ENGAGEMENT ACTION PLAN

21-875 Glanmire Solar Farm

March 2022

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TABLE OF CONTENTS

Figures

Table

ACRONYMS AND ABBREVIATIONS

CBS	Community Benefit Scheme
DPIE	Department of Planning, Industry and Environment (NSW)
EIS	Environmental Impact Statement
ha	Hectare
km	kilometres
LGA	Local Government Area
MW	Megawatt
NSW	New South Wales
SSD	State Significant Development
VIA	Visual Impact Assessment

1. ENGAGEMENT OVERVIEW

1.1. The Proposal

Glanmire solar farm is proposed to have a capacity of approximately 60 megawatts (MW)(ac) comprising ground mounted solar photovoltaic (PV) modules (panels) similar to those installed on rooftops around Australia. Glanmire solar farm is proposed on a site at 4823 Great Western Highway, Glanmire, NSW 2795. This site is located approximately 11km east of the township of Bathurst and approximately 4.5km east of Raglan.

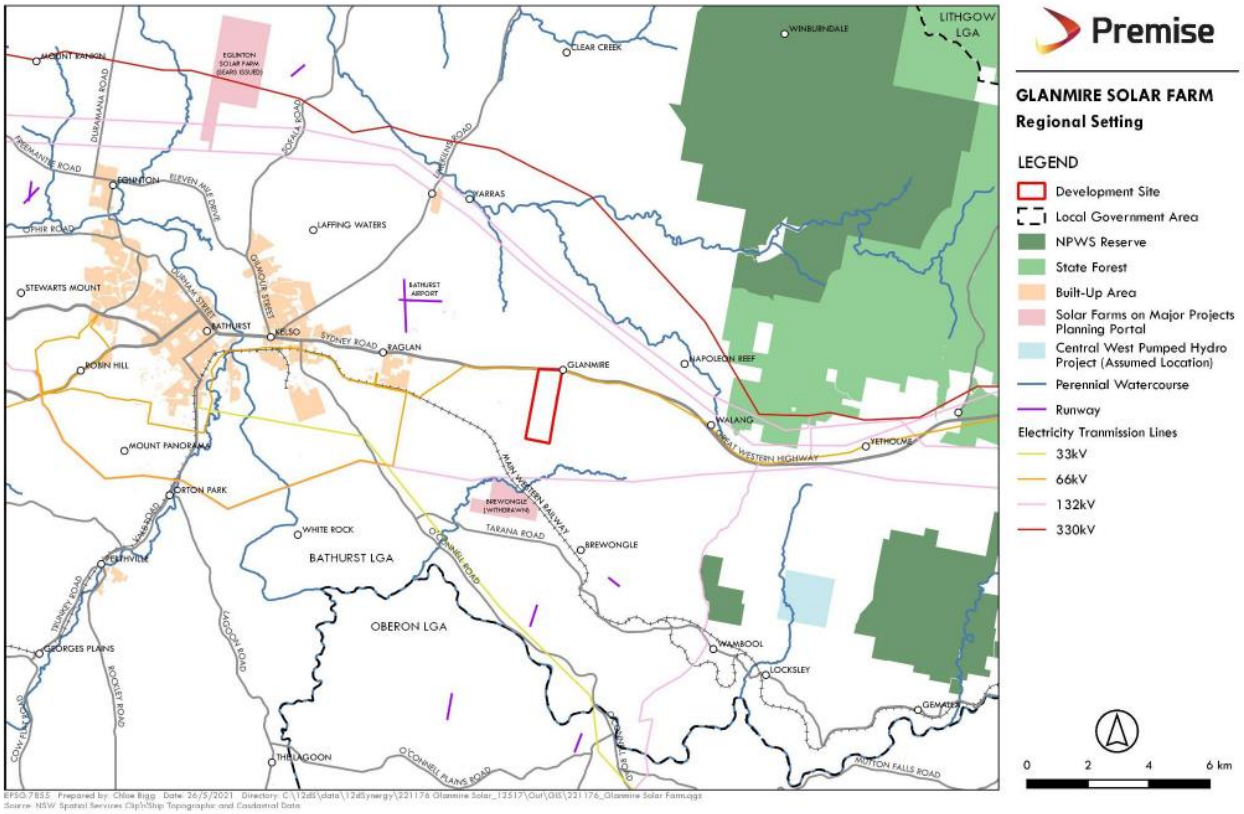


Figure 1-1 Regional setting

1.2. The context

The area has a history of community concern and interest in Solar Farms. In 2017 the Brewongle Solar Farm encountered targeted community push back on their proposal and an action group formed to rally against it. While this sentiment was limited in terms of the number of people involved, it did set a tone of caution around this type of development. This caution was also noted by Elgin during community and stakeholder discussions in 2020 and 2021 that informed the scoping report.

The proposal Scoping Report was completed and submitted in 2021 and SEARS were issued in late 2021 ahead of the EIS activities commencing earlier this year. The Scoping Report noted the following:

To date community consultation has focussed on Elgin Energy's neighbours – those within 3 km of the development site and part of the local Glanmire (and Walang and Napolean Reef) community.

During the preparation of the Environmental Impact Statement (EIS) additional and broader consultation will be undertaken with this local community, the Glanmire Action Group, as well as other stakeholders groups and the wider Bathurst community.

The community engagement plan will evolve to accommodate the interests of all stakeholders and incorporate appropriate engagement tools.

Commitments include:

- *Face to face meetings with neighbours and stakeholder groups as required.*
- *Maintenance of the project website (http://www.glanmiresolarfarm.com.au/) to provide updates on progress and enable stakeholders to contact the project team.*
- *Notification and provision of project information to stakeholders as the outcomes of investigations become available and concept design parameters are formulated.*
- *Actively pursuing opportunities for developing a local community benefit sharing scheme in partnership with the community.*
- *Maintaining a communication's register to accurately record all contact with stakeholders whilst respecting people's privacy.*
- *Hosting further drop-in sessions prior to lodgement of the Development Application, with access to specialists from within the project team as required.*

1.3. Requirements

In addition to meeting the commitments above, the engagement and social impact assessment activities for the EIS will need to demonstrate alignment with the requirements outlined in these documents:

- *Large Scale Solar Energy Guideline, DPIE, 2018*
- *SSD Engagement Guidelines, DPIE, 2021*
- *Social Impact Assessment Guideline for SSD Projects, DPIE, 2021*
- *SSD Scoping Report Guidelines, 2021*
- *A Guide to Benefit Sharing Options for Renewable Energy Projects – Clean Energy Council, 2019*
- *Re-Alliance Community Benefits Handbook, September 2021.*

The SEARS called for the following in relation to community engagement and social impact assessment:

- consult with the relevant local, State or Commonwealth Government authorities, infrastructure and service providers, and any exploration licence and/or mineral title holders

- undertake detailed consultation with community groups and affected landowners surrounding the development
- undertake detailed consultation with Bathurst Regional Council
- establish a Community Consultative Committee for the project in accordance with the Community Consultative Committee Guidelines for State Significant Projects, and consult with the committee during the preparation of the EIS
- analysis of whether the proposed development would significantly impact the scenic quality and landscape character of a regional city, including on any approaches to the city, taking into consideration any values identified by the community and Bathurst Regional Council
- the EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.

1.4. Key issues

The key issues highlighted in the Scoping Report include:

- visual impact on the local character, giving the area an industrial look (relevant to the recent ISEPP update)
- changes to prime agricultural land and loss of agricultural outputs
- perceived potential for reduction in property values
- impacts on future land use options
- the perception that solar farms should only be placed within a renewable energy zone
- impacts on insurance
- lighting at night
- site access and road safety given narrow road formation and two blind crests on Brewongle Lane
- fuel load management, access and the need for consultation with the local Glanmire-Walang Rural Fire Service (RFS) brigade
- Elgin Energy's business model and intentions once the farm is built
- the quality of solar irradiance in Bathurst
- microclimate effects of solar farms
- impact on helicopter and fixed wing RAAF flight training from Richmond
- glare impacts for motorists on the Great Western Highway;
- why solar farms can't be on more remote, poorer quality country;
- community benefit sharing with equestrian and power savings focus
- decommissioning surety.

1.5. Engagement objectives

The Engagement Action Plan aims to achieve the following objectives to support the Proposal and the communities surrounding it:

Objectives	Measures
Engage broadly to capture progressive views and support	Reach of engagement – including with targeted groups and advocates Achieve more than 50% neutral of support for the project in survey responses.
Engage proactively with local issues and opportunities	Proactive delivery of tools that address key issues. Delivery of tools and information to outline consideration of and proactive response to identified issues.
Produce clear information on the Proposal, potential impacts (positive and negative) and benefits for the environment, community, and region.	Delivery of high-quality communications across all targeted channels.
Demonstrate how the Proposal has a positive impact on the region.	Clear demonstration of shared local and broader regional social, economic, and environmental benefits.
Demonstrate sharing of Proposal benefits.	Creation of a successful community-led Community Benefit Scheme.
Support and engage local capabilities	Number of local suppliers engaged. Number of local opportunities identified.
Maintain a positive corporate image for Elgin Energy and the renewable energy industry.	Management of social and reputational risks.

1.6. Proactive measures to address issues

Through our understanding of the local setting and concerns, we recommend that the Glanmire Solar Farm engagement and community benefits sharing activities include:

- Strong visuals and narrative, using tools such as desktop film to provide balance to the discussions around change of land use, visual impact management and investment in the local community.

- Proactive development of vegetation screening designs and planting to demonstrate proactive mitigation of visual impacts. This may include screening on stakeholder's properties in addition to the project site.
- Near neighbour and local community benefit sharing schemes that include opportunities like discounted electricity, buy-in opportunities, annual contributions to community activities in the form of grants, etc.
- Partnering constructively with Bathurst Regional Council, BCCAN, the Bathurst Chamber of Commerce and other strategic stakeholders with a view to supporting delivery of their Bathurst Renewable Energy Action Plan (as a potential power supplier)
- Clear and transparent engagement as the EIS develops and adaptation of the design where this would clearly reduce impacts (such as increasing setbacks or reducing size of the farm where feasible).
- Investigation of a potential shopfront to host drop in sessions
- Opportunity to partner with other renewable energy projects (Eglington and Central West Hydro).
- Proactive media briefing and liaison.
- Consider add value elements such as arranging tours for local landholders to view similar solar farms with the idea of demonstrating solar grazing and the likely visual impact once screening is in place.

2. APPROACH

2.1. Key messages

2.1.1. The Proposal

Glanmire Solar Farm is proposed to have a capacity of approximately 60 megawatts (MW)(AC). The project will comprise ground mounted solar photovoltaic (PV) modules (panels) similar to those installed on rooftops around Australia.

Glanmire Solar Farm is proposed on a site at 4823 Great Western Highway, Glanmire, NSW 2795. This site is located approximately 11km east of the township of Bathurst and approximately 4.5km east of Raglan.

The project will cover a development footprint of approximately 186 hectares. The land is currently used for grazing with a small area used for intermittent cropping. It is intended that sheep grazing will continue within the development footprint of the project once operational.

The site was chosen for these reasons:

- High solar irradiance
- Cost-effective grid connection with capacity
- Relatively flat and clear land with few environmental constraints
- Not identified as highest quality agricultural land or 'Biophysical Strategic Agricultural Land'

2.1.2. The Proponent

Elgin Energy is a leading international solar developer with operations in Australia, UK, and Ireland.

To date, we have delivered 21 projects including the largest operational solar farms in Scotland (Errol, 13MW) and Northern Ireland (Bann Road, 46MW). As of this year, we have secured consents on close to 60 projects (770MW+). Our success rate in achieving planning approval is attributable to the work of our team in collaboration with local communities.

In 2019, Elgin Energy established an Australian office in Sydney to begin development. Elgin Energy takes a long-term development approach across our selected markets and our business model was designed for both a subsidy and post subsidy market.

2.1.3. Proposal benefits

Local benefits

The Proposal will bring numerous benefits to the Bathurst area including:

- supporting the transition to clean energy and healthier environment
- supporting the aspirations outlined in the Bathurst Renewable Energy Action Plan
- production of renewable energy and reduction in emissions:
  - enough to power all Bathurst homes
  - creation of jobs for the area:

  - 150 in the construction period
  - 1-3 full time equivalent jobs during operations
- supports local services such as hospitality and accommodation
- diversified investment in the area to strengthen the economy
- strengthens the network with battery storage and peaking power.

Broader benefits

- The Proposal will significantly contribute towards the NSW Government's aim of reaching net-zero emissions by 2050, by supplying clean renewable energy into the grid.
- This clean energy is critical to replace the fossil energy from nearby coal-fired power plants.
- It would also reduce greenhouse gas emissions, contribute to meeting international climate change commitments and aid transition towards cleaner electricity generation.
- The Proposal is also consistent with the current goals and targets for renewable energy generation in NSW. These include:
    - Contributing to the national renewable energy target [i.e., 20% renewable energy supply] by promoting energy security through a more diverse energy mix, reducing coal dependence, increasing energy efficiency, and moving to lower emission energy sources.
    - Contributing to achieving the NSW target of zero net emissions by 2050.

Benefits for owners and operators of solar farms where grazing continues

- Pasture prevents soil erosion as it adheres to the root of the plant. Prevents landslides and runoff that affect the structure of the panels.
- Sheep control the growth of vegetation around the panels constantly, which prevents the appearance of shadows on the solar modules.
- Reduces health and safety risks for solar farm personnel due to reduced need for operation of mowers and machinery
- Increased health and wellbeing of sheep due to protection from elements
- Less water consumption by sheep
- Safety from predators for livestock due to secure fencing
- Access to greener pasture, particularly during dry conditions or drought, leading to reduce operating costs.

2.1.4. Messaging around issues

The content provided in Table 2-1 would be used as FAQs in the Proposal information and visual tools need to be developed to support discussion of these items in face-to-face meetings. This list will grow as the Proposal is developed.

Table 2-1 Anticipated questions and proposed answers

Question	Response
Why is this Proposal needed? Isn't there enough solar energy being produced in the area?	NSW has roadmap to increase NSW's renewable energy penetration to over 60% by 2030. This statewide initiative will create 6300 construction and 2800 ongoing jobs in regional Australia and will reduce electricity price in the state by $130 per year for households, $430 for small business and reduce NSW's carbon emissions by approx. 90 million tons. Currently the renewable energy penetration in NSW is 16%. This Proposal in NSW will contribute to fill this target, create new jobs, and will contribute to electricity price reducing and carbon emissions reducing.
Who approves the Proposal?	Given the Proposal is expected to cost more than $30 million, it will be considered for approval by the NSW Department of Planning, Industry and Environment as a State Significant Development.
Will the Proposal change the way the area looks?	The proposal design and layout has been adjusted to reduce visual impacts, including pulling the footprint back from the highway to a point where the natural slope of the land and proposed vegetation screening can effectively shield the views of the Solar Farm. The proposed site has minimal views form established nearby homes within 2km of the site. A more detailed visual assessment is currently underway. Elgin Energy is committed to working closely with the local community to address these concerns. We encourage members of the community to approach us with any concerns relating to this issue. We are working closely with the Proposal neighbours to understand their views towards the Proposal area and how screening may be applied on the Proposal site or on their land to reduce visual impacts.
Will glare be an issue for us and for aviation nearby?	The primary function of PV panels is to absorb sunlight rather than reflect it. The technical process in manufacturing PV panels includes an anti-reflection, hydrophobic layers that minimises potential for sunlight reflection. More visual assessment is currently underway, and this will provide more understanding of local impacts and mitigation requirements. We have engaged with CASA regarding visual impacts, and we will continue to keep them updated as our assessments progress. CASA have approved projects close to airports in the past, reporting that more glare is expected from the local waterways and the sun itself. Glaring is typically not an issue for aviation activities, as evident by the fact that solar panels have been deployed in Residential, Industrial and Sensitive Facilities, such as many airports around the world, including

Question	Response
	Ballarat, Adelaide, Brisbane, Changi (Singapore), Denver and Dusseldorf (and many more).
How will construction traffic and road impacts be managed?	• Elgin will keep engaging with the community and Council regarding traffic management planning for the construction period. • We note the concerns regarding the narrow nature of local roads and we will ensure that safe routes are identified and agreed local adjustments are applied in cooperation with the state and local governments.
Will the Proposal devalue my land?	There are many factors that influence the value of a property and there is no evidence base available to reference on this subject. We do not expect this development to devalue land in the area. Elgin aims to deliver a Proposal that provides shared benefits to the community, while working with the site neighbours to reduce visual impacts and invest in meaningful opportunities to support the resilience of the Glanmire community.
How will fire risks be managed?	Solar Farms and batteries have very minimal fire risks. Elgin adheres strictly to a Code of Conduct substantially in line with the Clean Energy Council's Best Practices Charter, as well as other regulations, including fire safety. We will work closely with the RFS to confirm access requirements for the Solar Farm if there is a bushfire that moves into the area, or if a fire starts in the Solar Farm. A Management Plan will be produced prior to construction commencing that will include a Fire Management Plan to address the management of potential fires in construction, operations and decommissioning. The facility operations will be monitored using real time data, an on-site manager and security cameras to pick up fires which will trigger notification of the local CFA as part of the Fire Management Plan. The Proposal will not increase the risk of bushfires in the area.
Will there be a community benefit fund?	Elgin Energy aims to deliver a community benefit fund on every project and is committed to delivering a Community Benefit Fund if this project proceeds to energisation. There are several successful examples of the delivery of Community Benefit Funds from renewable energy projects across Australia. Funds are usually based on the project owner paying a fee to the local community organization on a fixed sum per MW basis.

Question	Response
	This fund is then distributed to suitable local projects/initiatives. We are keen to hear the community's thoughts in relation to this and invite residents to share their views on suitable local projects/initiatives
Other FAQ to be developed for these topics	• lighting at night • site access and road safety given narrow road formation and two blind crests on Brewongle Lane • fuel load management, access and the need for consultation with the local Glanmire-Walang Rural Fire Service (RFS) brigade • the quality of solar irradiance in Bathurst • microclimate effects of solar farms • impact on helicopter and fixed wing RAAF flight training from Richmond • glare impacts for motorists on the Great Western Highway • community benefit sharing with equestrian and power savings focus.

2.2. Applying a mix of engagement tools

It is always important to apply a mix of engagement tools and techniques to allow for a range of inputs and participation opportunities.

Given the impacts of COVID-19, there is a growing emphasis and uptake of digital tools. At the same time, digital engagement platforms are providing improved sophistication in terms of providing integrated tools to capture conversations, analyse sentiment and issues and generate reports in a very efficient way.

For this Proposal, it is recommended that a mix of traditional face to face methods and innovative digital tools are used to support the engagement plan.

2.2.1. Gap analysis

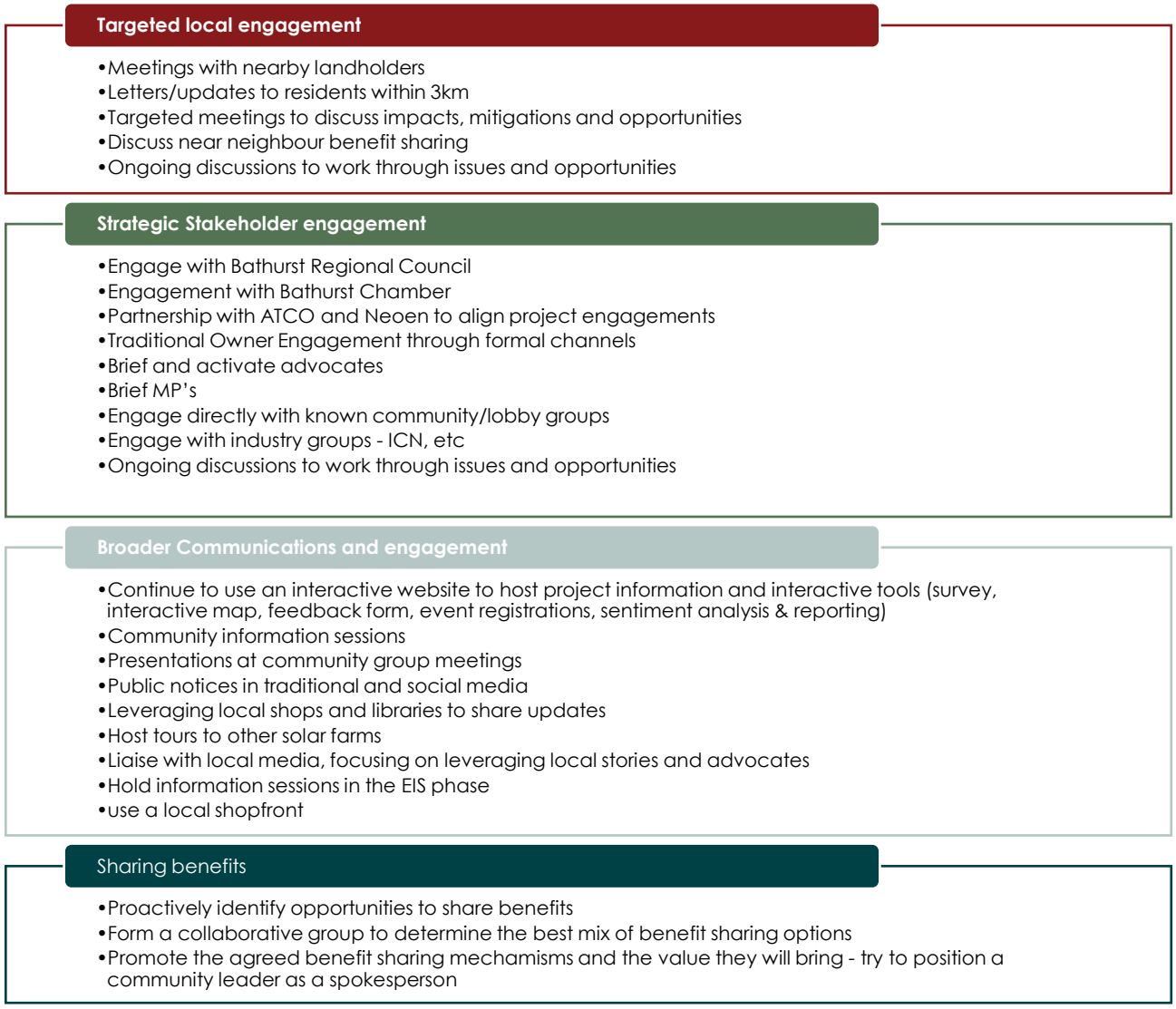
Our analysis to date has identified a good base of communications materials for use in the EIS phase, but the following items need to be developed to support the EIS phase:

- updated website content
- new letters to be sent to near neighbours
- specific content on key issues, benefit sharing and results of technical assessments
- newspaper ads for information sessions
- desktop videos from technical assessments
- where possible – desktop video interviews with advocates (TBC)
- online survey
- materials to support information sessions.

2.2.2. Engagement activities

It is recommended that a broader engagement approach is needed for the Proposal as it will help build awareness and engagement with attitudes in the wider community and region. It is proposed that the activities are broken across four types as outlined in **Error! Reference source not found.**Figure 2-1. This is coordinated through an Engagement Action Plan in Section 2.

Figure 2-1 Proposed mix of engagement activities



3. ENGAGEMENT ACTION PLAN

A draft action plan is outlined below. Note that the timing for delivery is contingent on the overall Proposal schedule.

