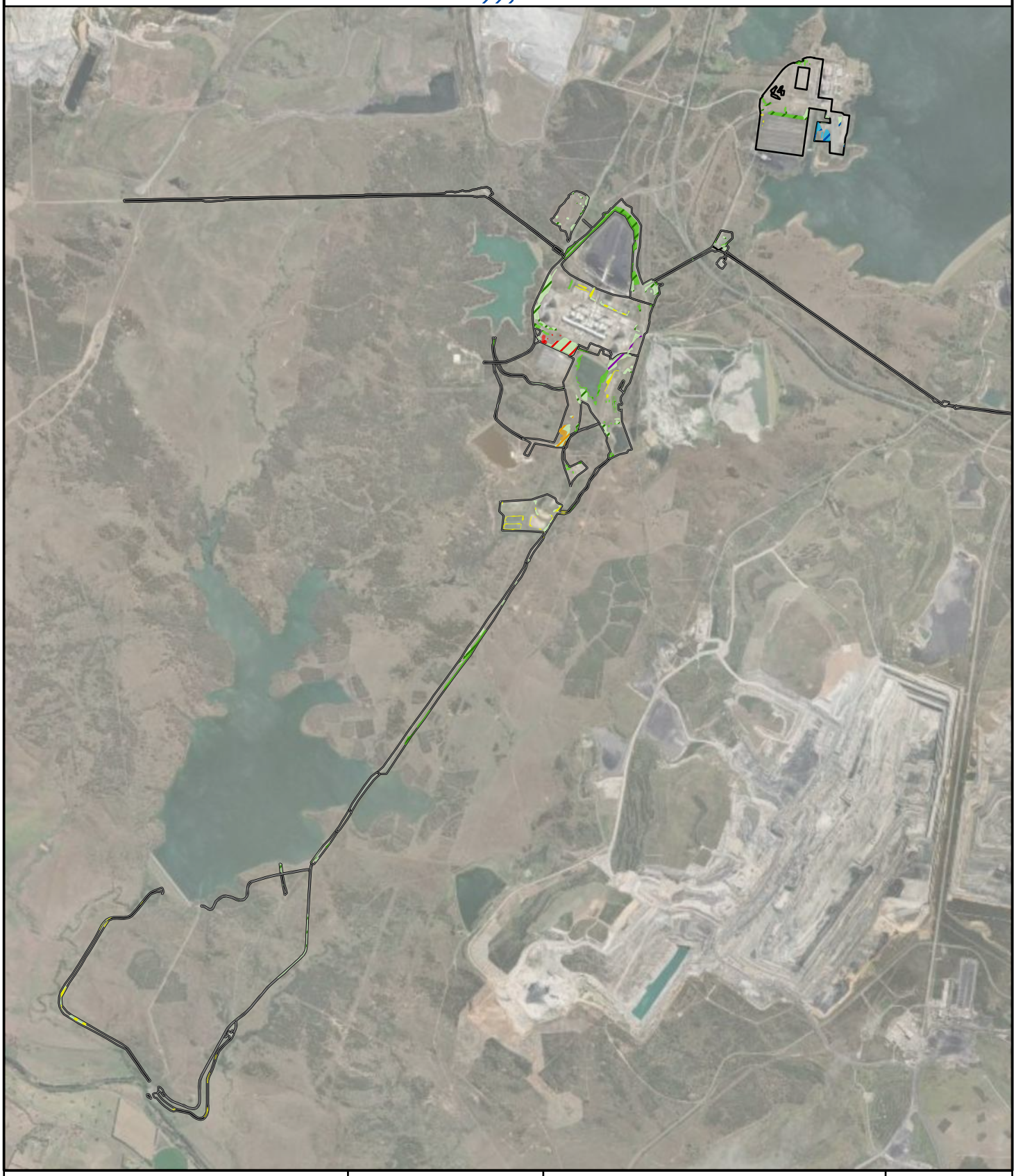
- SSD-8889679 Footprint
- Native PCT - No Offset Required

Native PCT Offset Required

- Stage 2A
- Stage 2B
- Stage 3A
- Stage 4
- Retired

Species Impacts Offset Required

- Stage 2A
- Stage 2B
- Stage 3A
- Stage 3B
- Stage 4
- Retired



Metres
0 500 1,000 1,500 2,000 2,500

N

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DATA SOURCE:
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Nearmap - 2021

Offset Mapping
All Stages

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

1

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

- SSD-8889679 Footprint
- Native PCT - No Offset Required

Native PCT Offset Required

- Stage 2A
- Stage 4
- Retired

Species Impacts Offset Required

- Stage 4
- Retired

Metres
0 100 200 300 400 500
N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
All Stages - Liddell

