

Kabanka Pty Ltd

Environment Management Plan

Wujal Wujal Solar Farm

September 2026

environment PACIFIC

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1. Introduction

1.1 Project Background

Jabalbina Yalanji Aboriginal Corporation has received funding under the community Commonwealth Disaster Ready Fund to be administered under the Qld Reconstruction Authority (QRA) for the construction and operation of a 0.95MW solar farm and ancillary pad mounted energy storage device. The project will be operated by Kabanka Pty Ltd, which is owned by Ngujakura Power Pty Ltd, a subsidiary of Jabalbina Yalanji Aboriginal Corporation's commercial entity, Ngananga Dajiway Pty Ltd.

The project delivers solar and battery infrastructure that will provide community-wide back-up power when the Ergon network connection is compromised during disaster events. The solar and battery generation site will be connected to the Ergon 22 kV high voltage line to provide redundancy backup power to the Wujal Wujal and Degarra communities. The project will span 30 years and all maintenance, risk management, materials, equipment, replacements, insurance and works on the site will be the responsibility of Kabanka Pty Ltd.

Supplying continuous power to the communities during disaster events will ensure provision of essential services, telecommunications, food supplies, emergency housing and reduce the need for mass evacuations.

1.2 Development Overview

Table 1 Project Features

Solar farm output	Maximum instantaneous output approximately 0.95 MW; approximately 0.957 MWp DC modules and 0.88 MWp AC string inverters in the supplied technical design.
Energy storage	Small-scale ancillary pad-mounted energy-storage device below the applicable 15 m² planning threshold. The selected technical design is a single containerised LFP unit with integrated battery management, cooling, multi-sensor detection and aerosol total-flooding suppression.
Electrical equipment	Control room / PCS / microgrid controller and SCADA, 22 kV RMU kiosk, two 1 MVA dry-type power transformers, and a sealed-oil neutral earthing transformer energised during islanded operation.
Grid connection	Connection to the existing Ergon/Energy Queensland 22 kV network by a short new overhead reticulation section and associated grid assets (Ergon assets).
Fire-fighting water	Two dedicated static tanks of 10,000 L each, providing a total reserved firefighting supply of 20,000 L, with appliance-accessible connection points and hardstand.
Occupancy	Normally unattended / remotely operated. Operational attendance is intermittent for inspection and maintenance. Construction occupancy will be higher and controlled through the construction emergency plan.

1.3 Location

The project is located within a 4.062ha lease within Lot 9 RP903516 Cape Tribulation–Bloomfield Road, Degarra QLD 4895, within Douglas Shire. The lease occupies the south-eastern part of the lot and has approximately 304 m frontage to the road. The solar farm development footprint is approximately 0.91 ha and is centred near latitude 15°56.97′S, longitude 145°19′55.46″E. (see Figure 1).

Figure 1 Overview of lease and development footprint



1.4 Purpose of this Environment Management Plan

The purpose of this EMP is to enable Kabanka Pty Ltd, and subsequently the Project Construction Manager (not yet appointed but designated as PCM in this EMP) to fulfil their environmental duty-of-care obligations with respect to the i.e. construction of the solar farm and ancillary infrastructure. This EMP addresses environmental requirements for the project which includes the solar farm site, over which Kabanka has secured a lease and the connection between the solar farm and the proposed Ergon connection point which is through land the property of the Wujal Wujal Aboriginal Shire Council.

This EMP will outline how activities associated within the solar farm generation site and the connection between the solar farm and the Ergon connection point will be managed to minimise potential harm to

surrounding and receiving environments. This EMP will apply to all aspects of the project construction. A detailed construction specific EMP (C-EMP) is to be prepared by the Project Construction Manager (PCM), based on the framework of this EMP.

The aim of this EMP document is to identify and assist in the implementation of:

- Effective and efficient environmental management throughout the construction/operational phases for Kabanka and the PCM.
- Provide a framework for the Construction Contractor to prepare a site-based C-EMP specific to their proposed approach to construction.
- Compliance with all regulatory requirements, including those for fulfilling conditions issued under the Douglas Shire Council Planning Scheme (2018) Queensland *Planning Act 2016*, and any other relevant legislation/permit or authority issued for the project.
- Identify practical and achievable Environmental Management Strategies for implementation in this project, to have comprehensive monitoring, auditing, reporting and control of site impacts during construction of the various Wujal Wujal solar farm project components, including connection to the Ergon 22kV network.

This EMP contains:

- Background and details of the works to be undertaken.
- Requirements and compliance measures as required under legislation.
- Kabanka and the PCM Environmental Obligations.
- Environmental Elements to be included in the final C-EMP for the construction component of the Wujal Wujal solar farm project.

2. Roles and Responsibilities

2.1 Responsibility Hierarchy

To achieve the overall objective of sound environmental management and construction works with the least possible impact on the environment, a clear implementation and management structure is required.

The following section provides an overview of the Contractors minimum implementation structure for the project relating to environmental responsibilities. Specific roles and responsibilities shall be included in duty statements and contracts between Kabanka and contractors.

Identification of the hierarchy is presented below, with details on roles and responsibilities following.

2.2 Project Manager

Kabanka Pty Ltd are the overall Project Manager for the Wujal Wujal solar farm project and are the project proponents and applicants for all regulatory requirements. DSC are trustees for the Cape Tribulation – Bloomfield Road. Kabanka hold a lease over the solar farm site with entire responsibility for all works within this area.

- Kabanka Pty Ltd are a registered entity subsequently hold ultimate responsibility for the performance of the environmental outcomes of the project as holders of the relevant permits/approvals.
- As project proponents and holders of the permits/approvals, Kabanka are responsible for providing annual return information on permits and approval conditions, including notification of incidents, mitigation/remedial measures employed and any other regulatory information required by permit conditions.
- Kabanka are the primary point of contact for any regulatory requirement, including notification to agencies, of any environmental aspect that has, or has the potential, to have significant adverse impacts on the environmental values of the area.
- Kabanka are required to comply with any notification and cultural heritage engagement requirements under the *Aboriginal Cultural Heritage Act 2003.*
- Kabanka are responsible for negotiation, identification and settlement of all approval conditions for the project as Douglas Shire Council.
- Kabanka will review and approve the final Construction Environmental Management Plan in accordance with approval conditions for the project as set by Douglas Shire Council.
- Kabanka (and/or their contractors) are to include a Traffic Management Plan in the final EMP for the project.

2.3 Project Construction Manager

An overall Project Construction Manager (PCM) has not yet been appointed by Kabanka (as the overall Project Proponent). The PCM shall maintain ultimate responsibility for the provision of suitable resources (e.g. financial, personnel, etc.) to ensure that construction works comply with all applicable legal requirements and best practice. PCM shall support all project personnel in the development and implementation of this EMP. The PCM may delegate responsibilities to appropriately qualified personnel where appropriate.

PCM responsibilities include (but are not limited to):

- Obtain any other civil approvals from the relevant regulatory agencies and ensure that all personnel operate in accordance with the EMP, approvals and legislative requirements.
- The above requires the following:
  - Review and submission of the ESCP to Kabanka prior to construction
  - Preparation of a Traffic Management Plan to provide to Kabanka prior to mobilisation
- Update this current EMP with conditions as may be issued on approvals and submit to Kabanka for review and approval. This is to include a final Erosion and Sediment Control Plan based on construction methodologies and permit/approval conditions (as above).
- Enact all requirements of the Bushfire Hazard Management Plan throughout all phases of construction.
- Ensure that all construction personnel are familiar with the EMP and Bushfire Hazard Management Plan and are aware of their environmental responsibilities.
- Ensure necessary guidance and advice is provided to all personnel with regard to environmental management requirements.
- Ensure staff are appropriately qualified and trained regarding the requirements and responsibilities of the EMP.
- Provide for a site induction (which includes environmental responsibilities) that is mandatory for all staff and contractors.
- Ensure that all relevant licenses/permits/approvals are in place prior to any works being undertaken (if required).
- Monitor and review (where required) environmental performance during construction works of the project.
- Where necessary, coordinate and/or assist in the response to environmental incidents through implementation of corrective actions.
- Report environmental incidents to Kabanka, and the relevant Administering Authority, including, DSC and DETSI/QPWS where incidences are of an immediate and significant threat to environmental values.
- Record and maintain a database detailing environmental incidents and non-conformances including corrective actions taken.

2.4 Project Site Supervisor

The Project Site Supervisor (PSS) may be Kabanka or a suitably qualified nominated Contractor. The Project Site Supervisor is responsible for

- Implementing and complying with this EMP, any regulatory approval conditions, Australian Standards and any relevant Code of Practice and/or Industry Standard.
- Provide a site induction (which includes environmental responsibilities) to all staff involved in construction works.
- Day to day waste management, including provide portable toilets onsite (if required) and ensure that maintenance and disposal of waste is conducted by a licensed contractor as required.
- Monitoring requirements as may be established as a Management Plan element of this EMP, including day-to-day inspections of ESCP provisions, audits and any other regular periodic inspections or assessments as required in this EMP and as conditions on approvals/permits.

- Ensure all vehicles arriving onsite utilise the designated entry/exit points and parking area.
- Ensure that all equipment is fuelled, maintained and 'fit for purpose' for the required task prior to arriving at the site.
- Notify Kabanka of environmental incidents and corrective actions taken (if any).

2.5 All Staff and Subcontractors

All staff and subcontractors are responsible for ensuring they comply with the EMP, their General Environmental Duty (GED) and Duty to Notify in accordance with the *Environmental Protection Act 1994* (EP Act) as detailed below.

2.5.1 General Environmental Duty

Section 319 of the EP Act states that every person has a GED. This GED requires that a person must not carry out an activity that causes or is likely to cause environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm. In deciding measures to be undertaken to fulfil the GED the following must be considered:

- The nature of the harm or potential harm
- The sensitivity of the receiving environment
- The current state of technical knowledge for the activity
- The likelihood of successful application of the different measures that might be taken
- The financial implications of the different measures as they would relate to the type of activity.

