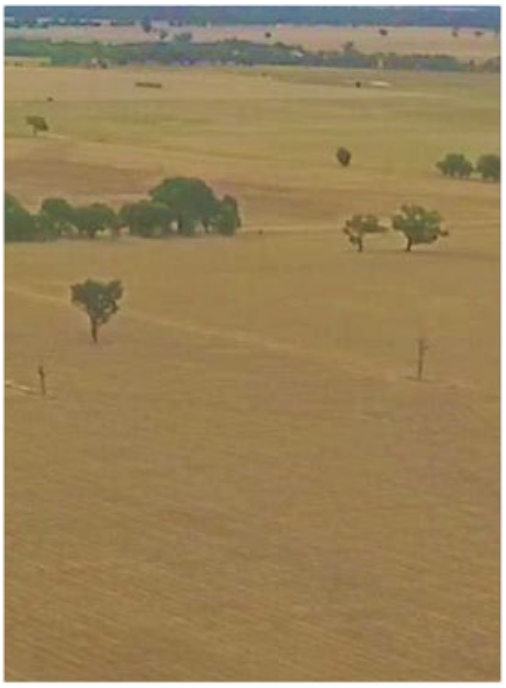
Landscaping Plan

Culcairn Solar Farm

January 2024

Project Number: 230166



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Acronyms and abbreviations

Term / Abbreviations	Definition / Expanded Text
AC	Alternating Current
APA	East Australian Pipeline Pty Ltd
APZ	Asset Protection Zone
AQF	Australian Qualifications Framework
AS	Australian Standard
CoA	Conditions of Approval
DC	Direct current
DPE	Department of Planning and Environment (NSW)
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPC Contractor	Engineering Procurement and Construction
EWMS	Environmental Work Method Statement
IPC	Independent Planning Commission
km	Kilometres
kV	Kilovolts
m	Metres
NSW	New South Wales
MW	Megawatt
NEM	National Electricity Market
PV	Photovoltaic
SEA	Site Environmental Advisor
sp/spp	Species/multiple species
SSD	State Significant Development
SWMP	Soils and Water Management Plan
The Proponent	Neoen

Term / Abbreviations	Definition / Expanded Text
UGLRL	UGL Regional Linx

1. Introduction

1.1. Background

Neoen Australia Pty Ltd (Neoen) (the Proponent) have approval for construction, operation and decommissioning of a 350 Megawatt (MW) alternating current (AC) / 402.5 MW direct current (DC), photovoltaic (PV) solar farm, referred to as Culcairn Solar Farm (the Project). The Project is located on rural land, approximately 4 kilometres (km) southwest of Culcairn, New South Wales (NSW).

The Project was assessed in an Environmental Impact Statement (EIS) in accordance with Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and Schedule 2 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation). It is considered State Significant Development (SSD).

The Proponent received approval for the Project on 25 March 2021 from the Independent Planning Commission (IPC).

Modification Report 1 (SSD-10288 – Mod 1) was prepared and submitted to the Department of Planning and Environment (DPE) October 2023 and was determined on the 22 December 2023 with consolidated Conditions of Consent issued. The modification to the Project was for minor alignment revisions and widening of the Project's Development Footprint along Weeamera Road and at two creek crossings. The modification was also for minor amendments to the definitions and wording of Schedule 3 Condition 2 – Transport.

As part of the EIS a visual impact assessment was prepared, which identified potential visual impacts of the built solar farm including views from receivers of solar farm infrastructure. Mitigation measures were outlined to minimise potential impacts including use of screening. Modification 1 resulted in no changes to the visual impacts of the Project, however in response to comments from Transport for NSW, one mitigation measure and two conditions of approval was updated to address potential lighting and visual impacts on the adjacent rail corridor if it was to be become operational. This Landscaping Plan has been updated to reflect this comment and changes to the mitigation measures and condition of approval. A concept landscaping plan was approved as part of the EIS. During the preparation of this Landscaping Plan and in response to consultation, the concept landscaping plan has been updated and presented in Appendix A. This Landscaping Plan outlines implementation of the concept landscaping plan and monitoring.

1.2. The Project

The Project will involve the construction and operation of a ground-mounted PV solar tracking array generating approximately 350 MW AC / 402.5 MW DC of renewable energy. The power generated will be exported to the national electricity grid.

Key development and infrastructure components will include:

- Single axis tracker PV solar panels mounted on steel frames over most of the site (maximum tilt 4.2 metres (m) in height)
- Underground and overground electrical conduits and cabling to connect the arrays to the inverters and transformers
- Systems of invertor units and voltage step-up throughout the arrays
- National Electricity Market (NEM) compliant metering arrangements for all energy exported to the grid as well as internal metering to measure battery and solar output
- On site substation, connecting to the existing 330 kV Transgrid transmission line
- Site office and maintenance building, vehicle parking areas, material laydown area, internal access tracks and perimeter security fencing
- Site access track off Weeamera Road

- Road crossing and easement electrical crossing through underground and/or overhead lines, of Cummings Road and Schoffs Lane
- Vegetative screening at impacted visual receivers and at the intersection of public roads.

The approved Project layout is provided in Figure 1-1. Note, the approved Project layout includes a Battery Energy Storage System (BESS). The BESS is currently not proposed to be constructed and therefore not considered in this management plan.

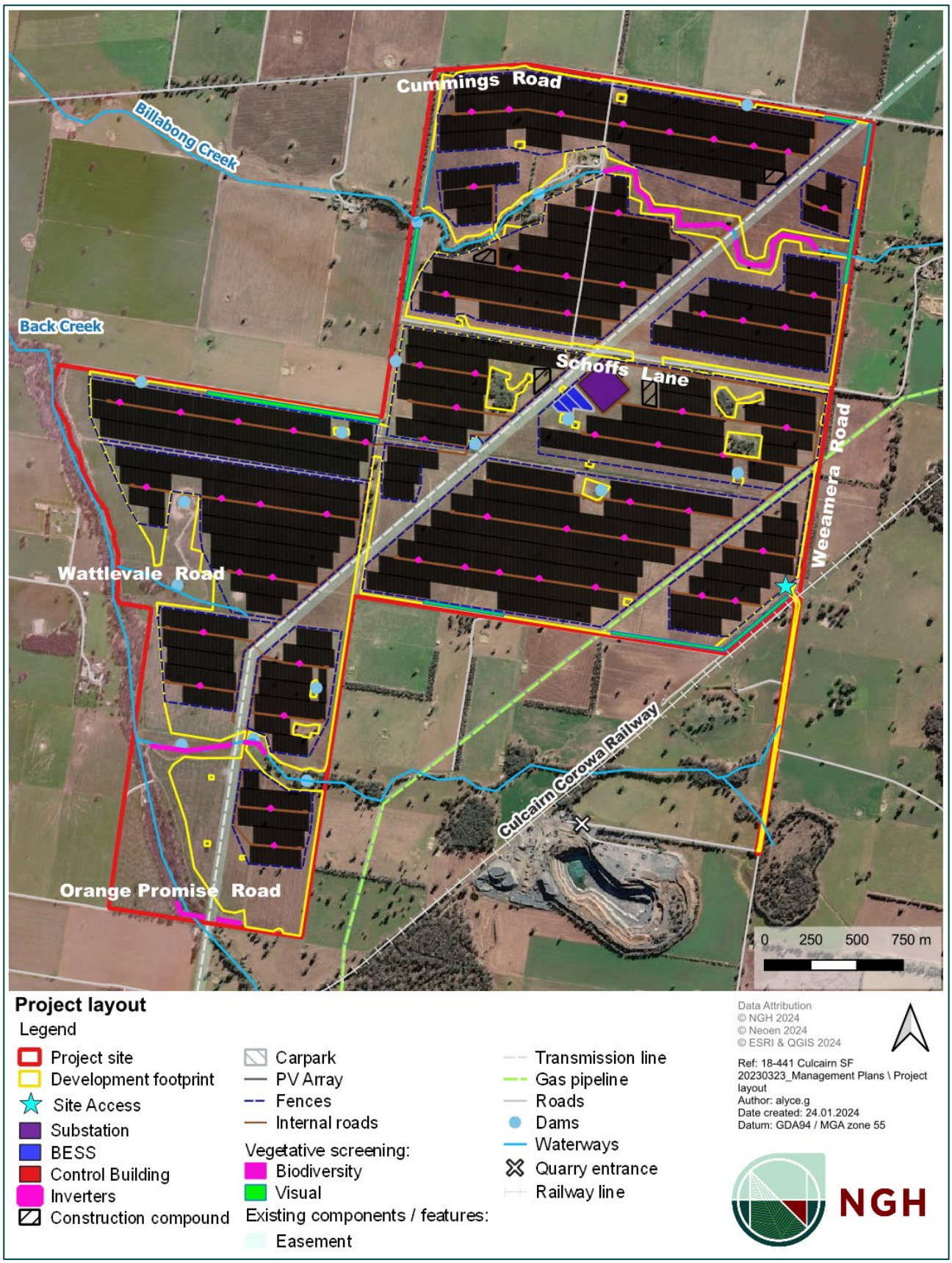


Figure 1-1 Approved Project layout

1.3. Environmental Management Strategy

The Landscaping Plan is part of the Project's overall Environmental Management Strategy (EMS). Mitigation and management measures identified in this Landscaping Plan will be incorporated into site or activity-specific Environmental Work Method Statements (EWMS).

When used concurrently, the overarching EMS, Landscaping Plan and other subplans, procedures and EWMS form management guides that clearly identify the necessary environmental management actions for reference by Neoen's personnel and contractors.

The review and document control processes for this plan are described in the EMS.

1.4. Related documents

Project documents that have been prepare and are relevant to this Plan include:

- EMS
- Biodiversity Management Plan (BMP)
- Pest and Weed Management Plan (PWMP)
- Groundcover Management Plan (GMP)
- Soil and Water Management Plan (SWMP)
- Heritage Management Plan (HMP)

The above plans will be implemented as part of the Project.

2. Purpose and objectives

2.1. Purpose

The purpose of this report is to plan, establish and maintain landscaping to reduce visual impacts to sensitive receivers and road users during operation of the Project.

2.2. Objectives

The key objective of the Landscaping Plan is to ensure that the development will be carried out in accordance with the EIS and the conditions of approval, mitigation measures and licence/permit requirements relevant to visual impacts. These are described, scheduled, and assigned responsibility as outlined in:

- The Project EIS (NGH, 2020)
- The Project Submissions Report (NGH, 2020)
- The Project Amendment Report (NGH, 2020)
- Modification Report 1 (NGH, 2023)
- DPE Consolidated Development Consent (determined 22 December 2023).

Additionally, the Landscaping Plan aims to:

- Ensure appropriate planning, controls and procedures are implemented during construction to facilitate the preparation and completion of landscape areas to be maintained during operation
- Maintain the land capability of the site (in accordance with the Groundcover Management Plan) for the life of the Project.

2.3. Targets

The following targets have been established for management of visual amenity impacts during construction and operation of the Project:

- Ensure full compliance with relevant legislative requirements, including Conditions of Approval (CoA)
- Landowners satisfied with the planting provided for their properties
- Effective screening of solar farm infrastructure within 3 years of commencement of construction.

3. Environmental requirements

3.1. Relevant legislation and guidelines

3.1.1. Legislation

Legislation relevant to landscaping management includes:

- *Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act)*
- Environmental Planning and Assessment Regulation 2021
- *Rural Fires Act 1997*
- *Biosecurity Act 2016*
- *Pesticides Act 1999*
- Pesticides Regulation 2017
- *Biodiversity Conservation Act 2016.*

How this legislation is relevant to the Landscaping Plan and Project is outlined in Appendix B of the EMS.

3.1.2. Guidelines and standards

The main guidelines, specifications and policy documents relevant to this Plan include:

- AS 4419-2003 Soils for landscaping and garden use: outlines the requirements for general purpose soils, top dressing, topsoil and landscaping mixes for domestic and commercial use.
- AS 2303:2015 Tree stock for landscape use: outlines the tree specification process for ensuring quality tree stocks for landscaping uses.
- Planning for Bushfire Protection 2019: provides standards and guidance for development on bush fire prone land, which needs to be considered with landscaping placement.

3.1.3. Conditions of Approval

The CoA and mitigation measures relevant to the Landscaping Plan are listed in Table 3-1. A cross reference is also included to indicate where the requirement is addressed in this Plan.

Table 3-1 Project conditions of approval and mitigation measures relevant to the Landscaping Plan

<table>
<tr><th>Reference number</th><th>Condition requirement</th><th>Document reference</th></tr>
<tr><td colspan="3">Conditions of Approval</td></tr>
<tr><td>Schedule 2
CoA 5</td><td>The Applicant must ensure that the solar panels, substation, inverters and battery storage within the approved Project site are not installed closer to the receivers identified in column 1 of Table 1 than the offset distances identified in column 2 of Table 1.
Table 1: Development Offset Distance Requirements
Table 1: Development Offset Distance Requirements
<table><tr><th>Receiver</th><th>Offset Distance</th></tr><tr><td>R9</td><td>585m</td></tr><tr><td>R17</td><td>1157 m</td></tr><tr><td>R19</td><td>363m</td></tr><tr><td>R24</td><td>544 m (east) and 1,155 m (south)</td></tr><tr><td>R33</td><td>249m</td></tr></table></td><td>Section 7.1</td></tr>
</table>

Reference number	Condition requirement	Document reference
	Offset distances in Table 1 apply unless the Applicant has a written agreement with the owner in regard to the visual impacts associated with the project, and the Applicant has advised the Department in writing of the terms of this agreement.	
Schedule 3 CoA 10	**Vegetation buffer** The Applicant must establish and maintain a vegetation buffer (landscape screening) at the locations outlined in the figure in Appendix 1 to the satisfaction of the Planning Secretary. The landscape screening must:	
	(a) Be planted prior to commencing construction	Section 7.3.1
	(b) Be comprised of predominantly mature tube stock that are endemic to the area	Section 7.3.1 and 7.3.3
	(c) Minimise views from receivers R9, R17, R19, R24 and R33 within 3 years of commencing operations	Section 7.3.1 Appendix A
	(d) Be designed and maintained in accordance with RFS's Planning for Bushfire Protection 2019 (or equivalent)	Section 7.3.2 Appendix A
	(e) Be properly maintained with a replanting programme being undertaken where the vegetation fails to establish	Section 7.3.4 Appendix A
	(f) Undertake appropriate weed management.	Section 7.3.4 and 7.3.6 Appendix A
	Unless the Planning Secretary agrees otherwise.	
Schedule 3 CoA 11	**Landscaping Plan** Prior to commencing construction, the Applicant must prepare a detailed Landscaping Plan for the development in consultation with receivers R9, R17, R19, R24 and R33, to the satisfaction of the Planning Secretary. This plan must include:	This Plan Consultation addressed in Section 4
	(a) A description of measures that would be implemented to ensure that the vegetated buffers achieve the objectives of condition 10 (a}-(f), above	As above Section 7
	(b) A program to monitor and report the effectiveness of these measures	Section 7.3.7

Reference number	Condition requirement	Document reference
	(c) Details of who would be responsible for monitoring, reviewing and implementing the plan; and timeframes for the completion of actions.	Table 7-1 Section 7.3.7 Appendix A
	Following the Planning Secretary's approval, the Applicant must implement the Landscaping Plan.	
Schedule 3 CoA 19	**Visual** The Applicant must: (a) Minimise the off-site visual impacts of the development, including the potential for any glare or reflection (including on the Culcairn to Cowra railway corridor) (b) Ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape (c) Not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.	Table 7-1 Section 7.2
Schedule 3 CoA 20	**Lighting** The Applicant must: (a) minimise the off-site lighting impacts of the development (including on the Culcairn to Cowra railway corridor); and (b) ensure that any external lighting associated with the development: • is installed as low intensity lighting (except where required for safety or emergency purposes); • does not shine above the horizontal; and • complies with Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version.	Table 7-1 Section 7.2
Mitigation measures		
VA1	Screening would be required on-site, generally in accordance with the Landscaping Plan developed in consultation with neighbouring landholders.	Section 7.3 Consultation has been undertaken with Holbrook Landcare and neighbouring landholders. Consultation is addressed in Section 4
	• Barrier plantings would be and where practical, planted on specific sections of the outside of the	Section 7.3

