# Hive Battery Developments Pty Ltd

# **VISUAL IMPACT ASSESSMENT**

Proposed Battery Energy Storage System

1154 Clarence Town Rd, Seaham NSW

January 2024



### Prepared by:

#### Conus Landscape Architecture Pty Ltd ABN. 52 144 562 756

158 Grandview Road New Lambton Heights NSW 2305

- t. 02 4950 9195
- e. info@conuslandscapearchitecture.com.au
- w. conuslandscapearchitecture.com.au
- Author: Anton Conus AlLA BLArch, GradCertUrbDesign, AdvCertUrbHort Registered Landscape Architect No. 8420

### **Document Information**

Hive Battery Developments Pty Ltd
Proposed Battery Energy Storage System
1154 Clarence Town Rd, Seaham
23.44
29.01.24

Version	Date	Description of revision	Prepared by	Checked by
А	19.01.24	Draft Submission	AC	AC
В	29.01.24	Final Submission	AC	AC

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289



#### **1.0 INTRODUCTION**

#### 1.1 Overview

conus

Conus Landscape Architecture has been engaged by HDB, on behalf of Hive Battery Developments Pty Ltd and Clean Energy Transfer Fund Pty Ltd to prepare a Visual Impact Assessment (VIA) of the proposed Battery Storage Energy System (BESS) at 1154 Clarence Town Rd, Seaham, NSW. This VIA is provided in association with Landscape DA Documentation LDA00-16 Rev A, dated 22.12.23 (source: Conus Landscape Architecture, 2023).

#### 1.2 The Proposal

The proposed development, referred to in this document as the Site, is for a single BESS compound comprising of 5 individual BESS to be located in the southwestern corner of a rural property at 1154 Clarence Town Rd, Seaham. As detailed in plans prepared by HDB, it consists of 5 individual compounds, divided into a row of 3 and a row of 2. Each in individual compound measures 44.16m long x 32.41m width and houses 12 x 2.5m high x 1.73m wide x 9.34m long individual batteries, grouped in pairs and several associated facilities (water tank, storage room, power conversion system, control room). This overall single compound is contained within a 3m high HushPanel noise barrier with Trimdek profile and coloured Windspray. This noise barrier will totally conceal all of the internal structures. The compound is accessed by 2 separate access gates on it's eastern side, which connect to a single 4m wide access road which connects to an existing internal road. Whilst each individual BESS is the subject of a separate individual DA, for the purpose of this VIA, all 5 DA's will be combined in the one Landscape DA, in addition to the Landscape Plan Documentation, already issued to council in a combined DA.

This development falls under the local government area of Port Stephens Council (PSC) and has been requested through a Request for Information (RFI), dated 7.11.23 to accompany a Landscape Plan:

Impacts on surrounding development:

5. The submitted landscape plan is not sufficient to provide a clear understanding on the location or types of vegetation proposed. It is therefore requested that the existing landscape design be updated to provide a notated design and clear planting schedule. Any proposed planting must also ensure that the bushfire mitigation requirements can be achieved and that the identified species are appropriate for the area.

6. The applicant must provide photomontages that show the views from the adjoining development to the southeast and west. These must include up to date photos and a scaled image of the entire proposed development on the site.



Figure 1: Overall Site Plan (source: HDB, 2023)

Figure 2: Detail Site Plan (source: HDB, 2023)

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289







Figure 3: Site Elevations including Wall (source: HDB, 2023)

Figure 4: Location Map (source: HDB & CLA, 2023)

#### 1.3 Purpose and scope of this report

PSC states that a VIA refers to a 'report that examines the visual impact of a development in situations where a development presents significant bulk, height or variations to setbacks. To be prepared by a suitably qualified person'. Additionally, a VIA is a tool to measure and assesses potential landscape and visual effects or impacts. This process can be used to potentially inform and influence the design or planning process. The end result of this process is that takes account of potential landscape and visual impacts to reduce negative impacts and enhance the existing landscape and visual environment. *PSC*, *DCP 2014 Development Application Supporting Documentation*.