Table 3-1 Community and Stakeholder Engagement Action Plan

Date	Activity	Status	Actions	Who	Complete
Feb	Set up meetings with BCAN and establish time, date and location for CCC Meeting.	Initial meeting completed.	Provide updated FAQ for BCCAN use	NGH	YES
Feb/ March	Meet with BRC and arrange Councillor Briefing	Meeting completed and briefing date offered for April. Complete	Prepare materials for Councillor meeting – Project Overview, FAQ, Presentation, maps	NGH	YES
March	Attend first CCC meeting and meet with strategic stakeholders	Met with ATCO,	Confirm Chamber of Commerce presentation	NGH	YES
March	Review materials for the Proposal, including: • Website content • Proposal Overview Fact Sheet • FAQ • Key maps	Website review completed Website to include CTA email engage@nghengage.com.au Subpage or section on landing page to be	Update key content for website and project overview Develop materials for drop in sessions and CCC meetings – maps, banners etc.	NGH and Elgin Energy	YES

Date	Activity	Status	Actions	Who	Complete
		included for information session registration.			
March	Activate email and phone contacts, and activate the stakeholder record management system	Complete	Keep updating	NGH and Elgin Energy	YES
March/ April	Create targeted content for CCC	FAQ complete and shared	NIL	NGH and Elgin Energy	YES
March/ April	Draft and deliver letters updating community members within 2-3 km on the project status, the activation of the CCC, proposed drop-in sessions and agreed online tools. Include FAQ.	Complete	Draft printed letter and email version using Mailchimp platform (EDM)	NGH	YES
March/ April	Liaise with residents regarding Visual assessments	Complete	Targeting w/c 26 April	NGH	YES
April	Setup location and timing for drop-in sessions	Complete	Use the Bathurst show as the April drop in, then coordinate locations for following months in alignment with the CCC meetings. Need to confirm venue and collateral required.	NGH	YES
April	Identify inclusions in the Community Benefit Fund	Discussed with Council and being investigated	Draft models for Elgin consideration. Complete	NGH	YES

Date	Activity	Status	Actions	Who	Complete
April onwards	Continue to meet with nearby neighbours to resolve issues, build a positive relationship and confirm mitigations where required.	Starting	Start with those involved in visual assessments Use update letter/EDM as an opportunity to engage and flag drop-in sessions	NGH	YES
April	Engage proactively with Traditional Owners via established contacts	To confirm contact to date	To confirm with Elwin and engage with Wiradjuri/LALC	NGH	YES
April	Activate online survey tool aimed at capturing queries, concerns and opportunities related to the Proposal that can be used to inform content development and social impact analysis.	To be developed	Draft and promote through letter/EDM/CCC Integrate with SIA	NGH	YES
April onwards	Identify opportunities for media engagement	Approach to be agreed. Potential angles: • CCC • EIS assessment findings • Benefit sharing and local industry participation • Project partnerships	• Firm up opportunities with Elgin • Liaise with local media	NGH	YES

Date	Activity	Status	Actions	Who	Complete
April onwards	Tee up ongoing stakeholder presentations	BCCAN, Chamber, CWA, Glanmire Community Group	Lock in updates in line with EIS progress	NGH	YES
April onwards	Capture footage of assessments for social media and website	Underway	Coordinate with Suzie, Biodiversity and Heritage Team Prepare a summary of requirements to share with each discipline – key images, questions, etc.	NGH	YES
May onwards	Prepare content and questions for each subsequent CCC (May-June)	To be developed	Build topic specific information Focus on SIA research where possible	NGH	YES
May/June	Establish a list of key issues/risks and opportunities and identify how they will be managed and mitigated through the delivery phases post approval.	To be covered as part of SIA.	Build on SIA scoping	NGH	YES
April onwards	Take calls, answer questions, and arrange any required follow up meetings that can help proactively address issues during the EIS phase.	Ongoing	Liaise with stakeholders Track issues and confirm mitigations/resolutions	NGH	YES
May/June	Review feedback from all tools and provide a summary of interactions	Ongoing		NGH	YES

Date	Activity	Status	Actions	Who	Complete
	and feedback to date for inclusion into the EIS.				
May/June	Make recommendations for the Engagement Plan for construction and operations.	To be completed at the time		NGH	YES
July/August	Coordinate virtual near neighbour meetings to talk through specific feedback and concerns.		Liaise with near neighbours to confirm availability. Another meeting needed to chat through updated site design and VIA findings.	NGH	YES
September onwards	Follow up virtual meeting with near neighbours and face-to-face meeting with Glanmire Action Group.	Near neighbour meeting 7th September. Action Group meeting TBC.	Presented VIA findings and updated site plans at the near neighbour meeting. Action Group meeting Chair, date, time and location need to be arranged.	NGH	In progress
15th September	Email Glanmire Action Group response letter.	Sent 15/09/2022	• Adjust BMEC venue to specific conference room. • Follow up call to Polly Bonanno.	NGH	YES
15th September	Follow up call to independent chair, David Johnson.		• Let David know we will come back to him with specific dates and after-	NGH	YES

Date	Activity	Status	Actions	Who	Complete
			hours times over the coming days.		
w/c 19th September	Engagement material development		• Develop key messages • Posted letters • EDM • Public notice • Corflutes with updated designs	NGH	YES
w/c 19th September	Coordination of meetings		• Call David Ross and discuss CCC October meeting. • Confirm Glanmire Action Group meeting time, date and location. • Confirm drop-in session time, dates and location. • Confirm VIA follow up visits with near neighbours. • Update stakeholders	NGH	YES
21st September	Review all draft materials		•	Elgin Energy	YES
End ofSeptember	Send engagement materials to stakeholders		• Calls, emails and collate any feedback in the stakeholder log.	NGH	YES

Date	Activity	Status	Actions	Who	Complete
October	CCC meeting				YES
October	Glanmire Action Group meeting			NGH Elgin Energy Glanmire Action Group	YES
October	Community information session			NGH Elgin Energy	YES
October	Final updates to EIS			NGH	YES

3.1. Stakeholder analysis

It is critical to understand the stakeholder setting surrounding the Proposal and its host region. This analysis can inform the engagement approach, identify risks, enable development of long-term relationships, and facilitate the social impact assessment. Consultation risks with near neighbours may include:

- impact on agricultural land
- impact on air and water quality, potential for erosion and dust
- bushfire and chemical hazards
- distribution of economic and social benefits
- traffic impacts and road wear and tear
- health issues- perceived impacts of noise, visual impact/glint and glare

Elgin and Premise commenced research into near and adjacent neighbours in the Scoping Phase. Near neighbours are listed below:

Neighbour	Distance from site
N1	0-1km
N2	0-1km
N3	0-1km
N4	0-1km
N5	0-1km
N6	1-2km

Neighbour	Distance from site
N7	1-2km
N8	1-2km
N9	1-2km
N10	1-2km
N11	1-2km
N12	1-2km
N13	2-3km
N14	2-3km
N15	2-3km
N16	>3km
N17	>3km
N18	>3km
N19	>3km

Neighbour	Distance from site
N20	>3km
N21	>3km

Table 2-3-1: Analysis of nearest neighbours in 2021

The engagement approach recommended for each stakeholder group refers to the IAP2 Engagement Spectrum.

Table 2-3: Broader stakeholder analysis

Stakeholder Group	Inclusions/details	Objectives and opportunities	Influence (H/M/L)	Impact (H/M/L	Engagement approach
Host Landowner (R1)	1 involved landholder.	• Develop a strong ongoing relationship. • Contribution to engagement planning and delivery. • Contribution to the Proposal's progress, ability to provide local knowledge, advice and input. • Involvement in development and of Community Benefit-Scheme.	H	H	Consult Involve Collaborate
Near neighbours within 3km	Neighbouring property owners listed in Figure 2-2	• Develop a strong partnership with the community. • Keep neighbours informed about the Proposal from early in the planning phase. • Identify impacts and mitigations – such as visual screening) through a collaborative process. • Discuss neighbour benefit sharing options directly. • Provide opportunities to raise issues and provide feedback.	H	M	Consult Involve Collaborate

Stakeholder Group	Inclusions/details	Objectives and opportunities	Influence (H/M/L)	Impact (H/M/L	Engagement approach
Local community	General Bathurst and Glanmire community	• Develop an understanding of and opportunity to participate in the Proposal • Provide opportunities to raise issues and provide feedback • Discuss Community Benefit Sharing options.	M	M	Consult Involve
Bathurst Regional Council	Regional Development and Planning Team TBC	• Develop and maintain a positive relationship • Build on previous discussions • Identify opportunities to support the local economy • Identify and Leverage council communication channels	H	M	Consult Involve Collaborate
State MP	Deputy Premier Member for Bathurst (Nationals)	• Introduce the proposal and its details. • Identify the members policies, concerns, and opportunities in relation to the Proposal.	M	M	Inform Consult
Federal MP	Member for Calare (Nationals)	• Introduce the proposal and its details. • Identify the members policies, concerns, and opportunities in relation to the Proposal.	M	M	Inform Consult
Traditional Owners – Indigenous community	Wiradjuri RAPs and Local Aboriginal Land Council	• Engage with the relevant Local Aboriginal Land Council and Wiradjuri RAPs through the formal process • Look for opportunities to contribute to the local story of country and contribute to the local Aboriginal Community.	H	H	Consult Involve Collaborate

Stakeholder Group	Inclusions/details	Objectives and opportunities	Influence (H/M/L)	Impact (H/M/L	Engagement approach
		• Involve local community organisations in Community Benefit Sharing initiatives.			
RFS/ Urban fire/emergency services	RFS and emergency services	• Liaise to ensure fire truck access is considered in the design, share information on how to manage fires in the solar farm and ensure the Proposal activities abide by safety and regulatory requirements.	M	L	Consult Involve
CASA	Civil Aviation Safety Authority	• Continue to liaise with CASA and seek approval letter to be submitted with EIS	H	H	Inform Consult
Schools, TAFEs and Universities	TAFE Central West, Central West Community College, Charles Sturt University, Public, Private and Catholic Schools	• Ensure organisations are updated on education and vocational opportunities associated with the Proposal. • Identify relevant community benefit scheme opportunities.	L	L	Consult Involve
Business groups / industry stakeholders	Bathurst Chamber of Commerce	• Work with the chamber to identify any local businesses that may be impacted by the Proposal (positive or negative). • Identify opportunities to develop or utilise local capability.	M	M	Consult Involve

Stakeholder Group	Inclusions/details	Objectives and opportunities	Influence (H/M/L)	Impact (H/M/L	Engagement approach
Groups of solar farm objectors	Glanmire Action Group	• Identify and address concerns as required • Prepare responses to known concerns based on previous projects • Manage issues constructively and efficiently • Ensure equity in the engagement (allow other stakeholders time to talk in information sessions)	M/L	L	Consult Involve
Advocacy groups	Bathurst Climate Action Network (BCAN)	• Consider opportunities for partnerships and community events • Consider advocacy opportunities • Potential for partnerships	M	M	Consult Involve
Community organisations	Apex, Rotary, Lions, Animal shelters, environmental groups, CWA	• Identify interests and opportunities to partner and contribute • Look for opportunities to address concerns in the CWA regarding impacts on productive land	M	M	Consult Involve

4. COMMUNITY BENEFIT SHARING OPTIONS

A Community Benefit Scheme (CBS) can ensure benefits are shared with the community in a way that enhances its resilience. From an industry best practice standpoint, several principles are seen as being helpful guides in developing or assessing a benefit sharing strategy, as outlined below[1]:

Table 3-4-1: Benefit sharing principles

Principle	Description
Appropriate	– Benefit sharing is tailored to local circumstances, culture and need, helping to address (not create or reinforce) patterns of conflict or inequality. It makes sense and is appropriate in the local context. – The local community provides guidance on how benefit sharing can create a positive, lasting and meaningful impact for their local community. We work with the local community to develop specific benefit sharing strategies that respond to their unique local context and need.
Flexible	– Benefit sharing is an aspect of Proposal development that will greatly benefit from being open to community involvement, influence, and negotiation. Having the flexibility to respond to local context will ensure benefit sharing has the best and biggest local impact. – The lifecycle of renewable energy developments is significant (25 years or more), a lot can change in a community during that period. Therefore, it is important to build in flexibility so that benefit sharing can evolve as the community needs do.
Transparent	– The benefit sharing strategy is transparently available to the community and provides a clear and understandable rationale for the various programs and who is eligible to participate. – Benefits are freely given for the sake of sharing the proceeds of the Proposal and building relationships. Benefit sharing must not come with conditions of silence or consent.
Integrated	– Benefit sharing seeks to integrate the Proposal owner/operators as valuable community members by building links and relationships into the community.
Mutually Beneficial	– The approach is designed to bring mutual benefit to local communities and the Proposal.

[1] Lane, T & Hicks, J, (forthcoming) Benefit Sharing Options for Renewable Energy, 2019, Clean Energy Council

Principle	Description
Proportionate	– The benefits are perceived as being proportionate to the scale of the Proposal and the level of change or disturbance experienced by local people. Given community members living closest to Proposals experience greater impacts, they should receive a proportionate benefit.
Strategic	– Create a positive legacy in the local community. Look to bring ongoing and lasting value to the local area. Integrate benefit sharing opportunities with broader strategies by building local partnerships.
Accountable	– Systems and processes are deployed to ensure the credibility and reputation of the benefit sharing program. – Benefit sharing is managed in a transparent and accountable way that involves local stakeholders.

4.1. Typical CBSP scope

In general terms, it is important to note that a CBSP does not include:

- required activities under our permit conditions such as for visual screening
- annual council rates payments or fire levies (where applicable)
- host landowner payments
- the value of local jobs and investment.

A successful CBSP is typically a mix of benefit-sharing mechanisms including:

- Near Neighbour payments or similar
- Community Benefit Fund
- Energy deals or discounts through solar and/or storage subsidies or a partnership with an energy retailer
- Community co-investment
- Investment to address specific local issue

Options suggested by BRC include:

- support of the local innovation hub (IBM/CSU)
- support of renewable energy capability development in partnership with CSU

- establishment of a VPA with Council to help guide governance
- identification of local benefit sharing activities that already exist and align with the project intent.

More general model options are included below.

Table 4-2 Options for benefit sharing

Option	Pros	Cons	Requirements	Constraints
Near Neighbour payments	• Provides benefit-sharing option for near neighbours who may be most affected by the Proposal, particularly during construction.	• Can be difficult to ascertain an appropriate radius. • Can be perceived by some as 'buying out' neighbours.	• Needs to be tailored to the local context. • Must be offered without conditions in relation to complaints, avoidance of compliance activities etc. • Must be equally applied and transparent.	• Population, topography, visual impact, scale. • Not applicable to involved landholders.
Community Benefit Fund	• Can create strong regional economic development outcomes. • Can create a strong legacy in community.	• Local government can negotiate to 'own' the fund – which may result in a higher cost of administration and potential politicisation of the program. • There can be a lack of sophisticated local programs or Proposals to apply to fund– may need to co-develop.	• Strong governance with community representation. • Strong evaluation and acquittal. • Flexible funding streams to enable longer term Proposals to access the fund. • Consider other existing regional funding bodies and look to enhance or offer point of difference.	• Not applicable to committed activities funded by any level of government. • A goal of the fund to be allocated to Proposals within Glanmire local community.

Option	Pros	Cons	Requirements	Constraints
Lower energy bills through solar and/or storage subsidies	• One off deployment of offer.	• Onerous to organise a defendable procurement contract.	• Delivered by local CEC accredited installers. • Easiest model is to select an installer – perform due diligence and deploy initiative at a fixed price (bulk buy approach).	• May be competing subsidies – such as state government that need to be taken into consideration – how to complement?
Lower energy bills through retail offer	• Possibility to 'skin' a retailer offers, and brand it per Proposal. • Offer that is equitable across the community – anyone can access it. • Connection to the renewable energy Proposal.	• Long term issues must be accounted for in the design – new arrivals, transition to solar and battery, competitive retail offers in the future. • Locals need to transfer to new energy supplier • Customer churn.	• Needs the right scale – minimum participation levels. • Needs the 'right' discount – i.e. minimum of 25-30%.	• Retailer desire to partner. • Marketing and customer acquisition needs to be resourced locally.
Community co-investment	• Enhancing regional economic benefits. • Sharing the profits with community retail investors. • Enabling participation in the development and deepening the connection and	• Can be challenging to integrate the investment in the back end of the Proposal finance structure. • May not be a supported concept in all communities – may be dependent on social economic factors.	• Can be delivered through fractional investment platforms. • Need to determine investment structure, debt vs equity, length of term, rate of return etc, and what is negotiable for community feedback.	• Considerations around equity or debt structures. • Consider timing of offer to reduce community investor exposure to issues such as connection delays.

Option	Pros	Cons	Requirements	Constraints
	interaction with the Proposal. • The economies of scale of large-scale Proposals can deliver significant returns.	• Can be onerous to administrate – ensure the impact/costs/ delegations are well modelled.		• Consider budget for marketing and development and impacts on other benefit sharing initiatives.
Investment to address specific local issue	• Can enable direct solutions to broader community needs/issues.	• Longevity of solution and appropriateness of solution can be difficult to establish.	• Community needs assessment to harvest ideas and then validate a chosen approach.	• Consider the budget allocation and how this may impact on other benefit sharing items.

4.2. Media liaison

Given the location of the Proposal, it will be worth applying a proactive media strategy, where local media are proactively briefed to help provide balanced coverage. Such a strategy would help to build awareness of the Proposal, proactively explain management of issues, and promote benefit sharing activities.

This liaison should focus on the proactive management of issues, the benefits the Proposal would bring to the area and the everyday people stories – the people planning, building, supporting, and supplying the Proposal. The relevant media outlets are listed in Table 4-3.

Table 4-3 Media types and outlets

Media type	Outlets
Local media	• Local newspaper (Western Advocate) • Local radio (2BS 95.1, ABC Central West) • Local television news (Nine, Prime 7) • Social media (Facebook, Instagram)
Digital / owned media	• Facebook • Instagram • Project Website • LinkedIn

Elgin would need to develop story ideas and suitable content and image opportunities to support local media in developing the story. The spokesperson may vary, starting with the Proposal Director.

Potential stories could be cultivated around these topics:

- Results of scoping investigations and initial engagements (outside of Proposal landholders).
- Engagement of local suppliers.

- Partnerships with local community-based organisations.
- Creation and launch of the Community Benefit Scheme.

5. EVALUATION AND NEXT STEPS

The Plan will be evaluated once the summary is completed in the context of the engagement objectives.

5.1. Next steps

- develop the required supporting materials
- complete messaging around issues
- schedule information sessions
- Continue adjusting this plan as the Proposal develops and proceeds through approval phases.

C.2 Engagement tools

C.2.1 Examples of public notice

Glanmire Solar Farm Proposal Consultation

Elgin Energy is developing a proposal for a Solar Farm at 4823 Great Western Highway, Glanmire.

The Solar Farm would be set on 186 hectares, have a capacity of approximately 60 megawatts (MW)(AC) and may include an associated battery energy storage system. Once constructed, it would generate enough clean electricity to power approximately 24,000 homes.

The proposal is moving through detailed assessments as part of an Environmental Impact Statement (EIS). These assessments will continue over the coming months.

The Elgin Energy Team and Environmental specialists, NGH, are continuing to engage with nearby landowners and seeking thoughts from the broader Bathurst Community to inform the EIS. We are also seeking ideas on how Elgin Energy can invest in local initiatives as part of an ongoing Community Benefit Scheme.

We invite you to learn more about the proposal or send us your thoughts by:

- Visiting our information stand at the Bathurst Royal Show on Friday 29 and Saturday 30 April
- Attending our Lunchtime Briefing with the Bathurst Business Chamber from 12-1:30 pm on Wednesday 27 April
  (see www.bathurstbusiness.com.au/events)
- Visiting the proposal website (see below), reading our **Frequently Asked Questions**, and completing our **feedback survey**
- Setting up a meeting with us by emailing engage@nghengage.com.au

To learn more about the proposal or to connect with us, visit
www.glanmiresolarfarm.com.au

223 Liverpool Street,
Darlinghurst,
Sydney NSW 2010

Insert address here

RE: Glanmire Solar Farm

Dear Resident,

As you may recall from our letters in 2021, Elgin Energy is developing a proposal for a 60 MW Solar Farm at 4823 Great Western Highway, Glanmire (see the proposed site below).

Figure 1 Glanmire Solar Farm proposal site

In 2021 Elgin completed some initial engagements and analysis to complete a Scoping Report, which was submitted to the NSW Government for acceptance and issuance of the assessment requirements for the project.

Following the submission and acceptance of the Glanmire Solar Farm Scoping Report in late 2021, the proposal is now working through the detailed assessments required for the Environmental Impact Statement (EIS). The EIS and the associated community engagements are being managed by NGH – a leading Australian environmental, social, and planning firm.

The EIS gives us the opportunity to fully assess the merits of the proposal, while engaging with the local and Bathurst community in more detail to inform the

assessments, to better understand issues, and to inform opportunities to share benefits locally.

The EIS assessments have commenced and will run through to June this year. It will include specialists completing studies in these areas:

- Biodiversity
- Heritage
- Land use
- Agricultural impact
- Visual impact
- Traffic and Transport
- Transport
- Water
- Hazards and Risks
- Socio-Economic impact
- Waste.

The EIS report will summarise all these studies and will be submitted in the second half of 2022 for formal assessment. Once reviewed by the department, it will be placed on exhibition for public feedback.

Community and stakeholder engagement will continue throughout the development of the EIS and will be summarised within it. When the EIS is completed, it will be placed on Exhibition for public comment via formal submissions.

All issues raised in the submissions will be addressed by Elgin Energy within a Submissions Report that will also be made available to the public.

The NSW Government Department of Planning and Environment (DPE) will then prepare an assessment report and make a recommendation whether to approve the project. Approval may be made by DPE or delegated to the Independent Planning Committee (IPC).

If approved, the project would aim to commence construction in the second half of 2023 and commence operations in 2024.

Visual impact Assessments

NGH is working with visual assessment specialists to coordinate visits to properties near the proposal site to observe the outlook and capture views towards the site.

This involves visiting properties with the landowners/tenants, taking photos from key points to capture key views and using this to inform the overall assessment of visual impact.

The first round of site based assessments is planned to occur on 27 and 28 April.

If NGH has not contacted you yet, and you would like to have an assessment completed for your property, please contact Ben Smith on ben.s@nghconsulting.com.au or 0414 943 326 to arrange a time.

How to learn more and provide feedback during the EIS

During the EIS Elgin are working with NGH to gather lots of information from locals to help inform the assessments, as well as shaping how the Solar Farm could be built and operated.

Our planned engagements over the coming months include:

- ongoing discussions with nearby landowners, including detailed assessments of visual impacts for nearby properties
- monthly drop - in information sessions from late April – starting with the Bathurst show
- monthly ***Community Consultative Committee*** Meetings (see details below)
- monthly email/letter updates to stakeholder database focused on assessment activities
- presentations to a range of groups, including Bathurst Regional Council and Bathurst Chamber of Commerce
- running an online survey focused on capturing thoughts on key issues and landscape values
- website and social media updates to show assessment activities
- discussions with local media
- social impact specific research – including targeted interviews to discuss impacts and opportunities

As noted above, Elgin Energy and NGH are attending the ***Bathurst Royal Show*** on Friday 29 April and will have a stand in the Trade Exhibition. Members from the Elgin Energy team will be there to discuss the proposal and answer questions. We will let you know where our monthly drop in sessions for May and June will be in the next update.

We have recently updated our website and we encourage you to check it out. Notably, we have completed a detailed list of Frequently Asked Questions and you can also provide your feedback by completing the feedback survey at www.glanmiresolarfarm.com.au

Community Consultative Committee (CCC)

A CCC was formed recently to provide a balanced and objective discussion of the project and to inform the EIS process. Elgin sees the CCC as a highly valuable opportunity to engage with a range of perspectives and representatives in a structured way.