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:
1a

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

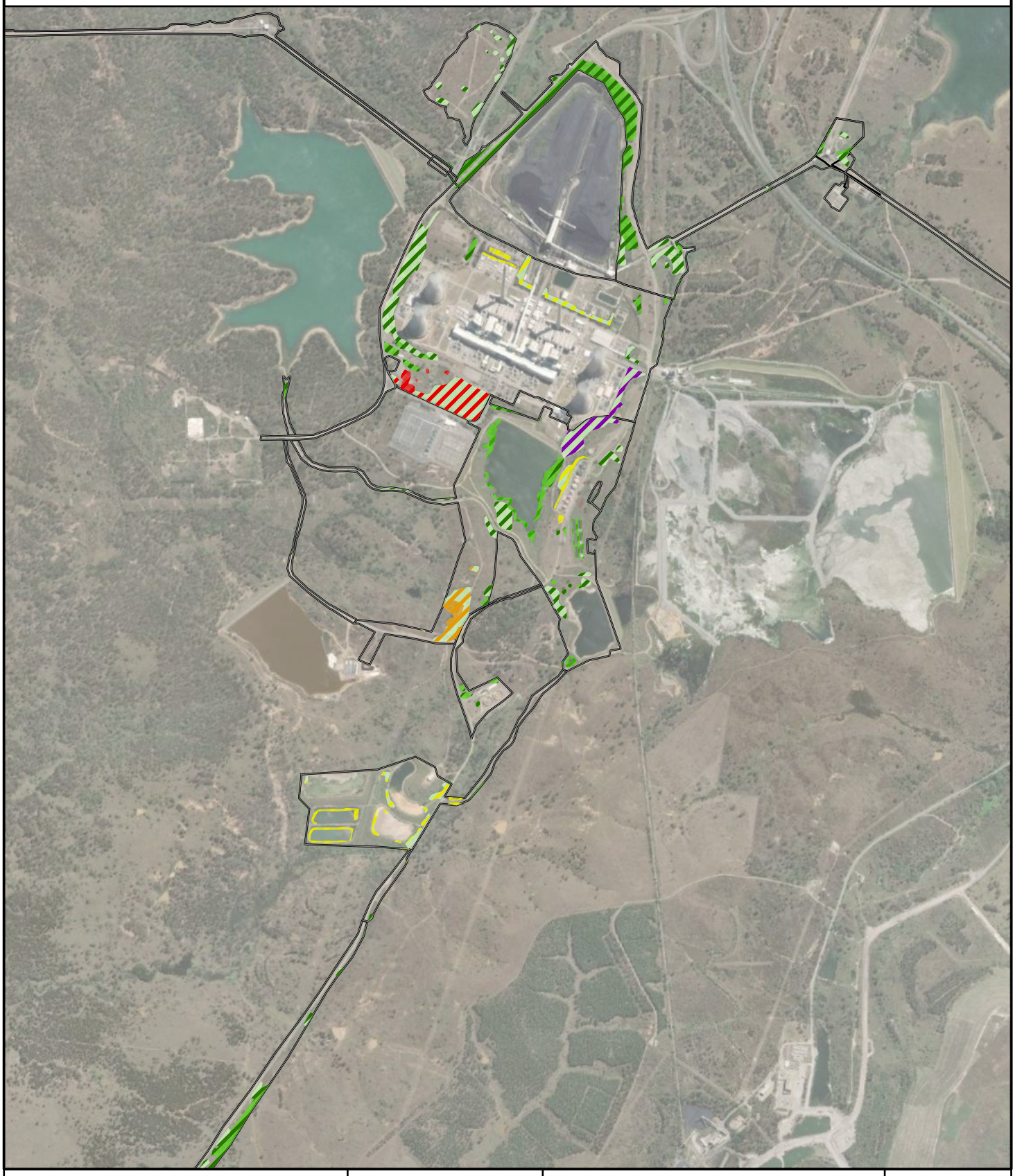
- SSD-8889679 Footprint
- Native PCT - No Offset Required

Native PCT Offset Required

- Stage 2A
- Stage 2B
- Stage 3A
- Stage 4

Species Impacts Offset Required

- Stage 2A
- Stage 2B
- Stage 3A
- Stage 3B
- Stage 4



Metres
0 200 400 600 800 1,000

N

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DATE DRAWN: 4/17/2025 13:03 Version 1

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
All Stages - Bayswater

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

1b

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

- SSD-8889679 Footprint
- Native PCT - No Offset Required

Native PCT Offset Required

- Stage 2A
- Stage 4

Species Impacts Offset Required

- Stage 2A
- Stage 4

Metres
0 200 400 600 800 1,000

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
All Stages - Bayswater South

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

1c

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT Offset Required

Stage 2A

Metres

0 100 200 300 400 500

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 2A - Liddell

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

2

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Stage 2A

Species Impacts Offset Required

Stage 2A

Metres

0 200 400 600 800 1,000

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 2A - Bayswater

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

3

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Stage 2A

Species Impacts Offset Required

Stage 2A

Metres

0 200 400 600 800 1,000

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 2A - Bayswater South

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

4

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Stage 2B

Species Impacts Offset Required

Stage 2B

Metres

0 200 400 600 800 1,000

N

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NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 2B - Bayswater

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

5

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Stage 3A

Species Impacts Offset Required

Stage 3A

Metres

0 200 400 600 800 1,000

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 3A - Bayswater

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

6

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Species Impacts Offset Required

Stage 3B

Metres

0 200 400 600 800 1,000

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 3B - Bayswater

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

7

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Stage 4

Species Impacts Offset Required

Stage 4

Metres

0 100 200 300 400 500

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 4 - Liddell

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

8

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Stage 4

Species Impacts Offset Required

Stage 4

Metres

0 200 400 600 800 1,000

N

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DATA SOURCE:
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Nearmap - 2021

Offset Mapping
Stage 4 - Bayswater

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

9

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Stage 4

Species Impacts Offset Required

Stage 4

Metres

0 200 400 600 800 1,000

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Stage 4 - Bayswater South

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

10

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)

Legend

SSD-8889679 Footprint

Native PCT - No Offset Required

Native PCT Offset Required

Retired

Species Impacts Offset Required

Retired

Metres

0 100 200 300 400 500

N

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DATA SOURCE:
NSW DFSI - 2020
Nearmap - 2021

Offset Mapping
Retired

AGL Macquarie
Bayswater Staging Modification Assistance

FIGURE:

11

J:\00 CLIENT FILES\129265_AGL_MacquarieLtd\25004733_SSD889679_S4.55_Mod\SSD889679_Working.aprx (Figures)