Compliance with the GED may be a defence to offences related to causing unlawful environmental harm. If defendants can show that the harm happened while a lawful activity apart from the EP Act was being carried out and they fulfilled their GED, then they cannot be found guilty of causing unlawful environmental harm.

2.5.2 Duty to Notify

Section 320 of the EP Act requires that on becoming aware of serious or material environmental harm being caused by an activity that they are involved in, a person has a duty to report that harm, unless the harm is authorised by the Administering Authority (i.e. is undertaken in accordance with an approval or condition of a permit/licence). This is the duty to notify environmental harm. For the Wujal Wujal solar farm project the Administering Authority is the Douglas Shire Council. Failure to fulfil this duty is an offence and can lead to prosecution.

2.6 Key Contact Information

The Project Construction Manager is to maintain a contact register for the key organisations/personnel involved in the project, emergency contact details and key environmental contacts. Environmental contacts should include (but not be limited to):

- Douglas Shire Council: (07) 4099 9444
- Wujal Wujal Aboriginal Shire Council (07) 4083 9100
- Kabanka Pty Ltd (+61) 412 639 861.
- Department of Environment, Tourism, Science and Innovation (DETSI) pollution hotline: 1300 130 372
- Queensland Parks and Wildlife Service (Cooktown): 13 74 68
- Jabalbina Yalanji Aboriginal Corporation (representing Eastern Kuku Yalanji): (07) 4098 3552
- FNQ Wildlife Rescue: (07) 4053 4467 (for reporting injured or orphaned wildlife).

3. Environment Management Plan Implementation

3.1 Environmental Obligations

Kabanka, the PCM, contractors and all entities associated with the construction of the solar farm will implement and foster environmentally responsible management of their activities and will comply with all relevant regulatory requirements, policies and permit approval conditions. The appointed PCM will be responsible for ensuring all subcontractors and employees similarly comply with all aspects of their environmental management obligations. An Environmental Policy is to be developed for the Wujal Wujal solar farm on the following basis.

3.1.1 Environmental Policy

The purpose of the environmental policy is to provide a framework for:

- Complying with all relevant legislation, regulations and policies.
- Improving environmental performance.
- Meet and strive to exceed the minimal acceptable requirements of the EP Act in its management of activities in relation to the environment.
- Requires all those who access project work areas for construction or auditing purposes to meet the minimal requirements in the treatment of the environment within and about the works site.
- Implements and maintains environmental review procedures.
- Establishes a framework where all activities, current and proposed can be assessed against minimum environmental requirements, ensuring that those requirements are met on a consistent and sustained basis.

Kabanka (and the PCM) will ensure that all employees contractors are aware of the policy and the commitment to the environment.

3.1.2 Environmental Objectives

Environmental objectives of this project are to:

- Ensure that all activities comply with this EMP.
- Minimise impacts from the on-site activities to receiving environments.
- Provide an appropriate level of environmental management for their own activities and all subcontractor activities.
- Raise staff awareness of the importance of implementation of this EMP.

Kabanka and the PCM Policies (when available) are to be appended to this EMP.

3.2 EMP Requirements

3.2.1 Training, Awareness and Competence

All personnel involved in construction works will be required to be formally briefed before commencing any work at the site. The induction is to specifically emphasis conditions on regulatory approvals and permits that are applicable to their area of works. The environmental component of the brief shall include (but not be limited to) the following items:

- All staff to be made aware of their General Environmental Duty and Duty to Notify responsibilities as per the *Environmental Protection Act 1994* and the implications of failing to fulfil these duties.

- All staff are to be made aware of the conditions of approvals from regulatory agencies in respect to undertaking their works, and the conduct of project construction generally.
- All staff to be made aware of their environmental responsibilities under this EMP in relation to implementing mitigation measures, reporting environmental incidents and complaints and implementing corrective actions.
- All staff to be given instructions on environmental emergency response procedures (i.e. spill kit locations and usage).
- All staff are to be inducted into the Bushfire Hazard Management Plan and be aware of emergency response procedures relevant to bushfire hazard.
- All tasks are to be reviewed with consideration given to changes to construction works, such as the weather, which may cause the proposed activities to impact on the environment.
- All staff to be aware of protocols of interactions with wildlife particularly snakes that may be present on the site.
- All staff to be aware of and have been given specific instruction with respect to traffic management and the Traffic Management Plan (TMP).

3.2.2 Records

All records shall be retained as a hard copy and electronically by Kabanka. It should be noted that records may be audited and any time, and any/all records be made available as requested by regulatory agencies. The records should include the following:

- Briefing notes, inductions, and any specific environmental training records.
- All records pertaining to any conditions under the Development Permit to be issued by Douglas Shire Council, including this EMP, and any conditions from any other regulatory agency on approvals.
- All records pertaining to agreements and conditions reached with Douglas Shire Council, including conditions on development and operational works approvals.
- Monitoring records and external environmental reports, which can be audited and/or requested by regulatory agencies at any time.
- Environmental incidents, complaints and non-conformances, and corrective action reports.
- Records shall also be made available to Kabanka as requested. All records shall be kept for a minimum of five years or as required by relevant third-party approval conditions.

3.2.3 Incident Reporting

All environmental incidents from site activities must be reported to Kabanka in the first instance, unless the instance constitutes a notifiable incident under the *Environment Protection Act 1994* (e.g. major hydrocarbon spill) in which case the DETSI Pollution Hotline on 1300 130 372 is be contacted the same time as reported to Kabanka. Examples of environmental incidents to be reported include the following:

- Fuel, oil and/or hydraulic oil leakages/spills (minor only and non-notifiable)
- Fire and/or explosions.
- Unearthing/disturbance of historical or indigenous cultural heritage.
- Significant erosion and sediment control failure.
- Vegetation clearing/fauna interactions (snakes particularly).

The PCM shall be responsible for investigating environmental incidents and maintaining records of actions taken. Where applicable, environmental incidents shall be reported to Kabanka and DETSI by the Contractor or in accordance with relevant contractual obligations.

3.2.4 Complaints

Complaints represent an opportunity for improvement or enhancement of project environmental performance. All project complaints, including those from members of the public, stakeholder groups and regulatory authorities, shall be recorded by the PCM and notification provided to Kabanka. Kabanka shall be responsible for investigating and responding to complaints in a timely manner.

3.2.5 Non-conformance and Preventative/Corrective Actions

Non-conformances managed by this EMP shall include (but not be limited to) the following:

- An incident or near miss with potential or actual environmental impact.
- Complaints regarding project construction works.
- Not meeting an objective or target.
- Management review not being undertaken.

The PCM shall be responsible for identifying and implementing any preventative and/or corrective actions in response to any non-conformance. Preventative and correction actions shall be incorporated into the Construction EMP as required.

3.2.6 Audit and Inspections

Aspects with a potential for environmental impact shall be subject to environmental inspections and audits as required (risk-based approach) and in accordance with internal approved procedures. Internal project audits shall be conducted by Kabana (or qualified delegate). Audit objectives shall be to verify compliance with the EMP and applicable permits, approvals and regulations.

It should be noted that external audits may be conducted by regulatory agencies at any time, or in accordance with final conditions on relevant approvals.

3.2.7 Reporting

Reporting by the PCM shall be undertaken in accordance with applicable approval/authority conditions or as requested by Kabanka and regulatory agencies as conditions on approvals. Reporting shall include all relevant information pertaining to environmental matters (e.g. records, monitoring results, incidents, complaints, audits and inspections, etc.) as required under the approval/authority. PCM shall be ultimately responsible for reporting with support from suitably experienced and qualified staff as required.

PCM shall report on environmental performance to Kabanka (as required) in any meetings or documented progress reports in accordance with contractual obligations.

3.3 Legislative Requirements

3.3.1 General

The purpose of environmental approval legislation is to define acceptable environmental performance standards and criteria. Licences and approvals are legally binding agreements between the administering authorities and the holder, which outlines the holder's commitment to protect the environment. Licence, permit and development approval conditions address the issues most likely to cause or risk environmental harm.

Kabanka is the regulatory applicant and the owner of the infrastructure under construction and is ultimately responsible for meeting the obligations for implementing the requirements of various permits

and approvals. Obligations of the PCM rests in accordance with contractual requirements with Kabanka and General Environmental Duty responsibilities under the EP Act. A summary of the regulatory requirements that are to be addressed as part of this project are presented in the following. Note that final conditions on some of the approvals are not yet available. When issued, any conditions that are additions to, or are variations to the elements in this EMP will be incorporated and approved by Kabanka (as permit holders) prior to commencement of construction.

Table 2 Summary of Considered Legislation

Legislation	Responsible Authority	Activity	License / Permit / Approval
Environment Protection and Biodiversity Conservation Act 1999	Department of Climate Change, Energy, the Environment and Water	Construction with potential for impact on Matters of National Environmental Significance.	**Not Applicable** No Commonwealth Matters of National Environmental Significance (MNES) are located within or adjacent the project construction area of influence. No referral is required.
Nature Conservation Act 1992	Department of the Environment, Tourism Science and Innovation	Vegetation disturbance in a high risk protected flora survey trigger area	**Exemption notification** A portion of the project area being the connection between the solar farm and the Ergon 22kV connection point is within a high risk protected flora survey trigger area. A protected flora survey has been undertaken and determined that no protected flora is present. The notification and flora survey report must be submitted no later than 12 months after the flora survey was completed and at least a week prior to beginning of construction.
Nature Conservation Act 1992	Department of the Environment, Tourism Science and Innovation	Interference with fauna breeding areas for listed species	**Not required.** Surveys within the solar farm site and connection to the Ergon 22kV connection have determined that no breeding areas for listed species are within or immediately adjacent the project disturbance footprint. The proposed design does not require the disturbance of any habitat breeding areas for colonial, special least concern or listed species, and subsequently this aspect is not applicable to this project.
Wet Tropics Management Plan	Wet Tropics Management Authority	Construction and operation of infrastructure within the WTWHA	**Not required** The project is not within the Wet Tropics World Heritage Area. Transport of materials to site through the WTWHA will be via public main road transport routes.
Planning Act 2016	Department of State Development, Infrastructure and Planning	Development Application for the entirety of the project required to the State Assessment Referral Agent.	**Applicable:** Controls overarching development approval for the solar farm under Qld legislation. Prelodgment meetings and responses from agencies have identified that there are no state interest triggers for the generation site. Approval for the solar farm (material change of use and reconfiguration of a lot) will be directly to Douglas Shire Council, and project operational work assessment are also devolved to DSC.