Community members were invited to apply to be part of the CCC and they were selected through the NSW Department of Planning.

A highly qualified Independent Chair was appointed by the government, and the first meeting was held on Wednesday 9 March at the Bathurst Regional Council Office. The CCC members for Glanmire Solar Farm include:

- David Ross (independent Chair)
- Jan Page, Napoleon Reef, Walang & Glanmire Residents Group
- Peter Hennessy, Glanmire Action Group
- Rebecca Welsh
- Ewan Chandler
- Dr Jim Blackwood, Bathurst Climate Change Action Group
- Christine Curry

- Andrew Young
- Ben Jowett
- Neil Southorn Bathurst Regional Council)
- Debbie Corlet (independent Secretary)

The first meeting included an overview of the proposal and an outline of the EIS activities from Elgin Energy and identification of key issues for further discussion in later meetings.

A detailed list of **Frequently Asked Questions** on the project website captured many of the queries discussed at the CCC, in addition to topics raised in previous engagements.

The next CCC Meetings will be held on 26 April and 17 May. We encourage you to engage with your CCC representatives to table queries and to hear more about each discussion.

Local benefit sharing

We would love to hear your ideas on how to share project benefits locally. Elgin always looks for ways to invest in the local community to help support local initiatives and improvements.

Elgin Energy will provide an annual contribution to a community project, initiative, or organization throughout the life of the project. This will be determined based on the consultation with community, Council, and other key stakeholders

If you have any thoughts on what Elgin could support locally (or any other thoughts on the proposal), please send an email to engage@nghengage.com.au

Kind regards,

Insert signature

Tim Averill
General Manager – Australia
Elgin Energy

C.2.2 Online survey

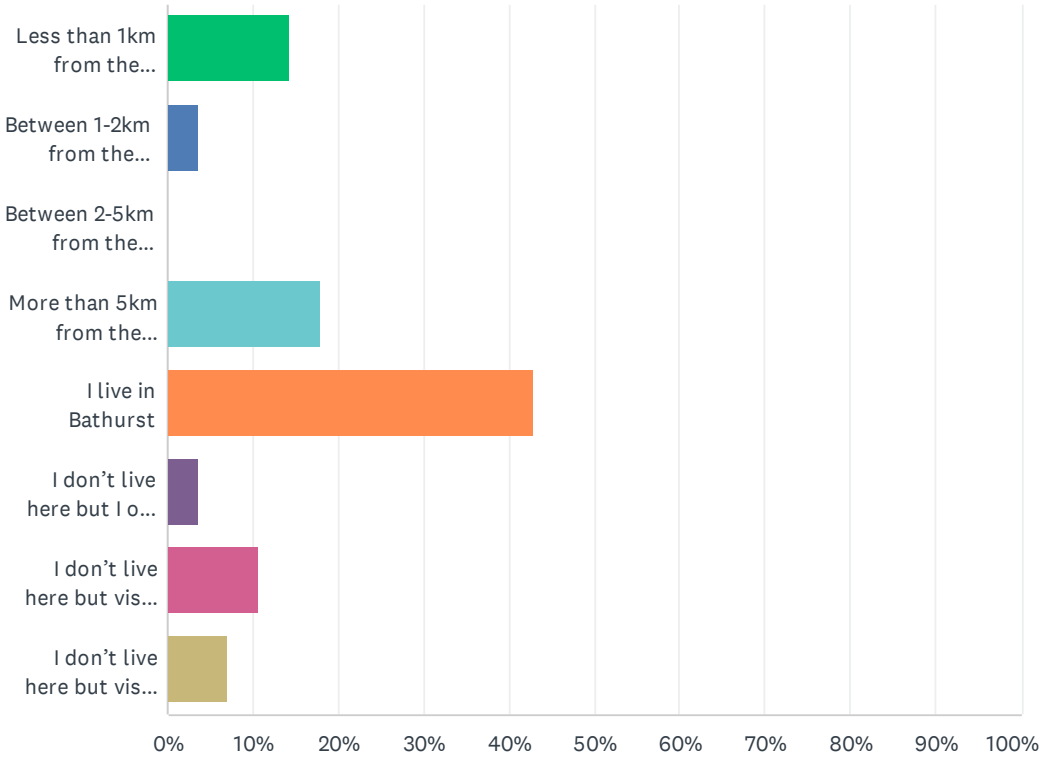
Q1 Contact information

Answered: 24 Skipped: 4

ANSWER CHOICES	RESPONSES	
Name	100.00%	24
Organisation name (if applicable)	8.33%	2
Address	100.00%	24
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	24
Phone Number	87.50%	21

Q2 Tick which box best describes where you live (Choose one response only)

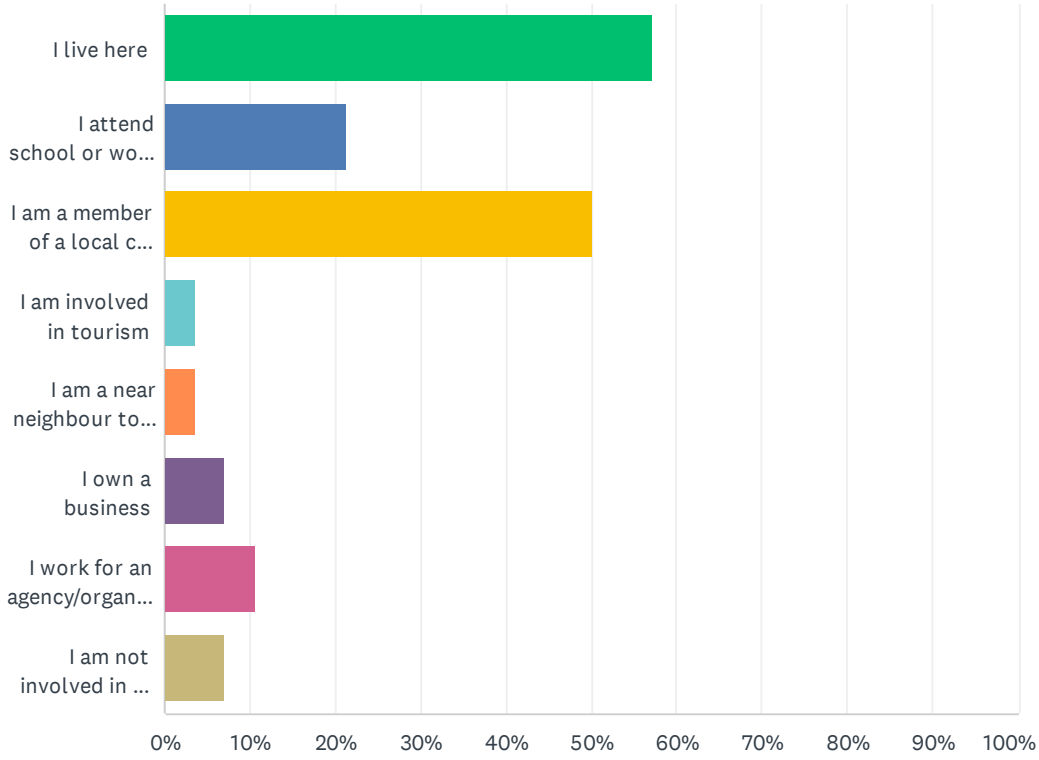
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
Less than 1km from the proposed project	14.29%	4
Between 1-2km from the proposed project	3.57%	1
Between 2-5km from the proposed project (excluding Bathurst)	0.00%	0
More than 5km from the proposed project (excluding Bathurst)	17.86%	5
I live in Bathurst	42.86%	12
I don't live here but I own land/property	3.57%	1
I don't live here but visit the area for recreation	10.71%	3
I don't live here but visit the area for work	7.14%	2
TOTAL		28

Q3 In what way are you involved in the community? Choose all that apply.

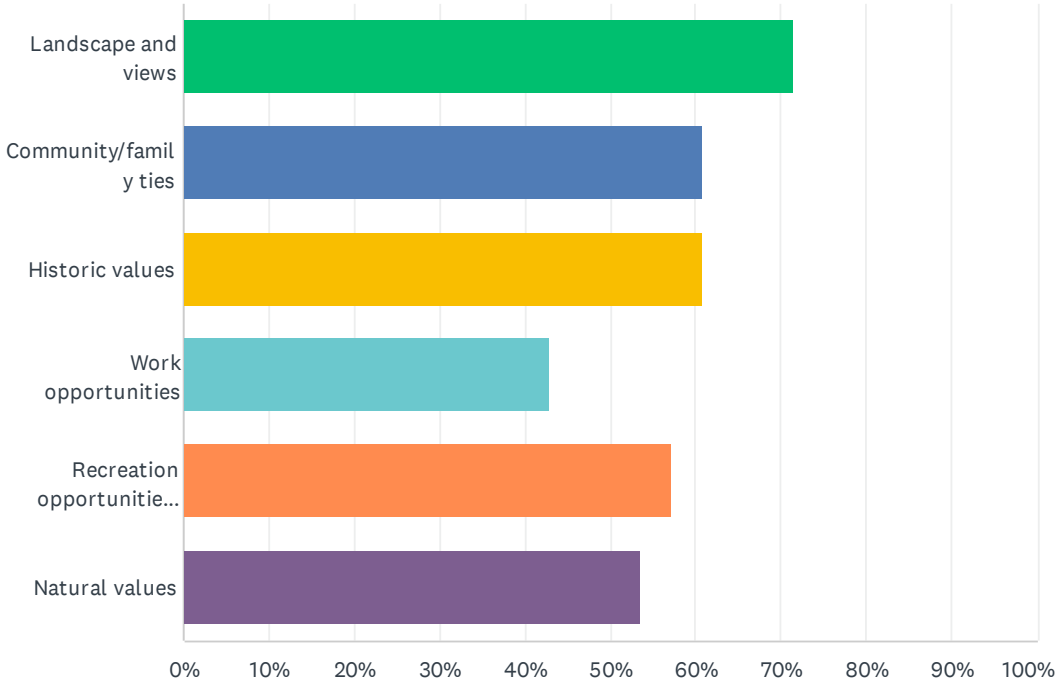
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
I live here	57.14%	16
I attend school or work locally	21.43%	6
I am a member of a local club or community organisation	50.00%	14
I am involved in tourism	3.57%	1
I am a near neighbour to the proposed development	3.57%	1
I own a business	7.14%	2
I work for an agency/organisation that is focused on this area	10.71%	3
I am not involved in the community	7.14%	2
Total Respondents: 28		

Q4 What do you value most about the local area? Choose all that apply.

Answered: 28 Skipped: 0



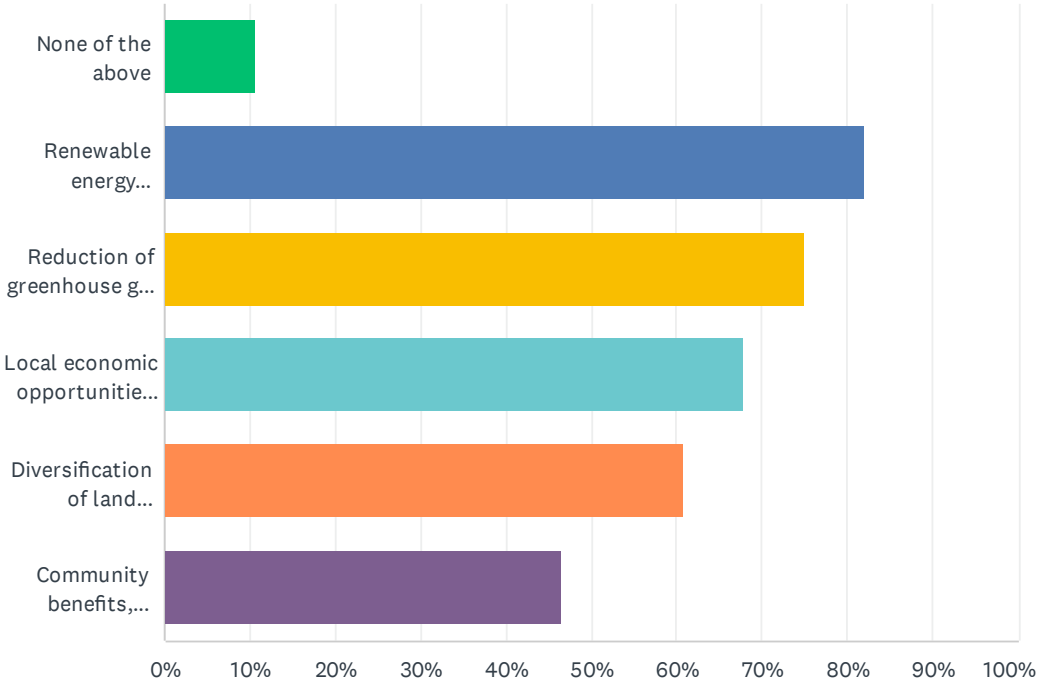
ANSWER CHOICES	RESPONSES	
Landscape and views	71.43%	20
Community/family ties	60.71%	17
Historic values	60.71%	17
Work opportunities	42.86%	12
Recreation opportunities, including sporting, nature based etc.	57.14%	16
Natural values	53.57%	15
Total Respondents: 28		

Q5 What views or landscape characteristics in the region and local area are important to you?

Answered: 28 Skipped: 0

Q6 What do you like about solar farms, generally? Choose all that apply.

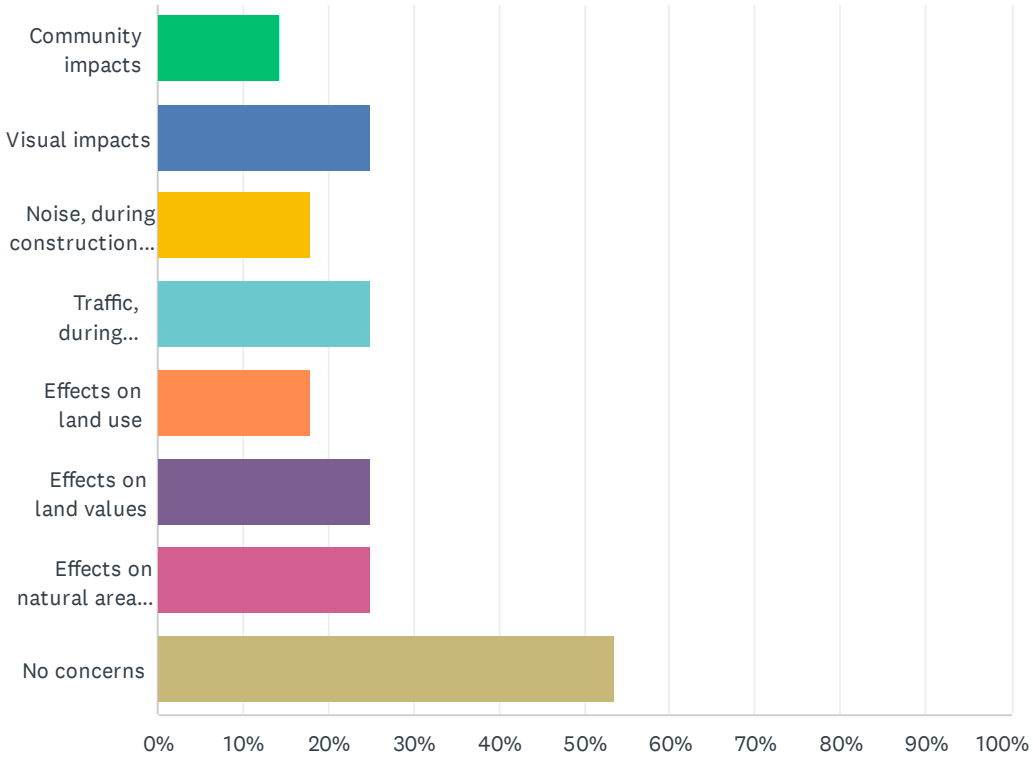
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
None of the above	10.71%	3
Renewable energy generation	82.14%	23
Reduction of greenhouse gas emissions & help to combat climate change	75.00%	21
Local economic opportunities – jobs, tourism, economic stimulus	67.86%	19
Diversification of land use/income streams	60.71%	17
Community benefits, including funds for community projects	46.43%	13
Total Respondents: 28		

Q7 What concerns do you have about potential impacts of solar farms, generally? Choose all that apply.

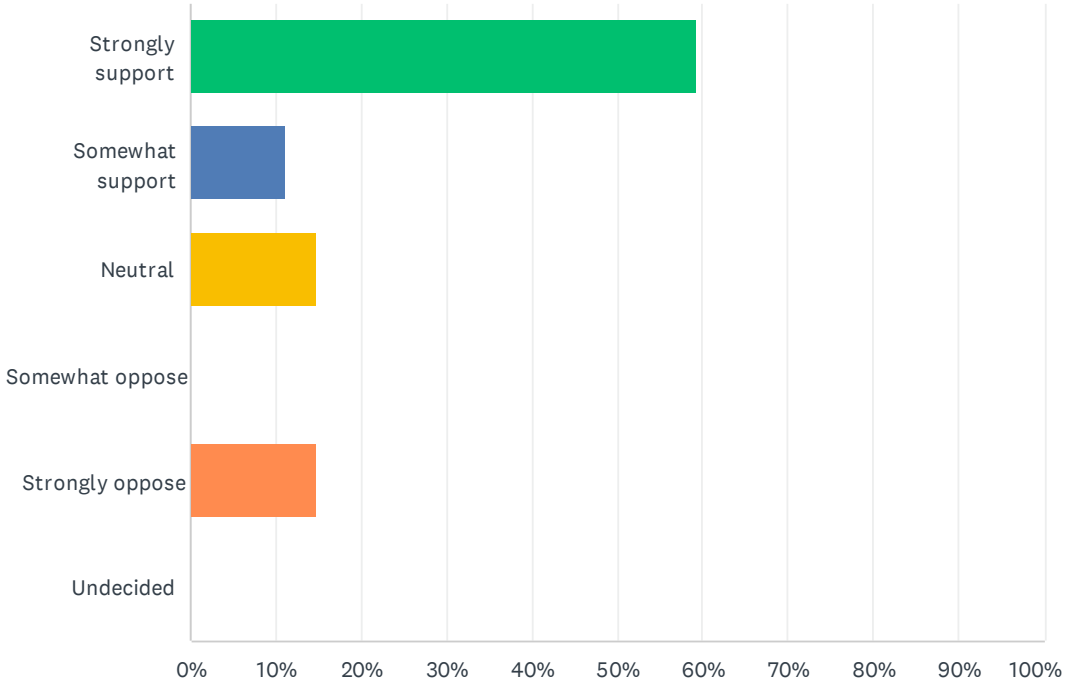
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
Community impacts	14.29%	4
Visual impacts	25.00%	7
Noise, during construction or operation	17.86%	5
Traffic, during construction or operation	25.00%	7
Effects on land use	17.86%	5
Effects on land values	25.00%	7
Effects on natural areas or habitats	25.00%	7
No concerns	53.57%	15
Total Respondents: 28		

Q8 How would you rate your attitude towards Glanmire Solar Farm?

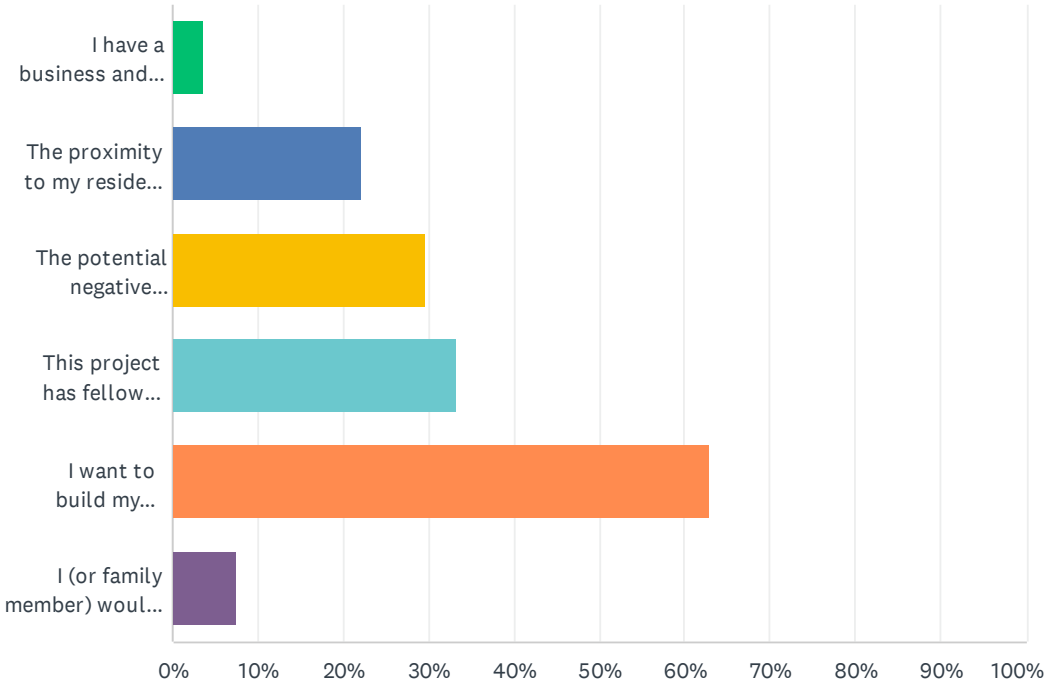
Answered: 27 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly support	59.26%	16
Somewhat support	11.11%	3
Neutral	14.81%	4
Somewhat oppose	0.00%	0
Strongly oppose	14.81%	4
Undecided	0.00%	0
TOTAL		27

Q9 What are the main reasons you're interested in the Glanmire Solar Farm? Choose all that apply.

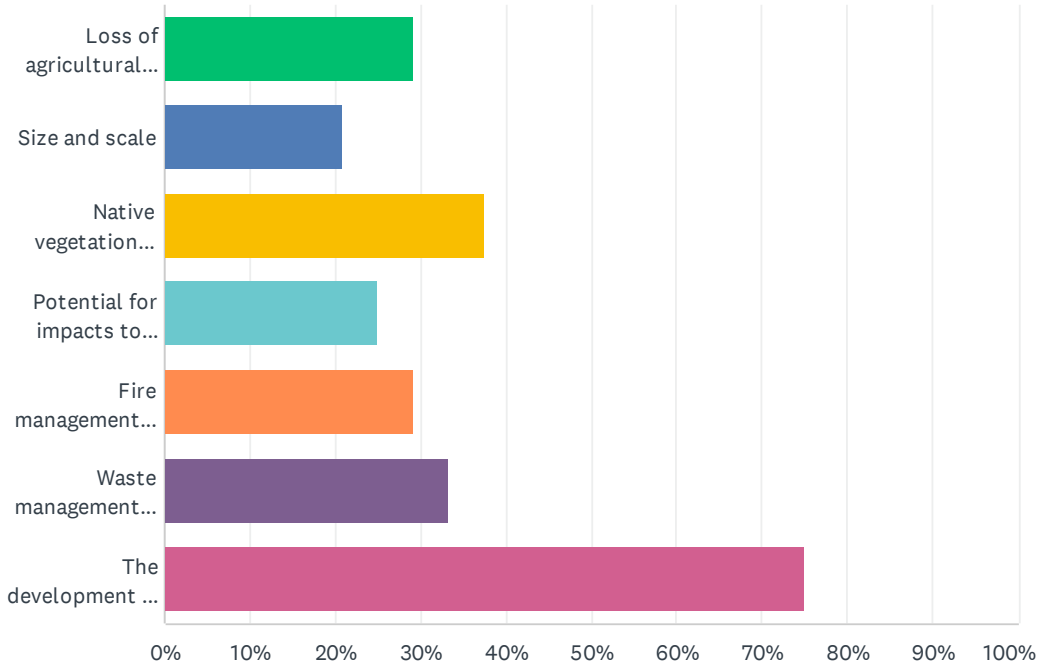
Answered: 27 Skipped: 1



ANSWER CHOICES	RESPONSES	
I have a business and I would like to seek potential work with the project	3.70%	1
The proximity to my residence and the impacts this may cause	22.22%	6
The potential negative impacts on the local Glanmire area	29.63%	8
This project has fellow community members interested so I would like to know more	33.33%	9
I want to build my understanding of the project	62.96%	17
I (or family member) would be keen to get some form of employment with the project	7.41%	2
Total Respondents: 27		

Q10 In terms of this proposal, what are the most important environmental factors to you? Choose all that apply.