Reference number	Condition requirement	Document reference
	perimeter fence to break up views of infrastructure including the fencing	Appendix A
	• The plant species to be used in the screen are native, fast growing, with spreading habitat and mixed mature heights of 2-4 metres, 3-5 metres and 5-10 metres. Plants derived from the naturally occurring vegetation community in this area	Section 7.3 Appendix A
	• Plants were selected in consultation with affected near neighbours and a botanist or landscape architect, and/or local Landcare groups	Section 7.3.3 Section 4
	• The timing is recommended to be within 2 months of completion of construction so that actual views of infrastructure can be more certain. The timing of planting should also be chosen to ensure the best chance of survival	Section 7.3
	• The screen would be maintained for the operational life of the solar farm. Dead plants would be replaced. Pruning and weeding would be undertaken as required to maintain the screen's visual amenity and effectiveness in breaking up views	Section 7.3.7 and 7.3.8
	• Proposed screening will be effective within three years of completion of construction	Section 7.3
VA2	Prior to the commencement of construction, a detailed Landscaping Plan will be prepared including: • Screening location • Species type • Planting density and spacing • Method for planting • Descriptive measures that would be implemented to ensure vegetative screening is successful (i.e. irrigation or other watering method) • A program to manage, monitor and report on the effectiveness of implemented measures.	Appendix A
VA3	The materials and colour of onsite infrastructure would, where practical, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that would blend with the landscape.	Table 7-1 Section 7.2
VA4	During construction, dust would be controlled in response to visual cues. Areas of soil disturbed by the project would be rehabilitated progressively or immediately post-construction, reducing views of bare soil.	Table 7-1

Reference number	Condition requirement	Document reference
VA5	Construction and operational night lighting would be minimised to the maximum extent possible (i.e. manually operated safety lighting at main component locations. Lighting will comply with *Australian Standard 4282 – Control of the Obtrusive Effects of Outdoor Lighting,* including: • Eliminating upward light spill, directing light downwards and directing light away from sensitive receivers • Use of shielded light fixtures • Using asymmetric beams • Compile and record a complaint register.	Table 7-1 Section 7.2
VA6	Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network or to train drivers in the railway corridor should the rail line become operational. In the event of glint or glare from the solar plant being evident from a public road or rail corridor if it becomes operational., the proponent shall immediately implement glare mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.	Table 7-1 Section 7.2
BD14	Appropriate landscape plantings of local indigenous species derived from local native plant communities.	Section 7.3.3
HA9	7. Prior to construction, any landscape plans must be submitted and approved by East Australian Pipeline Pty Ltd (APA). A three-metre minimum clearance between the pipeline and any mature vegetation with a mature height of greater than 0.5 m must be maintained.	Section 4.2 Section 7.3.2 Appendix A

4. Consultation

4.1. During assessment

A number of visual concerns were raised by neighbours and the general public during consultation for the Project. The concerns raised included devaluation of properties and homes that are reliant on their visual aspect (not productivity of land), glare, removal of vegetation and change in land use.

During consultation with adjacent landowners, vegetative screening was discussed and it was proposed that vegetative screening for a minimum of one row of mixed height native vegetation will be planted in strategic locations to break-up or soften views of the Project. A minimum of three rows of mixed height vegetation will be planted where there are clear views from neighbouring receivers (Appendix A).

4.2. Post Approvals

Table 4-1 outlines the consultation undertaken during preparation of this Landscaping Plan. Further details regarding consultation with the receiver is provided in Appendix F.

Following consultation, additional vegetation was included for the following receivers:

- R33 - an additional 100 metres of vegetation screening was added to either side of the approved screening.
- R24 – along the west boundary the vegetation buffer (southern) was extended 60 metres south to Schoffs Lane and the northern boundary vegetation buffer was extended an additional 100 metres west of the approved screening to further minimise visual impacts.

The additional screening is presented in Appendix A.

Table 4-1 Consultation undertaken for this Landscaping Plan

Entity	Consultation details	Discussion Points
Jayfields Nursery	Neoen has been undertaking ongoing consultation with Jayfields Nursery in regards to plant species and planting times.	Consultation with Jayfields Nursery has been considered in the preparation of this Landscaping Plan, specifically in regards to Section 7.3.
R9, R17, R19, R24, R33	The draft Landscaping Plan was provided to the landowners on 24 June 2023 for comment. A response was provided by R24 on 4 July 2023 and R09 12 July 2023. In person meetings were undertaken with the receivers on the 26 and 27 July 2023 to discuss the plan. Follow up emails were sent out to all receivers on 4 August 2023 responding to all of the questions that came up during the in-person meetings. Additional areas of screening were added to the Landscape Plan to further minimise the impact on R24, R19, and R33. Revised plan sent to receivers on 15 September 2023.	Neoen is to provide each receiver with the finalised version of the Landscape Plan, when available.

4.3. Pre-construction

Prior to construction, the Landscape Plans will be submitted and approved by East Australian Pipeline Pty Ltd (APA). A three-metre minimum clearance between the pipeline and any mature vegetation with a mature height of greater than 0.5 m must be maintained. The draft Landscaping Plan was provided to APA on 30 June 2023 for comment. The consultation undertaken with APA is detailed below in Table 4-1. APA has stated in their review of V1 (August 2023) that APA Infrastructure Protection has no objections to the proposal in its current form.

Table 4-2 Approval history of Landscape Plan with APA

Landscape Plan Revision	Discussion Points	Where addressed
V1 (August 2023)	Any plant species proposed on the easement (noting none planned in the V1 Landscape Plan), will be assessed individually to ascertain potential risk to the physical structure, or to APAs ability to maintain and manage the asset. Characteristics assessed include the species growth habit, and its fully established width and height. This is more stringent than what is required as per the EIS (Chapter 8) that states: *A three-metre minimum clearance between the pipeline and any mature vegetation with a mature height of greater than 0.5 m must be maintained.* Any plant species proposed to be planted within the APA easement in the future, shall be as per the distances specified to the details contained within Appendix C.	Appendix C
	No ripping to take place on easement without further discussions with APA and not without formal Third Party Works Approval. The ripping depth of 40cm deep would be allowed on easement; however, under supervision only.	Section 7.3.4 This measure was also captured as part of the Project Safety Management Study undertaken September 14th to the satisfaction of APA (report and APA validation was communicated to the DPE)
	Landscape Concept Design Detail Plan 1, [(drawing number 307415 LC301, Rev C, 05/05/2020) indicates two 11KV distribution lines running down the APA easement, one either side of the pipeline asset. If these distribution lines are proposed within the easement, then these assets will impact on APA's ability to develop the easement in the future and should be relocated outside of the easement.	No 11kV distribution lines are proposed within the APA gas pipeline easement, refer to LC301 in Appendix A. Map has been revised in latest version.

5. Existing environment

The Project site comprises several large paddocks that are generally flat, largely cleared of native vegetation, and cultivated for cropping, pastures and grazing, which is the dominant land use in the area. The Project site and most adjoining land are used for agriculture, including grazing and cropping.

Most of the Project site has been largely cleared of native vegetation through past agricultural practices. The vegetation within the Project site is predominantly exotic and comprises crops of Wheat *(*Triticum sp.),* Canola *(*Brassica napus)* and Oats *(*Avena sativa).* Exotic pastures occur more frequently north of the site and are comprised of Lucerne *(*Medicago sativa),* Chicory *(*Cichorium intybus)* or clover *(*Trifolium)* mixes.

Native vegetation occurs as scattered paddock trees over exotic crops or pasture or small isolated patches of remnant woodland. The understorey of these woodland patches has undergone frequent disturbance by grazing and agricultural practices and is dominated by exotic species such as Barley Grass *(*Hordeum leporinum)* and Rye Grass *(*Lolium perenne),* Paspalum *(*Paspalum dilatatum)* and Bromes *(*Bromus sp).* Yellow Box *(Eucalyptus melliodora),* Blakely's Red Gum *(Eucalyptus blakelyi)* and White box *(Eucalyptus albens)* are the dominant trees remaining in the Project site. Further south, Grey Box *(Eucalyptus microcarpa)* transitions as the dominant paddock tree. The higher quality vegetation of Yellow Box, Blakely's Red Gum and White Box remains along the creek lines, roadsides and central Crown Land paper roads. These higher quality areas have a mix of native groundcovers, shrubs and overstorey canopy. Areas of linear planted native vegetation occur in the north along fence lines. Planted native vegetation is comprised of a mix of Eucalypt and Acacia species.

A description of soils onsite is provided in the Project Soil and Water Management Plan (SWMP).

6. Visual impact assessment

6.1. Project EIS

Appendix E provides a summary the findings of the visual impact assessment for each receiver undertaken as part of the Project EIS. The visual impact assessment outlined three receivers (R14, R33 and R34) were assessed to have a high visual impact from their residences, which are located directly adjacent to the south-eastern boundary of the Project site. With the implementation of on-site screening presented in the Project's concept landscaping plan, the mitigated impact will be low to moderate for these receivers. It was noted at the time of the assessment R33 and R34 were uninhabited.

Two receivers (R08 and R24) were assessed to have a medium visual impact. Both receivers were consulted with during the EIS stage in regard to on-site vegetation screening as a mitigation strategy, which was also presented in the Project's concept landscaping plan.

The public viewpoints from Weeamera and Cummings Road were also assessed to have a medium visual impact. The Weeamera and Cummings Road viewpoints are representative locations for motorists using these two roads. On-site screening as a mitigation strategy for the intersection of these roads was presented in the Project's concept landscaping plan.

The concept landscaping plan provided in the EIS presented on-site screening proposed as the mitigation strategy to break up views of the solar farm and associated infrastructure from the receivers.

The EIS also assessed the potential for glare and glint impacts from the Project. Glare associated with non-concentrating photovoltaic systems which do not involve mirrors or lenses is relatively limited. Some of the other onsite infrastructure may cause glare or reflections depending on the sun's angle. However , this infrastructure will be relatively dispersed and unlikely to present a glare or reflectivity hazard to motorists or aircraft.

6.2. Post lodgement of EIS

Following lodgement of the EIS and receival of submissions, Neoen undertook adjustments to the solar farm layout to further reduce potential visual impacts on adjacent receivers by including the following setbacks from receivers to the solar array:

- 980 metres from R8
- Increased 80 metres setback from R24
- Increased 70 metres setback from R29.

These setbacks have already been addressed in the Project layout presented in this Landscape Plan. During the submission stage, the concept landscaping plan was updated to include an additional 5 metres of vegetation for R24 and additional screening to supplement existing vegetation in Back Creek to reduce overall views for R17 and R19. This updated concept landscaping plan presented as part of the Project's Submission and Amendment Report is being implemented through this Landscaping Plan.

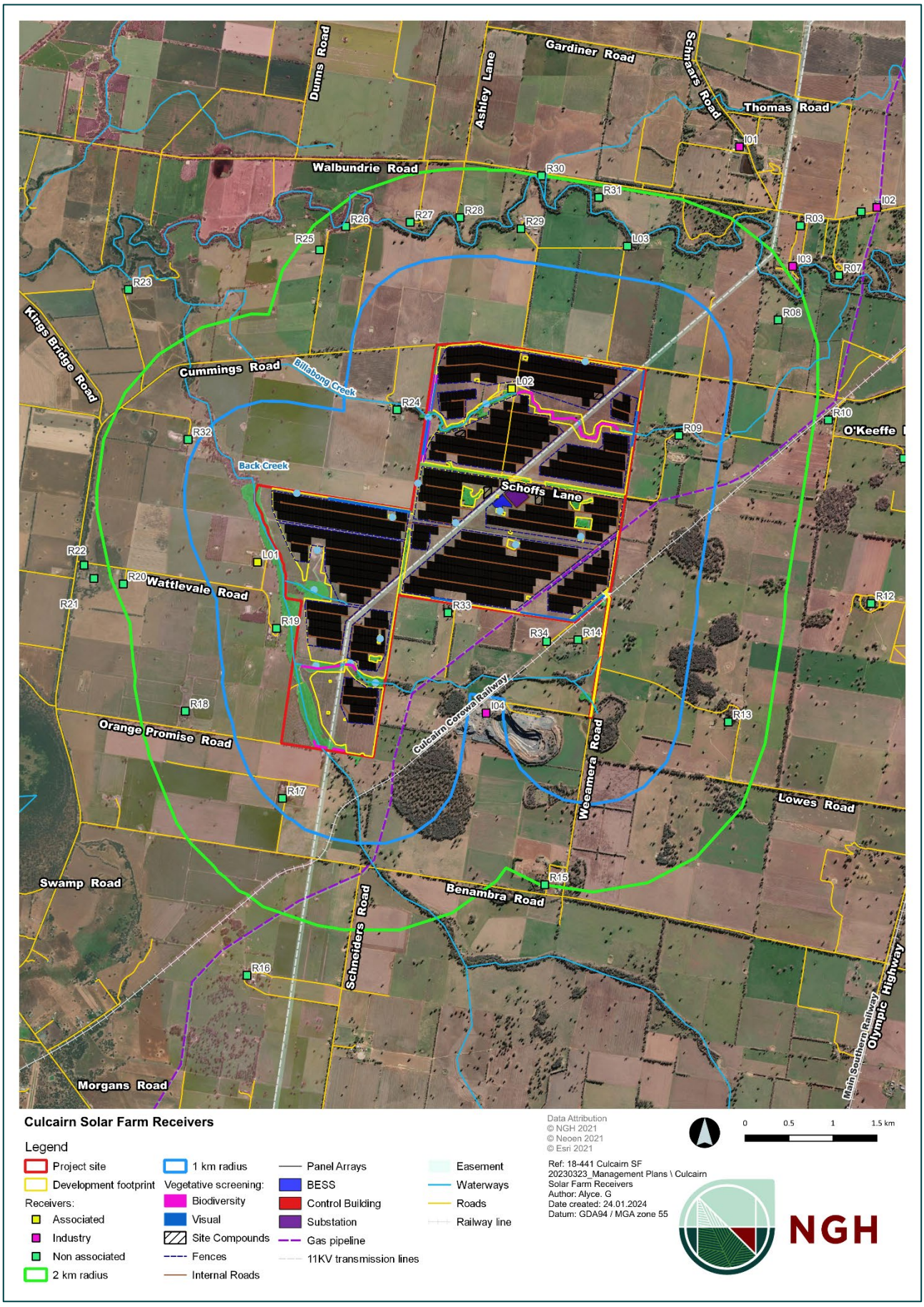


Figure 6-1 Sensitive receivers near the Project site

7. Landscape Management Protocols

Table 7-1 summarises the landscape management protocols to be implemented throughout different stages of the Project to minimise views of infrastructure and impacts on visual amenity.

Table 7-1 Landscape management protocols

Stage of Project	Objective	Management protocol	Resources	Responsibility
Design	Incorporate existing native vegetation and fauna habitat into screening/ landscaping design (i.e. no disturbance to existing native vegetation outside the approved footprint).	Areas to be landscaped will as per Appendix A. Detailed planting locations of this plan.	Appendix A Detailed planting locations of this Landscaping Plan	Design Manager
	Ensure project infrastructure is designed to be situated outside mapped Aboriginal heritage items (i.e. three modified trees and five cultural tree sites). A minimum 10 m buffer shall be in place around each modified tree and cultural tree site to prevent any inadvertent impacts to the canopy and root system. A minimum 5 m buffer should be observed around all stone artefact sites that cannot be avoided, including those outside the development footprint.	Areas to be landscaped will as per Appendix A and shall not impact Aboriginal heritage sites or buffer areas. Project Heritage Management Plan is to be implemented, including the following mitigation measures: • Site induction for all personnel will include Aboriginal Heritage training that outlines the location of heritage sites, which sites are to be protected and their buffers, and the existence of the Unexpected Finds Procedure. • Surface salvage collection of sites approved for impact prior to construction • Establishment and demarking of buffer zones (10 m buffer for the modified tree and cultural tree sites, and 5 m buffer for stone artefact sites) prior to pre construction works commencing. The buffer zones will be delineated by the placement of star pickets with either fencing wire and/or appropriate signage for environmentally sensitive	Appendix A Detailed planting locations of this Landscaping Plan Appendix B Heritage items Heritage Management Plan Conditions of Approval Appendix 6	Project Manager

Stage of Project	Objective	Management protocol	Resources	Responsibility
		zones. The buffers will be established by an Archaeologist. • Implementation of the Unexpected Finds Procedure. Where the buffer zones intersect vegetation screening, Neoen will consult with an Archaeologist to confirm if hand planting can occur in that location to reduce gaps within the screening.		
	Allow room for vegetation screen in detailed design	Areas will be designated for the landscape screening as set out in Appendix A. Detailed planting locations of this plan.	Appendix A Detailed planting locations of this Landscaping Plan	Project Manager
	Comply with offset distances to ensure Project infrastructure is not installed within the designated setback areas of the receivers	Detailed design to include offset distances outlined in the CoA	Section 7.1 Development offsets	Project Manager
	Reduce potential for glare and glint impacts from Project infrastructure, including in the Culcairn to Cowra Railway Corridor	The materials and colour of onsite infrastructure will, where practical, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that will blend with the landscape to reduce any potential for glare and reflection	Section 7.2 Glare and Reflection	Project Manager
	Reduce potential impacts for neighbours and Culcairn to Cowra Railway Corridor from Project lighting	Project lighting will be designed and installed to minimise offsite impacts of the Project. Neoen will ensure that any external lighting associated with the development:	Section 7.2 Glare and Reflection	Project Manager

Stage of Project	Objective	Management protocol	Resources	Responsibility

		• Is installed as low intensity lighting (except where required for safety or emergency purposes)
		• Does not shine above the horizontal
		• Complies with *Australian/New Zealand Standard AS/NZS 4282:2019- Control of Obtrusive Effects of Outdoor Lighting*, or its latest version including but not limited to:
		  ○ Eliminating upward light spill, directing light downwards and directing light away from sensitive receivers
		  ○ Use of shielded light fixtures
		  ○ Using asymmetric beams.		