#### 1.4 Applicable Guidelines

The visual impacts of the proposed development has been assessed in accordance with the following guidelines:

- Environmental Roads and Maritime Services, (2018,) Impact Assessment Practice Note EIA-N04 Guideline for Landscape Character and Visual Impact Assessment, Version 2.1
- Landscape Institute and Institute of Environmental Management & Assessment, (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition
- Lake Macquarie City Council, (2013) Scenic Management Guidelines Part D: Requirements for Landscape and Visual Impact Assessment

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

act Assessment, Version 2.1 I Edition

#### 2.0 METHODOLOGY

#### 2.1 Study area

The Site is part of single irregular-shaped rural residential 45.379ha block, zoned RU2 Rural Landscape Land Use (PSC). It is located on the southern side of Clarence Town Rd, Seaham, adjacent to a substation, a poultry farm and several rural properties. It contains two separate residences (northern and southern sections), a large metal storage shed. Two watercourses traverse the site: Deadman's Ck and an unnamed watercourse both flow in a southeasterly direction, from northwest to southeast.

#### 2.11 Topography and soil

Wildthing Environmental Consultants' Ecological Assessment Report, 2023 describes the subject land being located within the Lower Hunter Channels and Floodplains and Newcastle Coastal Ramp BioNet Landscapes (Mitchell Landscape). The majority of the impact area was located within the Lower Hunter Channels and Floodplains BioNet Landscape. The subject land contained four Soil Landscapes, Wallalong (wgx) in the south west and north east, Seaham Variant b (sezb) in the north west, Wallalong Variant a (wgxa) in the south east and Seaham (sez) in the central north (DPIE 2020). The majority of the impact area was located within the Wallalong Soil Landscape.

#### 2.12 Vegetation

The majority of the Site has been cleared of it's native vegetation for various historical agricultural pursuits except for remnant sclerohyllous forest and woodland areas adjacent to the two watercourses and various scattered Eucalyptus trees.

Wildthing Environmental Consultants' Ecological Assessment Report, 2023 identifies two vegetation communities, Plant Community Types (PCT) detailed in the NSW Vegetation Information System (VIS) classification database, are found in and around the Site:

- 1. PCT 3433 Hunter Coast Foothills Spotted Gum-Ironbark Grassy Forest Corymbia maculata (Spotted Gum), Eucalyptus fibrosa (Red Ironbark), Eucalyptus siderphloia (Grey Ironbark)
- 2. PCT 4042 Lower North Riverflat Eucalypt-Paperbark Forest, features such canopy tree species as: Eucalyptus siderphloia (Grey Ironbark) and the middle storey tree Melaleuca nodosa (Prickly-leaved Paperbark)

Two further disturbed vegetation communities are represented: Grazed exotic groundcover with scattered trees, including the Koala Feed Tree species Eucalyptus tereticornis (Forest Red Gum) and managed roadside grassland.

![](_page_4_Picture_13.jpeg)

### 2.2 Landscape treatment of the proposed development

conus

The following LDA03 Rev A Landscape Plan, dated 22.12.23 indicates the landscape treatment of the proposed development.

![](_page_5_Figure_2.jpeg)

Figure 5: LDA03 Rev A Landscape Plan, dated 22.12.23 (source: Conus Landscape Architecture, 2023)

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

PLAN	STATUS: Development Application			
	SCALE: 1:200	DATE: 22/12/23	JOB No: 23.40	
DTTED.	DRAWN: DS	CHECKED:	APPROVED:	

# 3.0 VISUAL IMPACT ASSESSMENT

# 3.1 Glossary of terms

conus

The following is a glossary of terms and their abbreviations used (where applicable):