Legislation	Responsible Authority	Activity	License / Permit / Approval
Fisheries Act 1994	Department of Primary Industries	Disturbance to waterways, waterway barriers and fisheries.	**Not applicable** There are no defined waterways within the project disturbance footprint. SARA pre-lodgement responses has indicated no State Interests with respect to Fisheries Act requirements are within the footprint area.
Aboriginal Cultural Heritage Act 2003	Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism	Require those conducting disturbance activities in areas of significance to take all reasonable and practical measures to avoid harming cultural heritage.	**Applicable (compliance)** No Aboriginal cultural heritage values are present in the project development footprint. In order to meet Duty of Care Guidelines an accidental discovery procedure (minimum) is required and included with the EMP as Appendix A
Biosecurity Act 2014	Department Primary Industries	Working in a mapped biosecurity zone.	**Applicable (compliance)** The general biosecurity obligation (GBO) requires everyone to manage biosecurity risks and threats under their control. Invasive species elements is included in this EMP.
Environmental Protection Act 1994	Department of Environment and Science	Where 'serious and material environmental harm' is caused or threatened.	**Applicable (compliance)** No approvals triggered. General Environmental Duty and Duty to Notify.
Vegetation Management Act 1999	Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development	Clearing of regulated vegetation	**Not applicable** All project footprint development areas are within Category X mapped vegetation not subject to assessment under the Vegetation Management Act.

3.3.2 FNQ ROC Regional Development Manual

Unless otherwise specified and approved, general works will be undertaken in accordance with the FNQ ROC Regional Development Manual - Version 9 – 2023.

4. Environmental Elements

4.1 Identification of Relevant Environmental Elements

The Queensland Government Guideline - *Preparing Environmental Management Plans* outlines likely environmental elements that should be addressed in an EMP. Relevant environmental elements to the Wujal Wujal Solar Farm Project as identified in the QLD Guideline are summarised in the following.

Table 3 Environmental Element Assessment

Issue	Applicable	Notes	EMP Element
Air quality	✓	Exhaust fumes, noise and dust may be encountered at any construction site.	Air Quality
Cultural heritage	✓	Duty of Care requirements and chance find procedure required.	Cultural Heritage
Complaint recording and reporting	✓	Essential requirement for project management.	All CEMP elements
Dust	✓	Earthworks are required for the construction of the solar farm.	Air Quality
Emergency response	✓	Essential requirement for project management.	Emergency Response
Erosion and sedimentation	✓	To be implemented across all construction elements.	Erosion and Sediment Control
Flora and fauna	✓	Limited applicability. The solar farm generation site is cleared and previously used as a quarry. The connection to the Ergon network is through heavily disturbed vegetation and includes existing clearing.	Flora and Fauna
Fire management	✓	A detailed Bushfire Hazard Management Plan has been produced for the project.	Emergency Response
Land contamination	✓	Low risk, primarily restricted to machinery malfunction/ accidents.	Contaminated Land, Fuel and Hazardous Substances
Noise and vibration	✓	Limited application. Noise and vibration will be associated with construction only and there are no noise sensitive receivers in the locality.	Noise and Vibration
Rehabilitation/ Landscaping	✓	Limited in scope to visual amenity enhancement owing to requirements to minimise bushfire risk fuel loads in proximity to the solar farm.	Flora and Fauna
Social disruption	✓	See below. Minor traffic disruption expected during construction.	Noise and Vibration Air Quality
Traffic (construction)	✓	As above. Minor traffic disruption expected during construction.	Noise and Vibration Air Quality
Visual amenity	✓	Construction will be visible to passing motorists.	All CEMP elements

Issue	Applicable	Notes	EMP Element
Waste and site clean-up	✓	Applicable to all elements of project management.	Waste
Water quality	✓	Limited in scope as no waterways on site and there are no direct flow paths to the nearest waterway being the Bloomfield River to the east. An ESCP will be in place.	Erosion and Sediment Control
Weed and pest management	✓	All traffic movement and construction activities generally have potential to act as vectors for pest distribution.	Biosecurity Management

This EMP does not specifically address traffic management for site specific activities as the PCM will be responsible for developing and implementing a traffic management plan during construction independent of this EMP. This traffic management plan will be developed in consultation with relevant local government, being Cook Shire Council and Wujal Wujal Aboriginal Council.

Notwithstanding, this EMP identifies a number of general measures related to traffic and machinery movement and activities that are to be incorporated into the traffic management plan.

4.2 Eastern Kuku Yalanji Cultural Heritage

4.2.1 Aspect and Impacts

Kabanka Pty Ltd is 100% owned by Ngujakura, which in turn is majority owned by Jabalbina Yalanji Aboriginal Corporation's ('Jabalbina') commercial entity, Ngananga Dajiway. Jabalbina representing the Traditional Owners (Eastern Kuku Yalanji) of the project area are key supporters of the Wujal Wujal Solar Farm project.

The proposed solar farm site is within a cleared quarry site nearing end of life operations. Major earthworks and ground disturbance have significantly modified the landscape, and no cultural heritage finds or values have been recorded by the quarry owner (Wujal Wujal Aboriginal Shire Council) over the life of operations.

While there are no specific cultural heritage values known and likelihood of encountering cultural heritage is considered to be negligible, an Aboriginal Cultural Heritage Identification template has been prepared by Jabalbina and is appended to this EMP.

4.2.2 Management Plan

Environmental Objective		
To minimise impacts to cultural heritage values, places or items.		
Performance Criteria		
• All works managed in accordance with the *Aboriginal Cultural Heritage Act 2003*and the Aboriginal and Cultural Heritage Duty of Care Guidelines 2003. • No complaints are received from regulatory authorities or the community in relation to the handling of cultural heritage items/places/values.		
Mitigation Measures	**Responsibility**	**Timing**
All personnel must exercise a duty of care, that is, they must take all reasonable and practical measures to ensure their activity does not harm Cultural Heritage items/ places/ values.	All personnel	At all times

If at any time during the activity it is necessary to excavate, relocate, remove or harm a Cultural Heritage find, the activity should cease immediately and the Site Supervisor and Kabanka notified.	All personnel	Immediately on discovery
All earthworks are to stop immediately on observance of cultural heritage elements, either by Eastern Kuku Yalanji observers, or by site workers. The affected area is to be immediately flagged, and no further disturbance undertaken until significance of the find has been assessed and a management approach agreed with the relevant party	Site supervisors Kabanka	Immediately on discovery
Any vegetation clearing for the connection between the solar farm and the Ergon connection point is to stop immediately on observance of cultural heritage elements, either by Eastern Kuku Yalanji observers, or by site workers. The affected area is to be immediately flagged, and no further disturbance undertaken until significance of the find has been assessed and a management approach agreed with the relevant party	Site supervisors Kabanka	Immediately on discovery
Upon discovery of a Cultural Heritage find, the representative of Jabalbina for the area shall be contacted in accordance with the provisions of the Eastern Kuku Yalanji Management Plan and their advice and agreement sought as to how best to manage the find to avoid or minimise harm to the Aboriginal Cultural Heritage.	Kabanka Site Supervisor	Immediately after notification
Any Cultural Heritage finds are to be managed in accordance with any agreement reached with the Eastern Kuku Yalanji Any agreement reached with the Aboriginal Party for the area (Eastern Kuku Yalanji) shall be recorded and documented.	Kabanka Site Supervisor	As required
Monitoring	**Responsibility**	**Timing**
Any discovery of Aboriginal Cultural Heritage, will be recorded on an Environment Incident Report Form.	PCM Site Supervisor	Upon identification
Monitor excavations for potential signs of Aboriginal Cultural Heritage.	Site Supervisor	During excavation
Reporting	**Responsibility**	**Timing**
All personnel to report incidents to Site Supervisor.	All personnel	At all times
Site Supervisor to notify Project Construction Manager (PCM) and Kabanka immediately in in the event of any Cultural Heritage find or management issue.	Site Supervisor	Following incident
Kabanka to notify the relevant Eastern Kuku Yalanji representative immediately in the event of any Cultural Heritage find or management issue.	Kabanka	Following incident
Inform the DSDSATSIP as soon as is practically possible in the event of any Cultural Heritage find or management issue.	Kabanka	Following incident
Record and manage all complaints in a register and corrective actions taken.	Kabanka	Following identification
Corrective Action	**Responsibility**	**Timing**
All complaints relating to Cultural Heritage management issues will be investigated promptly and appropriate actions taken.	Kabanka/PCM	Upon receipt of complaint
Where investigations identify issues with Cultural Heritage management actions, revision to management plans will be undertaken and further controls implemented, as necessary.	Kabanka/PCM	Following investigation
Corrective action will be implemented to meet required outcomes of Administering Authorities.	Kabanka/Project Management	Where required

4.3 Erosion and Sediment Control

4.3.1 Aspect and Impacts

Soils across the project area are not considered to be dispersive (i.e. of a sodic nature), however are considered vulnerable to off-site transport following periods of heavy rain.

Erosion and sediment control as per the International Erosion Control Association (IECA) Best Practice Erosion & Sediment Control Guidelines and the FNQ Regional Organisation of Councils (FNQROC) Development Manual v.9 2023 will apply to the earthworks component of the solar farm construction site. Construction aspects related to this project component are not unique, with industry standard ESCP provisions to be implemented based on the final layout and design of the solar farm structures.

ESCP implementation and effectiveness may be audited and inspected without need for notification by regulatory agencies during the course of construction, in accordance with conditions on approvals/permits. In addition to the

Any and all ESCP measures will be on public display and open to public scrutiny. The Cape Tribulation – Bloomfield road is a scenic road under the DSC Planning Scheme and as such is a key value.