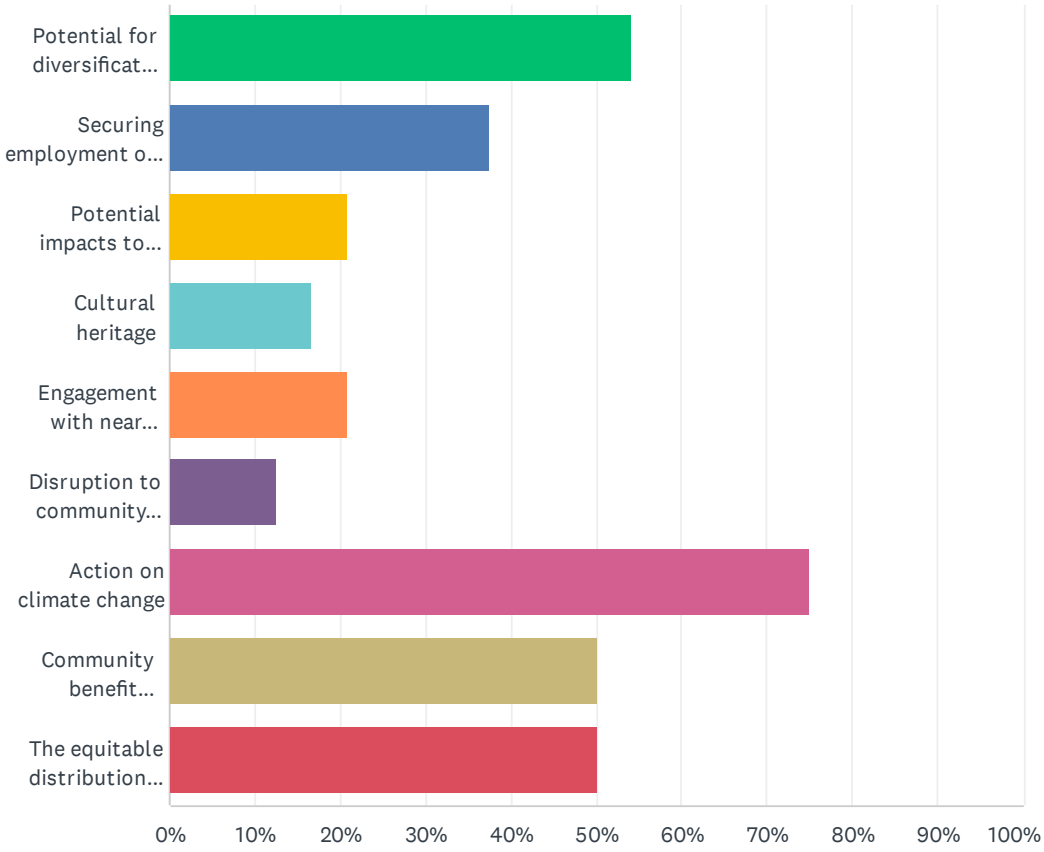
Answered: 24 Skipped: 4



ANSWER CHOICES	RESPONSES	
Loss of agricultural land within the region	29.17%	7
Size and scale	20.83%	5
Native vegetation impacts	37.50%	9
Potential for impacts to waterways	25.00%	6
Fire management practices	29.17%	7
Waste management procedures	33.33%	8
The development of renewable energy/action on climate change	75.00%	18
Total Respondents: 24		

Q11 In terms of this proposal, what are the most important social and economic factors to you? Choose all that apply.

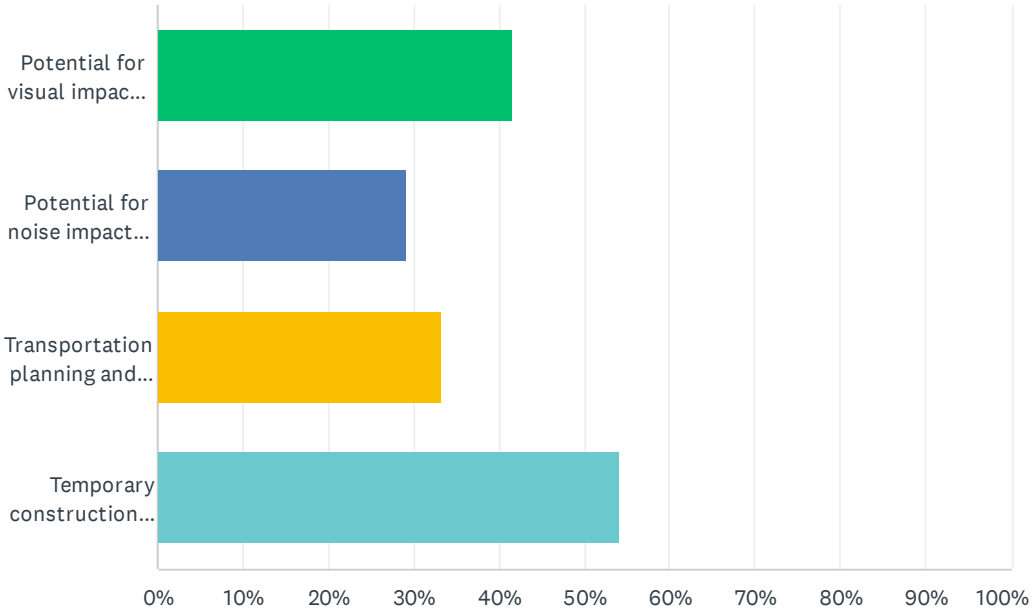
Answered: 24 Skipped: 4



ANSWER CHOICES	RESPONSES	
Potential for diversification of land use/income streams	54.17%	13
Securing employment or business from the project	37.50%	9
Potential impacts to property values	20.83%	5
Cultural heritage	16.67%	4
Engagement with near neighbours	20.83%	5
Disruption to community cohesion	12.50%	3
Action on climate change	75.00%	18
Community benefit opportunities from the project	50.00%	12
The equitable distribution of benefits	50.00%	12
Total Respondents: 24		

Q12 In terms of this proposal, what are the most important amenity factors to you? Choose all that apply.

Answered: 24 Skipped: 4



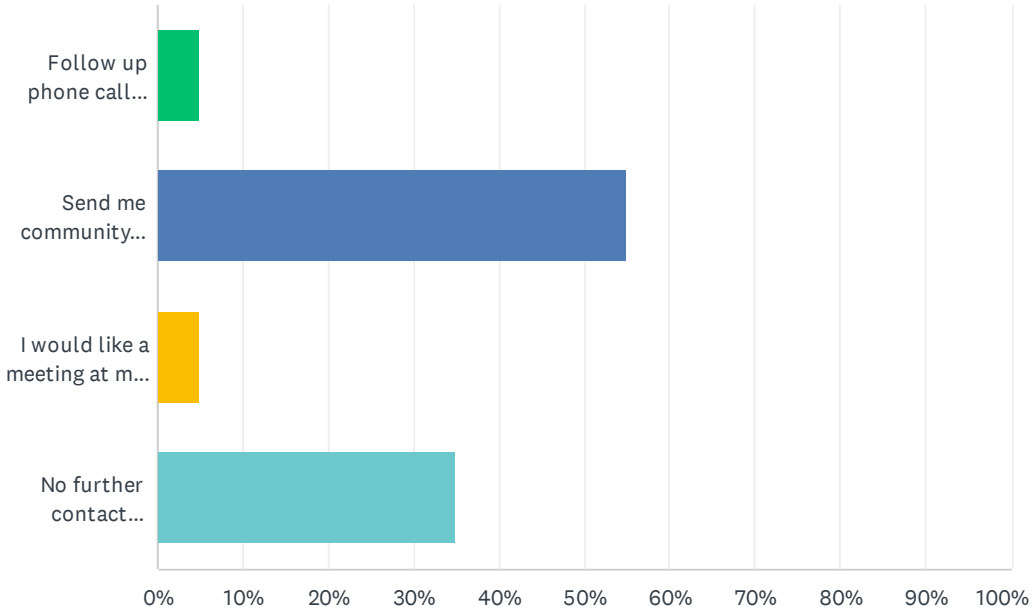
ANSWER CHOICES	RESPONSES	
Potential for visual impacts for near neighbours	41.67%	10
Potential for noise impacts for near neighbours	29.17%	7
Transportation planning and the use of local roads	33.33%	8
Temporary construction impacts (i.e., noise, traffic, dust)	54.17%	13
Total Respondents: 24		

Q13 In terms of the potential for Elgin Energy to invest in community initiatives, what do you think they could invest in on an annual basis and how could this be managed locally?

Answered: 24 Skipped: 4

Q14 How would you like the Project Team to engage with you going forward?

Answered: 20 Skipped: 8



ANSWER CHOICES	RESPONSES	
Follow up phone call please	5.00%	1
Send me community updates	55.00%	11
I would like a meeting at my residence please	5.00%	1
No further contact necessary	35.00%	7
TOTAL		20

Q15 Is there anything else that you would like to tell us or feel that is important to say?

Answered: 11 Skipped: 17

C.2.3 Frequently asked questions (FAQ) sheets

GLANMIRE SOLAR FARM FREQUENTLY ASKED QUESTIONS

QUESTION	ANSWER
1. What is the proposal?	Glanmire Solar Farm is proposed on a site at 4823 Great Western Highway, Glanmire, NSW 2795. This site is located approximately 11 km east of the township of Bathurst and approximately 4.5 km east of Raglan. Elgin Energy is the company developing this proposal. It would have a capacity of approximately 60 megawatts (MW)(AC) and may include an associated battery energy storage system. The project will cover a development footprint of approximately 186 hectares. The land is currently used for grazing and intermittent cropping. It is intended that sheep grazing will continue within the development footprint of the project once operational. The project would provide opportunities for local and regional businesses to support delivery and operation of the project, including approximately 150 construction jobs and approximately 1 - 3 ongoing jobs. It would also support NSW Government's renewable energy targets (NSW Electricity Infrastructure Roadmap, 2020) and generate enough clean electricity to power approximately 24,000 homes. The following components are proposed for this solar farm: • solar PV modules, either on a fixed-tilt or single-axis tracking system (East/West orientation) • inverters and transformers • underground cabling from the panels/inverters to the substation • a substation to connect the project to the electricity network • an upgrade to existing powerlines from the site back to the substation located in Raglan • access roads from the local road network and internal access tracks • fencing and CCTV around the perimeter • the project may also include a battery energy storage system (BESS).
2. Who is Elgin Energy?	Elgin Energy is a leading international and independent utility scale, solar and storage developer. Established in 2009, Elgin Energy has extensive experience in delivering projects from initial landowner engagement to project completion. As of 2021, Elgin Energy has successfully delivered 230 MW of solar energy across 21 projects in the UK, providing the equivalent of 75,000 homes with clean energy annually. The company has successfully obtained planning permission for 1 GW+ across more than 60 projects. A further 3 GW+ of projects are at late stages of development across the UK, Ireland and Australia. Elgin Energy's global base is in the UK and the Australian division is managed from Elgin Energy's Sydney office.

QUESTION	ANSWER
3. What stage is the project up to?	The Scoping Report for the project was accepted by the NSW Government and the Secretary's Environmental Assessment Requirements (SEARs) were issued in late 2021. The SEARs make clear what is required to be included in the Environmental Impact Statement (EIS). The EIS for the project, including required specialist investigations, is being developed and will be submitted as part of a Development Application later in 2022. Community and stakeholder consultation will continue throughout the development of the EIS and will be summarised within it. When the EIS is completed, it will be placed on Exhibition for public comment via formal submissions. All issues raised in the submissions will be addressed by Elgin Energy within a Submissions Report that will also be made available to the public. The NSW Government Department of Planning and Environment (DPE) will then prepare an assessment report and make a recommendation whether to approve the project. Approval may be made by DPE or delegated to the Independent Planning Committee (IPC). If approved, the project would aim to commence construction in the second half of 2023 and commence operations in 2024.
4. Why is this project needed? Isn't there enough solar energy being produced in other places?	The Australian Energy Market Operator has estimated that up to 50 GW of 'variable renewable energy' (wind and solar power) capacity will need to be installed between 2020 and 2040 to replace Australia's retiring coal-fired power stations. NSW has a roadmap to increase NSW's renewable energy penetration to over 60% by 2030. Currently the renewable energy penetration in NSW is 26% (Clean Energy Council April 2022), the second lowest across the states of Australia. This state-wide initiative will create 6300 construction and 2800 ongoing jobs in regional Australia and will reduce electricity price in the state by $130 per year for households, $430 for small business and reduce NSW's carbon emissions by approximately 90 million tons[1]. The closure of fossil fuel power stations is accelerating including the recent announcement that closure of Eraring coal fire power station (2880MW) is being brought forward by the project owners and renewable energy and storage solutions will need to offset these closures.

[1] NSW Electricity Infrastructure Roadmap Overview, 2020, P5

QUESTION	ANSWER
5. Why is this project not located in a Renewable Energy Zone?	Renewable Energy Zones (REZ) are being created to concentrate power generation, transmission, and storage in identified areas to unlock new capacity for the energy grid beyond the existing capacity. The NSW government is working through the planning, consultation and design steps required to establish the five identified REZ. The process above will take many years to deliver, and the aim is for the REZ to progressively start delivering energy to the grid by the late 2020's and into the 2030's. While the REZ will play a critical role, the NSW Government's revised Large Scale Solar Guidelines recognises that to meet state and national clean energy targets, renewable energy projects are also required outside of the REZ[2] areas. The NSW Government has noted development outside of the REZ must occur if it is to meet its emission reduction targets and about 70% of the developments are outside the REZ.
6. Why was this site chosen?	Elgin inspects many sites in regional Australia and considers a range of social, environmental and economic factors when considering whether to develop a proposal for each location. In the case of Glanmire Solar Farm, this site was selected for the following reasons: • high solar irradiance • the topography and location of the site can be used effectively to reduce visual impacts for neighbours and the highway • relatively flat and clear land with few nearby residential dwellings and environmental constraints • not identified as 'Biophysical Strategic Agricultural Land' or highest quality agricultural land. Further due diligence using soil surveys verified the site land capability to be Class 4 with small areas of Class 5 therefore avoiding Classes 1 – 3 as encouraged by DPE and considered suitable for solar. • cost-effective grid connection with capacity (which is limited across the State) • this development aligns with the strategic intent outlined through the NSW government and Bathurst Regional Council policies.
7. Is the development appropriate in RU1 land zoning?	Section 34(1b) of the ISEPP allows for electricity generating works, including solar farms, in prescribed rural, industrial or special use zones. RU1 land zoning is prescribed zone under this clause. It is considered generally

[2] DPE Revised Large-Scale Solar Energy Guidelines, 2021, p.3

QUESTION	ANSWER
	appropriate for development of electricity generating works. The majority of solar farms developed or approved across the State are located in RU1 zones. Land use objectives of the RU1 zone will be investigated as part of the determination process to ensure compatibility with the proposed land use as part of the EIS process. Specific to the Glanmire Solar Farm proposal, key areas of investigation will include: • a visual assessment which will include an assessment of the existing scenic rural character, which aspects of the visual landscape are most valued by the community and how the proposed solar farm will contrast with this. • an assessment of existing soil capability and ways the project can maintain soil health during operation. This will ensure that the agricultural value of the land can be maintained after the project has been decommissioned. • the potential for the proposed solar farm to impact adjacent land uses, including aviation and residential subdivision. • the potential to impact the values of the site with regard to the 'entrance to Bathurst' and being located within the Bathurst drinking water catchment.
8. Why is this land not being retained for agricultural purposes?	Biophysical Agricultural Land (BSAL) and land with a land and soil class capability of 1, 2 or 3 are considered the most important land to retain in NSW for agricultural use. NSW DPE have been clear that locating solar panel infrastructure in these areas should be avoided. Soil surveys have been undertaken to confirm the soil class at the Glanmire site. The Land and Soil Capability Assessment (SLR Consulting Australia Pty Ltd, 2021) found most of the site is classified as land and soil capability class 4, with the exception of areas greater than or equal to 10% slope which are classified as class 5 due to the presence of sodic subsoils. Additionally, solar farms are considered highly reversable in terms of their impact on agricultural land. While some infrastructure will remain in place after decommissioning, the vast majority of the site will be available for resumed agricultural or other land use. The project, if approved, will include clear commitments to ensure the agricultural values of the site are maintained so that agricultural productivity, after the site is decommissioned, will not be reduced. A commitment to retain the agricultural capacity and productivity of the land will be expected and is considered highly achievable.

QUESTION	ANSWER
	During operation, solar farms in NSW often utilise 'solar grazing' to manage biomass under and around panels. It is likely to be implemented as a 'ground cover management' strategy to ensure vegetation cover is retained beneath the panels, rather than for generation of a reliable farm income but it can have resilience and productivity benefits (Clean Energy Council, 2021[3]) and it is the most prevalent form of complementary land use for utility-scale solar farms.
9. How does the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) relate to local land zoning provisions?	Section 34(1b) of the ISEPP allows for electricity generating works, including solar farms, in prescribed rural, industrial or special use zones. RU1 is a prescribed zone that has been considered generally appropriate for development of electricity generating works. Under the Bathurst Regional Local Environmental Plan (LEP) RU1 zone provisions, electricity generation works are not specified and therefore deemed *permitted with consent*. In addition to addressing the LEP, the EIS is required to provide specific consideration of the impact on, or conflict with, land that would be required to support the growth of Bathurst Regional City having regard to any future growth areas identified in Regional Plans and Local Strategic Planning Statements and advice from Council on future growth areas. The applicability of the Regional Plan to the project will be considered as well as a specific consideration of impacts on residential development, in the Land Use Conflict Risk Assessment (LUCRA) assessment.
10. What is the importance of the proposed changes to the Infrastructure SEPP: Renewable Energy and Regional Cities?	Bathurst is one of the regional cities identified as having high solar and wind resource potential with the risk that utility scale renewables may adversely impact city expansion and growth. The matters that must be considered under the proposed changes to the ISEPP include: • whether the development is located so as to avoid land use conflicts with existing and approved uses of land • whether the proposed development is likely to have a significant impact on, or conflict with, land that would be required to support the growth of a regional city having regard to any future growth areas identified in Regional Plans and Local Strategic Planning Statements and advice from Council

[3] https://www.cleanenergycouncil.org.au/resources/resources-hub/australian-guide-to-agrisolar-for-large-scale-solar-1

QUESTION	ANSWER
	• whether the proposed development would significantly impact the scenic quality and landscape character of a regional city, including on any approaches to the city, taking into consideration any values identified by the community and Council. These matters are being carefully assessed as part of preparation of the EIS and the associated specialist assessment reports and through and the engagement process currently underway. More on this can be found here: https://pp.planningportal.nsw.gov.au/ISEPP-renewable-energy
11. Is development of a solar farm compatible with adjacent land uses?	The SEARs set out specific requirements for the EIS to consider, including an assessment of the potential impacts of the development on existing and approved land uses on the site and adjacent land. The investigation approach includes reference to: • A Land And Soil Capability Assessment (LSCA) (SLR Consulting Australia Pty Ltd, 2021) and Biophysical Strategic Agricultural Land (BSAL) Verification (SLR Consulting Australia Pty Ltd, 2021) to consider agricultural impacts and potential to manage and remediate any soil impacts. • A Land Use Conflict Risk Assessment (LUCRA) is a quantitative risk matrix used to look at the compatibility of the proposed change in land use. The LUCRA assessment is primarily used to consider impacts on agricultural developments but can be used to assess other industry. In this case, the LUCRA will be expanded also consider compatibility with nearby residential development, aviation activities, transport corridor entrance to Bathurst, drinking water catchment values. This will provide an opportunity to consider any appropriate actions the project should take to minimise impacts on these specific uses, such as setbacks from the highway, which has already been adopted. Land use compatibility will be a key consideration in the EIS. Visual impact assessment will consider the scenic character of the area and the value the community places on this. A solar farm on the subject land will not impact on the adjoining properties to carry out agricultural activities.
12. What has Elgin done to understand the soil quality and	Soil surveys have been undertaken to confirm the soil class. The Land and Soil Capability Assessment (SLR Consulting Australia Pty Ltd, 2021) found most of the site is classified as land and soil capability class 4, with the exception of areas greater than or equal to 10% slope which are classified as class 5 due to the presence of

QUESTION	ANSWER
agricultural output of the site?	sodic subsoils. While class 4 is considered suitable for solar, careful consideration of impacts on the surrounding land uses will also be considered in the EIS. An Agricultural Impact Statement (AIS) will be completed as part of the EIS. This body of work will consider the analysis completed for the Glanmire Action Group as part of a thorough assessment.
13. What impact will the solar farm have on the agricultural output of the property?	An Agricultural Impact Statement (AIS) will be completed as part of the EIS. This body of work will consider the analysis previously completed for the Glanmire Action Group as part of a thorough assessment. Elgin notes that previous analysis completed by the Glanmire Action Group was desktop only and not based on soil samples from the project site. As well the ground validated soil analyses completed for the site by Elgin, an Agricultural Impact Statement will be prepared to consider the impact on the agricultural economy and will inform the detailed assessment of the project. The AIS will factor in the continued use of the land for agricultural purposes through sheep grazing.
14. What impact will this project have on the local economy?	The project EIS will compare the local employment and economic stimulus being generated at the site now, under agricultural land use, to the solar farm's predicted employment impacts and ongoing grazing activities. This will be informed by the AIS. The construction phase, lasting around 12 months, will generate the most employment and stimulus to local providers, and support around 150 jobs (based on the project scope presented in the Scoping Report). It will require careful planning to ensure local employment is maximised and demand on limited local services does not impact the wider community. In operation, the employment will be much less, currently estimated to be around 1 - 3 full time equivalent jobs; more comparable to the current circumstance under agricultural use.
15. Will developing a solar farm reduce the ability to do soil carbon activities on the site?	While intensive agricultural use and any associated carbon sequestration opportunities will be precluded during the operational stage of the solar farm, the resting of the soil and benefits to soil biota beneath shaded solar arrays (which can act as a microclimate and increase soil health) will have a small, continued contribution. Some specific agricultural practices can be important contributions to mitigating climate change, by taking up carbon from the atmosphere and storing it. However, more impactful to mitigating the impacts of climate change will be the project's contribution to the NSW's transition away from fossil fuel electricity generation to renewable energy.