TERM	DEFINITION	ABBR
Aesthetics	Relating to the sense of the beautiful or science of aesthetics, ie the deduction, from nature and taste, the rules and principles of beauty.	
	The ability to reduce the visual impact of a development through siting design colour or screening	And
Background	Parts of a setting that appear most distant twickilly areater than 1.5 kilometres: also referred to as the regional setting	
Canopy tree	A tree with a minimum height of approximately 10 metres with an average crown spread of at least 8 metres to 10 metres in width	
Desired future	A term used to capture the desirable future outcome or vision for an area as set down in planning documents or as professionally assessed and envisaged by urban designers or other built environment professionals.	
character		
Environmental Impact		EIS
Statement		
Foreground	The area that immediately surrounds the proposal up to a distance of 0.5 kilometres; also referred to as the local setting.	
Impact	The effect of a proposal, which can be adverse or beneficial, when measured against and existing condition	
Kilometres		Km
Landscape and Visual	The assessment of the impacts of the proposal on landscape and visual values.	LVIA
Impact Assessment		
Lanascape	An aspects of a fract of land, including landiorm, vegetation, buildings, villages, lowins, crites and initiatrocture.	
Landscape Architecture	A profession involved with the dissessment, design and management of the built and natural environment.	
Assessment	The process of mapping, describing and evaluating landscapes of the presence and analigement of various landscape realities	LCA
Landscape character	Multiple similar landscape character zones repeated within a larger study area arounded to avoid repetition in their description	ICT
type		LOI
Landscape character	An area of landscape with similar properties or stronaly defined spatial qualities, distinct from areas nearby,	
zone		
Local planning policy	Local planning policies are tools used to implement the objectives and strategies of the Municipal Strategic Statement	LPPF
framework		
Magnitude	The measure of the scale, form and character of a development proposal when compared to the existing condition. In the case of visual assessment this also relates to har far the proposal is from a viewer. Combined with	
	sensitivity, magnitude provides a measurement of impact.	
Metres		m
Middleground	An intermediate area that is a 0.5 -2km distance from the proposal. Also referred to as the sub-regional setting.	
Modification level	The degree to which a development contrasts or blends with its setting.	
Receptor	A location or type of user for which views of the proposal may be possible.	
Significant landscape	Ine landscape is of national importance.	
Sensitivity	Ine sensitivity of a lanascape characterizate or view and its ability to absorb change of the nature of the proposal. In the case of visual impact this also relates to the type of viewer and number of viewers. Combined with	
Urban dosian	The present and product of deciging prejects or they fit ensitively with the built natural and community environments contribute to the functioning of the community and contribute to the quality of the public domain for	
orban design	the community and read user. Architects: Engineers any insensingent and community environment, community of the community and community, and community and c	
	Architects who have extended their expension into the field of urban Design	
Viewer perception	The way in which people respond to what they are seeing as influenced by things other than purely visual for example noise and economic benefits	
Viewpoint	Moderate or high sensitivity location from which views to the construction process or components of the proposal may be possible.	
Viewshed	The surface area visible from a particular viewing location.	
Visability	The state or fact of being seen	
Visual amenity	The qualities of a landscape setting that are appreciated and valued by a viewer.	
Visual catchment	The area over which an object can be seen within the landscape based on line of sight.	
Visual impact	The result of assessing the sensitivity level of a viewer and the modification level of a development	
Visual sensitivity	The degree to which various user groups would respond to change based on their expectation of a particular experience in a given setting.	