4.3.2 Management Plan

Environmental Objective		
Minimise potential for general off-site impacts of sediment transport from site earthworks activities through implementing erosion control measures appropriate to the scale and intensity of works, sensitivity of receiving environment and conditions of permits/approvals. Minimise potential for sediment to migrate off site from earthworks areas into adjoining sensitive habitats for fauna and flora e.g. Bloomfield River.		
Performance Criteria		
• All works are managed in accordance with the International Erosion Control Association *Best Practice Erosion & Sediment Control Guidelines*, FNQROC Development Manual (v.9) Design Manual s.D5 "*Stormwater Quality Management",* the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* and any other relevant approval and statutory requirement as per conditions on permits and approvals. • No complaints or adverse audit findings are made in relation to the ESCP measures employed. • No complaints are received from regulatory authorities or the community in relation to erosion and sediment control issues.		
Mitigation Measures	**Responsibility**	**Timing**
Erosion and sediment control methods shall be implemented in accordance with the International Erosion Control Association's "Best Practice Erosion and Sediment Control Guidelines" prior to commencing earthworks onsite and then maintained for duration of construction or until site is stabilised to satisfaction of auditing/monitoring requirements. .	PCM	As required during construction
All contractors are to provide individual ESCP particular to the type of operations they are undertaking, the localities, and the nature of machinery/earthworks involved.	PCM Contractors	Before commencing earthworks
Specific requirements for the preparation of ESCS and ESCP as per FNQROC Development Manual (v.9) Design Manual s.D5 "*Stormwater Quality Management",* to be submitted for approval to DSC prior to construction of works.	PCM	Before commencing construction.

A general project site and works specific Erosion and Sediment Control Plan (ESCP) shall be developed prior to disturbance works occurring. The ESCP shall address (at a minimum): - Stockpile, vehicle maintenance and hardstand areas. - Any areas utilised for machinery or vehicle movement and access during construction - The disturbance footprint to be clearly identified on all plans, and all areas of vegetation demarcated to avoid disturbance	Kabanka PCM	Before commencing earthworks
Sufficient materials shall be available to enable implementation of erosion and sediment controls as required.	PCM	Before commencing earthworks
Work shall be scheduled to ensure that temporary erosion control works are in place by the end of work each day, especially before weekends, if rain is imminent, or when permanent erosion control works are not in place or feasible.	PCM	Throughout construction
In the event of extreme weather conditions (e.g. storm events) construction work will cease and the need for additional erosion and sediment control shall be assessed and implemented where required.	PCM	Throughout construction
Soil and surface stability shall be maintained at all times.	PCM	Throughout construction
Stockpiles of surfacing material or removed soil, are not to be established outside of the solar farm site. No stockpiling to occur within the road reserve project area.	PCM Contractors	Throughout construction
All stockpiles within the solar farm site must be covered and bunded when not in use.	PCM Contractors	Throughout construction
Keep vehicles to defined access route, in accordance with traffic management plan.	PCM	Throughout construction
On any slope where there is potential for overland flow to impact on the earthworks then cross check flow rock or sediment fencing interception is required on the outward side of the works.	PCM Contractors	Throughout construction
All diversionary fencing/cross check rock/fencing to ensure that diversion will be to existing formed roadside drains and does not discharge to natural habitat.	PCM Contractors	Throughout construction
Monitoring	**Responsibility**	**Timing**
Undertake routine visual inspections to ensure erosion and sediment control measures are implemented where required.	Site Supervisor	Daily
Undertake ongoing monitoring of weather conditions (including extreme weather) and alerts relevant to the construction area.	Site Supervisor	Daily
Undertake inspections of the effectiveness of erosion and sediment control measures after significant rainfall events.	Site Supervisor	Where necessary
Reporting	**Responsibility**	**Timing**
All personnel to report incidents.	All personnel	At all times
Record and manage all complaints in a register and corrective actions taken.	PCM Kabanka	Throughout construction
Inform firstly Kabanka, and then the Administering Authority in a timely manner i.e. as soon as practical, in the event of a significant erosion and sediment control issue.	PCM/Site Supervisor	Following identification
Corrective Action	**Responsibility**	**Timing**
Appropriate control measures shall be implemented in a timely manner where sedimentation or erosion issues are identified or have the potential to occur in the future.	PCM	Following identification

Restore sediment areas as soon as is practical following event and repair/install sediment control mechanism. (e.g. rock aggregate, geo-textile).	PCM	Following identification
All complaints in relation to erosion and sediment control shall be investigated, and as required, legitimate problems shall be rectified.	PCM	Upon receipt of complaint
Corrective action shall be implemented to meet required outcomes of Administering Authorities.	PCM Kabanka	Where required

4.4 Visual Amenity

4.4.1 Aspect

The Cape Tribulation – Bloomfield Road is a Scenic Road under the Douglas Shire Planning Scheme and an important aspect of the local experience, whether for residents and local community, or visitors to the region. An assessment of the potential impact of the project on visual amenity has been undertaken with respect to far-field and near-field viewsheds.

Far-field viewshed visual impacts are those that are experienced at distance from project elements. In this project instance, this considers:

- The solar farm and array visibility from residences/business from World Heritage Area vantage points, or from other landscape scale viewsheds in the area.
- Glint and glare from the solar farm arrays potentially visible from at the above.

Near-field viewshed visual impacts are those that are sustained in proximity to project elements. For this project, near-field visual impact elements include:

- Construction aspects – machinery traffic, civil earthworks and general site construction.
- Operational aspects – solar farm arrays and supporting infrastructure visible to traffic along the Cape Tribulation – Bloomfield Road and potentially visible to Degarra, Wujal Wujal and Bloomfield residents

Both a far-field and near-field assessment of the visual amenity of the Wujal Wujal Solar Farm Project has been undertaken. The salient elements relevant to project management are set out below:

Far-field viewshed aspects:

The solar farm is not visible from any vantage point along the nearest WTWHA area viewshed, being the Cape Tribulation Road – Bloomfield Road at the WTWHA boundary approximately 1.5km to the south-east. A substantive section of range intersects this viewshed and the solar farm is completely shielded by the topography. Subsequently potential glint and glare from the solar panels will not be discernible from any vantage point from the WTWHA.

With respect to residential locations within a 2km proximity, the highest residential areas are located at along the Rossville – Bloomfield Road north of the Bloomfield River, approximately 500m to the north and the north-east of the solar farm. Both locations are shielded by either topographical profile or intervening remnant vegetation. The solar array (maximum of 2.0m height, and single storey containerised supporting infrastructure is not visible from any of these locations and subsequently also will not be subject to glint and glare from the solar arrays.

Near-field viewshed aspects:

Near field aspects will be encountered during construction of the solar farm being immediately adjacent the Cape Tribulation – Bloomfield Road.

During construction the key aspects will be the movement of machinery, the civil earthworks required and general visual amenity related to construction works.

Operationally, the solar farm construction site itself will not be visible from any residences in the Degarra area owing to the retained vegetation on these properties, however construction will be visible to passing traffic on the Cape Tribulation – Bloomfield Road. Post construction, retention of the existing roadside embankment and landscaping to provide visual screening will improve the overall amenity of the locality by comparison with the existing quarry.

Glint and glare from the solar array will not be experienced along the Cape Tribulation - Bloomfield Road (or in any other nearby vicinity, e.g. residential areas in Degarra).. This is due to low height of the solar panels (highest being 2.0m), orientation and PV arrays set according to the topography of the site. It is also proposed to plant screening vegetation along the embankment between the solar farm and the road to further mitigate the potential for near-field viewshed impacts.

4.4.2 Management Plan

Environmental Objective		
To ensure that the Wujal Wujal solar project elements do not adversely impact on the amenity values and resident community / visitor experience of the Cape Tribulation – Bloomfield Road and environs. To reduce the risk to key natural value vantage points with respect to maintenance of visual amenity.		
Performance Criteria		
• Solar farm site not visible from any far field viewsheds. • All earthworks disturbance areas are to be stabilised as soon as is practical after operations have finished. • Near field viewsheds are not compromised by the location, colour or design of ancillary distribution infrastructure. • The solar array post construction will not impart any glint and glare impacts on adjoining properties, nor the Cape Tribulation - Bloomfield Road. • All construction waste to be disposed of in accordance with the provisions of the elements in this EMP. • Landscaping along the embankment on the Cape Tribulation – Bloomfield Road to shield the solar array from traffic along this road and commensurate with requirements of the Bushfire Hazard Management Plan.		
Mitigation Measures	**Responsibility**	**Timing**
Construction waste to be removed from public areas (e.g. road reserves) as soon as practical after construction.	PCM	Throughout construction
Solar panel location, design and placement to be commensurate with proposed orientation to avoid any glint/glare for traffic/residents/visitors along Cape Tribulation – Bloomfield Road and surrounding areas.	Kabanka PCM	Design, construction
Road construction and operational access point to the solar farm off the Cape Tribulation – Bloomfield Road to be restricted to the existing quarry access/egress points.	PCM/Site Supervisor	Design Construction
Rehabilitation and stabilisation of any public areas (e.g. road reserves), to be undertaken as soon as practical post construction.	PCM/Site Supervisor	At all times
Planting for visual amenity along the road embankment and entry/exits to the solar farm will conform with requirements under the DSC Landscaping Policy and requirements under the Bushfire Hazard Management Plan.	PCM/Site Supervisor	Throughout construction
All containerised infrastructure within the solar farm re to be of a form/size and of a colour that will not detract from visual amenity of the surrounding area.	Kabanka PCM	Design
Monitoring	**Responsibility**	**Timing**
Landscape areas to be monitored for weed invasion, water stress, and maintained as required.	Site Supervisor	Construction
Regular inspections of all areas of earthworks are not left in a soil- exposed situations	PCM/Site Supervisor	Throughout construction

Monitor housekeeping activities to ensure waste is contained appropriately and site is clean at all times.	Site Supervisor	Throughout construction
Reporting	Responsibility	Timing
All personnel to report incidents where waste material has been a contributing factor to visual amenity.	All personnel	At all times
Record and manage all complaints in a register and corrective actions taken.	PCM	Throughout construction
Record and report on all significant construction practice/activity impacting on visual amenity in public locations, e.g. road reserve.	Site Supervisor	Following identification
Corrective Action	Responsibility	Timing
All complaints relating to amenity issues shall be investigated promptly and appropriate actions taken to clean up the affected area and manage the waste generated.	PCM	Upon receipt of complaint
Where investigations show unacceptable amenity impacts revision to design/construction practices and management plans shall be undertaken and further controls implemented, as necessary.	PCM	Following identification
Corrective action shall be implemented to meet required outcomes of Administering Authorities.	PCM	Where required

4.5 Contaminated Land, Fuel and Hazardous Substances

4.5.1 Aspect

The Wujal Wujal solar farm project area does not encompass habitats essential to native fauna, and has no waterways, riparian situations or other vulnerable areas in immediate proximity. Notwithstanding spills of fuel and hazardous substances may occur and have the potential to be sequestered in roadside drains and/or mobilised by rainfall events off site and present risks to the environment beyond the construction area.