Construction and Operation	Establish vegetation screening on the solar farm site and neighbouring properties to minimise views to residential receivers	Planting will be undertaken as set out in Section 7.3 of this Landscaping Plan. Including: • A strategy to obtain an effective screen within 3 years. • Locations for planting • Species selection (in consultation with local landscape architects, Landcare and/or local nurseries) • Planting establishment and monitoring requirements	Section 7.3 Planting Specification of this Landscaping Plan	Site Environmental Advisor (SEA)/ Project Manager/ Contractors
	Review screening to ensure effective screening will be achieved for identified receivers around protected heritage items.	Following planting of the vegetation screening, Neoen will review where the heritage site buffer zones intersect vegetation screening. Where gaps in the screening reduce the effectiveness of the screening for receivers, Neoen will consult with an Archaeologist to confirm if hand planting can occur in those gaps to improve the effectiveness of the screening.	Appendix A Detailed planting locations of this Landscaping Plan Appendix B Heritage items	Project Manager

Stage of Project	Objective	Management protocol	Resources	Responsibility
			Heritage Management Plan Conditions of Approval Appendix 6	
	Protect plants	The landscaping area will be protected during construction and operation as set out in Section 7.3 of this Landscaping Plan, including: • Watering • Tree guards • Replacement of plants to maintain 90% success rate for plantings.	Section 7.3 Planting Specification of this Landscaping Plan.	SEA/ Project Manager/ Contractors
	Protect heritage sites	Project Heritage Management Plan is to be implemented, including the following mitigation measures: • Inspection and monitoring of buffered heritage sites to be protected to ensure fencing and signage is well maintained. • Where any additional, unrecorded Aboriginal or non-Aboriginal objects are encountered during works within or outside the approved development footprint (Appendix A of the HMP) the Unexpected Finds Procedure will be followed. • If human remains are discovered on site, then all work surrounding the area must cease immediately, the area must be secured, and NSW Police notified. The Unexpected Finds Procedure will be followed to notify Heritage NSW as soon as possible. Work must not recommence in the area until this is authorised by Heritage NSW and/or NSW Police.	Appendix B Heritage items Heritage Management Plan Conditions of Approval Appendix 6	Project Manager Contractors

Stage of Project	Objective	Management protocol	Resources	Responsibility
	Protect existing significant environmental features	• Fence riparian zones with temporary fencing for the duration of construction	Fencing	SEA/ Project Manager/ Contractors
	Reduce soil erosion potential and impacts to surface water	• The landscaping area will be installed, monitored and maintained in accordance with the Project's Soil and Water Management Plan (SWMP)	Soil and Water Management Plan	SEA/ Project Manager/ Contractors
	Monitor and manage dust	• Daily visual monitoring of dust generated by construction and operation activities • Construction will cease if dust is observed being blown from site until control measures are implemented • All activities relating to the Project will be undertaken with the objective of preventing visible dust emissions from the Project site • Areas of soil disturbed by the project will be rehabilitated progressively or as soon as practicable post-construction, reducing views of bare soil.	Soil and Water Management Plan	SEA/ Project Manager/ Contractors
Operation	Monitor the planting	The plantings will be monitored and maintained for the life of the Project. Monitoring requirements for the Project are included in Section 7.3.7.	Section 7.3 Planting Specification of this Landscaping Plan.	Operator

7.1. Development setbacks

Neoen must ensure that the solar panels, substation and inverters within the approved Project site are not installed closer to the receivers as outlined in Table 7-2. These setback distances apply unless Neoen has a written agreement with the owner in regard to the visual impacts associated with the Project and has advised the Department of Planning and Environment (DPE) in writing of the terms of this agreement.

The setback distances for each receiver can be seen in Figure 7-1. Table 7-2 also outlines the distance of infrastructure from each receiver based on the solar farm design.

Table 7-2 Development setback distance requirements to receivers

Receiver	Setback distance as per the Development Consent	Actual setback distance based on design
R9	585 metres	585.2 metres (solar panels)
R17	1,157 metres	1,157 metres (solar panels)
R19	363 metres	363 metres (solar panels)
R24	544 metres (east) and 1,155 metres (south)	577 metres east (solar panels), 1,167 metres south (solar panels)
R33	249 metres	249 metres (solar panels)

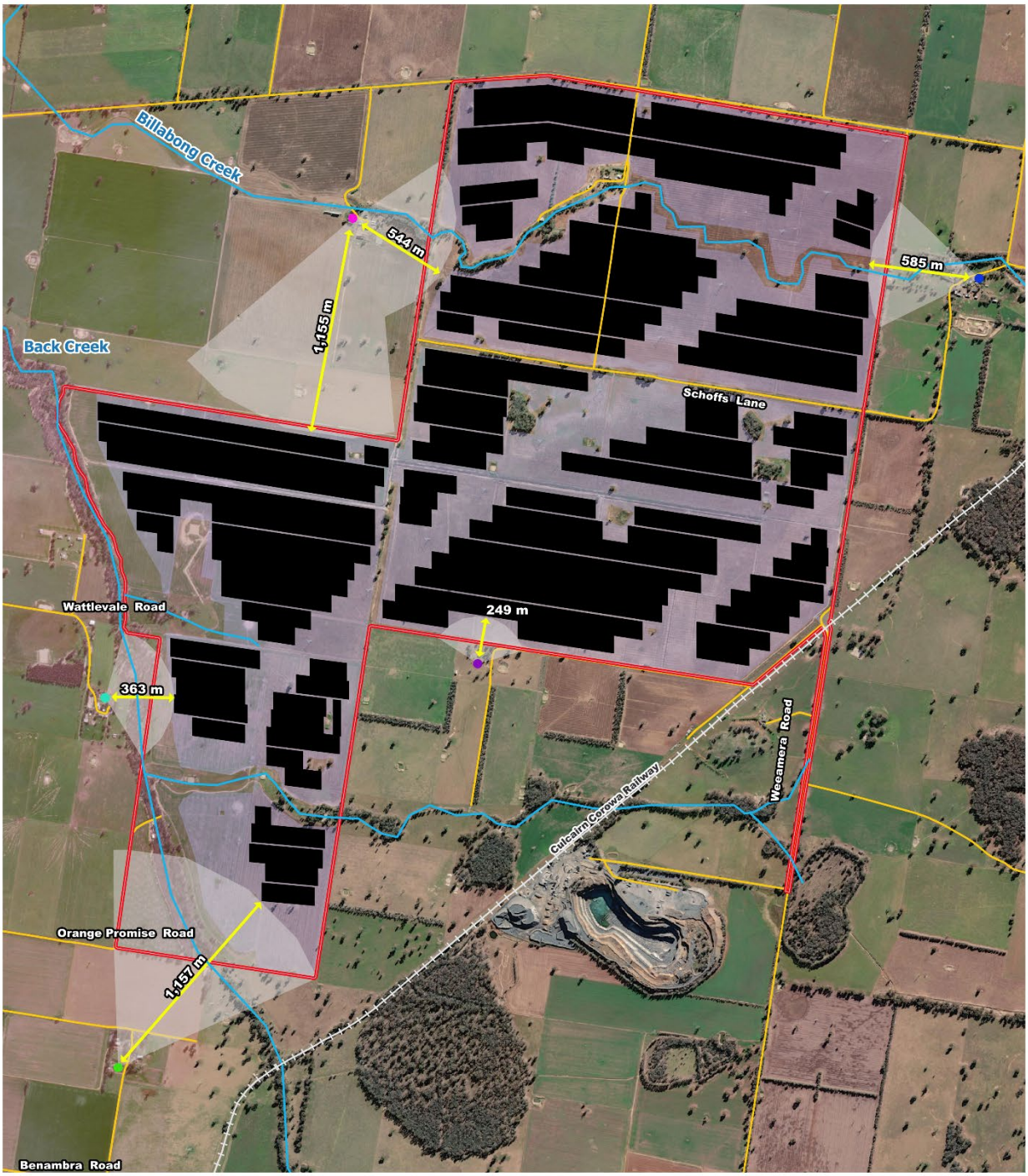


Figure 7-1 Infrastructure setback distances

7.2. Glare and reflection

The materials and colour of onsite infrastructure will, where practical, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that will blend with the landscape to reduce any potential for glare and reflection. Where practical:

- Buildings will be non-reflective and in eucalypt green, beige or muted brown
- Pole mounts/piles will be non-reflective
- Security fencing posts and wire will be non-reflective
- Avoidance of unnecessary lighting, signage and logos (unless required for identification or safety purposes)
- Retain and protect existing and planted boundary landscaping
- Vegetative screening will be placed on the outside of security fencing.

PV solar panels are designed to reflect as little sunlight as possible (generally approximately 2% of the light received; Spaven Consulting 2011) resulting in negligible glare or reflection. The reason for this is that PV panels are designed to absorb as much solar energy as possible in order to generate the maximum amount of electricity or heat. The panels will not generally create noticeable glare compared with an existing roof or building surface (NSW Department of Planning 2010). Seen from above (such as from an aircraft) they appear dark grey and do not cause a glare or reflectivity hazard.

Neoen will design lighting to minimise the off-site lighting impacts of the Project. Neoen will ensure that any external lighting associated with the development:

- Is installed as low intensity lighting (except where required for safety or emergency purposes)
- Does not shine above the horizontal
- Complies with *Australian/New Zealand Standard AS/NZS 4282:2019- Control of Obtrusive Effects of Outdoor Lighting*, or its latest version including but not limited to:
    - Eliminating upward light spill, directing light downwards and directing light away from sensitive receivers
    - Use of shielded light fixtures
    - Using asymmetric beams.

Compliance will be measured weekly during construction as part of the Weekly Environmental Inspection Checklist (refer to Section 10 of the EMS). During operation, compliance will be undertaken during regular site inspections (refer to Section 8.3). Additionally compliance will be against the number of complaints received in relation to glare and reflection. Complaints received will be dealt with as per the Complaints Procedure in Section 8.3 of the EMS. In the event of glint or glare from the solar farm being evident from a public road, Neoen shall immediately implement glare mitigation measures such as construction of a barrier (e.g., fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.

The above requirements and those outlined in this Landscaping Plan are to be implemented to minimise the potential offsite glare, reflection and lighting impacts to neighbours, local road traffic and the Culcairn to Cowra railway corridor.

Should the rail corridor become operational in the future, Neoen will consult with UGL Regional Linx (UGLRL) to understand and further mitigate any glare impact from the design, lights, signs etc that may be visible from the railway corridor. The Project design already excludes panels from the lot adjacent to the rail corridor and any glare impact outside of the Project site has previously been assessed as negligible in the Visual Impact Assessment of the EIS. Vegetation screening 40 m wide is also already included in the Project layout along the boundary of the railway corridor (refer to Appendix A, which should further aid in reducing any visual impact on the railway corridor.

7.3. Perimeter plantings

7.3.1. Planting strategy

The aim of the plant screening is to fragment views of infrastructure and not eliminate them. Less dense vegetation plantings, rather than formal 'hedge' plantings, are considered more appropriate to the existing environment. These will provide a more natural structure to the vegetation akin to small remnants.

In order to achieve effective screening within 3 years, this strategy relies on:

- Planting will be undertaken by an experienced landscape contractor in consultation with local nurseries
- Planting as soon as possible in the construction process when conditions suit
- Use of quality seasoned tube stock / long stem tube stock
- Maintenance (watering and protection from stock and other herbivores) during establishment
- Inclusion of 'pioneer species'. The species list includes pioneer species that grow rapidly and will be replaced by slower growing longer lived species over time.

The perimeter plantings will be planted prior to commencing construction of the Project. Plantings will be planted in the Autumn 2024. The intent of this Landscaping Plan is to ensure views of the solar farm are minimised for receivers R9, R17, R19, R24 and R33 within 3 years of commencing operations (CoA 10 c).

7.3.2. Planting areas

Sections of perimeter plantings will be established along the Project site boundary as shown in Appendix A, as per the CoA (Appendix 1 of CoA) and described in Table 7-4.

Plantings will:

- Be established in accordance with the requirements of the SWMP to minimise soil erosion potential
- Be within rip lines / rows 4 metres apart
- Be planted approximately 4 metres x 4 metres apart for large trees / Eucalypts with the rows staggered to allow for crown dispersal and maximise visual screening
- Be located within the Project site except where otherwise agreed with a receiver
- Be located outside of and adjacent to perimeter fencing, allowing sufficient space for plants to mature.

A 10 metre minimum bushfire protection setback (Asset Protection Zone (APZ)) from solar farm infrastructure will be applied to any woody vegetation plantings undertaken around the perimeter of the solar farm, as well as remnant woodland vegetation, in accordance with Planning for Bushfire Protection Guidelines (NSW Rural Fire Service, 2019). This can be seen in the indicative site boundary cross sections provided in Appendix A.

Additionally, a three metre minimum clearance between the gas pipeline onsite (south east corner) and screening areas will be implemented (Appendix A) and maintained.

In addition to the perimeter plantings, the Project also includes areas for supplementary biodiversity plantings for habitat connectivity and to compensate for the loss of paddock trees (refer to Figure 1-1 and Figure 6-1). These were committed to in the Response to Submissions (NGH, 2020). These supplementary biodiversity plantings will be planned and executed at the same time as the perimeter planting for visual amenity as outlined in this Plan. The supplementary biodiversity plantings will be comprised of endemic species to the relevant plant community type (PCT). To assist with the order of plants for the Project, these supplementary biodiversity plantings have been included in the planting density calculations below. However, the implementation and monitoring of these supplementary biodiversity plantings is described in Section 4.2 of the Project's Rehabilitation Plan, which is Appendix I of the Project's Biodiversity Management

Plan (NGH, 2023) and they are not considered further in this Plan. The supplementary biodiversity plantings required for the visual screening of R17 will also be monitored in accordance with this Landscaping Plan.

7.3.3. Plant selection and plant numbers

Plantings will:

- Be native species that are a part of the existing plant community types in the area. List of suitable species are in Table 7-3 based on fast growing, with spreading habitat and mixed mature heights of 2-4 metres, 3-5 metres and 5-10 metres
- Be derived from the naturally occurring vegetation community in this area
- Be shrubs and trees (no forbs) and will therefore be most effective screening views
- Be mixed to produce a heterogeneous mix of plantings
- Provide a successional planting strategy whereby:
    - Fast growing pioneer species are planted closest to receivers
    - Slower growing species are planted in the second and third row
    - Pioneer species are replaced by the slower growing species either as they senesce or as the slower growing species become effective in screening infrastructure
    - Long stem tube stock will be sourced from locally collected endemic seed where feasible (using a local nursery).

The following species list in Table 7-3 has been derived from the *General Native Vegetation Profile: Walla Walla District published in the South West Slopes Revegetation Guide (DLWC 1998)* and in consultation with Jayfields Nursery.