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

# REVIATION

3.2 Visual Impact assessment

conus

![](_page_7_Picture_1.jpeg)

Table 1. Impact level (matrix of sensitivity and magnitude)

Sensitivity	Criteria	Magnitude
Very High	Nationally designated landscape with high conservation or heritage value and absence of landscape detractors. Protected views identified in planning policy designation, State designated publicly accessible landscape or heritage assets.	Very High
High	Locally designated valued landscape with many distinctive characteristics and very few landscape detractors. Public views with a high visual prominence and a high number of users in close proximity, private views in close proximity, passive recreational receptors where the landscape has a high visual value.	High
Moderate	Landscape with some distinctive characteristics and few landscape detractors. Public views with a moderate visual value and a moderate number of users in close proximity, active recreational receptors where the landscape has little visual value.	Moderate
Low	Landscape with few distinctive characteristics and presence of landscape detractors. Public views with a little visual value and a low number of users, where receptors are mostly road users in motor vehicles or passers-by, people at their work place or views from commercial buildings where the landscape has some visual value.	
Very Low	Landscape with no distinctive characteristics and presence of many landscape detractors. Public views with none visual value and a limited number of users not in close	Very Low
	proximity, people at their work place or views from commercial buildings where the landscape has little or no visual value.	Negligible

Very High	Total loss or major change to key characteristics of the The proposal forms a significant and immediately appa It significantly contrasts in scale and character (either e It is severely detrimental to the quality of the scene.
High	Notable loss or change to key characteristics of the exis The proposal forms a dominant feature of the scene to become subordinate. It contrasts in scale and character (either existing or pla It is reducing the quality of the scene.
Moderate	Partial loss or change to key characteristics of the exist The proposal forms a visible new element within the ov relatively compatible with the surrounding character (ef and view's composition. It is possibly reducing the quality of the scene.
Low	Minor loss or change to key characteristics of the existi The proposal constitutes only a minor component of th compatible with the surrounding character (either exist composition.
Very Low	Limited or no loss or change to key characteristics of th The proposal constitutes only a minor component of th be missed by the casual observer or receptor. Awarene not have an effect on the overall quality of the scene.
Negligible	No change in the landscape or view.

Table 2.Sensitivity Ranking Criteria

Table 3. Magnitude Ranking Criteria

e existing landscape. arent part of the scene. existing or planned).

xisting landscape. o which other elements

lanned).

Criteria

sting landscape. overall scene, yet one that is (either existing or planned)

ting landscape. the wider view, that is sting or planned) and view's

the existing landscape. the wider view, which might ness of the proposal would

#### 3.21 Sensitivity

conus

Low. The proposal is situated to adjacent to screened commercial poultry sheds to the west, dense forest to the north and is screened by the adjoining southeastern nieghbour's property by existing boundary screen planting and is surrounded by open flat grassed fields. Whilst it will initially be visible to the existing eastern residence, this viewshed will in time be totally screened by the proposed dense layered planting.

#### 3.22 Magnitude

Low. The proposed development comprises of various different shaped and sized buildings, which have a maximum height of 2.52m. Excluding the 3m high perimeter acoustic fence, the tallest structure is the 3m high water tank. These structures are all concealed from view from the outside by a 3m high HushPanel acoustic fence. In turn, this 3m acoustic wall is screened by a buffer of native plants.

#### 3.33 Landscape character and visual impact assessment

The landscape character and visual impact assessment will be determined by referencing viewpoints showing existing landscape character in relation to the proposed development, taking from the same viewpoints. The local character of each of these viewpoints will be described and then an Impact Level Matrix will reveal the ultimate level of visual impact at each viewpoint/site.

Eight viewpoints were selected around the proposed site (refer to the Viewpoints location map below).

![](_page_8_Picture_7.jpeg)

Viewpoint	Location	Direction
1	Southeast	NW
2	Southeastern boundary	NW
3	Adjoining southern neighbour	NW
4	Southern boundary	NW
5	Southwest corner	NE
6	Western boundary	SE
7	Northeastern	W
8	West of eastern residence	W

Figure 6: Viewpoints location map

158 GRANDVIEW ROAD, NEW LAMBION HEIGHIS NSW 2289

![](_page_9_Picture_0.jpeg)

### Viewpoint 1: Looking northwest from southeast of Site

Existing

![](_page_9_Picture_3.jpeg)