QUESTION	ANSWER
	Additionally, solar farms are considered highly reversable in terms of their impact on agricultural land. While some infrastructure will remain in place after decommissioning, the vast majority of the site will be available for resumed agricultural or other land use. Overall, a commitment to retain the agricultural capacity and productivity of the land will be expected and is considered highly achievable. Recent research out of a collaboration among Argonne National Laboratory[4], the US National Renewable Energy Laboratory, and the University of Minnesota found that the restoration and management of native grassland vegetation beneath ground-mounted solar energy facilities can restore ecosystem services and drive a 65% increase in carbon storage potential over conventional management of turf grass on solar farms. This is something that can be explored with the landowner, but the solar farm does not prevent this activity from occurring.
16. How is the decommissioning process managed?	It is critical for renewable energy developments to demonstrate that they will not have any unreasonable impacts on the environment, including after they have been decommissioned. The developer is required to show how the infrastructure will be decommissioned and removed at the end of the project's life, in addition to how damaged components will be recycled or disposed of without impacting the environment. This includes the allocation of funds to manage this process. This must be reviewed and approved by DPE before the consent is provided to construct it. For this project, Elgin Energy will describe as part of the project, the commitment to the development of a Decommissioning and Rehabilitation Plan to ensure the array site is returned to at least or better than pre-solar farmland and soil capability during the decommissioning stage. The plan would be developed with reference to the base line soil testing (completed) and with input from an agronomist to ensure the site is left stabilised, under a cover crop or other suitable ground cover. Should a consent be granted, the conditions of consent must be met by the developer and the operator of the infrastructure. If the solar farm is sold, the conditions of consent must be met by the new owner. This requirement is also included in the lease conditions for Elgin Energy. The Glanmire project has a standard decommissioning clause (12 months to remove improvements and pay rent while doing so). A fund for the make good process will be established and can be drawn on for if required to facilitate this process.

[4] Source: https://www.sciencedirect.com/science/article/pii/S2212041620301698

QUESTION	ANSWER
17. Can solar panels be recycled?	Solar panels are inherently recyclable, due to their ability to be broken down and separated into existing recycling streams (Blakers, A 2021, ANU). Up until recently, Australia did not have the capability to recycle everything in a solar panel but, in recent years, dedicated recycling operators have emerged, and this capability is growing all the time. Notably, a facility is currently being established in Wagga Wagga by local company Solar Professionals. Given Glanmire Solar Farm would not start operating until 2024, and the panel recycling capability is growing quickly, it is anticipated that the project could make use of recycling facilities for disposal of damaged panels and for decommissioning.
18. Do solar farms devalue land?	Unfortunately, there is no credible local evidence base available to reference on this subject. It has been Elgin's experience that solar farms have not resulted in devaluation of surrounding land in the other markets they operate in, including the UK. Whilst there are many factors that influence the value of a property it is noted a large number of solar farms have been constructed in Australia over the 12 years and no conclusive evidence of adverse impacts on local property values resulting from these projects has emerged.
19. What impact does a Solar Farm have on insurance premiums for neighbouring properties?	Elgin Energy has requested clarity from the Australian Insurance Council in relation to concerns regarding insurance requirements for landholders near solar farms. The response below was provided to Elgin Energy in 2021: *The IAC have investigated the views of insurers and are not aware of any position of escalated risk focus being placed on neighbouring properties solely as a result of solar facilities being established.* *Insurance premiums are developed among many considerations on risk factors relevant to any specific property. As data and information develops, those risks may be alleviated or escalated and premiums applicable would be applied according to each insurer's determination on that specific location.* *There is no sole or single position on pricing or risk, each insurer will determine and apply their own risk framework, acceptance criteria and pricing model. While there may be a factor with one or some insurers, in a specific region or at a specific location, that will be an individual organisation position, it is not an industry position.* *Risk determination is complex and is property specific and applied individually by insurers in line with their own positioning.* ***We would like to confirm however that there is no position known at this time indicating or***

QUESTION	ANSWER
	highlighting any widespread increased risk relevant to a property neighbouring or being near a solar farm or facility.
20. What role will Elgin Energy play in this project in the future?	Many companies develop and sell renewable energy projects (approx. 60% of State Significant Projects) in Australia. In fact, a large proportion of renewable energy developers in Australia specifically aim to setup well informed and designed projects before selling them to companies who construct and operate the infrastructure while delivering on agreed standards and requirements (as established in the planning phase). Elgin Energy is currently working through options with respect to establishing and operating the projects under development in Australia. Elgin's objective over the next 12-24 months is to become an integrated independent power producer (IPP) in Australia delivering solar and storage to energisation and owning and operating the projects that are developed. Elgin and the conditions of any Development Consent will ensure that the commitments made during the planning process will be incorporated into the operation of the Solar Farm. This includes the agreed Community Benefit Scheme, management of construction impacts and the decommissioning obligations.
21. Who is Elgin Energy and how is Elgin Energy funded in Australia?	Elgin Energy was established in 2009 and is one the largest privately owned solar/battery developers in the UK. The Elgin business is well funded following the early success of the busines and recent fundraises as shown in the articles below: https://www.irishtimes.com/business/energy-and-resources/elgin-energy-raises-almost-30m-to-fund-projects-in-its-main-markets-1.4739113 https://www.pv-magazine.com/press-releases/berenberg-green-energy-junior-debt-fund-and-elgin-energy-enter-agreement-to-finance-late-stage-development-of-elgins-1-36-gwp-solar-portfolio/and project sales https://www.pv-magazine.com/press-releases/elgin-energy-announces-sale-of-uks-largest-solar-portfolio-to-iberdrolas-scottish-power-renewables/ As stated, Elgin's objective over the next 12-24 months is to become an integrated independent power producer (IPP) in Australia delivering solar and storage to energisation and owning and operating the projects that are developed. The Australian business was established in 2019 and is currently developing 750 MW of projects between NSW and Victoria and aims to deliver over 1 GW of projects over the next three years.

QUESTION	ANSWER
22. Will this project have a visual impact on the area?	Visual impact assessment will consider the scenic character of the area and the value the community places on this. The visual impact assessment is required to consider impacts from important locations, not just residential receivers. In this case the assessment will include views experienced by motorists approaching Bathurst. It is essential that our visual impact assessment specialists can meet with nearby landholders to capture their viewpoints and assess the likely impacts from a range of positions. The topography of the site is fortunate in that the properties near the site are oriented away from the proposed solar farm and battery. Elgin has already reduced the footprint of the development area to avoid views from the highway and there is some flexibility to modify the development area on the southern end of the site to help mitigate visual impacts. To ensure a rigorous visual assessment, the recently released NSW Government draft Visual Assessment Framework for Large-Scale Solar Energy Development will be considered by the assessment. The benefits of this new methodology include: • specific consideration of the difference in elevation between specific receivers and the solar farm infrastructure • reverse viewshed modelling to understand the most visible areas of the facility, where large numbers of receivers are affected • consideration of the horizontal magnitude of impact for specific receivers (being able to see the facility in more than one direction or 'sector') • a focus on consultation and the provision of 'photo montages' to inform the community and specific receivers about the impact on their existing views. The level of glare and reflectance from the PV solar panels is considerably lower than the level of glare and reflectance of common surfaces, particularly those surrounding the proposed solar farm. The PV panels are likely to reflect approximately 6.5% of energy which is less than typical rural environments which have a reflectivity of approximately 15-30% (MLA 2010; cited in several solar farm visual assessments including Nyngan and Capital Solar Farms). It is noted however that array mountings (steel or aluminium), PCUs, grid connection transmission line poles, the onsite substation and other site buildings could also produce glare and glint, however not more than is to be expected for existing rural infrastructure including sheds, powerlines and farm buildings.

QUESTION	ANSWER
23. Will glare be an issue for the airport?	The compatibility with land uses in including aviation will be investigated through the EIS. Glint and glare will be considered as part of the assessment. Generally, reflectivity of solar farm infrastructure is considered lower than surrounding rural infrastructure The primary function of PV panels is to absorb sunlight rather than reflect it. The technical process in manufacturing PV panels includes an anti-reflection, hydrophobic layers that minimises potential for sunlight reflection. Elgin have engaged with the Bathurst Airport and CASA regarding visual impacts, and we will continue to keep them updated as our assessments progress. CASA have approved projects close to airports in the past, reporting that more glare is expected from the local waterways and the sun itself. Glaring is typically not an issue for aviation activities, as evident by the fact that solar panels have been deployed in Residential, Industrial and Sensitive Facilities, such as many airports around the world, including Ballarat, Adelaide, Brisbane, Melbourne, Changi (Singapore), Denver and Dusseldorf (and many more).
24. How will fire risks be managed?	Solar Farms are proven to have very minimal fire risks. Well established set-backs from site boundaries (and vegetation where relevant) will be included in the design to ensure there is 'defensible space' between infrastructure and surrounding site boundaries/vegetation. Elgin will adhere strictly to a Code of Conduct substantially in line with the Clean Energy Council's Best Practices Charter, as well as other relevant regulations, including fire safety. We will work closely with the RFS to confirm access requirements for the Solar Farm in the event there is a bushfire that moves into the area, or if a fire starts in the Solar Farm. A Management Plan will be produced prior to construction commencing that will include a Fire Management Plan to address the management of fire risks in construction, operations, and decommissioning and will be developed in consultation with RFS. The facility operations will be monitored using real time data, an on-site manager and security cameras to pick up fires which will trigger notification of the local RFS as part of the Fire Management Plan.
25. Will there be enough agricultural land available as more	Despite the ambitious state and national goals for delivery of renewable energy infrastructure, Solar Farms will not need take up a large amount of land in proportion to agricultural land. Furthermore, the land area needed for every megawatt of installed capacity is expected to decline as solar modules become more efficient (CEC, 2021).

QUESTION	ANSWER
renewable energy projects are delivered?	In the unlikely event that all new variable renewable energy were to be in the form of large-scale solar, then the total land required to support this solar generation would be up to 120,000 hectares. That's the equivalent of less than 0.016 per cent of Australia's total land area, or 0.027 per cent of Australia's total land currently used for agricultural production. https://assets.cleanenergycouncil.org.au/documents/resources/reports/agrisolar-guide/Australian-guide-to-agrisolar-for-large-scale-solar.pdf
26. How will Elgin engage with the community and stakeholders during the EIS?	Elgin is committed to working the community and other key stakeholders as part of the EIS process and as part of the wider project. Initial engagement was completed during the project scoping phase, including: • targeted discussion with nearby landowners via letters and several face-to-face meetings and follow up emails • letters were sent out to a 3km radius of the project site • development of a project specific website, project overview, project survey and follow up emails • a community information session • targeted stakeholder meetings • an offer was made to meet with the Glanmire Action Group directly (but not taken up). The project is currently working with representative stakeholders as part of a Community Consultative Committee (CCC). This CCC ensures that key stakeholders are kept informed and can make comment on key issues and management plans at this very early stage of the engagement process. The CCC will meet monthly over the coming months. Outside of the CCC, Elgin has engaged with the Council, the Chamber of Commerce, BCCAN, similar projects, local institutions and local media. The wider community will be engaged through monthly drop-in sessions, newsletters, website updates, social media updates, presence at the Bathurst Show, presentations to The Bathurst Chamber, Councillors, community groups and targeted landholder meetings.
27. Is the project supported by Bathurst Council and the NSW government?	Elgin has been engaging with the planning department at Bathurst Regional Council and the council is represented in the CCC. Our understanding is that the Council will play an objective role that is focused on ensuring the development considers local interest and planning arrangements, as well as ensuring the project details and well communicated through meaningful engagement.

QUESTION	ANSWER
	We know that the project aligns with NSW Government policies around renewable energy development, but in the past the local member, the Hon Paul Toole MP has expressed some concerns about the project. We will continue to work through these concerns with Paul and his team in the coming months.
28. What local benefits will the project provide?	The project will provide several benefits including: • opportunities for both local and regional businesses to support delivery and operation of the project • employment opportunities, with approximately 150 employees needed during the construction period of approximately 12 months, and approximately 1 - 3 ongoing jobs during the operational phase • contributing to progress towards the NSW government renewable energy targets • annual reductions in greenhouse gas emissions and generation of enough clean electricity to power approximately 24,000 NSW homes • ongoing community benefits through a local community benefit scheme.
29. Will there be a Community Benefit Fund?	Elgin Energy aims to deliver a community benefit fund on every project and is committed to delivering a Community Benefit Fund if this project proceeds to energisation. There are several successful examples of the delivery of Community Benefit Funds from renewable energy projects across Australia. Funds are usually based on the project owner paying a fee to the local community organization on a fixed sum per MW basis. This fund is then distributed to suitable local projects/initiatives. Elgin has discussed benefit sharing opportunities with Council and this will be discussed with the CCC group in addition to the broader community. Elgin is keen to hear the community's thoughts in relation to this and invite residents to share their views on suitable local projects/initiatives.
30. Will the project supply power to the Bathurst Community?	In the eastern states and South Australia, energy that is generated from all large-scale energy generators (including any new solar farm or wind farm) goes into the energy grid and it is distributed according to the rules and controls that govern the grid's stable operation. The effective sale of the energy is done through purchase agreements or by selling it into the wholesale electricity market.

QUESTION	ANSWER
	Elgin cannot control the physical flow of power within the grid, but local contributions through other forms of investment can be considered in the Community Benefits Scheme that will be developed during the EIS engagement period. If community members have specific suggestions around the form of community benefits, Elgin would love to hear them.
31. Will there be changes to the local road network?	The Traffic Impact Assessment being undertaken by traffic engineering specialists, Amber, will investigate, in consultation with the road authorities, the safety of the existing road network, upgrades required to facilitate the construction of the project and mitigation strategies to ensure safety for road users and protect the road assets. This is expected to include intersection assessments, upgrades to intersection treatments and commitments to road dilapidation and traffic management strategies. The onus will be on the proponent to monitor and keep the road network in good repair. All assessment results and commitments will be included in the EIS.
32. Will there be impacts on local waterways?	Impacts on formed waterways are considered early in the design planning process. Standard setbacks are applied for most infrastructure to protect the riparian zones, where they exist. Where impacts are required within these zones, such as for limited waterway crossings by tracks and cables, they are designed in accordance with standard best practice measures and are considered to have high levels of confidence. These include: • Guidelines for Watercourse Crossings on Waterfront Land (DPI, 2012) • Guidelines for Laying pipes and Cables in Watercourses on Waterfront Land (Office of Water, 2010) • *Why do fish need to cross the road? Fish Passage Requirements for Waterway Crossings* (Fairfull and Witheridge, 2003). • *Policy and Guidelines for Fish Friendly Waterway Crossings* (NSW DPI, 2003). In addition, the site-specific hydrology report undertaken for the proposal, will be undertaken in two stages to: 1. Assist the proponent design the proposal so that solar farm assets will not be adversely affected by floods (this is done based on the existing catchment information). 2. Verifies that layout produced will not adversely affect local hydrology or exacerbate soil erosion due to run off (this modelling uses the indicative worst-case layout so that it will be resilient to any design changes in detailed design).

QUESTION	ANSWER
	In this way the soil and water resources will be protected during the operational stage of the project.

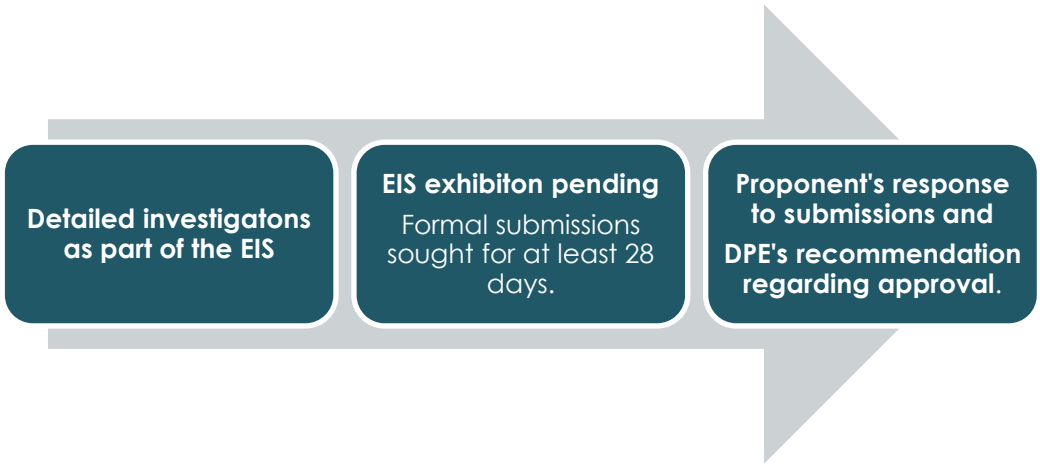
C.2.4 September 2022 Project update

PROJECT UPDATE

SEPTEMBER 2022

The Glanmire Solar Farm Project's environmental assessment team are drawing together the results of their detailed investigations. We would like to share the proposed site layout and the results of the visual and agricultural impact assessments prior to these being released as part of the Environmental Impact Statement (EIS). NGH is finalising the EIS on behalf of Elgin Energy and expect to begin the formal public exhibition period in early October 2022.

Once on exhibition, the EIS can be viewed in its entirely and public and agency submissions will be sought by the Department of Planning and Environment directly.



IN THIS PROJECT UPDATE:

1. Results of the investigation of visual impacts
2. Results of the investigation of agricultural impacts
3. Indicative site layout and landscaping overview

VISUAL IMPACTS AND GLINT AND GLARE

The visual impact assessment has considered the:

- Landscape character and scenic vistas in the locality.
- Stakeholder values regarding visual amenity.
- Potential impacts on representative viewpoints, including residences and road corridors.

While the guidelines surrounding solar farm visual assessment have been changing since the SEARs were issued, the Glanmire Solar Farm Project has attempted to adopt the most current guidance to allow the most robust assessment of impacts.

Photomontages (photorealistic impressions) have been created by combining a modelled image of the solar farm with a photograph using 3D modelling and photo editing techniques. The photomontages include public domain views as well as views from the most affected residences. For each location, a photomontage was prepared for the project 'at day one', and with the proposed vegetation shown in the medium term (shrubs modelled at 3 metres and trees at 5 metres) and long term (trees ranging from 10-20 metres).

The assessment of visual impact results shows:

- **Low landscape character impact** on the Bathurst Plains Landscape Character Area
- **No visual impact** from the Great Western Highway on the approach to or departure from Bathurst
- A **moderate visual impact** on views from Brewongle Lane on day one, reducing to low visual impact with the implementation of the landscape plan, and **no visual impact** on other public domain locations.
- **Very low visual impacts** on surrounding dwellings
- A **low glare impact** from one dwelling; setting a 4-degree resting angle during backtracking reduces the potential glare risk

The Landscape management plan has also been modelled using 3D modelling in the landscaping to ensure it will be effective. Arrangement of plantings has had input from ecologists. It replicates the characteristics of the White Box Yellow Box Blakely's Red Gum Woodland, in the larger areas of plantings, such as the southern planting area, and in the riparian areas. Two examples of the photomontages showing before and after landscaping are provided below.

Brewongle Lane viewpoint adjacent to the project boundary (day 1)

Brewongle Lane viewpoint adjacent to the project boundary (long term)

Great Western Highway, heading east out of Bathurst (day 1)

Great Western Highway, heading east out of Bathurst (long term)

AGRICULTURAL IMPACT SUMMARY

The Land and Soil Capability Assessment Scheme (Second Approximation; OEH, 2012) uses the biophysical features of the land and soil to derive detailed rating tables for a range of land and soil hazards. The scheme consists of eight classes ranging from 1- 8. Classes 1-3 are considered important agricultural land and would generally not be considered appropriate for solar farm development.

Class 1 - Extremely high capability land:
Land has no limitations. No special land management practices required. Land capable of all rural land uses and land management practices.
Class 8 - Extremely low capability land:
Limitations are so severe that the land is incapable of sustaining any land use apart from nature conservation. There should be no disturbance of native vegetation.

Based on higher than required soil survey sampling effort and taking a precautionary approach to build in conservatism, the majority of the land meets LSC Class 4 (172 ha), with the exception of areas with 10% or greater slope which are classified as LSC Class 5 (14 ha).

- LSC Class 4 is considered to have moderate agricultural capability with moderate to high limitations for high-impact land uses which restrict land management options for regular high-impact land uses such as cropping, high-intensity grazing and horticulture.
- LSC Class 5 is considered to have moderate-low agricultural capability and has severe limitations for high impact land management uses such as cropping. This land is generally more suitable for grazing with some limitations or very occasional cultivation for pasture establishment.

The project commits to a ground cover management plan to ensure that good cover of understorey vegetation is maintained beneath the panels during the operation of the solar farm. In comparison to grazing and cropping, rested land within the solar farm development, the site would be in the same or better condition as it is today, in terms of agricultural land capability. During operation there would be:

- Increased groundcover and diversity of groundcover: Perennial grasses can be encouraged to increase soil stability of the grassland around the panels
- Increase in soil moisture and nutrients from lessened grazing intensity.
- Increases in soil organic matter which means less evaporation, less impact of raindrops, less impact of runoff and less erosion.

A Rehabilitation Plan associated with decommissioning activities would be developed and implemented with the objectives of returning the land to its pre-solar capability. The plan would be informed by soil information derived from the soil surveys to ensure it is specific to the site.

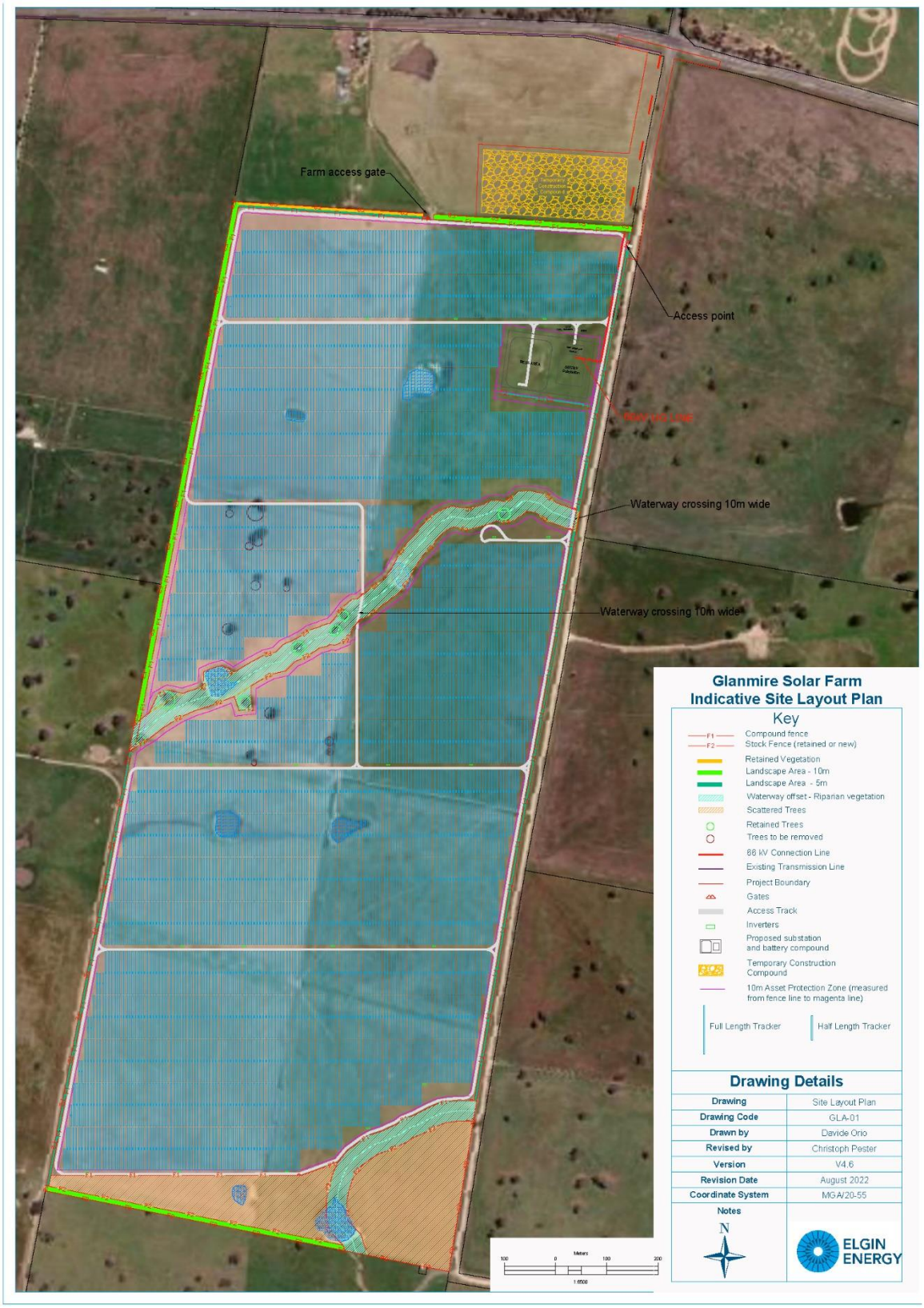
PROPOSED PROJECT LAYOUT

A detailed indicative infrastructure layout is provided overleaf as well as the Landscape Management Plan planting concept developed to mitigate visual impacts.