Vehicle refuelling, minor maintenance and on-site repairs may be required during construction. These aspects elevate the potential risk for fuels and other hazardous substances to be accidentally spilled or released.

A search of the Environmental Management Register and the Contaminated Land Register (EMR/CLR) for the solar farm generation site and the road reserve area has identified no sites included on the EMR or CLR register held by DETSI.

4.5.2 Management Plan

Environmental Objective		
Safely manage the potential risks to natural environmental values from activities that involve the operation of machinery and accidental fuel and hazardous material spills during construction.		
Performance Criteria		
• Fuel and hazardous substances used on site are used in accordance with AS 1940:2017 The storage and handling of flammable and combustible liquids. • No leakages of hydraulic fluids into the environment. • No spills of fuels, oils or other hydrocarbons into the aquatic or terrestrial environment. • No complaints are received from regulatory authorities or the community in relation to the spillage/leakage to roadside drains. • No disturbance to and/or disposal of hazardous waste along road reserves.		
Mitigation Measures	**Responsibility**	**Timing**
Minimum quantities of hazardous substances necessary for the project shall be used on site. Bitumen/asphalt/road surfacing material used for construction purposes only be stored at the solar farm and used as required.	PCM	Throughout construction
All storage and management of fuel and hazardous substances within the solar farm generation site will be in accordance with approved designs and the relevant Australian Standard for the volume and type of fuel/substance stored.	PCM	Throughout construction
All machinery repairs, maintenance, fuels/oils and other hazardous materials storage shall only occur within designated areas within the solar farm location during construction.	PCM Kabanka	Throughout construction
All mobile equipment shall be refuelled and maintained at least 100m from any perennial watercourse, and only within bunded areas or other areas able to retain any accidental spillage.	PCM/Site Supervisor	As required
An appropriate spill kit, personal protective equipment and relevant operator instructions and emergency procedures for the management of wastes and chemicals associated with construction must be kept at all work sites. This includes a spill kit that is to include air boom and fuel and oil absorbent boom to be available in the event of any spillage into a perennial waterway.	VM/Site Supervisor	At all times
Records shall be kept on chemicals and dangerous goods used during construction.	PCM	Throughout construction
First aid and firefighting equipment (hand held extinguishers and fire hoses) shall be available at the construction site.	PCM	At all times
Construction workers operating vehicles on-site to be appropriately trained and licensed, so that these vehicles are operated in a safe and appropriate manner. All vehicle operators to be briefed on locations of maintenance, storage and refuelling areas.	PCM	During induction
All relevant staff shall be trained in appropriate handling, storage and containment practices for chemicals and dangerous goods to be utilised during construction.	PCM	During induction
No fuel or hazardous substances are to be stored within the road reserve at any time. All such substances are only to be stored in the designated area at the solar farm lease area. Transport and use of any of these materials shall be undertaken in accordance with relevant Australian standards (AS), guidelines and legislation, including: • *Dangerous Goods Safety Management Act 2001* • Regulatory requirements • Safety Data Sheets (SDS) requirements. SDS for products kept on site shall be readily available.	PCM	At all times

Ensure that the appropriate personnel undertake adequate environmental awareness training covering the requirements of this CEMP, regarding safe working procedures around hazardous materials and identification of contaminated land indicators.	PCM Site Supervisor	During induction
Monitoring	**Responsibility**	**Timing**
Visual inspections of all work sites to ensure no oil leaks, hydraulic fluid leakages or fuel leakages/spills of any other hazardous material.	Site Supervisor	Throughout construction
Visual monitoring to be undertaken of all roadside drains for any evidence of discharge to these.	Site Supervisor	Throughout construction
An incident register shall be maintained which includes corrective actions undertaken and persons notified.	PCM Site Supervisor	Throughout construction
Reporting	**Responsibility**	**Timing**
Any environmental incidents involving spills shall be reported by all personnel, and recorded by Site Supervisor including time of incident, persons involved, details of incident, mitigation measures and actions taken to minimise the probability of recurrence.	All personnel Site Supervisor	Following incident
Inform the Project Construction Manager (PCM) immediately of any incidents resulting in potential or actual environmental harm.	Site Supervisor	Following incident
PCM to inform Kabanka immediately of receipt of report of any notifiable incidents of potential or actual environmental harm.	PCM	Following incident
Where warranted DETSI Pollution Hotline (1300 130 372) or the local office shall be contacted as soon as practicable after becoming aware of any release of contaminants.	PCM Kabanka	When required
Corrective Action	**Responsibility**	**Timing**
All complaints relating to fuels, chemicals or hazardous material use shall be investigated promptly and appropriate actions taken.	PCM Kabanka	Upon receipt of complaint
Disposal of contaminated soil (small or large quantities) shall be disposed of in accordance with relevant regulations.	PCM	Following incident response
Corrective action shall be implemented to meet required outcomes of Administering Authorities.	PCM Kabanka	Where required
Spills to be remediated depending on nature of product (PCM) to advise correct procedure). Immediate action should include: • Small hydrocarbon spill (terrestrial): apply absorbent material. • Large hydrocarbon spill: install containment (e.g. block drains, surround with sandbags, dig earthen bund) and apply absorbent material. • Chemical spill: application of appropriate absorbent material and containment.	PCM/Site Supervisor	Following incident
In the event of a spill of dangerous goods, work procedures and control measures shall be reviewed to ensure they are fit for purpose and revised where necessary.	PCM	Following incident where required
In the event of an environmental incident, corrective or remedial action shall be taken as is required to render the area safe and avoid or minimise environmental harm.	PCM	Following incident where required

4.6 Waste Management

4.6.1 Aspect and Impacts

Waste will be generated at work sites as a result of construction activities. This includes construction waste (steel, packaging, plastics, etc.) and personnel waste (sewerage, general rubbish). Machinery refuelling, and minor vehicle/machinery maintenance will be undertaken within the solar farm construction site and will generate wastes associated with these activities.

Waste materials are to be managed and disposed of in such a way as to avoid land contamination, maintain visual amenity and to reduce the proclivity of waste from attracting fauna and pest species animals.

4.6.2 Management Plan

Environmental Objective		
To prevent or minimise the generation of wastes and to appropriately contain, control and dispose of all waste generated.		
Performance Criteria		
• No complaints are received from regulatory authorities or the community in relation to waste issues. • All works are managed in accordance with the *Waste Reduction and Recycling Act 2011* and E*nvironmental Protection Act 1994.* • No uncontrolled waste or litter observed on site. • Appropriate storage and disposal of waste evident on site.		
Mitigation Measures	**Responsibility**	**Timing**
Adopt the waste management hierarchy (i.e. avoid, re-use, recycle, energy recover and disposal).	PCM	Where practicable
Waste materials shall be contained on site (solar farm) in appropriate containers. Organic and general domestic waste containers are to be sealable and the waste storage/collection is to be fenced and secured from wildlife accessing the organic waste.	Site Supervisor	At all times
General housekeeping shall be undertaken on an ongoing basis to keep work sites clean.	Site Supervisor	Daily
All wastes, (including regulated waste) shall be collected and removed from work sites regularly by an appropriately licensed contractor, (as required).	Site Supervisor	Throughout construction
Portable ablution facilities are to be provided on site and disposal of waste shall be to an appropriately licenced facility approved to take such waste.	PCM	At all times
Any wastewater, (e.g. dewatering) shall be collected and appropriately disposed of in accordance with direction and conditions of approvals.	PCM	At all times
General waste transport shall be conducted in a manner that does not cause littering or unlawful waste disposal.	PCM	Throughout construction
Prohibit the discarding of cigarette butts to the ground.	Site Supervisor	At all times
Non-recyclable materials/wastes (including foods, regulated and hazardous wastes) are stored in appropriate areas and are disposed of at licensed landfill sites according to regulatory requirements.	PCM Site Supervisor	At all times
On the completion of works, the site shall be cleared of all rubbish and waste and left in a clean tidy condition.	PCM Site Supervisor	Prior to leaving site

Monitoring	Responsibility	Timing
Regular inspection of on-site facilities shall be undertaken to ensure waste is being generated, stored, handled, disposed and transported in accordance with regulations.	PCM	Daily
Monitor housekeeping activities to ensure waste is contained appropriately and site is clean at all times.	Site Supervisor	Throughout construction
Reporting	**Responsibility**	**Timing**
All personnel to report incidents where waste material has been a contributing factor.	All personnel	At all times
Record and manage all complaints in a register and corrective actions taken.	PCM	Throughout construction
Inform Kabanka in a timely manner in the event of a significant waste management issue.	PCM	Following identification
Corrective Action	**Responsibility**	**Timing**
All complaints relating to waste issues shall be investigated promptly and appropriate actions taken to clean up the affected area and manage the waste generated.	PCM	Upon receipt of complaint
Where investigations show unacceptable waste management, revision to management plans shall be undertaken and further controls implemented, as necessary.	PCM	Following identification
Corrective action shall be implemented to meet required outcomes of Administering Authorities.	PCM	Where required

4.7 Natural Values – Fauna and Flora

4.7.1 Aspect and Impacts

Surveys have been undertaken on the site on three occasions by experienced ecologists to confirm if there are any potential requirements under legislation required to be assessed. These surveys have assessed protected flora, vegetation communities, and fauna and habitats – including potential animal breeding areas particularly for colonial, special least concern and other conservation significant fauna.