Proposed + visual impact

![](_page_9_Picture_5.jpeg)

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

View looking northwest beside the residence to the east of the Site across open turf. The view is framed on the south by a clump of Corymbia maculata (Spotted Gum) in the fore and midground and the Koala food tree Eucalyptus tereticornis (Forest Red Gum) in the background. This tree cover extends to the background in a more-dense manner. An opensided carport on the southern side of the residence can be seen to the left-hand-side foreground. The Grass is a prominent visual material in the fore to midground. A View looking northwest beside the residence to the east of the Site across open turf. A metal mesh fence can be seen in the midground, separating mown grass surrounding the house and pasture grass beyond.

#### Proposed landscape character

The proposed BESS, with its 3m HushPanel acoustic fence cannot be seen through the layered dense screen plantings. The view of the screened BESS is framed on the south by a clump of Corymbia maculata (Spotted Gum) and the carport on the southern side of the residence. The paved access road which transects the viewpoint is the dominant built form, albeit at ground level. Grass is a prominent visual material in the fore to midground. Together with the background surrounding trees, the visual impact is softened by this dense layered planting treatment. The openness of the visual catchment is till maintained, despite the addition of more vegetation to the south of the shed.

#### 

SENSITIVITY	MAGNI TODE				
	High	Moderate	Low	Negligible	
High	High	High-moderate	Negligible	Negligible	
Moderate	High-moderate	Moderate	Moderate-low	Negligible	
Low	Moderate	Moderate-low	Low	Negligible	
Negligible	Negligible	Negligible	Negligible	Negligible	

VISUAL IMPACT ASSESSMENT

# 

![](_page_10_Picture_0.jpeg)

#### Viewpoint 2: Looking northwest from southeast of Site

Existing

![](_page_10_Picture_3.jpeg)

#### Proposed + visual impact

![](_page_10_Picture_5.jpeg)

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

Existing landscape character

View looking northwest along from the southern boundary, showing boundary screen planting in the lower left foreground, scattered stand of Corymbia maculata (Spotted Gum) in the left midground and further Corymbia maculata (Spotted Gum) forest in the background. Grass provides a dominant visual element, in addition to the existing trees. The grass is mown in the foreground in front of the existing metal mesh fence and unmown pasture on the far side of the fence.

#### Proposed impact

The proposed BESS, with its 3m HushPanel acoustic fence cannot be seen through the layered dense screen plantings. Together with the midground of Corymbia maculata (Spotted Gum), the visual impact is softened by this dense layered planting treatment in front of the acoustic fence surrounding the proposed BESS. Grass is still a dominant visual element in the fore and midground, both in front and behind the existing metal mesh fence. This is also a direct viewpoint from the adjoining residence to the southeast of the Site. However, dense screen planting already exists along this boundary, so there are no views to the proposed BESS.

<b>SENSITIVITY</b>	<u>MAGNI</u> <u>TUDE</u>			
	High	Moderate	Low	Negligible
High	High	High-moderate	Negligible	Negligible
Moderate	High-moderate	Moderate	Moderate-low	Negligible
Low	Moderate	Moderate-low	Low	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible
Sensitivity and Magnitude				
	Overall impact			

VISUAL IMPACT ASSESSMENT

![](_page_11_Picture_0.jpeg)

#### Viewpoint 3: Looking northwest from south of Site

## Existing

![](_page_11_Picture_3.jpeg)

#### Proposed + visual impact

![](_page_11_Picture_5.jpeg)

#### Existing landscape character

View looking northwest from the driveway in the northern section of the adjoining southeastern residence. It shows low foreground massplantings of Agapathus orientalis (Agapanthus) and Agave attentuata (Agave). A large urn on a plinth with Liriope muscari (Liriope) tufting from it's top provides a major focal point in the centre foreground. Scattered specimens of Corymbia maculata (Spotted Gum) occur in the midground and dense forest plantings in the background. Grass provides a dominant visual element, in addition to the existing trees. The grass is mown in the foreground in front of the existing boundary metal mesh fence and unmown pasture on the far side of the fence.