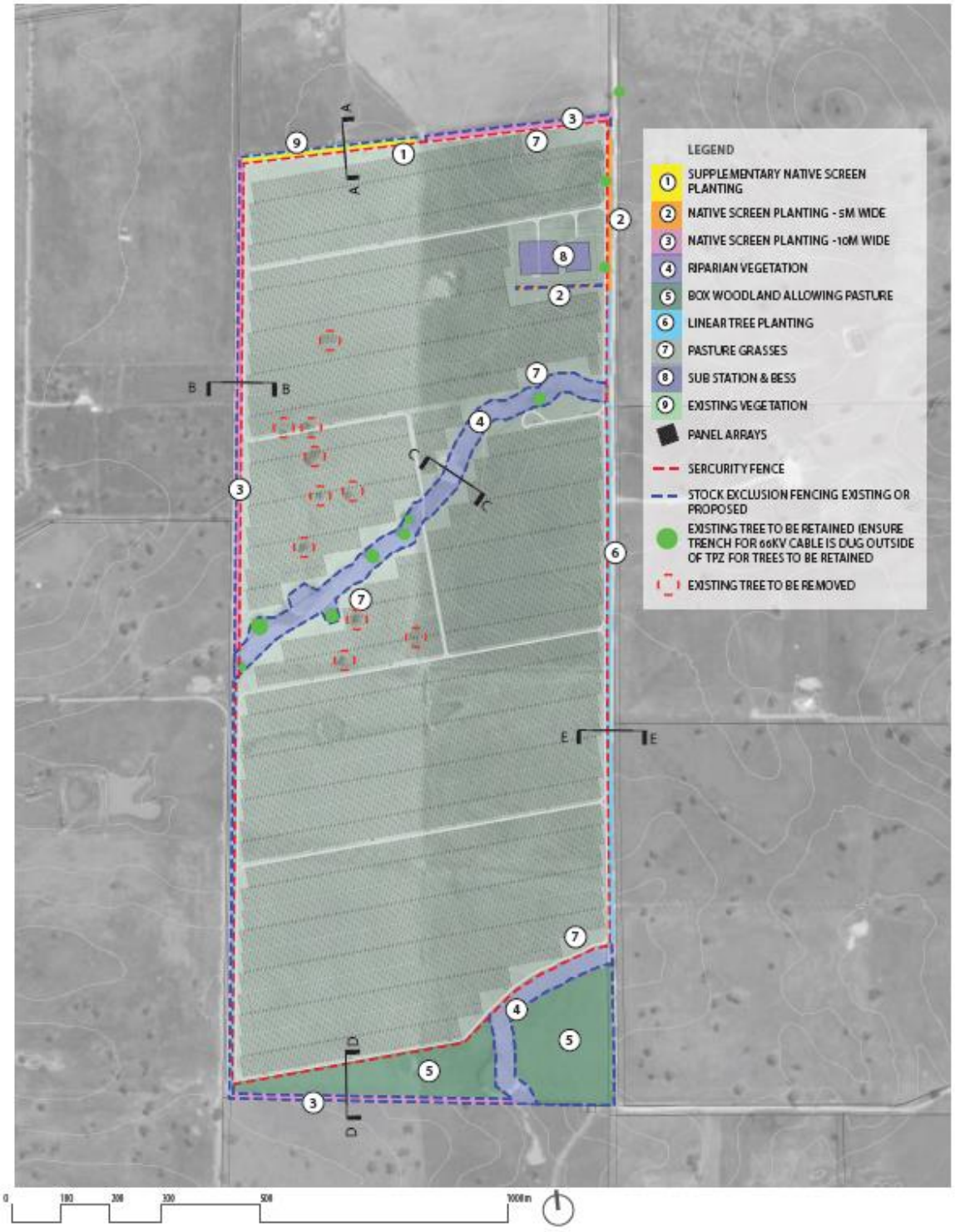
The layout below shows where the key infrastructure components would be located and how visual screening has been located to reduce visual impacts. The principles underpinning the layout are outlined below.

Protect important agricultural land
• No impact on prime agricultural land.
• Riparian areas protected and enhanced.
Protect important viewpoints
• Set back for above ground operational infrastructure and retaining existing pine plantings and proposing additional plantings, protecting the entrance to Bathurst.
• Minimal visibility of panels within 500m of approved or constructed (non-project associated) dwellings.
Protect heritage values
• No impacts on heritage listed 'Woodside' Inn.
• Measures developed with Aboriginal Representative Parties to protect 2 recorded heritage sites.
• No greater than low visual glint and glare impacts.
Protect biodiversity values
• Landscape management plan developed with input from ecologists to best replicate the characteristics of the *White Box Yellow Box Blakely's Red Gum Woodland community* for larger areas and riparian areas.

INDICATIVE INFRASTRUCTURE PLAN



LANDSCAPE MANAGEMENT PLAN



Glanmire Solar Farm | Landscape Concept Plan
21058 REV [F] d.06.09.22 6

C.3 Agency consultation log

Submitted directly to DPE, not for public exhibition.

C.4 October Project Update

GLANMIRE SOLAR FARM PROJECT UPDATE

4TH OCTOBER 2022

In our September update, we explained that the Glanmire Solar Farm Project's environmental assessment team were drawing together the results of their detailed investigations.

Since then, there have been some updates that we would like to share in relation to the results of the visual impact assessment and off-site transmission line works which will be managed by Essential Energy.

NGH is now including these updates as they finalise the Environmental Impact Statement (EIS) on behalf of Elgin Energy and is hoping to have the EIS on formal public exhibition by November 2022.

Once on exhibition, the EIS can be viewed in its entirety for a period of at least 28 days and both public and agency submissions will be sought by the Department of Planning and Environment (DPE) directly.

All issues raised in the submissions will then be addressed by Elgin within a Submissions Report that will also be made available to the public.

IN THIS PROJECT UPDATE:

1. Upcoming Information Session and meeting information where community members can ask questions and provide feedback
2. Update on the investigation of visual impacts
3. Transmission line update

GLANMIRE ACTION GROUP MEETING

In a response letter that was sent to the Glanmire Action Group on the 15th September 2022, Elgin Energy advised that there would be face-to-face meeting to follow on from recent 'near neighbour' discussions about findings from recent assessments.

We would like to invite the Glanmire Action Group members to a private meeting on ***Wednesday 19th October at 6:30pm at Keystone 1889, 99 Keppel Street Bathurst.***

Unfortunately, BMEC was not available for this meeting, so we were required to find an alternative venue.

We respectfully ask that no more than 10 members attend, so that we can ensure information is discussed constructively and to allow an appropriate balance of attendees from all parties. We do however encourage all members to submit questions through to us or attending members ahead of the meeting.

The meeting will also be attended by two Elgin Energy representatives, two NGH representatives and Garry West, an Independent Chair from Orange, who will officiate the meeting.

During the past decade, Garry West has chaired several CCCs and undertaken land use planning reviews. He was previously the Northern Regional Joint Regional Planning Panel chairman and member of the NSW Planning Assessment Commission. These roles have required the provision of advice and the determination of both State and Regional significant projects. Garry has also served as an elected Member and Minister in the NSW Parliament for 20 years before retiring to take up a role in corporate affairs.

An agenda will be circulated to attendees closer to the meeting date, however we kindly ask that attendees RSVP to Bree Schubach at breannah.s@nghconsulting.com.au by close of business on ***Thursday 13th October.***

HAVE YOUR SAY AT THE COMMUNITY INFORMATION SESSION

Given there have been key updates with assessments since the last Community Information Session in June 2022, there will be one final Community Information Session ahead of the EIS submission.

The drop-in style session will be held on ***Thursday 20th October from 12:00pm – 8:00pm at Keystone 1889.***

Should you have any further questions or concerns, this will be an opportunity for you to discuss the Project with members from both Elgin and NGH at a time during this period that suits you.

COMMUNITY CONSULTATIVE COMMITEE MEETING (CCC)

The CCC was formed to provide a balance of objective discussion of the project and to inform the EIS process. Elgin has viewed the CCC as a highly valuable opportunity to engage with a range of perspectives and share information on how the assessments would occur and what they have found.

There will be one final CCC meeting on ***Tuesday 18th October*** ahead of the EIS submission. All CCC members have been notified of this meeting and further information in relation to the agenda and presentations will be distributed in the near future by the CCC Chair, David Ross.

VISUAL IMPACTS

As stated in our September update, the visual impact assessment considered the:

- Landscape character and scenic vistas in the locality.
- Stakeholder values regarding visual amenity.
- Potential impacts on representative viewpoints, including residences and road corridors.

As the EIS studies are in their final stages, in further analysis and further consideration of mitigation options, we have now updated the visual impact results which are shown below.

The findings continue to find a low impact on the landscape character of the Bathurst Plains. The assessment also considered the values identified by the community and Council, increasing the viewer sensitivity of the Great Western Highway. The assessment concludes there would be no significant impact on the scenic quality and landscape character of Bathurst, with reference to the Transport and Infrastructure State Environmental Planning Policy.

The updated results show:

- A **very low visual impact** on views east bound from the Great Western Highway and **no visual impact** from the Great Western Highway on the approach to Bathurst.
- A **moderate visual impact** on views from Brewongle Lane on day one, reducing to **low visual impact** with the implementation of the landscaping plan.
- **Very low visual impacts** on six surrounding dwellings and **low visual impacts** on three residences on day one. With the implementation of mitigation, this impact would reduce the three residences with a **very low visual impact**.
- **A low glare impact** from one dwelling which would be mitigated by planting on the Project's boundary, once established.

Elgin and NGH have discussed these results with neighbours that participated in the VIA and are currently planning follow up meetings that will occur in October.

TRANSMISSION LINE UPDATE

We have previously discussed with stakeholders that there may be refurbishment works to local transmission lines to enable the Glanmire Solar Farm to connect to the grid. We are pleased to be able to provide you with an update on this matter as a result of Elgin's proactive consultation with Essential Energy, the organisation who would design, assess and commission these works.

As noted previously, Essential Energy confirmed that options exist for the refurbishment/augmentation of existing transmission infrastructure built for 66 kV capacity within existing easements, with the possibility of relocation of a short section of 11 kV line. While details of the refurbishment have not been finalised by Essential Energy, an updated outline of the works is provided below. It is Elgin's current understanding of the options regarding these works, noting:

- Design options exist for several sections of the route.
- Options will involve consultation with affected landowners.
- The final works description is out of Elgin's control and will be developed by Essential Energy.

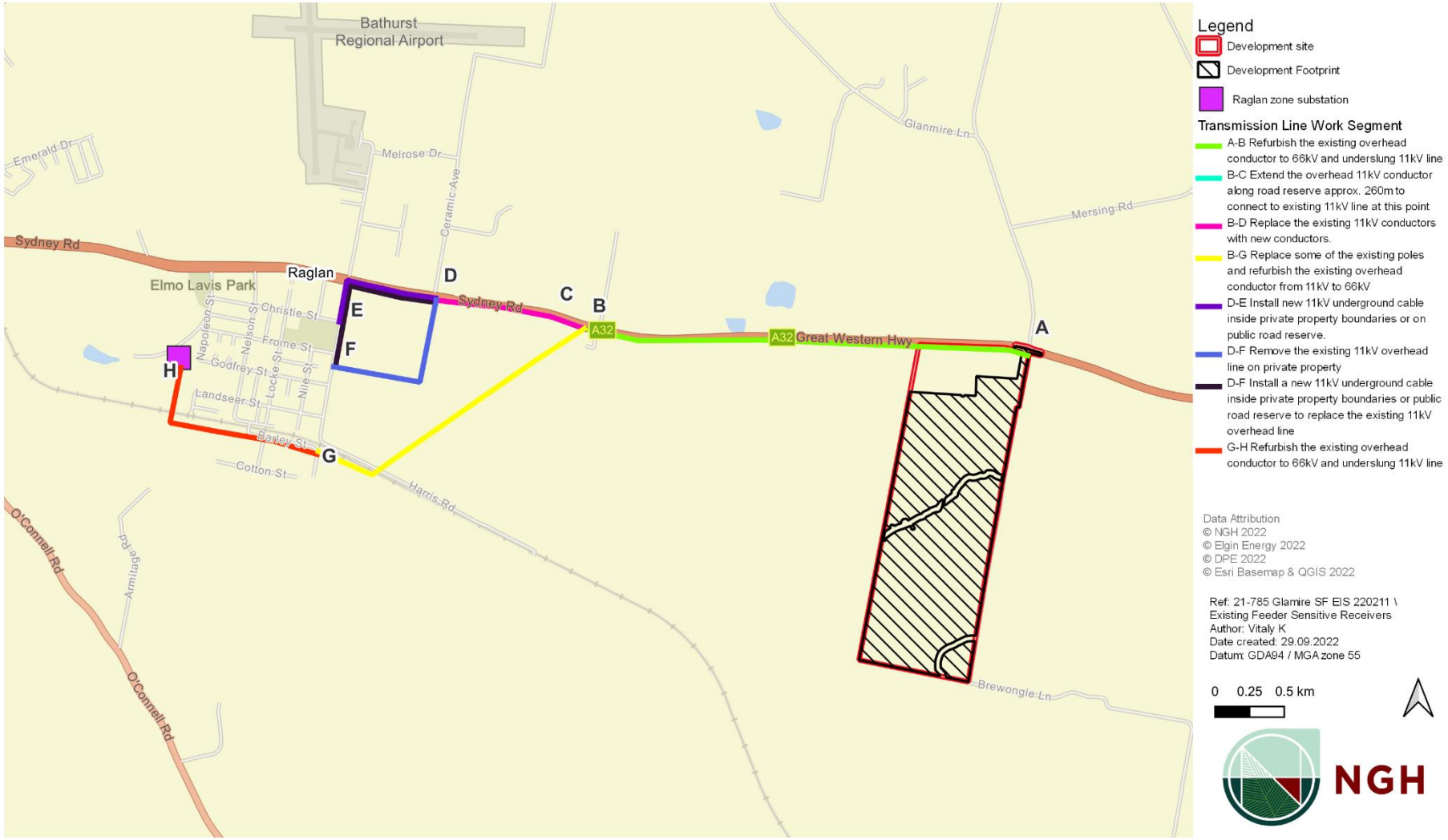
In summary, the works are expected to involve replacing the existing conductors and most of the existing poles on the existing route between the solar farm site and the Raglan substation. A pole height increase of between 2 and 6 metres may be required in some sections. The replacement poles will be made from either wood, steel, or concrete. Other sections of the works may include:

- Conductor replacement, pole top refurbishments and conductor re-tension, removal of redundant infrastructure on the existing route between the solar farm site and the Raglan substation.
- Works within the Raglan 66/11kV Zone Substation including an extension of the 66kV bus bar and upgrade to accommodate 67MW.
- Re-routing the 11kV line either beneath the new 66kV line or by establishing new overhead or underground line routes.

Most works will occur within existing easements and road reserve and the works have been characterised by Essential Energy as likely to have low impacts. The EIS will provide a high-level assessment of anticipated impacts, clearly separating them from the assessment of works within Elgin's control on the solar farm site. They will focus on the more certain sections of the existing route between the solar farm site and the Raglan substation.

To date the assessment has concluded the works would be low risk for aviation (subject to an 18m pole height limit in specific sections of the route), visual and noise impacts, and hazards (such as fire and electric and magnetic fields). In the small sections where works may be undertaken outside existing easements, further heritage and biodiversity investigations would be recommended. There will be a requirement for further detailed assessment under Part 5 of the EP&A Act prior to these works being undertaken.

Elgin remain committed to continue proactive consultation with Essential Energy in order to provide further information to the community as it becomes available.



Above: Likely refurbishment options for the transmission lines connecting to Raglan substation. Note: The solar farm 'development footprint' is defined as the uppermost area of land that would be impacted by the Project including infrastructure, permanent and temporary, as well as areas that will be actively planted in accordance with a Landscape Management Plan.

Section start point	Section end point	Colour on map	Description of the work	Existing
A	B	Green	Refurbish the existing overhead conductor to 66kV and underslung 11kV line	
B	C	Blue	Extend the overhead 11kV conductor along road reserve approx. 260m to connect to existing 11kV line at this point	
B	D	Pink	Replace the existing 11kV conductors with new conductors.	

Section start point	Section end point	Colour on map	Description of the work	Existing
D	E	Purple	Install new 11kV underground cable inside private property boundaries or on public road reserve.	
D	F	Light purple	Remove the existing 11kV overhead line on private property	
D	F	Dark purple	Install a new 11kV underground cable inside private property boundaries or public road reserve to replace the existing 11kV overhead line (co-located with D – E)	

Section start point	Section end point	Colour on map	Description of the work	Existing
G	H	Orange	Refurbish the existing overhead conductor to 66kV and underslung 11kV line	
B	G	Yellow	Replace some of the existing poles and refurbish the existing overhead conductor from 11kV to 66kV	

FIND OUT MORE

We are committed to keep the community informed about the Project and will work to mitigate any issues that may arise.

We look forward to meeting with you in Bathurst in the coming weeks at whatever meeting you may be available to attend.

Should you require further information in the meantime, please contact Bree Schubach from NGH via email at breannah.s@nghconsulting.com.au.

C.5 Fact Sheet

Glanmire Solar Farm

OCTOBER 2022 FACT SHEET

TRANSMISSION LINE UPDATE

The refurbishment of existing transmission lines will be required to ensure that energy from the Glanmire Solar Farm can reach the Raglan substation as efficiently as possible. These refurbishment works will be designed and undertaken by Essential Energy. Elgin Energy has been proactive in undertaking consultation with Essential Energy, and is able to provide an update here on design considerations that have been discussed to date.

Essential Energy has confirmed that options exist for the refurbishment/augmentation of existing transmission infrastructure built for 66 kV capacity within existing easements, with the possibility of relocation of a short section of 11 kV line, and that affected landowners will be consulted on these options.

OUTLINE OF WORKS

The works are expected to involve **replacing:**

- existing **conductors**
- and most of the existing **poles** on the existing route between the solar farm site and the Raglan substation.
- A pole height increase of between 2 and 6 metres may be required in some sections. Replacement poles will be made from either wood, steel, or concrete.

Other sections of the works may include:

- Pole top refurbishments and conductor re-tension
- Removal of redundant infrastructure
- Re-routing the 11kV line either beneath the new 66kV line or establishing new overhead or underground line routes.
- Works within the Raglan 66/11kV Zone Substation include an extension of the 66kV bus bar and upgrade to accommodate 60MW.

Most works will occur within existing easements and road reserve.

Existing conductors may need to be replaced with new conductors as part of the refurbishment works.

Example of an "underslung line".

Questions and feedback

We are committed to keeping the community informed about the Project.

Should you require further information, please contact Bree Schubach from NGH via email at breannah.s@nghconsulting.com.au.

ELGIN ENERGY

Glanmire Solar Farm

OCTOBER 2022 FACT SHEET

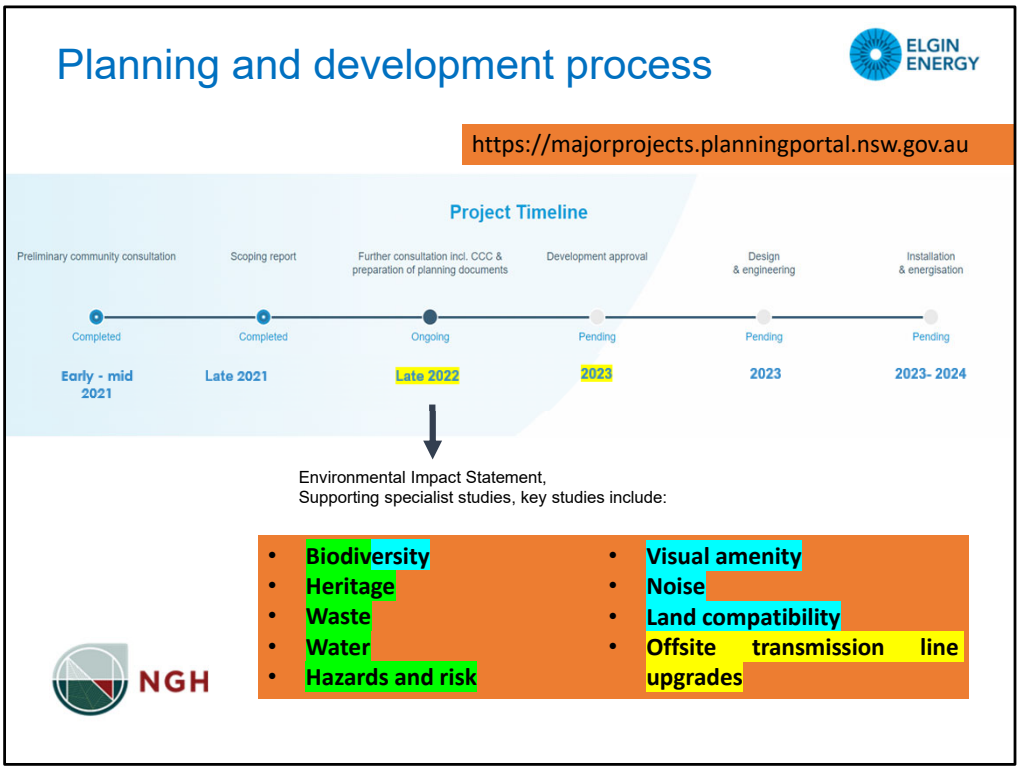
ENVIRONMENTAL RISKS & PROPOSED METHODOLOGY

The table below has been created to develop a high-level assessment methodology for relevant environmental parameters that could be affected by the proposed works. The assessment is mostly focused on the section of the proposed works between the solar farm site and the Raglan substation.

Environmental issue	Sensitivity of receiving environment	Nature and extent of key impacts	Assessment methodology
Aviation impacts	***High*** Located close to Bathurst Regional Airport	***Moderate*** 2 to 6 m increase in pole height on 700 m of existing transmission line route. Small sections of new overhead line (260m).	Desktop assessment of Obstacle Limitation Surfaces (OLS) by specialist.
Amenity impacts: Visual impact on scenic amenity, landscape character, noise impacts	***Moderate*** Sensitivity due to the scenic value of the Bathurst Plains and close proximity to residential receivers for sections of works	***Low*** 2 to 6 m increase in pole height on 700 m of existing transmission line route The removal of existing 11kV overhead line on private property would be a potential improvement to views and the landscape character.	Field work and desktop evaluation to consider impacts.
Aboriginal cultural heritage	***Moderate*** Potential for surface scatters and subsurface artefacts	***Low*** Replacement of around 47 poles in an existing transmission line easement. ***Moderate - High*** Trenching or other soil disturbance outside of existing easements.	Desktop evaluation by specialist.
Historic heritage	***Low*** Number of surrounding listed historic sites	***Moderate*** Trenching or other soil disturbance outside of existing easements.	Desktop evaluation by specialist.
Biodiversity	***Low*** Highly modified grassland	***Low*** Replacement of around 47 poles in an existing transmission line easement. ***Low - Moderate*** trenching or other soil disturbance / vegetation clearing outside of existing easements.	Desktop evaluation by specialist.
Hazards and physical impacts: soil, water, air	***Low*** Existing areas of disturbance, stable, low relief terrain, few close receivers no change in land use.	***Low*** Replacement of around 47 poles in an existing transmission line easement. ***Low - Moderate*** Trenching or other soil disturbance / vegetation clearing outside of existing easements.	Desktop assessment.