The solar farm generation site is the location of an existing quarry, nearing end of life operations. The site has been cleared of vegetation, and the land profile has been extensively modified by quarry works. In abandoned worked over areas the location is dominated by introduced species, predominantly grasses (guinea grass in particular) and isolated successional sclerophyll species have recruited into these areas.

Subsequently the vegetation across the solar farm development site is mapped as Category X under the Queensland *Vegetation Management Act 1999,* vegetation not managed under the Act comprising as it does predominantly cleared areas and introduced grass areas. No flora or fauna habitats of any significance were noted across the solar farm development site.

The connection between the solar farm and the Ergon network traverses a small area of successional mixed rainforest/sclerophyll forest which has been heavily impacted by past clearing, fire, and more recently by extensive flooding of the Bloomfield River. The alignment partially follows a maintenance access track to the Ergon lines, and approximately 200m^2 of the alignment has been cleared. It is also mapped as Category X however the vegetation is included in the high risk protected flora survey trigger area and subsequently surveys for protected flora were undertaken. No protected flora is

present in the potential disturbance area and in the surrounding 100m buffer survey area. Surveys also assessed fauna habitat integrity and conducted searches for the location of any potential or actual animal breeding places. No animal breeding places were identified in the surveys and are unlikely to occur owing to the low habitat integrity and lack of suitable breeding places.

Whilst flora/fauna values across the entirety of the footprint of the solar farm development are minor, there is still potential for construction to create conditions which may have cumulative or indirect effects on surrounding areas.

4.7.2 Management Plan

Environmental Objective		
All environmental objectives for all other Management Aspects are relevant. To minimise disturbance to native vegetation and surrounding ecosystems in order to maintain environmental quality and natural values of the surrounding areas. To ensure that only vegetation necessary for the safe construction and operation of electrical infrastructure is damaged/removed.		
Performance Criteria		
• All performance criteria for all other Management Aspects area relevant. • No complaints are received from regulatory authorities or the community in relation to flora and fauna management. • Only vegetation necessary for the safe construction and operation of the project is removed. • All works are managed in accordance with conditions on the Development Permit issued by Douglas Shire Council and any other relevant legislation and regulatory requirements. • No road kill is reported as a result of transport of materials to/from the site by construction vehicles. • To minimise the potential for adverse interactions with fauna through the incorporation of fauna sensitive design and education of contractors. • To minimise risk to fauna generally during the construction of the solar farm		
Mitigation Measures	**Responsibility**	**Timing**
All elements in all other Management Aspects are relevant	Kabanka PCM Contractor	At all times
PCM to engage with Douglas Shire Council road maintenance operations to ensure that existing road maintenance practice and policy with respect to management of non-native vegetation (grass slashing for example) are adhered to.	PCM	Prior to construction.
Exotic weed species in the solar farm are to be controlled and removed prior to establishment of works offices, laydown areas or any other construction to ensure these are not to be dispersed into surrounding areas.	Contractor PCM	Prior to works commending on site
Vegetation to be retained along the connection to the Ergon 22kV line (east of the Cape Tribulation – Bloomfield Road) to be clearly demarcated by bunting, survey tape or similar visual barrier. Vegetation outside of this demarcation is not to be removed.	PCM	Prior to vegetation clearance works to Ergon connection
Vegetation removed will not be burnt. Preference is for onsite mulching of smaller item to support landscaping elements, and larger logs may be cut to length and laid along side of the clearing.	PCM Contractor	During vegetation clearance works to Ergon connection
Barbed wire, razor wire, and any other material capable of entrapping or snaring wildlife is not to be used in any aspect of design or construction for the project.	PCM	Construction and operation

Should any animals be encountered, injured or nests discovered, works shall cease and the Site Supervisor be notified immediately.	Site Supervisor	As required
In the event that injury to native fauna occurs, where practicable, it shall be transported to a local veterinary clinic, wildlife carer or reported to local Queensland Parks and Wildlife Services (QPWS) for advice/action. Contact numbers are: • Cooktown QPWS: 07 4069 5777 • FNQ Wildlife Rescue: 07 4053 4467, or Daintree Rescue (07) 4098 7284 (for reporting injured or orphaned wildlife).	Site Supervisor	As required
No erosion and sediment control structures will require disturbance of native vegetation, nor shall any ESCP structure direct water flow to adjoining habitat but shall be directed to the existing roadside drainage network.	Contractor PCM	Prior to works commending on site and throughout construction,.
No evening construction or machinery / materials transport is to occur throughout the project construction phase. Afterhours work to be limited to emergency requirements for repair / maintenance only.	PCM	Throughout construction
Snakes, including venomous snakes, will be encountered. Staff are not to handle snakes and snakes are to be removed to a safe location away from construction only by a qualified snake handler. All staff shall be inducted into strategies for dealing with potential wildlife by CMP/Site Supervisor or delegate.	All project staff	At all times
Machinery that has recently been used in earthworks/vegetation clearing in a biosecurity restricted zone is to have an approved biosecurity/weed hygiene certificate prior to crossing the Bloomfield River.	Site supervisor, PCM	Prior to, and throughout construction.
All machinery generally to be washed down prior to earthworks operations if they are transported from outside the Bloomfield/Degarra. Washdowns are to occur prior to mobilising to sites at a specialised washdown bay is to be established in consultation with WWASC	PCM Site Supervisor	Prior to works commending on site
Monitoring	**Responsibility**	**Timing**
Ensure any native vegetation delineation bunting is maintained and vegetation beyond this bunting is not disturbed.	Site supervisor	Daily
Undertake routine visual inspections of all erosion and sediment control measures to ensure no discharge are occurring into adjoining vegetation	Site supervisor	Daily
Undertake routine visual inspections of evidence of leaking oils, hydraulic fluids and other potential hazardous substances.	Site supervisor	Daily
Reporting	**Responsibility**	**Timing**
All personnel to report incidents.	All personnel	At all times
Any observed failure of any ESCP structures are to be reported immediately.	All personnel	At all times
Any native vegetation disturbance (including failure to observe clearing limits, significant limb or root damage) is to be reported immediately	All personnel	During vegetation clearance works to Ergon connection
Inform the relevant Authority (DSC/WWASC /DETSI) immediately in the event of a significant environmental management issue, e.g. large scale spill of hazardous material either in transport or on site.	Kabanka PCM	Following identification

Corrective Action	Responsibility	Timing
All complaints shall be investigated promptly and appropriate actions taken.	PCM	Upon receipt of complaint
Where investigations identify vegetation removal or damage outside of the development footprint as a result of accidental clearing, revision to management plans shall be undertaken and further controls implemented, as necessary.	PCM	Following identification
Corrective action shall be implemented to meet required outcomes of relevant Authorities.	PCM	Where required

4.8 Biosecurity Management

4.8.1 Aspect and Impacts

Private freehold land within the area has a high potential as major source for non-native plant species. Civil works using machinery imported from locations outside of the Bloomfield / Degarra areas could introduce weeds and pests not currently known to occur in the area e.g. electric ants. It is important that all civil machinery from outside the local area is inspected and washed prior to use on site, and each time that machinery is moved outside the area and returns.

4.8.2 Management Plan

Environmental Objective		
Avoid and effectively manage potential impacts associated with weeds and pests.		
Performance Criteria		
• No introduction or spread of new (declared) weeds and pests. • No electric ants or yellow crazy ants become established on site • No complaints are received from regulatory authorities or the community. • Works undertaken in accordance with the DSC Biosecurity Management Plan and *Biosecurity Act 2014.* All requirements of the Plan and supplementary guidelines to be enacted • All earth moving machinery (including tip trucks) from outside the Wujal Wujal/Degarra area to be cleaned and washed down prior to first access to site.		
Mitigation Measures	**Responsibility**	**Timing**
All vehicles, construction machinery and materials are to examined for electric ants or yellow crazy ants prior to arrival at site, before crossing the Bloomfield River at an inspection site nominated by DSC/WWASC/Biosecurity Australia.	PCM	At all times
Vehicles identified as being infested will not be permitted to access the Wujal Wujal Solar Farm project area until the vehicle has been cleaned, and inspected by a qualified biosecurity specialist and verified as being cleared of infestation.	PCM	At all times
A construction washdown and inspection area should be established in consultation with Wujal Wujal Aboriginal Shire Council north of the Bloomfield River.	Kabanka PCM	Prior to construction
Food scraps to be disposed of into bins with closed lids and removed from site regularly to minimise vermin infestations.	All personnel	At all times
If fill is required to imported for construction at the solar farm site, only clean imported fill with a weed-free certificate can be used on site.	PCM	Where appropriate
Vehicles arriving on site from known and potential weed infested areas must, prior to arriving at site, undergo vehicle checks or wash down procedures preferably before crossing the Bloomfield River or at a weed washdown site nominated by Kabanka/ Biosecurity Australia.	Kabanka PCM Site Supervisor	At all times