Table 7-3 Suitable species list

Large evergreen trees 5-10m	Medium evergreen trees 3-5m	Shrubs and groundcovers 2-4m
• *Eucalyptus blakelyi* (Blakely's Red Gum) • *Eucalyptus melliodora* (Yellow Box) • *Eucalyptus polyanthemos* (Red Box)	• *Acacia dealbata* (Silver Wattle) • *Acacia implexa* (Lightwood) • *Allocasuarina luehmannii* (Bulloak) • *Allocasuarina verticillata* (Drooping Sheoak)	• *Acacia acinacea* (Gold-dust Wattle) • *Acacia rubida* (Red-stemmed Wattle) • *Bursaria spinosa* (Sweet Bursaria) • *Dodonea viscosa subsp. angustissima* (Narrow-leaf Hop-bush)

Planting density has been derived from the Holbrook Landcare Network advice for a planting density of 600 plants per hectare with a ratio of 30% trees to 70% shrubs and groundcovers (Appendix D). Table 7-4 provides the planting density for vegetative screening.

Table 7-4 Planting density

Vegetative Screen (refer to Appendix A)	Receiver	Dimensions (not including APZ)	Area ha	Plants (600/ha)	Large trees (15%)	Medium trees (15%)	Shrubs/GC (70%)
Southeast Vegetation Buffer	R14	40 m width by 450 m	1.8	1,080	162	162	756
Southern Vegetation Buffer – 1 (eastern)	R34	20 m width by 620 m	1.24	744	112	112	521
Southern Boundary Vegetation Buffer- 2 (western)#	R33	20 m width by 640 m	1.28	768	115	115	538
West boundary vegetation buffer – 1 (northern)	R24	20 m width by 405 m to augment existing scattered vegetation	0.81	486	73	73	340
West boundary vegetation buffer – 2 (southern) #	R24	20 m width by 435 m to augment existing scattered vegetation	0.87	522	78	78	366
North boundary vegetation buffer #	R24	15 m width by 1050 m	1.575	945	142	142	661
Eastern boundary/Cummings Road vegetation buffer – 1 (northern)	R09	5 m width by 468 m	0.23	138	21	21	97
Eastern boundary vegetation buffer – 2 (southern)	R09	5 m width by 400 m	0.2	120	18	18	84
Supplementary rehabilitation and revegetation to Back Creek (south)*	R17, R19	20 m by 660 m	1.32	792	119	119	554
Supplementary planting to existing ephemeral drainage line (north)*	R09	20 m by 1,680 m	3.36	2,016	302	303	1410
Supplementary planting to existing ephemeral drainage line (south)*	R17, R19	20 m by 400 m	0.8	480	72	72	336
Totals			**13.49**	**8091**	**1214**	**1215**	**5663**

*Supplementary biodiversity plantings as described in Section 4.2 the Project's Rehabilitation Plan (NGH, 2023)

Vegetation screening extended post approvals in response to consultation with neighbours.

7.3.4. Ground preparation

In order to prepare the soil for plantings, the planting areas will undergo weed control and may be ripped as deemed necessary by the landscaping contractor.

Any weed control must have regard to the broader biodiversity objectives contained in the Biodiversity Management Plan and Weed and Pest Management Plan. Weed control will include the following:

- If mechanical, manually clear an area 1 m buffer from the planting to minimise encroachment during establishment.
- For more intensive infestations of weeds, the use of selective herbicides may be warranted to prevent seed set and promote weed control. The advice of an ecologist and agronomist will be sought to advise on the control of weed infestations.

Ripping works will involve the following:

- Dial Before You Dig undertaken (to locate any underground services)
- Ripping will be done when the soil is dry, to reduce the risk of air pockets forming
- Rip lines will be spaced 4m apart and at least 40cm deep
- On undulating land, rip lines shall follow the contour of the land.

The addition of soil ameliorants may also be required as determined by the awarded landscape contractors. These would be added to improve the condition of the soils and could include the addition of gypsum, organics and/ or fertilizer as needed.

If ripping is not required, the landscaping contractor will undertake the Dial Before You Dig, weed control and soil amelioration prior to planting.

APA Easement

Where ripping is required within the gas pipeline easement, a l Third Party Works Approval will be secured from APA. All work will be undertaken in accordance with the requirements of the Third Party Works Approval including supervision, methodology and depth of ripping (<40cm).

7.3.5. Planting method

The plantings will be a heterogenous mix of identified species that are locally available at the time of planting. The number of plants required will reflect the numbers in Table 7-4, which is derived from Appendix A with the locations of perimeter plantings.

Establishment

- Planting will be undertaken by an experienced landscape contractor
- Plants will be approximately 4 metres apart from each other (horizontal separation) in a staggered or matrix formation (refer to Appendix A for examples of the arrangement)
- Planting will be undertaken in Autumn 2024.
- Tube stock should be sourced as early as possible, refer to Section 7.3.6
- The method of planting will be guided by the landscaping contractor and nursery. However, typical methods to consider include:
    - Addition of gypsum may assist to alleviate dispersion risk and break up hard setting surface soils
    - Increasing organic content with composted organics may improve fertility, assist nutrient retention and improve moisture holding capacity of this type of soil
    - Regular, small amounts of fertiliser additions can be beneficial over single large quantities

    - Using mulch to protect surfaces assists to reduce raindrop induced crusted or hard setting surface
    - Relieve any compaction present and ensure adequate fertility for quick establishment
- Weed control will be undertaken in each of the screening sites:
    - If mechanical, manually clear an area 1 m buffer from the planting to minimise encroachment during establishment
    - For more intensive infestations of weeds, the use of selective herbicides may be warranted to prevent seed set and promote weed control. The advice of an ecologist and agronomist will be sought to advise on the control of weed infestations. Any weed control must have regard to the broader biodiversity objectives contained in the Biodiversity Management Plan and Weed and Pest Management Plan
- Monitoring of weed infestations will occur as part of the routine environmental inspections to determine effectiveness of management controls. The presence of any weeds and the necessary management actions will be noted on the Environmental Inspection Checklist
- Pesticide application, if required, will only be administered by authorised personnel with Australian Qualifications Framework (AQF) 3 in accordance with chemical handling
- Pesticides will only be applied in accordance with label instructions for that product
- A Pesticide Application Record will be completed, and public notifications made in accordance with relevant legislation, where pesticides are to be used in areas that could be accessed by members of the public
- Only pesticides registered for use near water may be used near any waterways
- These soils will require frequent, low volume watering due to the dense subsoils
- Tree guards will be used to protect plants (creating a microclimate to reduce water loss and making follow up maintenance easier).

Planting timing and need for irrigation

Planting is planned to occur in Autumn 2024. This is unlikely to occur prior to the commencement of construction however has been approved via DPE via a separate approvals document.

While planting in Autumn is generally the best time, if sufficient rainfall has not occurred irrigation will be installed, or weekly hand watering is to be undertaken to achieve the consent condition of ‘effective screening in 3 years’.

Irrigation may improve the success of the plantings, reducing replacement of mortalities. Where irrigation is used, temporary polypipe, moveable water tanks and moveable pumps will be used to irrigate the plantings during establishment. This will allow more frequent lower intensity watering. No additional water sources or quantities are required.

Planting maintenance

- Weed control will be undertaken around plantings as required to ensure they are not outcompeted by surrounding vegetation
- Only herbicides and pesticides registered for use near water may be used near any waterways
- Replace tree guards as required and remove once plants have outgrown them
- Replace dead plants to achieve an overall 90% success rate for the life of the Project.

7.3.6. Works schedule

The schedule of work below guides the timing and outcomes of landscaping work, refer to Table 7-5. This table will be modified based on alterations to Project phases and climatic conditions. Works are intended to commence in Spring 2023.

Table 7-5 Schedule of works

Project Phase	Landscaping Work	Indicative timing / Preferred Season	Performance Target	Measure and Monitor	Variation
Early construction	Source / order tube stock	Summer 2023	Sufficient numbers ordered	Shattering of soil	Second control session if required
Early construction	Control exotic pasture – herbicide application (apply 10 days after any rain)	Late summer 2024 (approximately 1 month prior to planting)	Exotic pasture controlled (died-back)	Grass cover dying	Second control session if required
Early construction	Slash (as required) Ripping	Autumn 2024	Biomass slashed 4m apart greater than 400mm	Biomass slashed by autumn Grass cover dead by autumn	Second control session if required
Early construction	Planting	Autumn 2024	Sufficient numbers planted – 600 plants / ha	Climatic conditions, rainfall, area covered, watering, ensure the plant location and spacing are aligned with the planting schedule above.is as per this Landscaping Plan.	Install irrigation or hand water if rainfall is not sufficient
Construction	Maintain plantings (watering, follow up weed control)	Weekly for first 12 months, then reduced as required	Plants alive	Mortality, weeds, rainfall and watering and soil moisture	Reduce watering if heavy substantial rainfall or irrigated
Construction and life of Project	Replace dead plants	As required (note as substantial lead time is required, order surplus quantities)	90% success	Mortality and soil moisture	

7.3.7. Planting monitoring program

Table 7-6 Planting monitoring program

Monitor	Establishment (first 12 months after planting)			Two years post planting			Three years' post construction			Six years post construction to decommissioning		
	Timing	Action	Responsibility	Timing	Action	Responsibility	Timing	Action	Responsibility	Timing	Action	Responsibility
Watering	Weekly	Regular hand weekly watering where <30mm of rain has occurred in that month, unless irrigated	EPC Contractor personnel or the landscaping contractor	Monthly	Water when rainfall less than 10mm/month unless irrigated	Neoen (appointed landscape / maintenance contractor)	Monthly	Water when rainfall less than 10mm/month or as advised by landscape contractor	Neoen (appointed landscape / maintenance contractor)	Monthly	Water when rainfall less than 10mm/ month	Neon (appointed landscape / maintenance contractor)
	Weekly	For sections with temporary irrigation, check all drippers operational and water once per week	EPC Contractor personnel or the landscaping contractor	Monthly	For sections with temporary irrigation, check all drippers operational and water once per month	Neoen (appointed landscape / maintenance contractor)	Monthly	For sections with temporary irrigation, check all drippers operational and water once per month	Neoen (appointed landscape / maintenance contractor)	Remove drippers once established.		
Weeds	Monthly	Spot spray or manually remove weeds within 1.5 m of planting	EPC Contractor – landscape / maintenance contractor	Monthly	Spot spray or manually remove weeds within 1.5 m of planting	Neoen (appointed landscape / maintenance contractor)	Quarterly	Spot spray or manually remove weeds within 1.5 m of planting	Neoen (appointed landscape / maintenance contractor)	Every six months	Spot spray or manually remove weeds within 1.5m of planting	Neoen
Mortality	Quarterly	Replacement planting to occur in areas where plantings have died (not to occur during summer) to achieve a 90% success rate.	EPC Contractor – landscape / maintenance contractor	Quarterly	Replacement planting to occur in areas where plantings have died (not to occur during summer) to achieve a 90% success rate.	Neoen (appointed landscape / maintenance contractor)	Annually	Replacement planting to occur in areas where plantings have died (not to occur during summer) to achieve a 90% success rate.	Neoen (appointed landscape / maintenance contractor)	Annually	Replacement planting to occur in areas where plantings have died (not to occur during summer) to achieve a 90% success rate.	Neoen
Visual screening	Monthly	Visual inspection from residence and consult with Receivers 9, 17, 19, 24 and 3.	EPC SEA/ Project Manager	Quarterly	Visual inspection from residence and consult with Receivers 9, 17, 19, 24 and 3.	Neoen SEA/ Project Manager/ Contractors	Annually	Visual inspection from residence and consult with Receivers 9, 17, 19, 24 and 3.	Neoen	Annually	Visual inspection from residence and consult with Receivers 9, 17, 19, 24 and 3.	Neoen
Reporting	Monthly	Report on success of watering, weeding, mortalities, replacement plantings and visual screening (as implemented above). Corrective actions as required	EPC Contractor – landscape / maintenance contractor	Quarterly	Report on success of watering, weeding, mortalities, supplementary, plantings and visual screening (as implemented above). Corrective actions as required	Neoen (appointed landscape / maintenance contractor)	Annually	Report on success of watering, weeding, mortalities, supplementary, plantings and visual screening (as implemented above). Corrective actions as required	Neoen (appointed landscape / maintenance contractor)	Annually	Report on success of watering, weeding, mortalities, supplementary, plantings and visual screening (as implemented above). Corrective actions as required	Neoen

7.3.8. Effectiveness of screening

Effectiveness of the screening will be assessed using the results of the monitoring program as outlined in Section 7.3.7 with reference to compliance with the Landscaping Plan targets outlined in Section 2.3 and ongoing consultation with receivers R9, R17, R19, R24 and R3. Neoen will undertake internal review of vegetation screening condition throughout the duration of the Project.

Consultation and results of the monitoring and visual inspections will be recorded. If it is found that the screening is not compliant, DPE will be notified within 7 days with corrective actions as per Schedule 4 CoA 8 - 10.

8. Compliance management

8.1. Roles and responsibilities

Section 4.8 of the EMS describes the roles and responsibilities of Neoen's Project team in relation to environmental management. Specific responsibilities for the implementation of this Landscaping Plan are detailed in Section 7 of this plan.

8.2. Training

All employees, contractors and utility staff working on site will undergo site induction training that includes landscaping requirements. The induction training will address elements related to landscaping management including:

- Existence and requirements of this sub-plan
- Relevant legislation
- Planting requirements
- Monitoring and maintenance requirements
- Complaints reporting

Further details regarding staff induction and training are outlined in Section 7 of the EMS.

8.3. Monitoring and inspection

Requirements and responsibilities in relation to monitoring and inspections during construction are documented in Section 10 of the EMS. Monitoring requirements for perimeter plantings are detailed in Section 7.3.7 of this document.

Operational monitoring requirements relevant to visual amenity will be identified during the pre-operations phase of the Project. The EMS and associated Management Plans shall be reviewed and updated to reflect operational requirements requiring to be minimised or maintained, including glint and glare impacts, visual appearance of ancillary areas (retained service buildings) and to ensure that logos and advertising labels are not present (except for safety signage). Such items would be reflected in operational phase routine inspections undertaken for the operation life of the Project.

8.4. Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this sub plan, infrastructure approval and other relevant approvals, licences, and guidelines. Audit requirements are detailed in Section 9.3 of the EMS.

8.5. Reporting

Reporting requirements and responsibilities are documented in Section 10.4 of the EMS. Specific to this plan, monitoring requirements for perimeter plantings are detailed in Section 7.3.7 of this document. In summary, they will include:

- **Establishment (first 12 months after planting)** – Monthly; Report on success of watering, weeding, mortalities, supplementary. Corrective actions as required
- **Two years post planting** – Quarterly; Report on success of watering, weeding, mortalities, supplementary. Corrective actions as required

- **Three years post construction** – Annually; Report on success of watering, weeding, mortalities, supplementary. Corrective actions as required.
- **Six years post construction to decommissioning** - Annually; Report on success of watering, weeding, mortalities, supplementary. Corrective actions as required

Details on incident reporting is included in Section 9.3 of the EMS and expanded below in Section 8.5.1. The Contractor will promptly advise Neoen on events that are non-conforming with the CoAs and mitigation measures. Neoen will advise DPE accordingly for any notifiable non-conformances as per below:

8.5.1. Incident reporting

In accordance with Condition 7 of Schedule 4 of the Development Consent, the Planning Secretary must be notified in writing via the Major Projects website immediately after Neoen becomes aware of an incident.

Written notification of an incident must:

a) Identify the development and application number
b) Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident)
c) Identify how the incident was detected
d) Identify when the applicant became aware of the incident
e) Identify any actual or potential non-compliance with conditions of consent
f) Describe what immediate steps were taken in relation to the incident
g) Identify further action(s) that will be taken in relation to the incident
h) Identify a project contact for further communication regarding the incident.

As per Appendix 7 of the CoA (Incident Notification and Reporting Requirements), within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must also include:

a) A summary of the incident
b) Outcomes of an incident investigation, including identification of the cause of the incident
c) Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence
d) Details of any communication with other stakeholders regarding the incident.

All written requirements of the Planning Secretary or relevant public authority, which may be given at any point in time, to address the cause or impact of an incident must be complied with, within any timeframe specified by the Planning Secretary or relevant public authority.

Non-compliances

Non-compliances will be reported in accordance with Section 10.4 of the EMS, and the Planning Secretary (DPE) must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.

A non-compliance notification must identify:

- The development and the application number for it,
- Set out the condition of consent that the development is non-compliant with,
- The way in which it does not comply
- The reasons for the non-compliance (if known) and
- What actions have been, or will be, undertaken to address the non-compliance.

It should be noted that as per the requirements of Schedule 4, Condition 10, a non-compliance which has been notified as an incident, does not need to also be notified as a non-compliance.

9. Improvement and updates

9.1. Continuous improvement

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets.