C.6 Impact Assessment Update


ELGIN
ENERGY
Glanmire Solar Farm
Impact assessment update
October 2022
www.elgin-energy.com



Update to timing - Draft EIS submitted to DPE informally Friday 7th October to ensure fit for public exhibition. Minor changes expected before exhibition including incorporating Registered Aboriginal Parties input.

Last update to CCC covered

- **Biodiversity**
- **Heritage**
- **Waste**
- **Water**
- **Hazards and risk**

This update will cover

- **Offsite transmission line upgrades**
- **Biodiversity**
- **Visual amenity**
- **Noise**
- **Land compatibility**

Construction phase activities (= impacts)

Site Preparation → Piling → Rack Installation → Module Installation

Cable Installation → Inverter Station → Grid Substation → Testing and Commissioning

- Around 4% of the soil surface would require substantial levels of disturbance.
- Well in excess of 90% of the Development footprint will not be permanently disturbed once post-construction remediation is complete, rather the key impact will be removal of the grazing regime and shading by the ground mounted panels.

| 3

Reminder of my scope: impact assessment
Identify activities first.
For this project key impacts are:
Construction: Soil disturbance for tracks, footings, cut and fill benching for larger infrastructure (BESS and substation)
Visual impacts and noise propagation from equipment including the traffic bringing equipment and personnel to site.
Note the calculations for this site are that this direct soil disturbance will affect about 4% of the site (about 6 ha in total).

Operation & Decommissioning phases

OPERATION ACTIVITIES

- Maintenance of grounds and equipment on site
- Replacements where required
- Ongoing sheep grazing / ground cover maintenance
- Cleaning of the panels using water efficient solutions

DECOMMISSIONING

- All elements of the project can be removed at end of project life (excluding substation and some underground infrastructure, assets that the landowner wants to retain ie tracks)

| 4

Key impacts in operation will be:
Visual and noise amenity – views to the site and noise propagation from equipment
Shading of the areas below the array – all of the panel array area affected to some extent, depending on the row spacing
This is about 90% of the site or 143 ha.

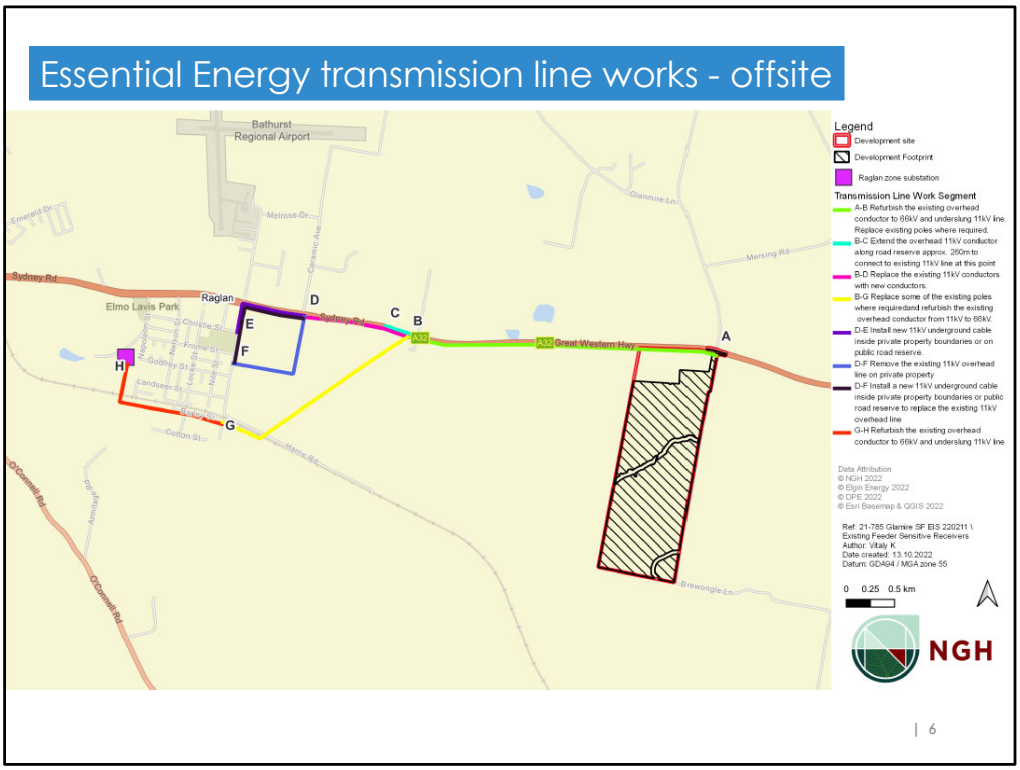
Latest Project updates

1. Essential Energy have provided further information to assist understanding and assessing off **site transmission line augmentation** to connect the project to the grid (more in this presentation)

2. The traffic assessment consultants Amber Organisation has verified **no upgrades are required to the Highway / Brewongle Lane intersection and no sealing of Brewongle Lane is required.** They have stipulated the turn treatment required for the site access off Brewongle Lane – 15m wide all weather access.

3. A **concept landscape plan** has been developed to set out:
    1. Specific locations of plantings
    2. Structure, composition and density of planting

    (provided to key stakeholder and reflected in the indicative infrastructure layout now)



The EIS now includes a high level assessment of Elgin Energy's current understanding of the scope of works required by Essential Energy as part of the detailed Project description in Section 3.2.5. Impacts are assessed separately in an appendix of the EIS and summarised as part of Cumulative Impacts.

Transmission line works description

Extract from Appendix E…High level TX line assessment

*Works are **expected to involve** replacing the existing conductors and potentially most of the existing poles on the existing route between the solar farm site and the Raglan substation.*

*The **existing 15.5–18.5m poles may increase to between 17–20.7m** above ground level, except where aviation constraints limit the poles to 18m.*

*This is a pole height increase of **between 2 and 6 metres**. The replacement poles will be made from either wood, steel or concrete. Around 47 poles are currently located on the existing line.*

Other infrastructure may include:

- *Conductor replacement, pole top refurbishments and conductor re-tension, removal of redundant infrastructure on the existing route between the solar farm site and the Raglan substation.*
- *Works within the Raglan 66/11kV Zone Substation including an extension of the 66kV bus bar and upgrade to accommodate 60MW.*
- *Re-routing the 11kV line either beneath the new 66kV infrastructure or by establishing new overhead or underground line routes.*
- *Telecommunication pathways (diverse paths) to meet the automatic access standard and remote monitoring to AEMO for embedded generation >30MW.*

| 7

- Note uncertainty regarding transmission works
- Most works are within the existing Essential Energy transmission easements but some will involve private land and road reserve.

Transmission line works assessment

High-level (not detailed) **assessment considered appropriate as:**

- Separates works solar farm works from works on Essential Energy assets (required to be done to Essential Energy's specifications)
- This makes clear those issues for which **feedback is sought** from the community (as Elgin Energy cannot commit to implement any actions / safeguards that relate to the Essential Energy assets).
- This is consistent with DPE advice to provide a '**high-level assessment**' of the offsite Essential Energy works.
- Addresses the SEARs, which require '*assessment of the likely impacts of all stages … which is* ***commensurate with the level of impact****…'*
- *Is consistent with the cumulative impact guidance which considers cumulative impacts as '…****the additional impacts arising from further planned or foreseeable future developments…'.***

Transmission line works offsite – assessment methods

Figure 2-2 Example of an 'underslung' line, applicable to Sections A-B and G-H.

Existing environment section B-G

Environmental issue	Sensitivity of receiving environment	Nature and extent of key impacts	Assessment methodology
Aviation impacts	High– located close to Bathurst Regional Airport	Moderate – 2 - 6 m increase in pole height on 700 m of existing transmission line route. Small sections of new overhead line (260m).	*Desktop assessment of Obstacle Limitation Surfaces (OLS) by specialist.*
Amenity impacts: Visual impact on scenic amenity, landscape character, noise impacts	Moderate sensitivity – due to the scenic value of the Bathurst Plains and close proximity to residential receivers for sections of works	Low – 2 - 6 m increase in pole height on 700 m of existing transmission line route The removal of existing 11kV overhead line on private property would be a potential improvement to views and the landscape character.	*Field work and desktop evaluation to consider impacts.*
Aboriginal cultural heritage	Moderate – potential for surface scatters and subsurface artefacts	Low – replacement of around 47 poles in an existing transmission line easement. Moderate-High – trenching or other soil disturbance outside of existing easements.	*Desktop evaluation by specialist.*

| 9

- Some specialist input including biodiversity

Transmission line works offsite – key results

Table 4-1: Risk assessment summary; all works options

Works sections:	A-B; B-G; G-H Overhead lines on existing easement	C-D Replace conductors on existing easement	B-C New overhead line; 260m in road reserve	D-E; D-F Removal of overhead lines / new underground lines
Aviation; key issues include OLS penetration, CASA consultation, Accurate survey information required				
Risk rating	Low impact	Nil	Low impact	Low impact
Mitigation	Pole height limits in specific sections of route likely to be required.	Nil	Pole height limits in specific sections of route likely to be required.	Nil
Amenity impacts (visual and noise impacts; key issues include Landscape character impacts, Management of noise during construction works				
Risk rating	Low	Nil	Low	Low
Mitigation	Standard noise management and complaints management protocols during construction	Nil	Standard noise management and complaints management protocols during construction	Standard noise management and complaints management protocols during construction
Aboriginal cultural heritage; key issues include Sites / values in close proximity to works				
Risk rating	Low	Nil	Moderate without further assessment to these works	Moderate without further assessment
Mitigation	Due Diligence assessment focussed on sensitive landforms within 200 m of waters and a more general assessment elsewhere.	Nil	Due Diligence assessment focussed on sensitive landforms within 200 m of waters and a more general assessment elsewhere.	Due Diligence assessment focussed on sensitive landforms within 200 m of waters and a more general assessment elsewhere.
Historic heritage; key issues include Heritage listings in close proximity to works				
Risk rating	Low	Nil	Low	Low
Mitigation	Avoidance of works near these listings.	Nil	Site survey for any unlisted items	Site survey for any unlisted items
Biodiversity; key issues include Potential to degrade habitat or injure threatened species				
Risk rating	Low	Nil	Moderate without further assessment to these works	Moderate without further assessment
Mitigation	Minimise disturbance of the ground cover, restrict to existing easements	Nil	Survey to validate existing conditions and further assessment	Survey to validate existing conditions and further assessment

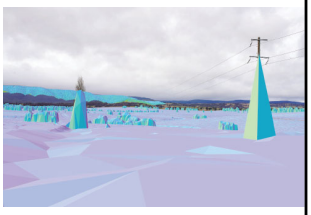
| 10

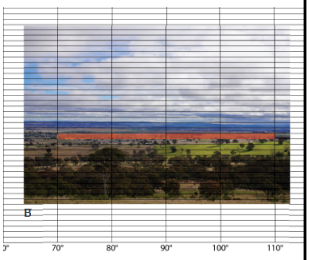
- Aboriginal and biodiversity will require further assessment however for some sections
- Mitigation measures included to guide further assessment and design of works but ultimately the responsibility of EE and their part 5 assessment under EP&A Act.

Visual amenity: landscape and public viewpoints

Key Results

- **Low landscape character impact** – no mitigation required but it is noted the mitigation proposed may locally enhance landscape character due to the revegetation of two streams within the site with riparian vegetation, and the planting of hundreds of scattered trees around the perimeter of the site.
- **Very low visual impact on views east bound from the Great Western Highway** - with mitigation this reduces to no impact in the long term.
- **No visual impact from the Great Western Highway on the approach to Bathurst** - due to set backs and an array exclusion zones proposed.
- **A moderate visual impact on views from Brewongle Lane**, reducing to low visual impact with the implementation of the landscape plan.
- **This Project would not have a significant impact on the scenic quality, visual character and setting of Bathurst.**





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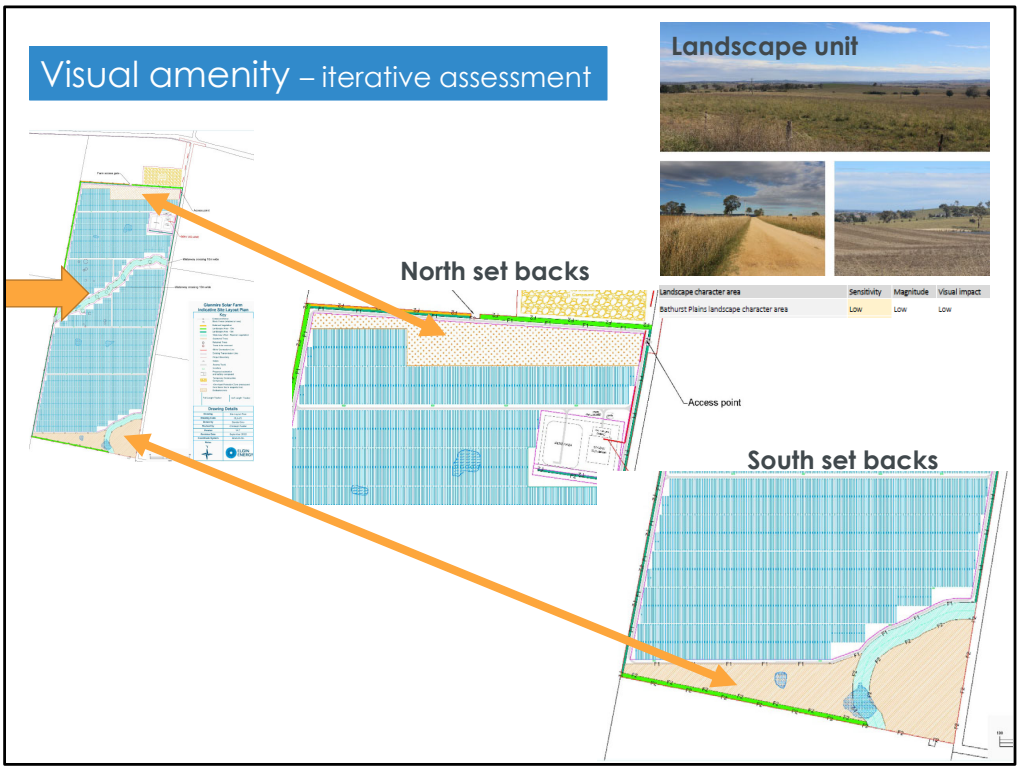
- Methods
  - digital elevation models, model existing and proposed features
  - Standardised guidance on what constitutes low mod high / sensitivity magnitude and impact



Iterative assessment in that the early results were considered

Bathurst plains landscape character area and highway views avoided by:

- Exclusion zones to north of project site
- Perimeter planting in 5-10m wide strips to supplement existing screening
- Riparian enhancement = local improvement in visual character

Visual amenity: highway montage of panels

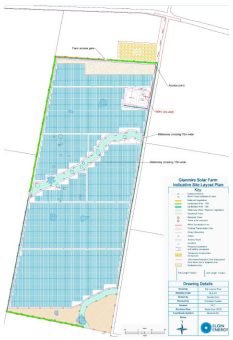


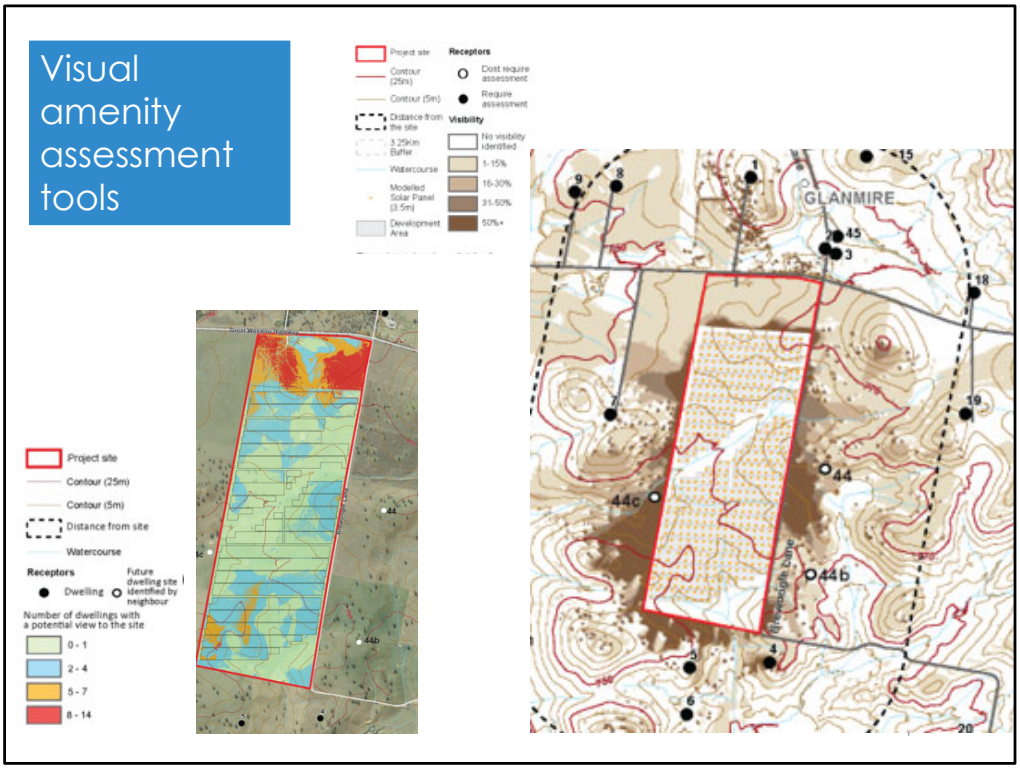
Figure 6-9 View east from the Great Western Highway (day 1; unmitigated)

Brewongle lane – shows clearly low profile infrastructure in a low relief landscape – visible but not dominant (unmitigated). A moderate visual impact on views from Brewongle Lane, reducing to low visual impact with the implementation of the landscape plan

- Perimeter planting in 5-10m wide strips
- Images show, looking south down Brewongle Lane

1. Day one (without mitigation)
2. Medium term (shrubs modelled at 3 metres and trees at 5 metres, about 2–5 years), and
3. Long term (shrubs about 6 metres and trees ranging from 10-20 metres, about 10–15 years).

Visual amenity assessment tools

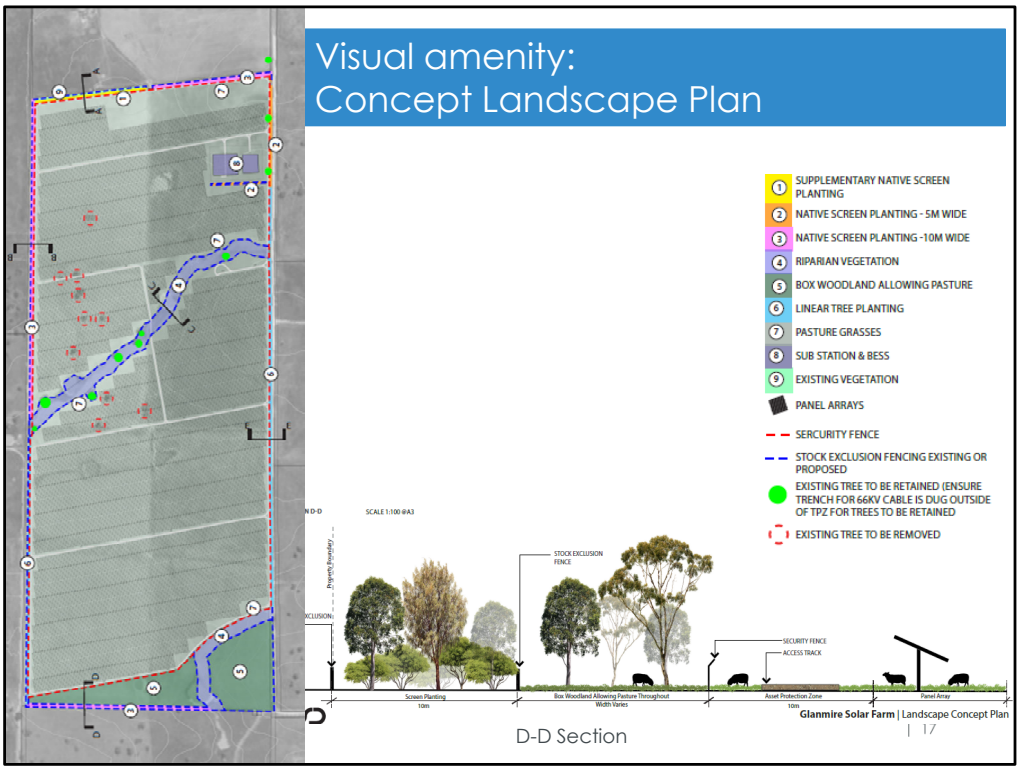


- Lhs – areas of the site visible to most residences
- Rhs – residences shielded by topography (white) or with high potential for views (based solely on topographic modelling)

Visual amenity results for residences

Ref. No.	Property address	Distance to the panel arrays	Identify views to be affected.	From what part of the property are the views obtained.	Visible area of the proposal	Potential impact	Effect of vegetation screening	Potential impact with mitigation
4	264 Brewongle Lane Brewongle	~~215m~~	This property has medium and long-range north, east and south facing views, over undulating rural fields oriented towards the ~~Wiburndale~~ Range and the surrounding hills.	Northwest-facing windows of the dwelling, northern part of the garden, and the driveway.	The solar panels would be set back from the site boundary, over ~~500m~~ away from this dwelling. The southern part of the Project would be seen in northerly views from the dwelling, northern part of the garden and the driveway.	Very low	The vegetation proposed along the southern boundary of the site would further screen the solar farm infrastructure over time.	Very low
5	244 Brewongle Lane Glanmire	~~325m~~	This property has panoramic views over undulating rural fields towards the ~~Wiburndale~~ Range and the surrounding hills.	North-facing windows of the dwelling, northern part of the garden, and the driveway.	The solar panels would be set back from the site boundary, over ~~450m~~ away from this dwelling. The ~~south-eastern~~ part of the Project would be seen in north easterly views from the dwelling, northern part of the garden and from the driveway. The Project would comprise a small part of the panoramic views from this property and would not obstruct views to the ~~Wiburndale~~ Range and the surrounding hills.	Very low	The vegetation proposed along the southern boundary of the site would further screen the solar farm infrastructure over time.	Very low
7	4887 Great Western Highway Glanmire	~~466m~~	This property includes a single storey house, surrounded by mature trees and shrubs in the garden. Although there may be glimpses to northern parts of the site, there is not likely to be clear views to the site from this property due to the intervening vegetation and landform.	Glimpses from east facing windows and veranda of the house, eastern parts of the garden, fields to the east of the dwelling and the driveway. <15% of the Project visible from the house and garden, and up to 30% of the Project potentially visible from the central part of the driveway.	The Project would be glimpsed from the house and garden due to intervening trees and shrubs within the garden and adjacent field. From the driveway a small part of the Project would be visible in easterly views from the central part of the driveway, where there are no trees obstructing views to the site. From fields close to the site, the Project would be prominent.	Very low	The vegetation proposed for the western site boundary of the solar farm would partially screen views to the Project over time.	Very low
44 [13]	*119 Brewongle Lane, future house site*					*Low*		*Very low*
~~*44b*~~	*119 Brewongle Lane, future house site*					*Low*		*Very low*
~~*44c*~~	*4985 Great Western Highway, Glanmire, future house site*					*Low*		*Very low*

- **Residential receivers**
- No existing residence higher than very low unmitigated impact.
- Mitigation is still proposed as a commitment of the project



- DD section shown
- CC shown next

Biodiversity: highly modified vegetation



Most of the Development footprint (approximately 144.7ha) meets the definition of Category 1 – exempt land, as defined in Part 5A of the *Local Land Services Act 2013*.