Any weed infestation shall be treated at earliest stage while small and manageable. If chemical treatment is required, chemicals may be used only in accordance with manufacturer's specifications.	Site Supervisor	At all times
Monitoring	**Responsibility**	**Timing**
Weeds – Weekly inspection of all earthworks areas to identify any restricted or prohibited matter categories under the *Biosecurity Act 2014.*	Site Supervisor	Throughout construction, and post construction for all earthworks areas.
Electric ants– Weekly site inspection of the laydown and construction areas at the solar farm site for electric ant presence/nests, and random vehicles and equipment checks.	Site Supervisor	Throughout construction
Yellow crazy ants – Weekly site inspection of the solar farm construction and laydown areas, and random vehicles and equipment surveys.	Site Supervisor	Throughout construction
Reporting	**Responsibility**	**Timing**
All personnel to report incidents	All personnel	At all times
All infestations of biosecurity matters, including yellow crazy ants, electric ants and weed pests in Classes 1 – 3, are to be reported to the DSC, WTMA and DAF on 13 25 23.	PCM All personnel	At all times
Record and manage all complaints in a register and corrective actions taken.	PCM	Throughout construction
Corrective Action	**Responsibility**	**Timing**
Vehicles identified as being infested will not be permitted to access the Wujal Wujal solar farm project area until the vehicle has been cleaned, and inspected by a qualified biosecurity specialist and verified as being cleared of infestation.	PCM	At all times
All complaints relating to weeds or pest issues shall be investigated promptly and appropriate actions taken.	PCM	Upon receipt of complaint
Where investigations identify restricted/declared weeds, and pests are present, revision to management plans shall be undertaken and further controls implemented, as necessary. Controls may include use of contracted licensed weed eradicator or pest exterminator.	PCM	Following identification
Corrective action shall be implemented to meet required outcomes of Administering Authorities permit and approval conditions, or as a result of direction received following notification.	Project Manager	Where required

4.9 Air Quality

4.9.1 Aspect and Impacts

Dust and fumes are an aspect of the project that have limited potential to impact on receptors adjacent to and within the works area. The existing Cape Tribulation – Bloomfield Road is not sealed along the solar farm frontage, and the condition of the road and road traffic is the primary source of existing dust and traffic fumes.

While civil earthworks are expected to generate dust and fumes, there are no sensitive receivers (residences and businesses) in proximity to the works and the overall impact is considered to moderate by comparison with road usage. Dust is a hazard to road traffic, and measures must be undertaken during construction to limit the cumulative risk of dust raised during construction on the road traffic.

Stockpiles are only allowed within the solar farm construction site and must be bunded and covered whenever not in active use.

4.9.2 Management Plan

Environmental Objective		
To prevent dust and other atmospheric emissions generated by construction activities (including traffic movement) from causing a hazard or nuisance to the environment and particularly impacting on the traffic on the Cape Tribulation – Bloomfield Road.		
Performance Criteria		
All works are managed in accordance with the *EP Act* and the *Environmental Protection (Air) Policy 2019.* No complaints are received from regulatory authorities or local residents in relation to dust and fumes impacts Dust from civil works and general solar farm construction does not increase the risk profile of the existing unsealed Cape Tribulation – Bloomfield Road to passing traffic.		
Mitigation Measures	**Responsibility**	**Timing**
Ensure equipment is properly serviced, with records provided. If excessive exhaust fumes are observed to be emitted, vehicles to be shut down and maintenance check undertaken offsite.	Site Supervisor	Throughout construction
Work hours are limited to daylight hours only, nominally 7am to 5pm Mon to Sat. There is to be no nighttime work, except for emergency maintenance/repairs.	PCM Site Supervisor	Throughout construction
During hot/dry conditions, visual dust monitoring to be undertaken along Cape Tribulation – Bloomfield Road to establish dust conditions and potential traffic risk on the road.	PCM Site Supervisor	Throughout construction
The solar farm construction site is to be watered down whenever monitoring indicates dust from project works on this road exceeds thresholds considered to be a potential issue or risk to road traffic.	PCM Site Supervisor	Throughout construction
Burning or incineration of waste is not permitted at any work site.	Site Supervisor	At all times
When not in use, vehicles and other onsite equipment are to be turned off.	Site Supervisor	Throughout construction
Stockpiles of earth at the solar farm site must be appropriately bunded and covered when not in active use.	Site Supervisor	Throughout construction
The speed of vehicles on access roads to comply with all speed limits, and off site limited to speeds set by the Project Construction Managers.	PCM Site Supervisor	Throughout construction
Disturbed areas, including working areas shall be stabilised as soon as possible.	PCM Site Supervisor	Throughout construction
Monitoring	**Responsibility**	**Timing**
Undertake visual inspections / observations of site during day to day works, to identify problem areas and where corrective action is needed. This includes the solar farm construction site and the Cape Tribulation – Bloomfield Road frontage to the project area.	Site Supervisor	Daily
Monitoring of Cape Tribulation - Bloomfield Road condition to ensure that dust raised by project civil works and construction traffic is managed appropriately.	Site Supervisor	Under hot/dry conditions
Visual dust monitoring to be undertaken daily during all periods of civil earthworks.	Site Supervisor	Daily

Reporting	Responsibility	Timing
All personnel to report incidents.	All personnel	At all times
Record and manage all complaints in a register and corrective actions taken.	PCM	Throughout construction
Corrective Action	**Responsibility**	**Timing**
Appropriate control measures as identified in this EMP shall be implemented in a timely manner where nuisance dust and other air quality issues are identified.	PCM	Following identification
Any responses to complaints from local residents are to be implemented and recorded in consultation with the PCM.	PCM Site Supervisor	Following identification
Cape Tribulation - Bloomfield Road and solar farm site to be watered down under hot/dry conditions favouring dust generation.	PCM Site Supervisor	Following identification

4.10 Noise and Vibration

4.10.1 Aspect and Impacts

Noise and vibration are not likely to be potential issue to any local businesses or residents. The project farm is in an isolated area and separated from business and residential areas by dense vegetation and distance. Noise and vibrations from construction will arise from the following:

- General earthmoving and construction machinery activity.
- Machinery and traffic movement along the Rossville – Bloomfield Road (through Wujal Wujal and Bloomfield), and then along the Cape Tribulation – Bloomfield Road south of the Bloomfield River bridge.
- General construction personnel movement and noise.

The above activities will impact on properties along the above roads with varying intensities at different times during construction. Primarily most impacts will be limited to the times that material is transported to the construction, with small numbers of truck movements (not semi-trailers) expected intermittently over a two to three week period. Noise from general construction activities at the solar farm site are mitigated by distance from existing sensitive receptors and intervening forested vegetation.

Noise and vibration will be temporary, during daylight hours only, not anticipated to have any permanent or cumulative impact on residents or businesses in the area.

4.10.2 Management Plan

Environmental Objective
To minimise noise impacts and vibration from construction activities on landholders adjacent to construction works area including the solar farm and fronting the road reserve network. To limit the adverse impact of noise and vibration from construction, on wildlife around the construction areas generally.
Performance Criteria
• All works are managed in accordance with the EP Act and the Environmental Protection (Noise) Policy 2019. • No complaints are received from regulatory authorities or the community in relation to noise and vibration issues. • Noise limits, timing and duration are within • WWASC to be informed of truck movements timing through Wujal Wujal Aboriginal Community at all times of works program.

Mitigation Measures	Responsibility	Timing
WWASC are to be provided with an indicative work program with the timing, extent/location and duration of construction activities. The Project Construction Manager are to ensure construction is compliant with the work program. Any deviation to the work schedule/program is to be communicated immediately to WWASC.	Kabanka PCM	Prior to construction and as required when work program is amended.
Where possible, plant with the lowest noise rating which meets the requirements of the task shall be selected.	Site Supervisor	Throughout construction
Construction activities are to be undertaken during normal construction hours, (e.g. 7.00 am to 5.00 pm, Monday to Saturday).	PCM	Throughout construction
Equipment will be switched off when not in use if safe to do so.	Site Supervisor	When not in use
The noise of power generators to be used to power equipment during construction is controlled by design, and to have a noise level less than 65 dBA when measured from a distance of 7 metres	PCM	Throughout and post construction
Provide appropriate hearing protection to all workers if noise levels exceed the 85 dBA limit for protection of workers health.	Site Supervisor	As required during construction
Where possible, limit obtrusive construction activities to times that minimise noise impacts to Wujal Wujal Aboriginal and Degarra communities.	PCM Site Supervisor	Throughout construction
All vehicles and equipment to be maintained in good working order and serviced according to manufacturer's recommendations to avoid unnecessary nuisance.	Site Supervisor	Throughout construction
Site induction training to advise personnel of requirements to limit unnecessary revving of engines, engine braking and to exercise due courtesy of local residents, accommodation premises and other workers.	PCM Site Supervisor	During induction
Monitoring	**Responsibility**	**Timing**
Records of plant maintenance shall be kept on-site and/or with plant machinery.	Site Supervisor	Throughout construction
Operators shall undertake and log daily pre-start checks to ensure equipment is well maintained.	Operators and Site Supervisor	Daily
Undertake daily observations during construction as to the effectiveness of noise control measures and the control of excessive noise.	Site Supervisor	Daily
In the event of any complaint, noise monitoring equipment to be installed as per installation	PCM	As required
Reporting	**Responsibility**	**Timing**
All personnel to report complaints received and any obvious noise or dust effects.	All personnel	At all times
Noise monitoring results (if required to be undertaken) is be reported by PCM to Kabanka	PCM Kabanka	
Record and manage all complaints in a register and corrective actions taken.	Site Supervisor PCM	Throughout construction
Corrective Action	**Responsibility**	**Timing**
All complaints shall be investigated promptly and appropriate actions taken.	PCM	Upon receipt of a complaint
If monitoring identifies noise to be in excess of Environmental Protection (Noise) Policy 2019 for those activities, and/or is more than 65 dBA when measured from a distance of 7 metres then corrective action to remedy source problem to be undertaken	PCM	Where required
Corrective action shall be implemented to meet required outcomes of Administering Authorities.	Kabanka PCM	Where required

4.11 Emergency Response

4.11.1 Aspect and Impacts

On any construction project there is potential for an emergency situation to occur, such as fire, chemical release, spill, fuel/oil leaks, snake bite, equipment failure or any other likely emergency. While the potential is low some wildlife interactions (e.g. venomous snakes) may also require an emergency response. All emergency situations have the potential to cause damage/injury/impact to personnel and environment.

Of note is that the project area is within a high and very high bushfire hazard risk area. A separate Bushfire Hazard Management Plan has been prepared for the project, and provides the primary response for bushfire hazards including identification of fire fighting facilities, emergency response, evacuation and exit locations.