### Proposed visual character

The foreground treatment of massplantings of Agapathus orientalis (Agapanthus) and Agave attentuata (Agave). A large urn on a plinth with Liriope muscari (Liriope) tufting from it's top in the adjoining neighbour's driveway garden. The proposed BESS, with its 3m HushPanel acoustic fence cannot be seen through the layered dense screen plantings. Together with the background surrounding trees, the visual impact is softened by this dense layered planting treatment. The visual catchment is far more closed than the existing viewshed. Whilst grass is still visible, it has a diminished visual presence.

#### CENICITIV/ITV

SENSITIVITY	MAGNI_TUDE				
	High	Moderate	Low	Negligible	
High	High	High-moderate	Negligible	Negligible	
Moderate	High-moderate	Moderate	Moderate-low	Negligible	
Low	Moderate	Moderate-low	Low	Negligible	
Negligible	Negligible	Negligible	Negligible	Negligible	

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

VISUAL IMPACT ASSESSMENT

![](_page_12_Picture_0.jpeg)

#### Viewpoint 4: Looking west from southern part of Site

#### Existing

![](_page_12_Picture_3.jpeg)

#### Proposed + visual impact

![](_page_12_Picture_5.jpeg)

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

#### Existing landscape character

View looking west along the southern boundary, showing scattered specimens of *Corymbia maculata* (Spotted Gum) occur in the fore and midground and dense forest plantings in the background. Grass is the most dominant visual element, found beneath the scattered trees, on either side of the boundary metal mesh fence. It is mown on the adjoining southern property and more pasture-like on the northern side of the fence. It has an open character.

#### Proposed visual character

This viewpoint is still dominated by grass in the foreground, punctuated by scattered *Corymbia maculata* (Spotted Gum), where it is pasture length. This is contrasted by mown grass on the southern side of the boundary metal mesh fence. In the midground, the visual catchment is dominated by the layered dense screen plantings. This dense planting treatment totally obscures the 3m high HushPanel perimeter acoustic fence. Except for a small section in the rear left corner, to the south of the boundary fence, the background of denser forest is totally obscured by the proposed dense BESS planting treatment. The visual character is somewhat more closed than prior to the BESS treatment.

. . . . . . . . . . . .

## SENSITIVITY

SENSITIVITY	MAGNI TODE					
	High	Moderate	Low	Negligible		
High	High	High-moderate	Negligible	Negligible		
Moderate	High-moderate	Moderate	Moderate-low	Negligible		
Low	Moderate	Moderate-low	Low	Negligible		
Negligible	Negligible	Negligible	Negligible	Negligible		

VISUAL IMPACT ASSESSMENT

![](_page_13_Picture_0.jpeg)

#### Viewpoint 5: Looking northeast from southwestern corner of Site

# Existing

![](_page_13_Picture_3.jpeg)

#### Proposed + visual impact

![](_page_13_Picture_5.jpeg)

#### Existing landscape character

View looking northeast from the southeastern corner of the property. This viewshed is an open vista dominated by pasture-like grass in the fore and midground. It is punctuated by a single tree, a Eucalyptus tereticornis (Forest Red Gum), with its upright open canopy. Openess and expansive-ness of the flat level grassed floodplain are 2 visual attributes of this visual catchment. To the background horizon the dense tree line of Eucalyptus tereticornis (Forest Red Gum) and Corymbia maculata (Spotted Gum), can be seen on the horizon, framing the visual catchment with a green wall. The residence to the east of the Site can be seen in the rear right background.