9.2. Landscaping Plan revisions

A document review process ensures that environmental documentation including this Landscape Plan is updated as appropriate for the specific works that are occurring on-site. Reviews of the Landscape Plan are expected to be triggered as relevant, by:

- Independent Environmental Audit
- Internal audits
- Additional environmental aspects and risks
- Environmental near misses and incidents
- Project stage change between construction, operation, and decommissioning

Should the document review process identify any issues or items within the documents that are either redundant or in need of updating, it is the responsibility of the Neoen Project Manager or delegate to prepare the revised documents.

In accordance with Condition 2 of Schedule 4 of the Development Consent, within 1 month, unless otherwise agreed with the Planning Secretary, of:

- The submission of an incident report under Condition 7 of Schedule 4
- The submission of an audit report under Condition 11 of Schedule 4
- Any modification to the conditions of this consent.

The Neoen Project Manager or delegate must review, and if necessary revise the strategies, plans, and programs required under the Development Consent to the satisfaction of the Planning Secretary.

Where this review leads to revisions in any such document, then within four weeks of the review, the revised document will be submitted to the Planning Secretary for review and approval, unless otherwise agreed with the Planning Secretary.

In accordance with Condition 3 of Schedule 4 and agreement of the Planning Secretary, revised strategies, plan or programs may be prepared without undertaking consultation with all parties nominated under the applicable condition in this approval.

Only the Neoen Project Manager, or delegate, has the authority to change any of the environmental management documentation.

In addition, the processes described in Section 11 of the EMS may result in the need to update or revise this Plan. This will occur as needed.

9.2.1. Document control

A copy of the updated plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure – refer to Section 12.2 of the EMS. This also includes providing the EMS and Management Plans to DPE and that these are made publicly available (i.e. via the Major Projects Planning Portal). Details regarding this are specified in Section 12.3 of the EMS.

10. References

NGH. (2020). *Amendment Report - Culcairn Solar Farm.* NGH Pty Ltd.

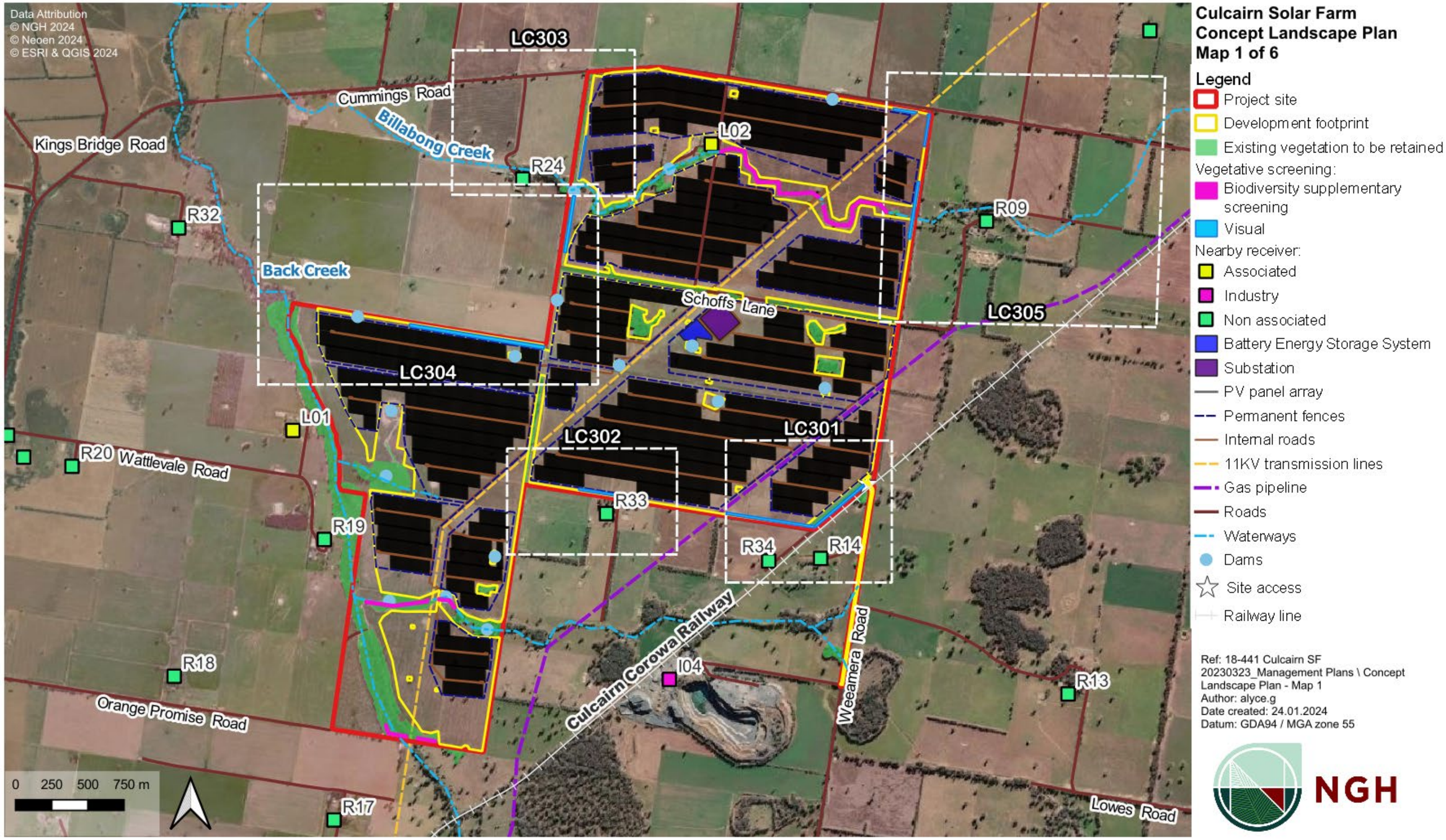
NGH. (2020). *Environmental Impact Statement - Culcairn Solar Farm.* NGH Pty Ltd.

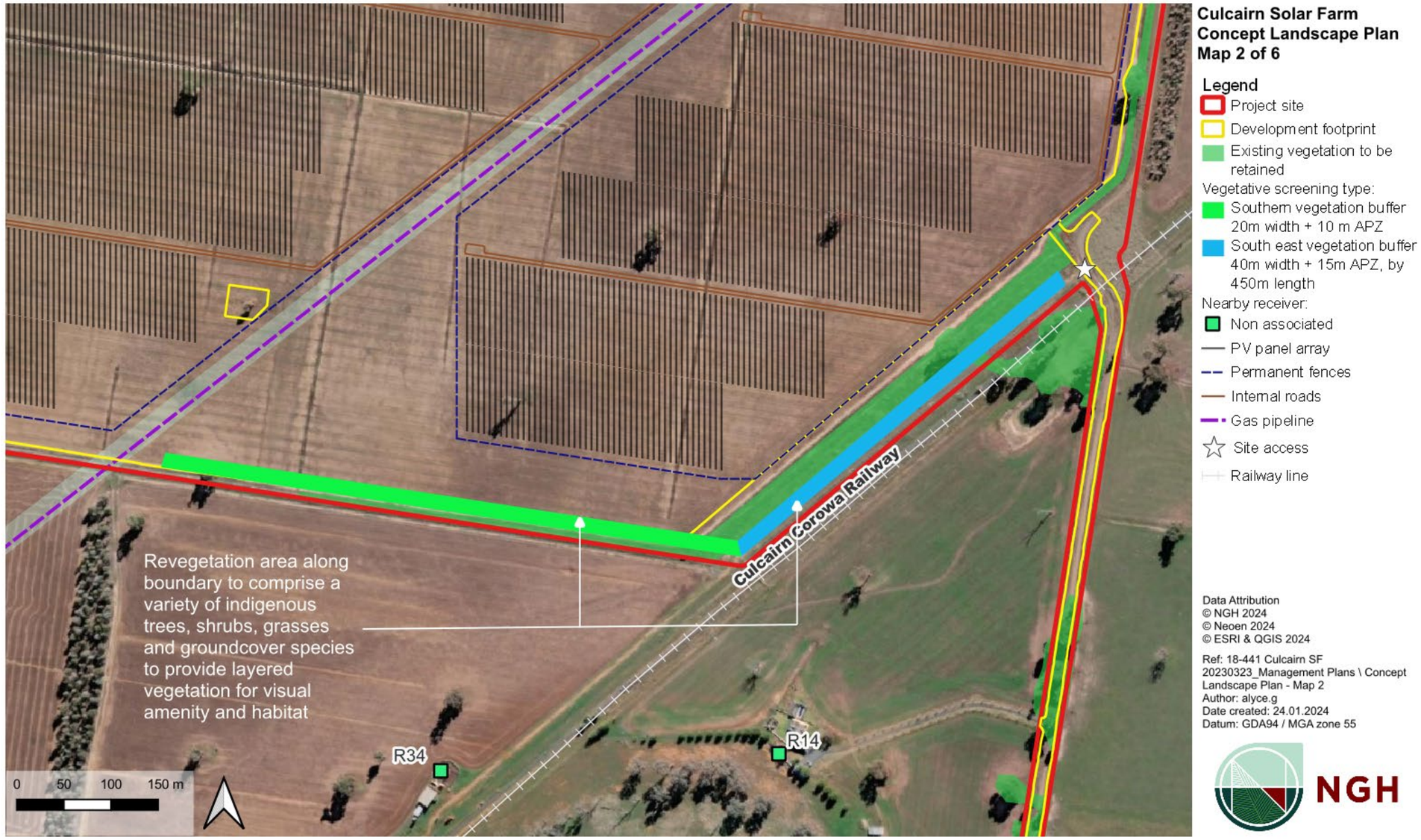
NGH. (2020). *Response to Submissions - Culcairn Solar Farm.* NGH Pty Ltd.

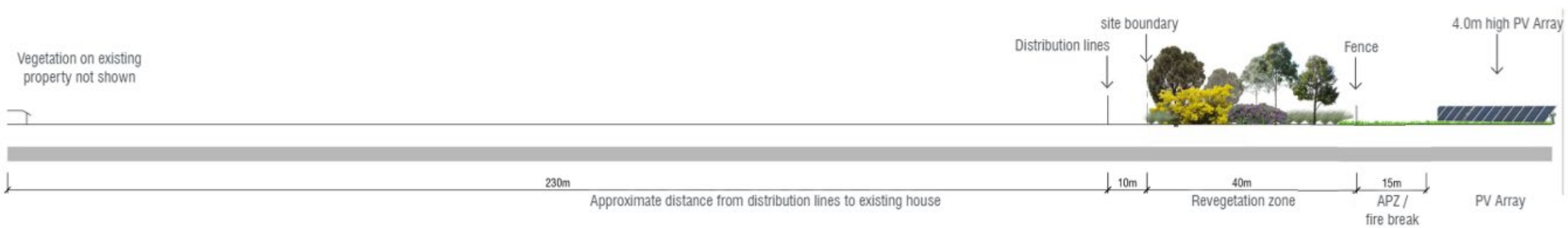
NGH. (2023). Modification 1 Report - *Culcairn Solar Farm.* NGH Pty Ltd.

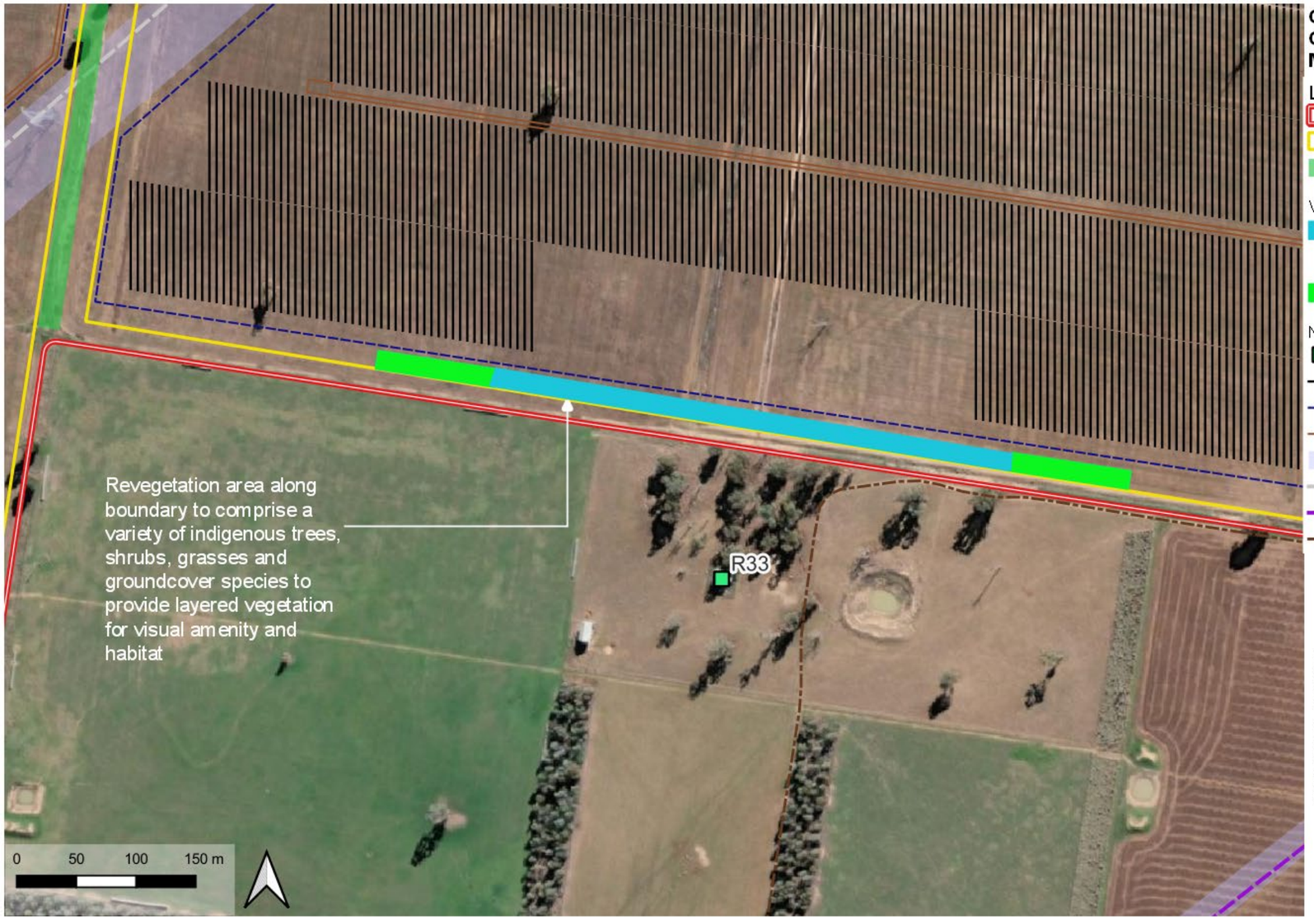
NSW Rural Fire Service. (2019, November). *Planning for Bushfire Protection A guide for councils, planners, fire authrities and developers.* Retrieved from https://www.rfs.nsw.gov.au/__data/assets/pdf_file/0005/174272/Planning-for-Bush-Fire-Protection-2019.pdf

Appendix A Concept Landscape Plan




Culcairn Solar Farm
Concept Landscape Plan
Map 2 of 6
Legend
Project site
Development footprint
Existing vegetation to be retained
Vegetative screening type:
Southern vegetation buffer 20m width + 10 m APZ
South east vegetation buffer 40m width + 15m APZ, by 450m length
Nearby receiver:
Non associated
PV panel array
Permanent fences
Internal roads
Gas pipeline
Site access
Railway line
Culcairn Corowa Railway
Revegetation area along boundary to comprise a variety of indigenous trees, shrubs, grasses and groundcover species to provide layered vegetation for visual amenity and habitat
R34
R14
0 50 100 150 m
Data Attribution
© NGH 2024
© Neoen 2024
© ESRI & QGIS 2024
Ref: 18-441 Culcairn SF 20230323_Management Plans \ Concept Landscape Plan - Map 2
Author: alyce.g
Date created: 24.01.2024
Datum: GDA94 / MGA zone 55
NGH


Vegetation on existing property not shown
site boundary
Distribution lines
Fence
4.0m high PV Array
230m
10m
40m
15m
Approximate distance from distribution lines to existing house
Revegetation zone
APZ / fire break
PV Array



Culcairn Solar Farm
Concept Landscape Plan
Map 3 of 6

Legend

- Project site
- Development footprint
- Existing vegetation to be retained

Vegetative screening type:

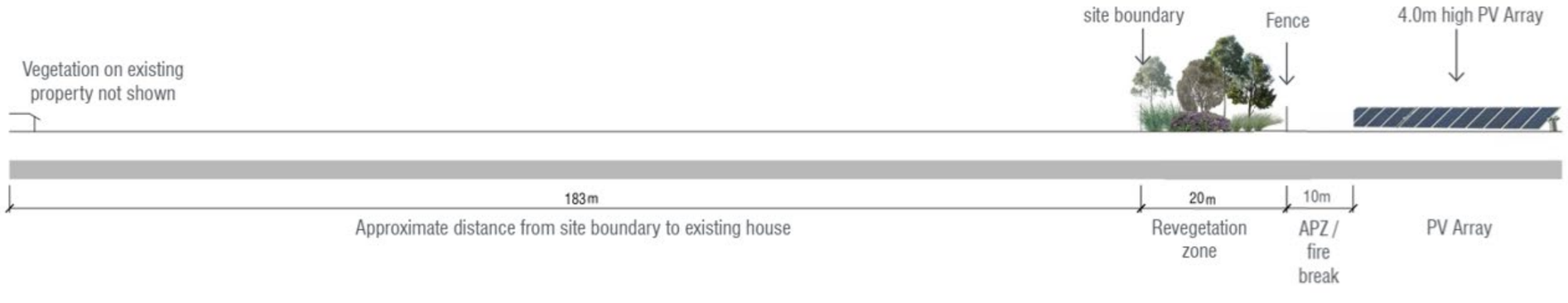
- South boundary vegetation buffer 20m width + 10m APZ, by 540m length
- Additional screening to that already approved

Nearby receiver:

- Non associated
- PV panel array
- Permanent fences
- Internal roads
- Easement
- 11KV transmission lines
- Gas pipeline
- Roads

Ref: 18-441 Culcairn SF 20230323_Management Plans \ Concept Landscape Plan - Map 3
Author: alyce.g
Date created: 23.08.2023
Datum: GDA94 / MGA zone 55

NGH



Culcairn Solar Farm
Concept Landscape Plan
Map 4 of 6

Legend

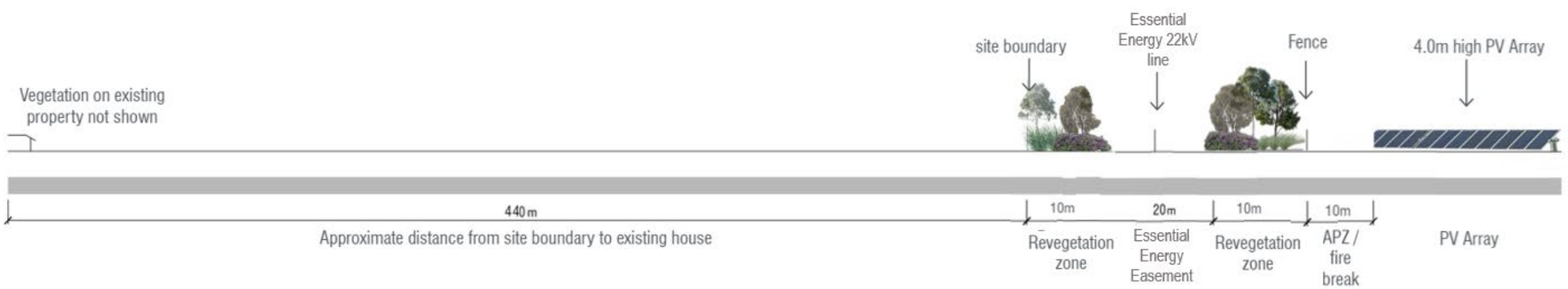
- Project site
- Development footprint
- Existing vegetation to be retained
- West boundary vegetation buffer 20m width by 435m length to augment existing scattered vegetation

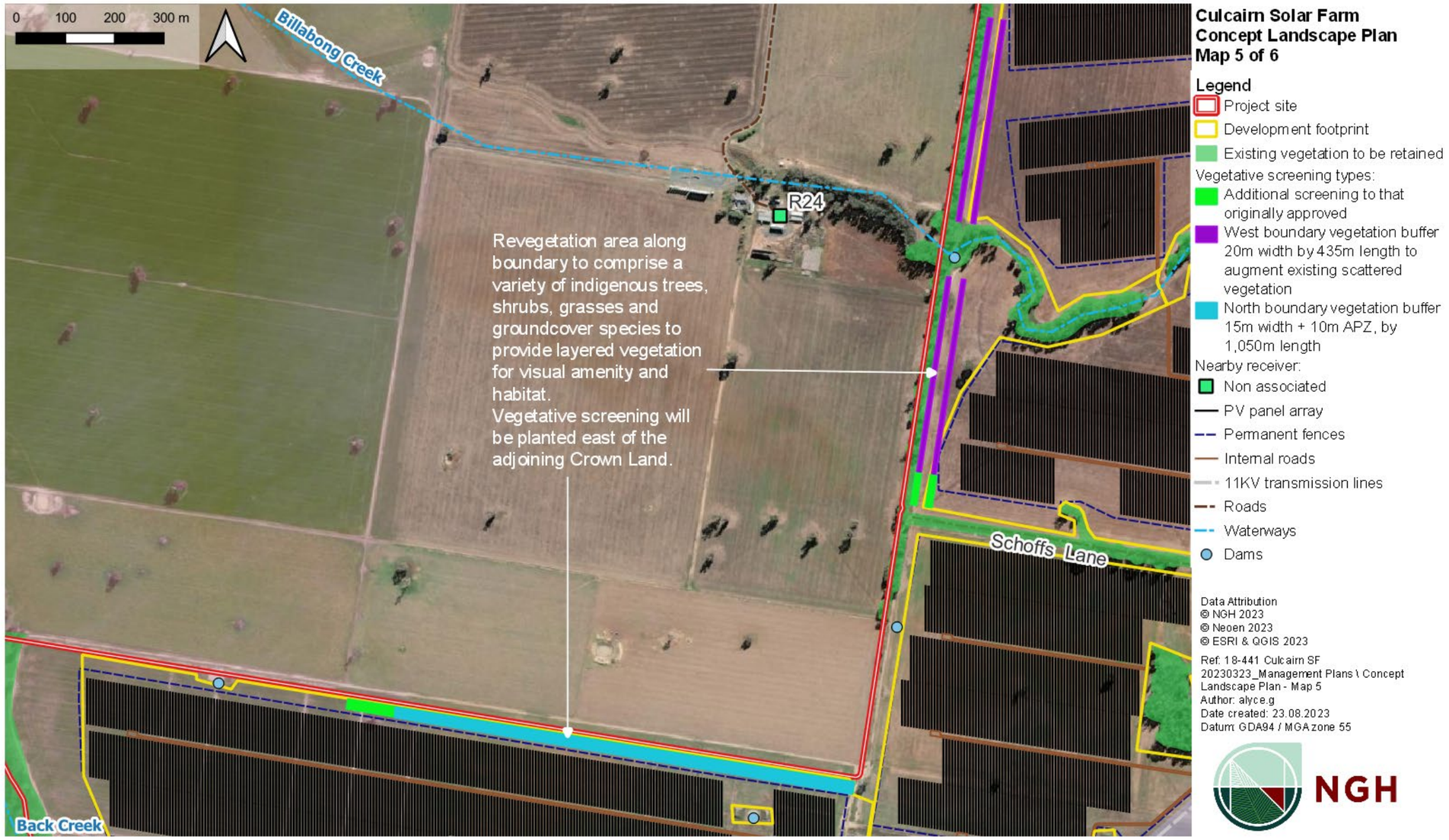
Nearby receiver:

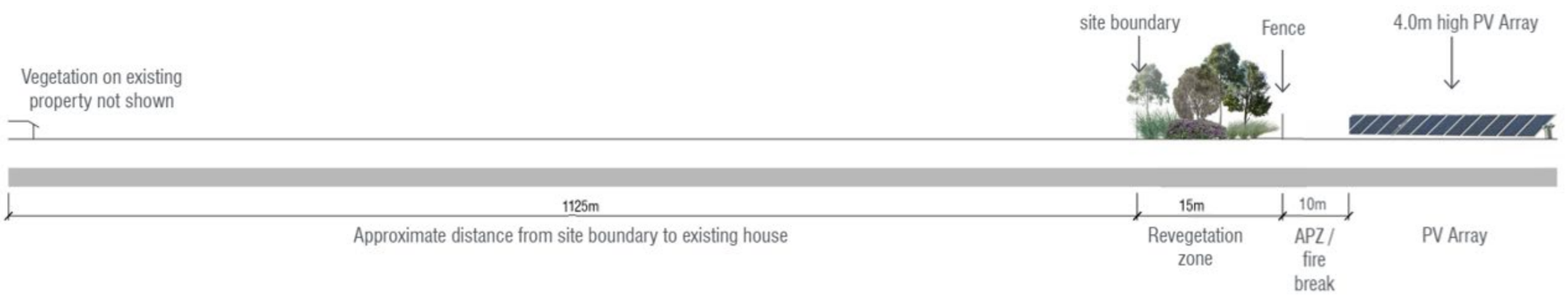
- Non associated
- PV panel array
- Permanent fences
- Internal roads
- Roads
- Waterways
- Dams

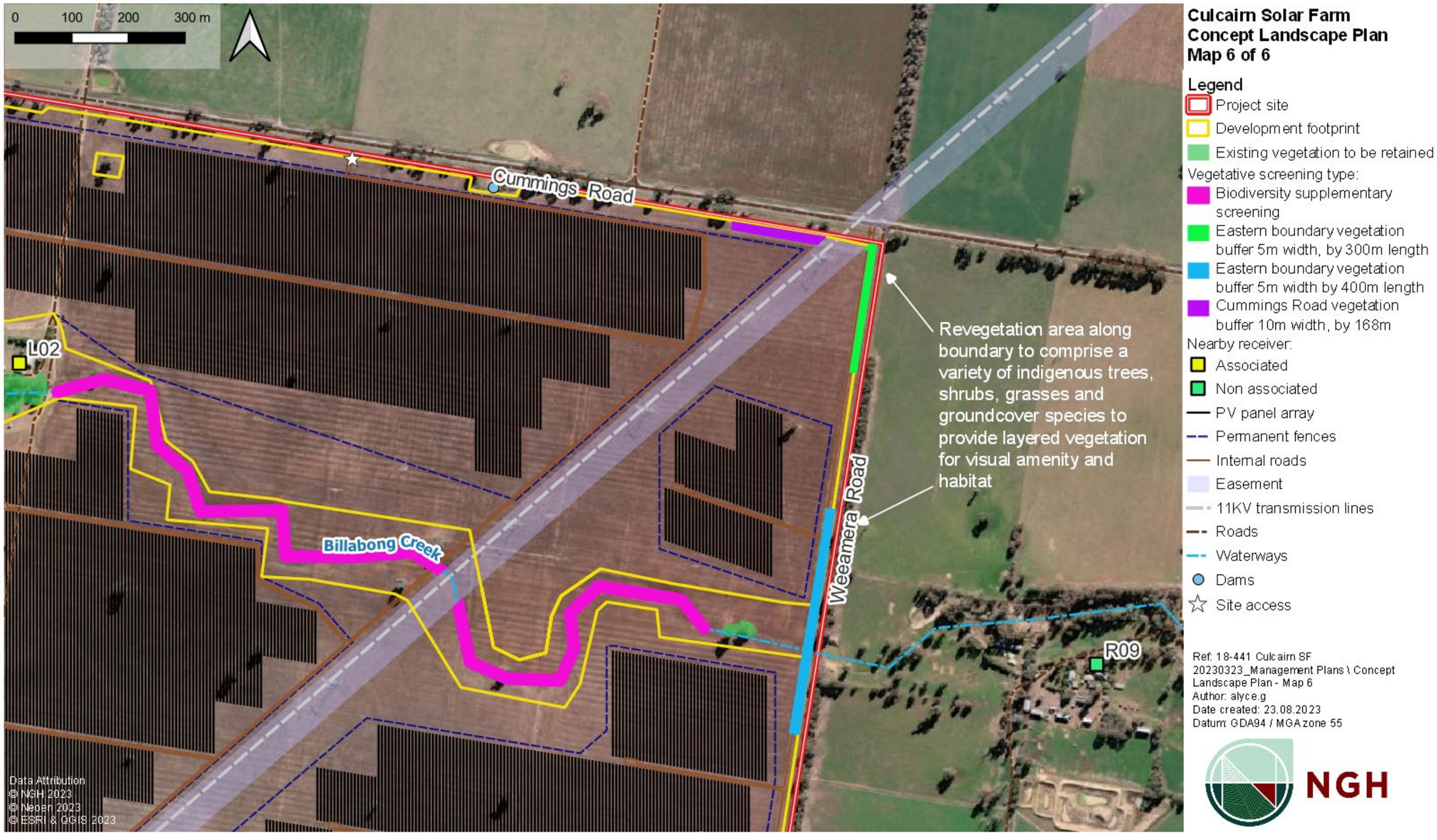
Ref: 18-441 Culcairn SF 20230323_Management Plans \ Concept Landscape Plan - Map 4
Author: alyce.g
Date created: 23.08.2023
Datum: GDA94 / MGA zone 55

NGH




0 100 200 300 m
Billabong Creek
R24
Revegetation area along boundary to comprise a variety of indigenous trees, shrubs, grasses and groundcover species to provide layered vegetation for visual amenity and habitat.
Vegetative screening will be planted east of the adjoining Crown Land.
Schoffs Lane
Back Creek
Culcairn Solar Farm
Concept Landscape Plan
Map 5 of 6
Legend
Project site
Development footprint
Existing vegetation to be retained
Vegetative screening types:
Additional screening to that originally approved
West boundary vegetation buffer 20m width by 435m length to augment existing scattered vegetation
North boundary vegetation buffer 15m width + 10m APZ, by 1,050m length
Nearby receiver:
Non associated
PV panel array
Permanent fences
Internal roads
11KV transmission lines
Roads
Waterways
Dams
Data Attribution
© NGH 2023
© Neoen 2023
© ESRI & QGIS 2023
Ref: 18-441 Culcairn SF 20230323_Management Plans \ Concept Landscape Plan - Map 5
Author: alyce.g
Date created: 23.08.2023
Datum: GDA94 / MGA zone 55
NGH


site boundary
Fence
4.0m high PV Array
Vegetation on existing property not shown
1125m
15m
10m
Approximate distance from site boundary to existing house
Revegetation zone
APZ / fire break
PV Array



Culcairn Solar Farm
Concept Landscape Plan
Map 6 of 6

Legend

- Project site
- Development footprint
- Existing vegetation to be retained

Vegetative screening type:

- Biodiversity supplementary screening
- Eastern boundary vegetation buffer 5m width, by 300m length
- Eastern boundary vegetation buffer 5m width by 400m length
- Cummings Road vegetation buffer 10m width, by 168m