Not native vegetation	Development footprint area (ha)
Category 1 – exempt land (currently cropped)	78.00
Category 1 – exempt land (previously cropped)	66.77
Exotic vegetation	0.72
Dams	1.11
Existing roads	0.87
Total:	**147.47**

Biodiversity impacts

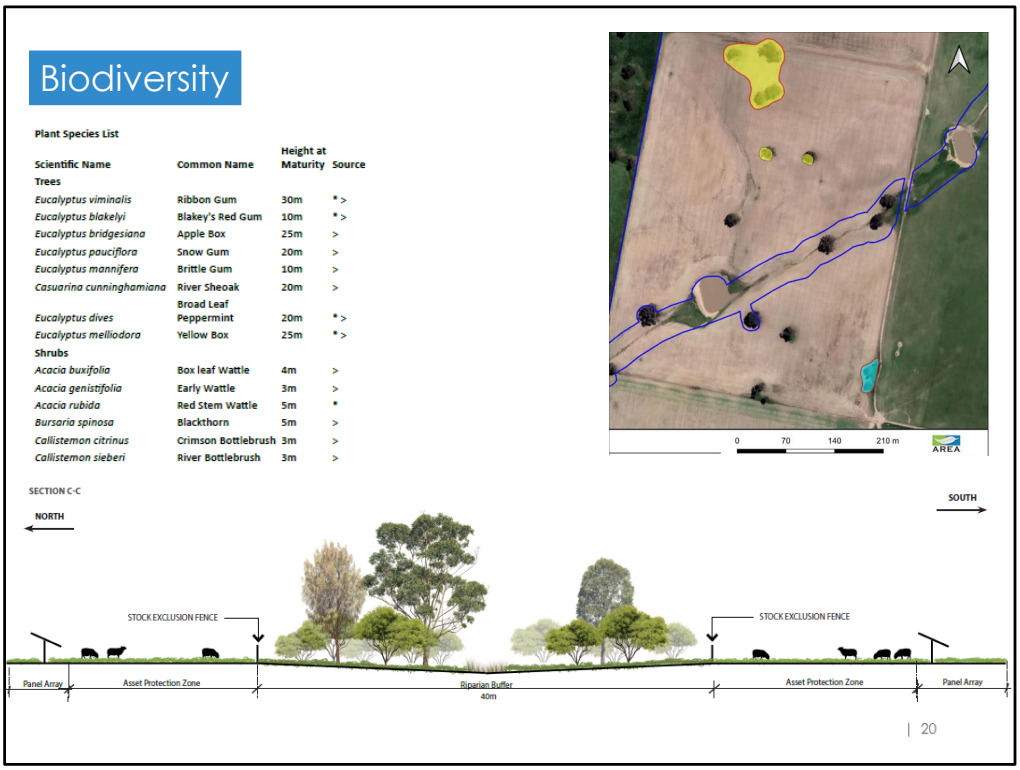
- Up to **0.65 hectares** and **six scattered trees** would be impacted directly. Some trees contain hollows
- Vegetation to be removed is PCT1330 - This PCT meets the definition of the BC Act listed **TEC *White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland* and is also an SAII entity**. These remnants (blue and yellow in top right) are too degraded to generate offsets.
- **Five dams** occur throughout the Development footprint (two in the paddocks north of the waterway, one along the waterway is partially within the Development footprint, and two in the cropped areas south of the waterway).
- This habitat may still provide habitat for flora and fauna,; one **bat and one parrot** which are threatened ' species credit species' generate an offset requirement .

Vegetation zone	PCT name	TEC	Impact area (ha)	Number of ecosystem credits required
Scattered tree assessment	Yellow Box – Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion	*White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions*	N/A – Six trees	6
Common name	Scientific name	BC Act status	Loss of habitat (ha) or individuals	Number of species credits required
Southern Myotis	*Myotis macropus*	Vulnerable	0.18 hectares (species polygon)	1
Superb Parrot	*Polytelis swainsonii*	Vulnerable	0.18 hectares (species polygon)	1

| 19

Offset requirement for:

- Scattered trees and 2 species.
- The native vegetation remnant integrity is too poor to generate an offset requirement
- No formal onsite offsets are proposed (Stewardship site). The credit obligation will likely be paid out directly to the Biodiversity Conservation Trust, as it is small.



Enhancement opportunities in drinking water catchment (CC section)

- The riparian area is all exotic
- The landscape plan proposes to restore native riparian planting to benefit biodiversity and water quality (extracts provided)
- The southern set back planting (DD) also provides more significant area of enhanced habitat.

Aboriginal heritage

A total of two Aboriginal sites have been recorded during the archaeological survey:

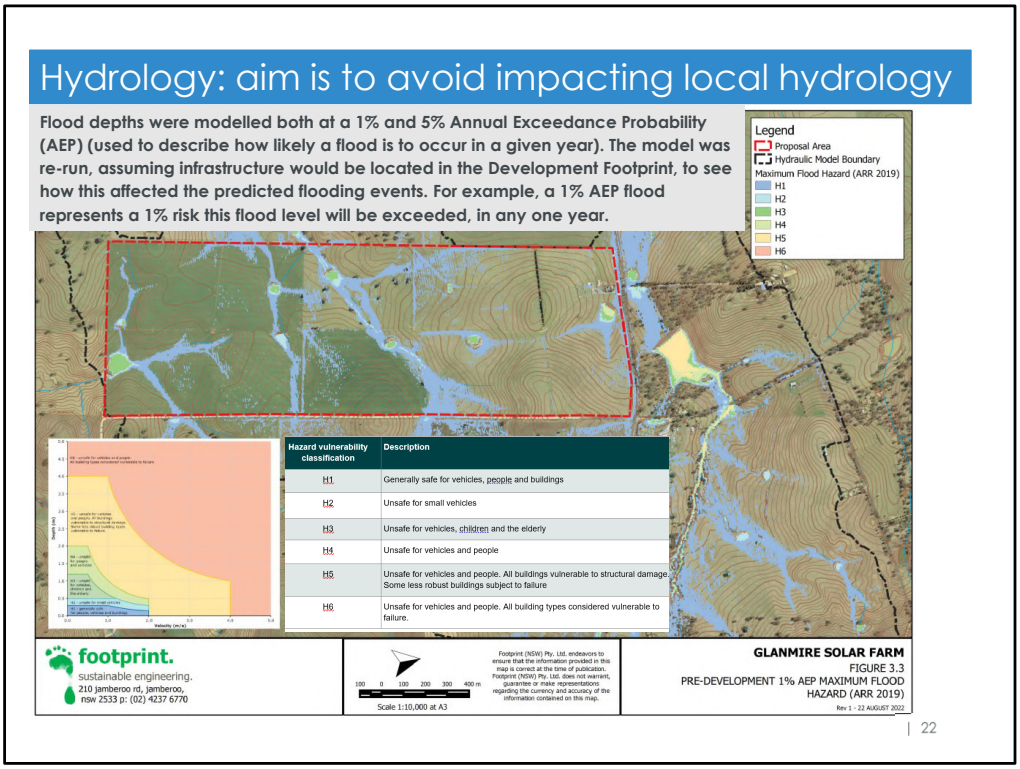
- Glanmire-CMT-01, a culturally modified Yellow Box tree located 10m from drainage line will be avoided.
- Glanmire-ISO-01, an isolated Quartz flake in a disturbed ploughed location will be moved an exclusion zone and protected from further impacts.
- *Results pending comments by RAPs.*

Table 6-14 Summary of Impacts to Aboriginal heritage under the current form of the proposal

Development footprint site ID	Impact unless managed	Effect of proposal on significance	Actual impact with implementation of the mitigation measures
Glanmire-ISO-01	Direct	Total	Total loss of value
Glanmire-CMT-01	Indirect	None	No loss of value

| 21

- Report is reviewed by Registered Aboriginal Parties and then exhibited a part of EIS



Hydrology – aim is to ensure no effect on local hydrol / erosion

we usually undertake this in 2 stages

1) model catchment's run off as it is, to consider flooding hazard to manage

- Safety of people and assets
- Local hydrology (looking to retain not change this)
- No concentrated run off which may exacerbate erosion

The layout is developed to reflect this mapping, then:

2) model catchment's run off <u>assuming the infrastructure is present</u> to:

- verify the impacts are acceptable ie not change to local hydrology or increased erosion potential

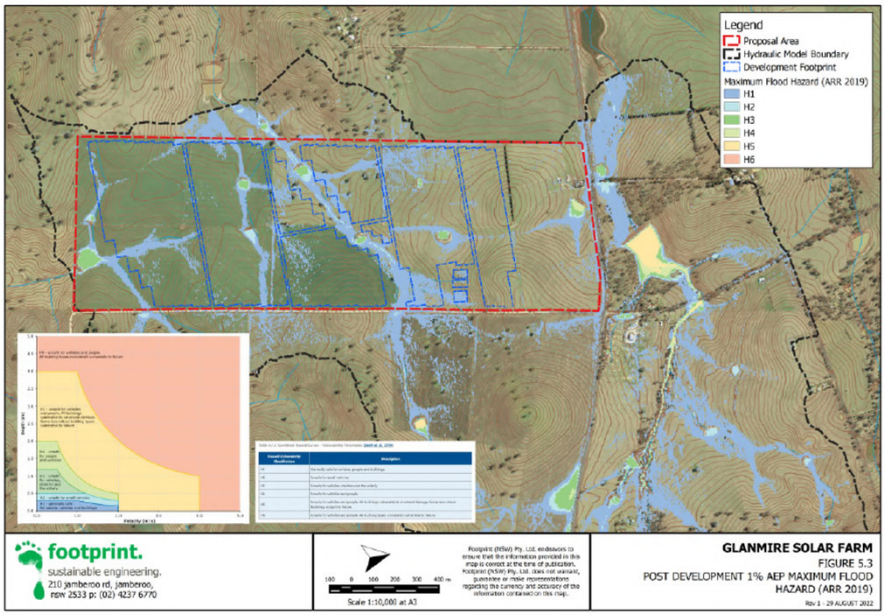
Other considerations:

- Water quality - factor of soils and hydrology studies, standard set backs applied to waterways based on size
- Water requirements – for concreting, dust suppression, cleaning
- Water sharing / sourcing options – was very significant during drought

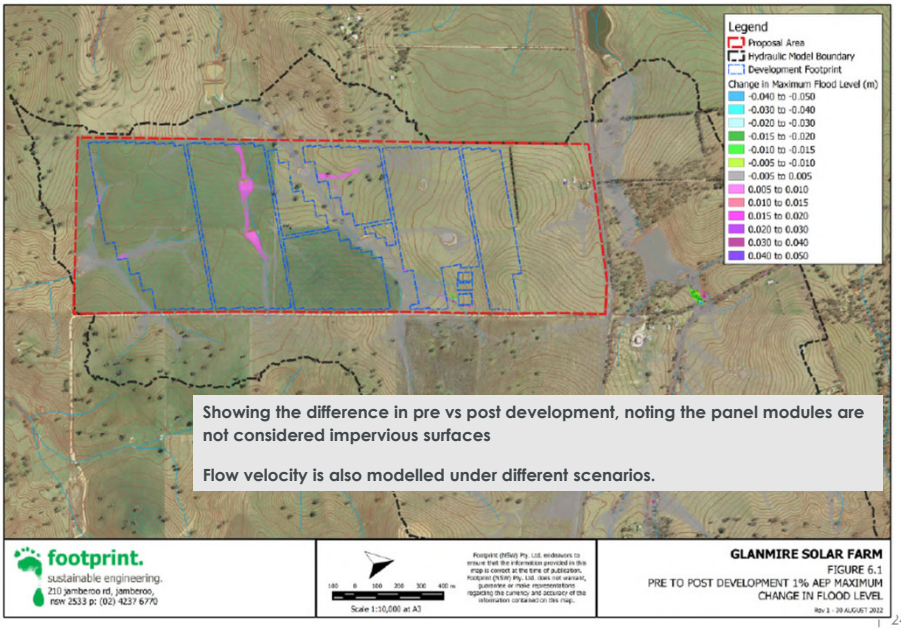
1. Note: *It is a common misconception that solar panel arrays result in an increase in imperviousness and therefore generate addition runoff.*

   This can be explained as follows: When viewed in isolation the ground surface area under each panel will theoretically not be able to accept runoff from that panel and will therefore not have an opportunity to infiltrate that runoff. However, as the solar panels are proposed to be arranged in linear arrays separated by a distance of 6m, runoff from upslope panels will run under immediately downslope panels thereby affording the opportunity for infiltration under each panel (as demonstrated in Figure 1), with the exception of those panels which are most upslope (i.e. only the highest row of panels).

   Therefore, when viewed as a whole, the ground surface area underneath the solar panel arrays available for infiltration is almost identical to that which currently exists and therefore any increase in runoff from the site for the arrays would be negligible.


Legend
Proposal Area
Hydraulic Model Boundary
Development Footprint
Maximum Flood Hazard (ARR 2019)
H1
H2
H3
H4
H5
H6
footprint.
sustainable engineering.
210 jamberoo rd, jamberoo,
nsw 2533 p: (02) 4237 6770
Scale 1:10,000 at A3
GLANMIRE SOLAR FARM
FIGURE 5.3
POST DEVELOPMENT 1% AEP MAXIMUM FLOOD
HAZARD (ARR 2019)

The **change** due to the project is shown



24

Change due to project

The flood level, depths, velocities and hazards remaining largely unchanged. Velocities over the Project site are shown to be contained in the range of plus or minus 0.25m/s when compared to pre-development velocities and therefore, would not result in any adverse impact to the stability of the bed and banks of existing waterways or contribute to degradation of the land by erosive flood forces. Other scenarios are also run but this is a brief summary of the full assessment.

Land use compatibility

- Soil properties and risks, including a slope analysis, to verify the local terrain on the site.
- Soil surveys, to verify the physical parameters of the subject land:
  - 14 sites in total were surveyed in accord with the Interim *Protocol for Site Verification and Mapping of Biophysical Strategic Agricultural Land* (OEH 2013).
  - Laboratory analysis undertaken for four sites to ascertain the Australian Soil Classification (Isbell, 2021) soil taxonomic class and enable land and soil capability classification. Parameters analysed included pH, electrical conductivity, cation exchange and exchangeable cations (a measure of nutrient status and physical properties such as dispersion and water movement).
- Land and Soil Capability (LSC), including:
  - Verification of the LSC Class based on soils surveys, in accordance with the Land and Soil Capability Assessment Scheme; Second Approximation (OEH, 2012).
  - BSAL verification in accordance with the *Interim Protocol for Site Verification and Mapping of Biophysical Strategic Agricultural Land* ((OEH, 2013).
- A Land Use Conflict Risk Assessment (LUCRA) in accordance with the Department of Industry's Land Use Conflict Risk Assessment Guide (DPI, 2011).
- An Agricultural Impact Assessment to assess the potential impacts on agricultural resources and industries within and surrounding the site.

Complex combination of issues covered in this chapter.
Note key piece of misinformation early in the assessment is the existing desktop mapping of land and soil capability, now verified by soil surveys.

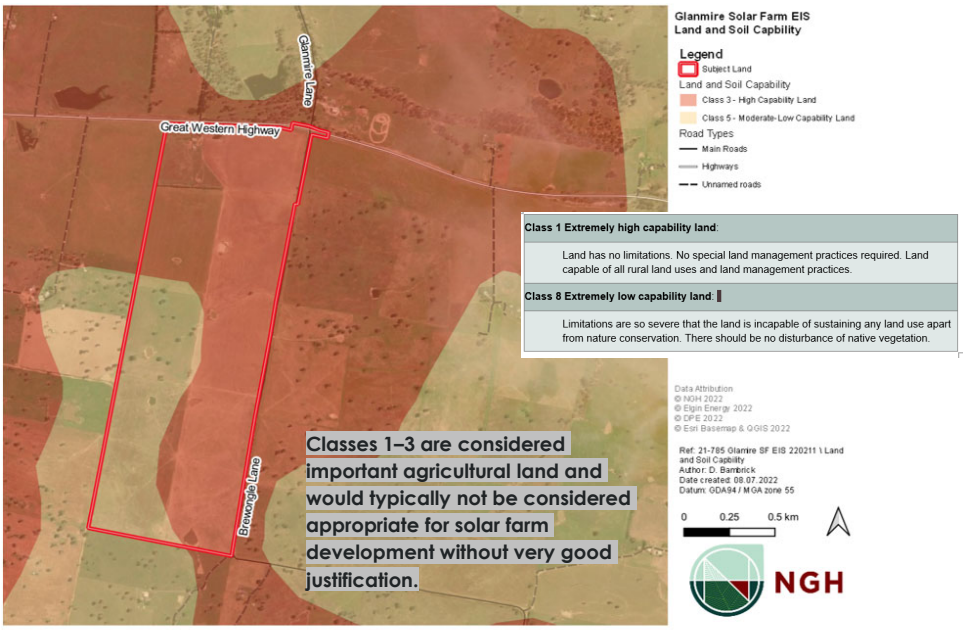
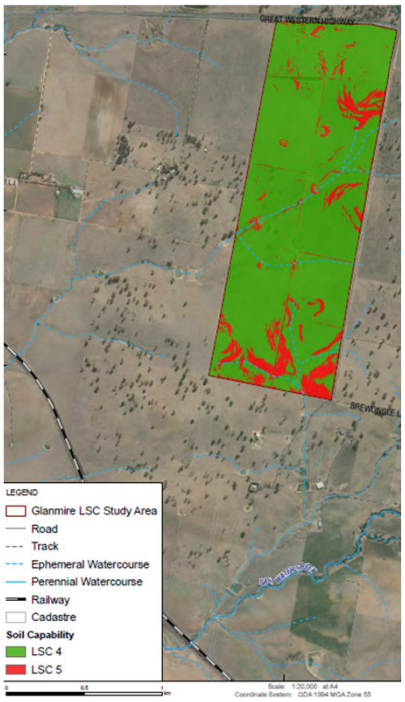


Figure 6-33 Land and soil capability mapping of the Subject land and surrounding areas, using only desktop mapping resources.

Desktop sources show the site is mostly class 3.

Based on soil surveys onsite and using conservative application of the Land and Soil Capability Assessment Scheme: Second Approximation (OEH, 2012).

- All sites within the Subject land were classified as LSC Class 4 (172 ha), with the exception of areas with 10% or greater slope, which were classified as LSC Class 5 (14 ha).
- **LSC Class 4** is considered to have moderate agricultural capability with moderate to high limitations for high-impact land uses which restrict land management options for regular high-impact land uses such as cropping, high-intensity grazing and horticulture. LSC **Class 4 is associated with the Sodosol on areas of less than 10% slope and comprises 92% of the Subject land.**
- **LSC Class 5** is considered to have moderate-low agricultural capability and has severe limitations for high impact land management uses such as cropping. This land is generally more suitable for grazing with some limitations or very occasional cultivation for pasture establishment. **LSC Class 5 is associated with the Sodosols found on areas of greater than or equal to 10% slope and comprises 8% of the Subject land.**



Ground truthed refined mapping superseded this and is site specific modelling
Class 4 appropriate as its stable and able to rehabilitate well but not prime agricultural land.
Note the project is highly reversable given the limited areas of actual soil disturbance

- **Around 4% of the soil surface would require substantial levels of disturbance (~ 6ha).**
- **Well in excess of 90% of the Development footprint will be remain as pasture for the life of the Project, once post-construction remediation is complete (~143ha).**

Land use compatibility

In summary, highest potential for conflict was seen for

Agricultural conflicts:

- The continued agricultural use on the Subject land during the life of the Project. This is not considered a conflict at a local rural economy level, only for the one landowner who will be compensated by their involvement in the Project.
- No impact on adjacent agricultural operations is likely; either to the agricultural equipment, activities or soil capability. **The impact on the local agricultural economy is deemed negligible.**
- The construction phase and operational phase fire risks require careful management in the design as well as through the life of the Project.
- Construction risks to soil and water are noted but considered highly manageable and likely to be offset by longer term benefits of less intensively worked land in operation.

Rural residential conflicts:

- Traffic disruption, dust and noise may affect nearby residents temporarily, during peak **construction.** These are considered manageable. – see traffic , air quality, noise chapters.
- **Operational views from** dwellings may reduce enjoyment of these areas. Screening is able to mitigate impacts to an acceptable level. – see visual chapter

Complex combination of issues covered in this chapter.

Land use compatibility

Regional growth conflicts:

As it is not located in a residential expansion zone, operational views from the only relevant regional vista, the Great Western Highway / eastern entrance to Bathurst, may affect landscape scenic value. Project set backs / exclusion zones and screening are able to mitigate impacts to an acceptable level. – see visual chapter

Table 6-17 Quantitative LUCRA risk rating matrix.

Traffic light matrix; high (red), moderate (orange), low risk (green)

Probability	A Almost certain	B	C	D	E Rare
Consequence					
1 Severe	25	24	22	19	15
2	23	21	18	14	10
3	20	17	13	9	6
4	16	12	8	5	3
5 Negligible	11	7	4	2	1

Highest mitigated risk was potential to exacerbate bushfire risks; 10.

All others were 6 or below.

Complex combination of issues covered in this chapter.

Noise amenity: models worst case and works back from there

Construction noise

- Model using the 3 loudest plant and equipment operating concurrently.
- Noise emissions may exceed the nominated criteria at when operating within **700m of four dwellings**.
- Safeguards and mitigation strategies are provided to limit the potential impact of the noise generated by construction activities to acceptable levels.

Vibration, operational noise and road traffic noise

- Expected to comply at all receivers. An indiscernible exceedance of 1dB(A) was predicted at a possible future residential location.
- With the implementation of specific measures, the impacts to comply with the relevant criteria at all existing are considered manageable.

| 30

- As for visual , the EIS is not required to assess impacts at unapproved , future dwellings but this has been included here to provide clarity around this issue for neighbours of the site.

Where to now?

The Glanmire Solar Farm EIS has concluded that the project proposed **meets all relevant planning provisions and guidelines and is considered justifiable and acceptable on its merits**. The Project is considered appropriate to the:

- Site's location, where it will supply nearby population centres with renewable energy to assist the transition away from coal generated electricity.
- Site's environmental values, where it has demonstrated key values can be retained or improved in the long-term, specifically:
  - **Soil heath and agricultural productivity.**
  - **Riparian vegetation and water quality, in this drinking water catchment.**
  - **Landscape character.**

1. **During the public exhibition of this EIS, the community, local council and government agencies are invited to make informed submissions in relation to the Project.**
2. **The consent authority will consider all formal submissions made during the exhibition period.**
3. **Elgin Energy's response to all matters raised in submissions will also be exhibited as the Department of Planning and Environment commence preparation of their own assessment of the Project's impacts and its merits and make a recommendation regarding its ability to be approved.**

| 31

- Longer process if more than 50 unique objections – determination made by Independent Planning Commission in this case.