#### Proposed visual character

The viewpoint has changed its character dramatically, having the amount of grass reduced to the foreground by the dense layered planting treatment. This planting scheme totally obscures the 3m high HushPanel perimeter acoustic fence. The single Eucalyptus tereticornis (Forest Red Gum) in the centre midground has been removed and replaced with multiple specimens, in addition to other dense layers of plantings. The background forest with its vertical trunks and dense canopies has been totally obscured by the dense layered planting treatment.

<u>SENSITIVITY</u>	<u>MAGNI</u> <u>TUDE</u>				
	High	Moderate	Low	Negligible	
High	High	High-moderate	Negligible	Negligible	
Moderate	High-moderate	Moderate	Moderate-low	Negligible	
Low	Moderate	Moderate-low	Low	Negligible	
Negligible	Negligible	Negligible	Negligible	Negligible	
Sensitivity and Magnitude					
	Overall impact				

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

![](_page_14_Picture_0.jpeg)

### Viewpoint 6: Looking southeast from northwest of Site

### Existing

![](_page_14_Picture_3.jpeg)

Proposed + visual impact

![](_page_14_Picture_5.jpeg)

Existing landscape character

View looking southeast from the western boundary, adjacent to the commercial poultry sheds of the adjoining western property. This visual catchment is characterised by scattered Corymbia maculata (Spotted Gum) and Eucalyptus tereticornis (Forest Red Gum) trees in the foreground, with a denser line clump also containing smaller Melaleuca nodosa (Pricklyleaved paperbark) in the centre midground. A line of denser forest can be seen in the background, from left to right. Buildings associated with the eastern residence can be seen in the left background. The overall visual character is an openess and expansiveness of the flat level grass, punctuated by scattered trees.

#### Proposed visual character

The main visual catchment of grass with scattered trees has been changed by the presence of the layered dense screen plantings in the centre of the midground. This clump of dense planting now dominates the viewshed although the openness of the grassed foreground is still prominent. The single Eucalyptus tereticornis (Forest Red Gum) can still be seen in the centre left midground. The proposed BESS, with its 3m HushPanel acoustic fence cannot be seen through the layered dense screen plantings. A section of one of the sheds associated with the eastern residence can be partially seen, with the remaining buildings obscured. Only small sections of the background dense forest plantings on the left and right sides can be seen.

<u>SENSITIVITY</u>	MAGNI TUDE				
	High	Moderate	Low	Negligible	
High	High	High-moderate	Negligible	Negligible	
Moderate	High-moderate	Moderate	Moderate-low	Negligible	
Low	Moderate	Moderate-low	Low	Negligible	
Negligible	Negligible	Negligible	Negligible	Negligible	
Sensitivity and Magnitude					
	Overall impact				

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

VISUAL IMPACT ASSESSMENT

![](_page_15_Picture_0.jpeg)

#### Viewpoint 7: Looking southwest from northeast of Site

# Existing

![](_page_15_Picture_3.jpeg)

Proposed + visual impact

![](_page_15_Picture_5.jpeg)

#### Existing landscape character

View looking southwest from inside the forestline to the north of the eastern residence. Framed by a couple of scattered Corymbia maculata (Spotted Gum), the main visual character is an open expanse dominated by grass. The midground and background horizon is broken up by scattered trees of Corymbia maculata (Spotted Gum) and Eucalyptus tereticornis (Forest Red Gum). There is also a big sky presence, adding to the openness of the visual character.

#### Proposed visual character

The viewpoint still provides an expanse of open grass in the foreground and midground, framed by the 2 Corymbia maculata (Spotted Gum) but the main difference is the layered dense screen plantings in the centre of the midground. The proposed BESS, with its 3m HushPanel acoustic fence cannot be seen through the layered dense screen plantings. This dense planting treatment links the clumps of Corymbia maculata (Spotted Gum) and Eucalyptus tereticornis (Forest Red Gum) trees on both the left and right sides. The expansiveness of the open sky has been reduced but is still a strong visual element.