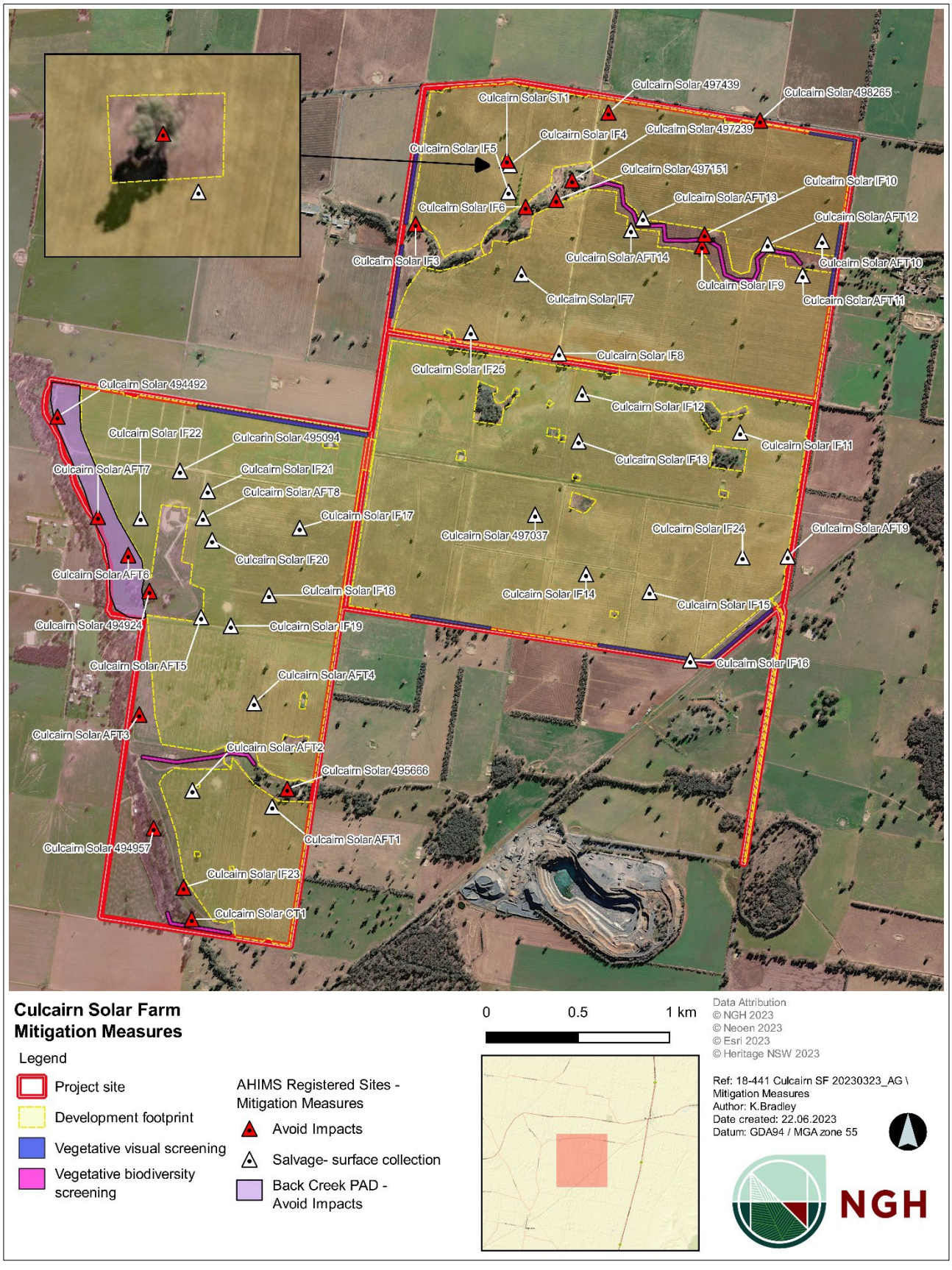
Nearby receiver:

- Associated
- Non associated
- PV panel array
- Permanent fences
- Internal roads
- Easement
- 11KV transmission lines
- Roads
- Waterways
- Dams
- Site access

Ref: 18-441 Culcairn SF 20230323_Management Plans \ Concept Landscape Plan - Map 6
Author: alyce.g
Date created: 23.08.2023
Datum: GDA94 / MGA zone 55

NGH

Appendix B Heritage items and measures



Appendix C APA easement planting requirements

Trees/Tall Shrubs		
Botanic name	Common name	Comment
Eucalyptus blakelyi	Blakely's Red Gum	Not to be planted within 5 meters from edge of asset
Eucalyptus melliodora	Yellow Box	Not to be planted within 5 meters from edge of asset
Eucalyptus polyanthemos	Red Box	Not to be planted within 5 meters from edge of asset
Acacia dealbata	Silver Wattle	Not to be planted within 5 meters from edge of asset- Ideally not on easement at all due to the short life span and cracking nature of senescent individuals.
Acacia implexa	Lightwood, Hickory Wattle	Not to be planted within 4 meters from edge of asset
Allocasuarina leuhmannii	Buloke	Not to be planted within 5 meters from edge of asset
Allocasuarina verticillata	Drooping Sheoke	Not to be planted within 5 meters from edge of asset
Acacia rubida	Red-stem Wattle	Not to be planted within 5 meters from edge of asset
Small to Medium Shrubs		
Botanic name	Common name	Comment
Acacia acinacea	Gold Dust Wattle	Not to be planted within 5 meters from edge of asset
Bursaria spinosa	Sweet Bursaria	Not to be planted within 4 meters from edge of asset
Dodonea viscosa subsp.angustissima	Narrow-leaf Hop-bush	Not to be planted within 3 meters from edge of asset

Appendix D Culcairn Solar Farm Revegetation Guidance

Holbrook Landcare Network

REVEGETATION

Bushlinks

Site preparation for tube stock

SPRING

SUMMER

AUTUMN

WINTER

SPRING

Spray out exotic perennial pasture

- If you are planting in perennial pasture dominated site, spraying the site the Spring prior to planting is the ideal preparation , and you may then only require one spray in Autumn

Order plants

- Order plants early to guarantee supply of desired species
- Consult with your local nursery and the "Southwest Slopes Revegetation Guide" (online at www.holbrooklandcare.org.au)for appropriate plants for your area

Control rabbits and hares at site and surrounds

- Coordinate with neighbours if necessary, deal with burrows and surface dwelling rabbits
- Avoid the need for labour intensive and expensive tree guards

Ripping—where appropriate

- Rip before the Autumn break, while the ground is hard and dry to get deep shattering of the soil
- Rip lines should be spaced a minimum of 4 metres apart and at least 40cm deep
- Do not rip under the drip-line of existing trees., through wet areas or where there is erosion hazard

Crash graze/slash grass and spray rip lines before frosts, but about 10 days after rain

- Seek appropriate agronomic advice on sprays and rates of chemical
- Spray rip lines only —broad scale spraying of site not recommended
- If no rip lines, spot herbicide application 1 square metre per plant

Re-spray one month prior to planting if required

- Only non-residual herbicides are recommended for use
- If no chemicals to be used, consider slashing/grazing again

Plant seedlings mid July to September

- For 400 plants per ha, plant every 6 m for rip lines that are 4m apart
- For 600 plants per ha, plant every 4 metres for rip lines 4m apart

Check for vermin or stock damage first week after planting

- Inspect for vermin such as rabbits, hares and **act** on any specific problems
- Check that there is no stock entry to plantation

Check plants regularly post-planting

- Watch and act on weed regrowth through Spring and early summer.
- Monitor insects such as grasshoppers, Rutherglen bugs etc. Spot spraying may be undertaken if necessary
- Damage can be caused by frost, birds , kangaroos and wombats
- Remember to shut the gate on the way out!!

128 Albury St (PO Box 121) Holbrook NSW 2644
T 02 6036 3181 E office@holbrooklandcare.org.au
ABN 64 092 836658

REVEGETATION

Ripping

Before ripping, landowners should contact Dial-Before-You-Dig to check the location of utilities.

- Ripping should be done when the profile is dry to ***shatter*** the soil (not slice) and reduce the risk of air pockets forming, especially in clay soils.
- Rip lines should be spaced 4 metres apart, and at least 40cm deep.
- If the rip has resulted in air spaces, running a tractor wheel or cultivating over the rip line may be appropriate.

- On undulating or hilly land, rip lines should be along the contour to minimise soil erosion.
- Mounding may be recommended in specific soil types, especially sites prone to waterlogging, but it is the exception rather than the rule.

When is ripping NOT appropriate?

Native grass sites—IF planting is appropriate at all, then native grass areas should be direct seeded to prevent disturbance and the invasion of weeds.

Steep Land– slopes must be safe to work on and the appropriate equipment used. If accessible, rip on the contour. Choose appropriate equipment (eg. bulldozer rather than tractor).

Erodible lands— sites with existing active erosion, erodible soil types (including subsoil) or at risk of sheet erosion. Rip lines can catch and redirect water if not designed properly. Seek advice before ripping in erosion prone areas.

Spraying

- The area covered by herbicide spraying should be no wider than 50cm along either side of the rip line.
- If weed regrowth is excessive, over spraying with some chemicals is possible at certain times of the year when the plants are dormant. Consult with your nursery or professional for advice.

What if I don't want to use chemicals?

Site preparation is about reducing the competition for moisture, light and nutrients for the seedling, and this can be achieved in other ways.

- **Reduce the biomass**—slashing or using grazing to knock down the grass load.
- **Scalping** (taking the top 1-2cm of soil off) the planting site may be appropriate in sites with low erosion risk. As you are scraping off the nutrients present in the top layer, there is usually some residual effect before regrowth occurs. Scalping over large areas is not recommended, except under VERY specific circumstances (eg sheep camp restoration).

Tree Guards?

Advantages

- Can provide protection from rabbits and hares where control difficult
- Can provide protection from frost

Disadvantages

- Significant cost per unit
- Significant labour cost to install
- Require maintenance and eventual removal

Watering?

Good site preparation and the timing of planting in late Winter/early Spring is recommended to eliminate the need for watering over the first Summer.

Assessing losses— Vegetation growth in the first Spring can often make it difficult to see the plants. Assess the site properly before making a decision. We recommend to wait until the end of the second or third Spring to assess for replanting UNLESS there has been a specific grazing incursion or insect attack.

For more information please contact Holbrook Landcare Network

Phone: (02) 6036 3181 Mobile: 0418 198 522
Email: kyliedurant@holbrooklandcare.org.au
http://www.holbrooklandcare.org.au/bushlinks

Appendix E Visual Impact Assessment Results

Receiver id	Type	Proximity	Inherent visual impact	Mitigated visual impact	Impact
R03	Residential	Middle Ground (1-2 km)	Indistinct	NA	Infrastructure is not likely to be discernible by residence due to distance and existing vegetative screening. The substation, control room, operations and maintenance building and BESS are more than 4 km south-west. **No mitigation required.**
R08	Residential	Foreground (< 1 km)	Medium t	Low	Infrastructure of the solar farm is approximately 800 m west. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 3.5 km south-west. Broken views of the infrastructure through scattered paddock trees are likely to be discernible. **Mitigation recommended.** A vegetative screen (minimum 15 m width) is recommended for the length of the solar farm boundary that is visible from the residence of R08. The vegetative screening would assist in reducing the view of the solar farm, resulting in a low mitigated visual impact.
R09	Residential	Foreground (< 1 km)	Low	NA	Infrastructure of the solar farm is approximately 500 m west. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 1.8 km south-west. Broken views of the infrastructure through scattered paddock trees would be noticeable.

Receiver id	Type	Proximity	Inherent visual impact	Mitigated visual impact	Impact
					Mitigation recommended. A vegetative screen (minimum 5 m width) is recommended for the length of the solar farm boundary that is visible from the residence of R09. The vegetative screening would assist in reducing the view of the solar farm.
R14	Residential	Foreground (< 1 km)	High	Medium	Infrastructure of the solar farm is approximately 250 m north-west. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 1.6 km north-west. Unbroken views of the infrastructure through scattered paddock trees would be discernible. There is potential for R14 to have views of the upgrade to Weeamera Road. However, Weeamera Road is approximately 250 m from R14 residence, and any impacts would be minimal and temporary. **Mitigation recommended.** A vegetative screen (minimum 40 m width) is recommended for the length of the solar farm boundary that is visible from the residence of R14. The vegetative screening would assist in reducing the view of the Project from the lower level of the residence and over time, break views from the upper level. The mitigated visual impact from this property would be medium as a result of the double storey residence.
R17	Residential	Foreground (< 1 km)	Low	NA	Infrastructure of the solar farm is approximately 750 m north-east. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 4 km north-east. Broken views of the infrastructure through the riparian vegetation along Back Creek would be noticeable.

Receiver id	Type	Proximity	Inherent visual impact	Mitigated visual impact	Impact
					No mitigation required. As part of the post submissions, additional screening to supplement existing vegetation in Back Creek was included to reduce overall views for R17. Refer to Section 6.2.
R18	Residential	Middle ground (< 1.5 km)	Indistinct	NA	Infrastructure of the solar farm is approximately 1.5 km east. Currently, the land is predominately cleared with a slight rise east from the residence, as indicated in the image. The substation, control room, operations and maintenance building and BESS are more than 4 km north-east. No views of the infrastructure are visible from the residence R18. **No mitigation required.**
R19	Residential	Foreground (< 1 km)	Low	NA	Infrastructure of the solar farm is approximately 350 m east. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 2.8 km east. Minor broken views of the infrastructure would be visible through the Back Creek riparian vegetation from the residence R19. **No mitigation required.** As part of the post submissions, additional screening to supplement existing vegetation in Back Creek was included to reduce overall views for R19. Refer to Section 6.2.
R24	Residential	Foreground (< 1 km)	Medium	Low	Infrastructure of the solar farm is approximately 370 m east. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 1.5 km south-east.

Receiver id	Type	Proximity	Inherent visual impact	Mitigated visual impact	Impact
					Broken views of the infrastructure through the riparian vegetation along the unnamed waterway and mature woodland along the undeveloped council road would be noticeable. **Mitigation recommended.** A vegetative screen (minimum 15 m width) is recommended for the length of the solar farm boundary that is visible from the residence of R24. The vegetative screening would assist in reducing the view of the solar farm, resulting in a low mitigated visual impact.
R25	Residential	Background (>2 km)	Low	NA	The Project is approximately 2.4 km east of the residence R25. The substation, control room, operations and maintenance building and BESS are more than 3 km south-east. Infrastructure is not likely to be discernible by residence due to distance. **No mitigation required.**
R26	Residential	Background (>2 km)	Low	NA	The Project is approximately 2.2 km east of the residence R26. The substation, control room, operations and maintenance building and BESS are more than 3 km south-east. Infrastructure is not likely to be discernible by residence due to distance. **No mitigation required.**
R28	Residential	Foreground (< 1 km)	Indistinct	NA	The Project is approximately 950 m east from R28. The substation, control room, operations and maintenance building and BESS are more than 3 km south-east. Infrastructure is not likely to be discernible by residence due to distance and vegetative screening. **No mitigation required.**
R29	Rural Road	Foreground (< 1 km)	Low	NA	Infrastructure of the solar farm is approximately 270 m east. Currently, the land is predominately cleared and flat. The substation, control room,

Receiver id	Type	Proximity	Inherent visual impact	Mitigated visual impact	Impact
					operations and maintenance building and BESS are more than 2.9 km south-east. Infrastructure is not likely to be discernible from residence due to distance and planted vegetative screening along the property boundary that adjoins the Project. **No mitigation required.** Planted native vegetation along the boundary fence line of R29 and the Project would continue to grow and screen the infrastructure.
R30	Residential	Foreground (< 1 km)	Indistinct	NA	The Project is approximately 600 m south from the residence R30. The substation, control room, operations and maintenance building and BESS are more than 3.5 km south. Infrastructure is not likely to be discernible by residence due to distance and vegetative screening. **No mitigation required.**
R31	Rural Road	Foreground (< 1 km)	Indistinct	NA	The Project is approximately 450 m south from the residence R31. The substation, control room, operations and maintenance building and BESS are more than 3.3 km south-east. Infrastructure is not likely to be discernible by residence due to distance and vegetative screening. **No mitigation required.**
R32	Residential	Foreground (< 1 km)	Indistinct	NA	The Project is approximately 1 km south-east or 2.7 km east of the residence R32. The substation, control room, operations and maintenance building and BESS are more than 3.7 km east. Infrastructure is not likely to be discernible by residence due to distance and vegetative screening. **No mitigation required.**

Receiver id	Type	Proximity	Inherent visual impact	Mitigated visual impact	Impact
R33	Residential	Foreground (< 1 km)	High	Low	R33 is currently an unoccupied dwelling, infrastructure of the solar farm is approximately 120 m north. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 1.3 km north. Unbroken views of the infrastructure of the receiver through scattered paddock trees would be discernible. **Mitigation recommended.** A vegetative screen (minimum 20 m width) is recommended for the length of the solar farm boundary that is visible from the residence of R33. The vegetative screening would reduce the visual impact of the solar farm, resulting in a low mitigated visual impact.
R34	Residential	Foreground (< 1 km)	High	Low	Unoccupied residence, infrastructure of the solar farm is approximately 300 m north. Currently, the land is predominately cleared and flat. The substation, control room, operations and maintenance building and BESS are more than 1.5 km north. Unbroken views of the infrastructure through scattered paddock trees would be discernible. **Mitigation recommended.** A vegetative screen (minimum 15 m width) is recommended for the length of the solar farm boundary that is visible from the residence of R34. The vegetative screening would reduce the visual impact of the solar farm, resulting in a low mitigated visual impact.

Appendix F Consultation records

Receiver	Date	Communication	Issues/Outcomes
R09, R17, R19, R24, R33	26-Jun-23	Neoen **sent** an email to the neighbours	Neoen sent an email to each of the neighbours attaching the draft Landscape Plan and asking for comments.
R09	12-Jul-23	Email response **received** from the neighbour	R09 responded to inform Neoen that some mapping may not be up to date and would need revising.
R24	4-Jul-23	Email response **received** from the neighbour	R24 responded to inform Neoen that they have concerns about several aspects of the project and Landscape Plan, including: • That the presence of the solar farm will create heat islanding which will increase temperatures on their property. • That the amount of vegetation screening currently proposed would not prevent such heat from propagating to their property and that this would have an impact on their cropping and livestock. • That the number and density of shrubs vs trees is not high enough – their view was that there should be more taller trees favoured above shrubs. • They requested more clarity around the location of the edge of the solar farm infrastructure, Asset Protection Zone and vegetation screening in relation to the existing 11kV Essential Energy easement and the Crown Land laneway which separates their property from that of the main solar farm landowner. • That some of the mapping had minor discrepancies in relation to width of the vegetation screening to be planted.
R24	10-Jul-23	Neoen **spoke to** the neighbour on the phone and **sent** an email follow-up	Neoen called the neighbour to acknowledge receipt of their email of 4 July and sent an email follow-up proposing a meeting on 26 July to discuss in person.
R09	12-Jul-23	Neoen **sent** email to the neighbour	Neoen sent an email to the neighbour to organize an in-person meeting and respond to their initial comments of 12 July. Neoen noted that maps would be reviewed to make sure they were up to date and confirmed an in-person meeting for 26 July.

Receiver	Date	Communication	Issues/Outcomes
R17 and R24	26-Jul-23	**In-person meetings**	Neoen met with the neighbours at each of their houses. The main points of concern raised were from R24, including (in addition to those raised in their email of 4 July): 1. That they would experience impacts during construction such as noise and dust. 2. That they request Neoen to construct an earth bank around the perimeter of the solar farm to encourage heat from the solar farm to rise before it propagates on to their property. 3. That they want denser vegetation screening be planted, as well as longer lengths such that the screening spans the length of their property boundary with the solar farm. 4. That they want to understand their liability if fire were to spread from their property to the solar farm. 5. That they want to understand how aerial spraying will be managed during construction and how this would be coordinated with them. **Overall:** It was a good meeting, with four family members and a family friend. The family is opposed to the solar farm but the discussion was relatively constructive. Neoen took a list of actions away and committed to providing a response in writing to the neighbours within a week.
R09 and R33	26-Jul-23	**In-person meetings**	Neoen met with the neighbours at a local RSL. The main points of concern raised were: 1. That they would experience impacts during construction such as noise and dust. 2. That they want to understand their liability if fire were to spread from their property to the solar farm. 3. That they feel the amount of vegetation screening is insufficient 4. That they want to understand how aerial spraying will be managed during construction and how this would be coordinated with them. **Overall:** It was a satisfactory meeting. This neighbour is opposed to the project. Good discussion of concerns, although it was not a friendly meeting *per se*, it was also not unfriendly.
R19	26-Jul-23	**In-person meeting**	Neoen met with the neighbour at his property. They raised no concerns per-se but wanted to understand: • The extent of the biodiversity screening (which is addressed in the BMP) at his property. • How the drainage line across the solar farm landowner's property which feeds part of his property would be protected and maintained during construction and operation. • About perimeter fence and retrieval of livestock if they were to get onto the solar farm site. • Whether every neighbour is receiving the same construction disruption payment, which they are. **Overall:** It was a friendly meeting. The neighbour is not opposed to the project.

Receiver	Date	Communication	Issues/Outcomes
R17 and R24	29-Jul-23	Neoen **sent** email to neighbour	Neoen sent an email to the neighbour confirming in writing what was discussed at the meeting and the actions Neoen had taken away.
R09 and R33	30-Jul-23	Neoen **sent** email to neighbour	Neoen sent an email to the neighbour confirming in writing what was discussed at the meeting and the actions Neoen had taken away.
R19	31-Jul-23	Neoen **sent** email to neighbour	Neoen sent an email to the neighbour confirming the locations of the biodiversity screening and provided response to unrelated topics.
R17 and R24	1-Aug-23	Email response **received** from the neighbour	The neighbour sent an email to Neoen confirming what was discussed and re-iterating their concerns.
R17 and R24	4-Aug-23	Neoen **sent** email to the neighbour	Neoen sent email to the neighbour addressing the questions and concerns raised during the in-person meeting, including: • Providing a list of expected impacts during construction. • Advising that Neoen has the customary insurances for all its assets and that Neoen has never brought a claim against a landholder or neighbour for damages they have caused to a Neoen asset. • Confirming that the vegetation screening has been extended and the Landscape Plan has been updated to reflect this. • Suggesting that we establish direct and open communication between Neoen's site manager, construction site manager and the landholder about aerial spraying and that ideally the construction site manager would want approx. 2 weeks advance notice of expected spraying dates, if possible. • Confirming that an earth bank is not a viable solution after discussion with NGH and Neoen's construction team – it would pose serious flood implications, impact surface water flow. We also confirmed that we would not expect increased heat from the solar farm would affect neighbouring properties. • Confirming that the density of the landscape screening planting is based on Landcare guidelines and the selected species were chosen because they are fast growing natives.

Receiver	Date	Communication	Issues/Outcomes
R09 and R33	4-Aug-23	Neoen **sent** email to neighbour	Neoen sent email to the neighbour addressing the questions and concerns raised during the in-person meeting, including: • Providing a list of expected impacts during construction. • Advising that Neoen has the customary insurances for all its assets and that Neoen has never brought a claim against a landholder or neighbour for damages they have caused to a Neoen asset. • Confirming that the vegetation screening has been extended and the Landscape Plan has been updated to reflect this. • Suggesting that we establish direct and open communication between Neoen's site manager, construction site manager and the landholder about aerial spraying and that ideally the construction site manager would want approx. 2 weeks advance notice of expected spraying dates, if possible.
R19, R33 R17 and R24	15-Sep-23	Neoen **sent** email to neighbours	Neoen sent email to neighbours attaching the revised Landscape Plan.
R17 and R24	16-Sep-23	Email response **received** from the neighbour	Neighbour sent an email to Neoen confirming what was discussed and re-iterated their concerns about the vegetation screening being insufficient and that visual impact will be high as well as their concerns about heat impacts. They also requested additional clarification around the 11kV Essential Energy Easement.
R17 and R24	25-Sep-23	Neoen **sent** email to neighbour	Neoen sent email to neighbours to: • Clarify where in the Landscape Plan the density of trees is provided and how it was calculated and re-iterated that additional screening has been added to respond to their concerns. • Provide a map of the location of the vegetation screening in relation to the 11kV easement.
R19	11-Oct-23	In-person meeting	Neoen provided revised Landscape Plan to the neighbour at an in-person meeting with our Community Liaison Officer present. No objection to the plan.

Jayfields Nursery

Thursday, May 07, 2020

Jayfields Nursery have been liaising Neoen regarding Native vegetation planting & species suitable for planting at the Culcairn Solar Farm site.

Jayfields Nursery are a leading supplier of Native vegetation plants including Trees, shrubs and grasses and we supply to a wide variety of both Govt and private organisations including supplying plants for Commercial Forestry, Farm Forestry, Farm revegetation including shelter belts and erosion control, road projects, housing, commercial and renewable energy projects.

To provide an indication of the scale of our operations across NSW and Victoria during 2019/2020 we are supplying in excess of 4.5m trees to various projects and advised on several major projects in respect of the correct planting regime to ensure that plants we supply mature sufficiently and establish a good root ball system which leads to effective screening where required. I have attached our full profile document for your overview.

Jayfields Nursery have been helping customers successfully establish plants in varying landscapes for the past 30 years. It is our professional opinion that I am adamant that attempting to plant mature species would be futile and would not be the most effective and efficient use of native plants. Mature planting in our experience leads to a very high plant loss and results in much weaker growth pattern which is often not noticeable till 3-8 years down the track and particularly evident in high wind/storm events. We do not recommend this for any of our projects across NSW or Victoria.

I am aware of the location of the Culcairn Solar Farm and the characteristics of the native vegetation that will thrive if correctly planted across the area. Our professional recommendation is that by correctly preparing the ground coupled with excellent weed control & localised spraying, followed by planting during the winter months (ideally mid July) will give our plants the best possible chance of success which will lead to an effective and healthy screen whilst also providing habitat and foraging areas for native birds and wildlife.

ACCREDITED NURSERY NIASA Setting the Standards

NIAN

180 Clifton Ring Road, PULLETOP NSW 2650 – PH: 02 6036 7235 – FAX: 02 6036 7254 ABN: 87 010 716 936

Jayfields Nursery

I can confirm that we have provided Neoen with our detailed guidance sheets on best practice for ground preparation which I understand Neoen will furnish to the Landowners and any involved contractors.

Please let me know if you require any further information regarding this process. We would be pleased to help you ensure a successful planting outcome.

Kind regards

_____

Kelly Glass
Jayfields Nursery

180 Clifton Ring Road, PULLETOP NSW 2650 – PH: 02 6036 7235 – FAX: 02 6036 7254 ABN: 87 010 716 936

Jayfields Nursery

Tree Planting Calendar

"Successful preparation is the key to successful planting"

SUMMER

ORDER TREES AND SHRUBS

- Order plants early to guarantee supply, December/January is best.
- Select species local to you area or ask **Jayfields Nursery** for advice on suitable species.

AUTUMN

RIP TREE LINES

- Rip before the Autumn break, while the ground is dry, and before ground becomes too wet preferably, to get deep shattering of the soil.
- Rip 4 metres apart at a minimum depth of 45cm.
- Don't rip under the drip-line of existing trees.
- Mound in wet areas.
- Break up large clods as they can cover phalaris plants thus reducing winter spray effectiveness.

SPRAYING

Before frost and 10 days after rain

- Spray any **couch grass** areas with *Glyphosate*.

One month after Autumn break when plants are actively growing

- **Spray phalaris and/or cocksfoot, if present**. These plants are very hard to kill so seek appropriate advice on sprays and rates.

WINTER

3-4 WEEKS MINIMUM - PRIOR TO PLANTING. Knock down weeds & apply residual herbicide to control competition throughout Spring.

- **For normal annual weed and pasture species, spray with *Glyphosate*, plus a suitable residual herbicide. Adequate weed control is best achieved with the application of *Glyphosate* and a residual herbicide. *Glyphosate* alone will not achieve adequate weed control.**
- ***Simazine*, a residual herbicide, has been used extensively with great success in weed control in the past.**
- **NB. Plant back period on *Simazine* is minimum of 3 weeks.**
- **Please refer to product labels or a reputable chemical advisor for rate and use details.**

BEFORE PLANTING

Control rabbits and hares

- Coordinate with neighbours if necessary.
- Avoid the need for labour-intensive and expensive tree guards.

One week prior to planting.

- Inspect rip lines for regrowth and respray if needed with *Glyphosate* only.

WINTER/SPRING

PLANT SEEDLINGS

- Plant mid July to mid September (depending on rainfall and soil type), but one month after spraying.
- Plant at least 4 x 4 metres apart, up to a maximum of 625 seedlings/ha

AFTER PLANTING

First week after planting

- Inspect for vermin or stock damage, or stock entry to plantation.

Regularly post-planting

- Check plants – make sure there are no weeds within half a metre of plants through Spring and early Summer.
- Watch regularly for grasshoppers, particularly in dry years – spray if causing damage. Use suitable methods to control, seek advice.

Weed control throughout the first Spring and into Summer is the single most important element affecting tree survival and growth.

180 Clifton Ring Road, PULLETOP N.SW. 2650 Tel: 02 6036 7235 Fax: 02 6036 7254
Email: sales@jayfieldsnursery.com.au Web: www.jayfieldsnursery.com.au

Jayfields Nursery

Profile:

Jayfields Nursery commenced operations in 1987 on the property 'Jayfields' 30 km north of Holbrook. Since then, Jayfields Nursery has established a reputation for:

- Providing high quality seedlings using state of the art propagation techniques.
- Meeting production schedules
- Delivering on time with efficient transport carrying loads of up to 161,300 seedlings, (Hiko V93).
- Site Preparation
- Contract planting
- Friendly efficient service

Annual production/capacity up to 4.5 million seedlings grown for a variety of revegetation projects, large and smaller scale forestry throughout QLD, NSW, Victoria.

- Services have in the past been provided in NSW, Victoria, QLD, and can include SA and NT.

Jayfields Nursery is an accredited nursery of the NSW Nursery Industry Association, and complies with the Nursery Industry Accreditation Scheme of Australia, (NIASA).

Jayfields Nursery has previously won the Award of excellence for Outstanding Achievement in NSW and ACT as well having won a **State and National - Australian Garden Industry Award for Best Medium Production Nursery.**

Jayfields Nursery currently produce a large variety of approximately 170 different species of Australian natives & Pinus Radiata seedlings in the **Hiko 40 cell tray, 93 cc volume**. Seedlings are grown from a variety of provenances and sourced from authorised seed collectors such as Greening Australia, our own collectors in specific locations, other private collectors such as Natural Capital Seeds, private forestry seed orchards, and CSIRO. Collections are Florabank compliant.

- Nursery propagation techniques involve precision vacuum seeding where a single seed is sown in the centre of the cell. Most plant species are initially sown into small cells where pre germination imbibition is carried out to improve germination % and uniformity of germination. Cells are then transplanted into Hiko cell when plants are large enough. All propagation takes place at Jayfields Nursery.

- Seed lots, provenances and batches are strictly and accurately tracked throughout the entire propagation process with use of specialised Nursery software and appropriate recording. All trays are tagged with species information and seed lot code.

- All seedlings are grown off the ground on rolling benches and racks to meet accreditation requirements and allow for air pruning of roots during growing out in the nursery.

- Regular reporting is provided to the client if requested by measuring seedling/plant development, assessing numbers etc and reporting with excel spreadsheets. Inspection from clients is welcome at all times with prior appointment.

- Seedlings meet our nurseries strict quality specifications, and QA process.

- Seedlings are grown in the open nursery with excellent airflow and under no shade, and be fully exposed to frost for hardening off. The nursery growing area provides a hygienic nursery environment.

- Watering is controlled by computerised travelling irrigation units with the supply coming from an on farm bore with proven and more than ample supply, and purified through a reverse osmosis unit. The nursery also has back up extensive storage of 85 ML of earth storage dams that if used is sterilised through UV units in compliance with NISIA accreditation

- Seedlings undergo rigorous analysis throughout the growing period to ensure growth factors are on target, and they are free of disease. Plant tissue analysis is conducted to ensure plant health and growth targets are achieved.

- Fertiliser is added to potting medium and also applied through the boom spray irrigation delivering very accurate and even nutrient application. A nursery software program is used and has been developed and refined to accurately determine specific nutrient applications for plants.

Qualifications:

Staff at Jayfields are highly experienced with combined 50 years working with Jayfields Nursery over the last 24 years

Qualifications include:

Bachelor Commerce – Melbourne University
Bachelor of Commerce – CPA – Deakin University
Diploma in Horticulture - Charles Sturt University
Certificate 3 Horticulture

Dispatch of seedlings:

Jayfields Nursery can deliver practically any where with a variety of methods, racks, shelves, trailers, trucks.
Loads of up to 161,300 plants (Hiko V93) more with smaller cells, in one load can be delivered.
Smaller loads can be delivered using our fully covered Ute(s) and trailer(s) combinations from 6k up to 25k plants in one load.
Dispatch dockets will be sent with every delivery.

Current and past clients:

This list does not include many of the 1500 odd clients we have serviced on our data base.
Greenfleet

Murrumbidgee LLS
Murray LLS
Parks Conservation and Lands
DSE Mansfield Vic
CO2 Australia
VIC Forests
Carbon Conscious
Noske Skog
Citola
Albury City Council
Parklands Albury Wodonga
Wagga City Council
Holbrook Landcare
Upper Murray Landcare
Murrumbidgee Landcare
Central West Landcare
RMS
ABI Group

Frewin Trees
GMC Environmental Services
Wodonga City Council
Forest Enterprises Australia
Great Southern Plantations
Integrated Tree Cropping
Midway Wood Products
Plantations International
East Coast Tree Farms
Hume Forests
Agriwealth / ForAust
PF Olsen
Indufor
Abbeygate
R.Steiner

Other wholesale nurseries

References available upon request.

Please visit our website, www.jayfieldsnursery.com.au

For any further information including our species list and brochure, please phone, fax or email us.

Yours sincerely,

Tim and Kelly Glass
Owners / Managers
JAYFIELDS NURSERY
02 60367235
sales@jayfieldsnursery.com.au