<u>SENSITIVITY</u>	
	Hig

<b>SENSITIVITY</b>	MAGNI TUDE						
	High	Moderate	Low	Negligible			
High	High	High-moderate	Negligible	Negligible			
Moderate	High-moderate	Moderate	Moderate-low	Negligible			
Low	Moderate	Moderate-low	Low	Negligible			
Negligible	Negligible	Negligible	Negligible	Negligible			
Sensitivity and Magnitude							
Overall impact							

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

VISUAL IMPACT ASSESSMENT

![](_page_16_Picture_0.jpeg)

### Viewpoint 8: Looking west from east of Site

### Existing

![](_page_16_Picture_3.jpeg)

Proposed + visual impact

![](_page_16_Picture_5.jpeg)

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

#### Existing landscape character

View looking southwest from the western side of the eastern residence. Grass dominates the visual catchment. This open character dominates the fore and midgrounds, framed by scattered Corymbia maculata (Spotted Gum) and Eucalyptus tereticornis (Forest Red Gum) on both the left (southern) and right (northern) midground. Beyond these clumps, a denser strip is formed by denser forest. There is also a big sky presence, adding to the openness of the visual character, together with the open grass. The only built form is the minor visual obtrusiveness of the low open metal mesh fence. This feature separates the mown grass to its south and pasture on its north.

#### Proposed visual character

The viewpoint still provides an expanse of open grass in the foreground and midground but it now contains a concrete access road on the right (southern) side, which terminates in the layered dense screen plantings in the centre of the midground. The proposed BESS, with its 3m HushPanel acoustic fence cannot be seen through the layered dense screen plantings This dense planting treatment links the clumps of Corymbia maculata (Spotted Gum) and Eucalyptus tereticornis (Forest Red Gum) trees on both the left and right sides. The horizon of dense forest is now obscured. The expansiveness of the open sky has been reduced but is still a strong visual element.

# 

SENSITIVITY	MAGNI_TUDE				
	High	Moderate	Low	Negligible	
High	High	High-moderate	Negligible	Negligible	
Moderate	High-moderate	Moderate	Moderate-low	Negligible	
Low	Moderate	Moderate-low	Low	Negligible	
Negligible	Negligible	Negligible	Negligible	Negligible	

VISUAL IMPACT ASSESSMENT

### 4.0 Elevations

conus

As seen below is an elevation of the western side of the BESS (B2) which shows a progression of what the landscape treatment will look like at 1 year after planting, 5 years after planting and maturity, approximately 10 years from planting. As shown, there is almost full screening of the raised BESS compound and its 3m high perimeter HushPanel acoustic boundary fence. Note the use of the colour Windspray for the acoustic fence minimises visual impact at construction, which gradual reduces its visual impact as the planting grows and gradually conceals most of the boundary fence in time.

![](_page_17_Picture_2.jpeg)

Figure 6: Elevations at maturity (approximately 10 years from initial planting) (source: Conus Landscape Architecture, 2023)

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289

![](_page_18_Picture_0.jpeg)

#### 5.0 Conclusion

The proposed single BESS compound with its 3m high HushPanel Windspray-coloured acoustic perimeter wall will be totally screened by native plantings at maturity. The proposed development will ultimately be predominantly concealed from all viewpoints. The low sensitivity and moderate-low magnitude of the proposed development has resulted in a moderate-low visual impact. The grey-coloured Windspray colour of the HushPanel wall is also of low visual impact. The only evidence of something there will be the plantings. Even though the Site is an open and expansive grassed area with very few structures and houses, the proposed screen planting treatment will provide a low visual impact as viewed from most viewpoints. The only built elements in view being the access road and the entry gate to the BESS compound. With good growing conditions from good soil, mulch and irrigation, in addition to good natural rainfall and coastal warm temperate climate of the location, the plantings will reach their maturity within a 10 year time frame.

158 GRANDVIEW ROAD, NEW LAMBTON HEIGHTS NSW 2289