There is also the risk of electrical hazards that may require emergency responses.

4.11.2 Management Plan

Environmental Objective		
For project personnel to respond effectively and efficiently in the event of an emergency associated with any aspect of the project To ensure that any response is commensurate with the identification and mitigation of risks to the environment. All responses to comply with requirements of the Wujal Wujal Bushfire Hazard Management Plan.		
Performance Criteria		
• Emergency plans for construction developed prior to commencement of works on site. • All personnel familiar with emergency procedures and their role in the event of an emergency. • All personnel to be inducted into this EMP and the Bushfire Hazard Management Plan		
Mitigation Measures	**Responsibility**	**Timing**
Requirements of the Bushfire Hazard Management Plan takes precedent overall other responses in the event of a bushfire hazard threatening the construction site.	PCM/Site Supervisor	At all times
An appropriate spill kit, personal protective equipment and relevant operator instructions and emergency procedures for the management of wastes and chemicals associated with construction must be kept at the site.	PCM/Site Supervisor	At all times
Records shall be kept on chemicals and dangerous goods used during construction.	PCM	Throughout construction
All personnel engaged in any aspect of live electrical work are to be suitably trained and qualified in their areas of experience to undertake the work required.	PCM	Throughout construction
First aid and firefighting equipment (handheld extinguishers and fire hoses) shall be available at all construction locations.	PCM	At all times
Construction workers operating vehicles on-site to be appropriately trained and licensed, so that these vehicles are operated in a safe and appropriate manner. All vehicle operators to be briefed on locations of maintenance, storage and refuelling areas.	PCM	During induction
All relevant staff shall be trained in appropriate handling, storage and containment practices for chemicals and dangerous goods to be utilised during construction.	PCM	During induction

No fuel or hazardous substances are to be stored outside of the solar farm laydown area. All such substances are only to be stored, transported and used in accordance with relevant Australian standards (AS), guidelines and legislation, including: • *Dangerous Goods Safety Management Act 2001* • Regulatory requirements • Safety Data Sheets (SDS) requirements. SDS for products kept on site shall be readily available.	PCM	At all times
Important contact numbers and names to be available on site e.g. 000 for fire, ambulance, police, DETSI Pollution Hotline	PCM	At all times
Personnel to undertake adequate environmental awareness and training covering the requirements of this EMP and other management plans regarding emergency response.	Site Supervisor PCM	During induction
An emergency response plan shall be prepared which includes consideration of the following – • Response procedure in the event of a fire, chemical release, spill, leak, explosion, natural disaster, equipment failure, wildlife or any other likely emergency • Communication arrangements and contact details • Roles and responsibilities of project personnel • Emergency controls and alarms • Evacuation procedures • Training requirements • Site security.	Project Manager	Prior to commencement of works on site
Monitoring	**Responsibility**	**Timing**
Undertake review of the emergency response plan to identify any issues and check information is up to date.	Site Supervisor	Throughout construction
Review all potential work areas and activities that have the potential to create emergency situation prior to commencement of work	Site Supervisor	Throughout construction
Conduct drills if necessary.	Site Supervisor	Throughout construction
Reporting	**Responsibility**	**Timing**
All personnel to report incidents.	All personnel	At all times
Any personnel or environmental emergencies can be reported by all personnel, and recorded by Site Supervisor including time of incident, persons involved, details of incident, mitigation measures and actions taken to minimise the probability of recurrence.	All personnel Site Supervisor	Following incident
Inform the PCM and Site Supervisor immediately of any incidents resulting in potential or actual environmental harm.	All personnel	Following incident
PCM to inform Kabanka immediately of receipt of report of any notifiable emergencies of potential or actual harm to personnel or environment.	PCM	Following incident
Corrective Action	**Responsibility**	**Timing**
Where investigations identify inefficient or ineffective procedures, revision to management plan shall be undertaken and further controls implemented as necessary.	PCM Kabanka	Following identification

4.12 Traffic and Vehicle Management

4.12.1 Aspect and Impacts

A Traffic Management Plan (TMP) for the construction of the Wujal Wujal solar farm is to be prepared independently of this EMP. This TMP will be prepared jointly between the PCM and independent contractors responsible for transport of materials to the project area. The TMP will be approved by the Project Manager (Kabanka). Transport of materials to the site will be only from north of the Bloomfield River, via the Rossville – Bloomfield Road, and the Cape Tribulation – Bloomfield Road. No transport will occur along the Cape Tribulation – Bloomfield Road south of the solar site.

Heaviest traffic loads are expected for the movement of construction materials with the greatest number of vehicle movements transporting the numerous solar panels to site. These will be small trucks carrying the panel, estimated as two weeks (non-continuous) of this activity. All movements are during daylight and will only be to the solar farm, which will be the designated site laydown area. The other items (control room, battery energy storage systems, transformer etc) are modular in containers and will average about one larger trucks (not semis) trips per day for a week. All vehicles will comply with load and dimensions restrictions as applicable to the bridges and road requirements by Cook Shire Council and Wujal Wujal Aboriginal Council.

All personnel will be checked in and parked at the solar farm site each working day. Only vehicles essential to construction will leave the laydown area each day, with the personnel required. The only individual project vehicles parked on the road during construction will be those relevant to traffic management, project/contract management, or monitoring and auditing personnel. There will be no individual personnel vehicle parking their vehicles at work sites along the road network.

Busy periods, such as weekends, will largely be avoided for works along the main Cape Tribulation – Bloomfield Road. All works, including transport, are during normal daylight working hours, and with strict traffic management at the construction site.

4.12.2 Management Plan

Environmental Objective		
To minimise the potential for social disruption related to traffic and machinery movement and use on the roads within the general project area.		
Performance Criteria		
• All project vehicle traffic and machinery movement complies with the Traffic Management Plan as approved by Kabanka • There are no adverse vehicle/fauna interactions as a result of non-compliance with the Traffic Management Plan • There are no notifiable incidents involving local traffic and project machinery or vehicles.		
Mitigation Measures	**Responsibility**	**Timing**
TMP will be prepared conjointly between the PCM and independent contractors responsible for transport of materials to site. The TMP will be prepared in consultation with Kabanka and the relevant local governments managing the transport network.	Kabanka/PCM Individual contractors	Prior to construction
All project traffic is to comply with existing weight/load and dimension restrictions as may be applicable to any section of the project road network.	PCM	At all times
All project construction activity (including transport of materials to the laydown area at the solar farm) are to be in within normal daylight working hours 7am to 5pm, and avoid travelling at dawn and dusk, which are fauna vulnerable impact times.	PCM	At all times
There are no night movements of traffic for construction, or of personnel vehicles as all work will cease at 5pm, unless there are emergency activities,	PCM	At all times

e.g. repairing erosion and sediment control structures as a result of catastrophic rain or similar after hours emergencies.		
The solar farm will be the sole mustering point for the Project workforce. All commuter and private traffic will be retained at this muster point during work hours,	PCM Site Supervisor	At all times
Unless the vehicle is for specialised contractor purposes, e.g. electrical connections, there is to be no vehicle parking of workforce personnel within road reserves at any time other than for emergency requirements.	PCM Site Supervisor	Throughout construction
All fuel or hazardous substances are to be stored at the designated areas at the solar farm site. Transport and use of any of these materials shall be undertaken in accordance with relevant Australian standards (AS), guidelines and legislation, including: • *Dangerous Goods Safety Management Act 2001* • Regulatory requirements • Safety Data Sheets (SDS) requirements. SDS for products kept on site shall be readily available.	PCM	At all times
Monitoring	**Responsibility**	**Timing**
The site supervisor is to maintain an incident log of: • Adverse interactions between fauna and project traffic and machinery, including any incident while on route to project areas generally. • Private traffic near misses and actual incidents involving project traffic and machinery	Site Supervisor	Daily
Reporting	**Responsibility**	**Timing**
Incidences involving vehicular accidents between project machinery/traffic and private traffic resulting in damage to equipment or injury to humans is to be reported: a) to Police if warranted by severity of incident, b) immediately to the PCM.	PCM Site Supervisor	At all times
Inform the Project Construction Manager (PCM) immediately of any incidents resulting in potential or actual environmental harm.	Site Supervisor	Following incident
Project Construction Manager (PCM) to inform Kabanka immediately on receipt of report of any notifiable emergencies of potential or actual harm to personnel or environment.	PCM	Following incident
Corrective Action	**Responsibility**	**Timing**
In the event of any notifiable incident TMP sections appropriate to the activity being undertaken at the time of the incident to be reviewed.	Kabanka PCM	Following identification
Where investigations identify inefficient or ineffective procedures, revision to traffic management plan shall be undertaken and further controls implemented, as necessary.	Kabanka	Following identification

Appendices

Appendix A – Environmental Complaints Template

ENVIRONMENTAL COMPLAINT RECORD FORM

To be completed on receiving a complaint

SECTION 1: (to be completed by person receiving the complaint)

Current Date: __/__/____ Current Time: ___:___ am / pm
Complainant Name: Complainant Contact Details: Ph No._____ Address: _____ _____
Date of incident / Issue Causing Complaint: ____/____/____ Time of incident / Issue Causing Complaint: ____:____ am / pm Location of Incident / Issue Causing Complaint: _____

REASON FOR COMPLAINT

Describe clearly and in detail the circumstances leading to the incident / issue, and the incident / issue itself causing the complaint. As far as possible, verify the facts recorded, and identify witnesses.

……
……

Complaint reported to: Site Supervisor Date: __/__/____ Time: __:__ am / pm Signed: ……. Project Construction Manager Date: __/__/____ Time: __:__ am / pm Signed: …….

DETAILS OF ANY INVESTIGATIONS TAKEN:

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……
……

CONCLUSIONS FORMED:

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ACTIONS TAKEN TO RESOLVE COMPLAINT:

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ANY ABATEMENT MEASURES IMPLEMENTED:

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COMPLAINT RESOLVED BY:

Name:

Position:

Signature: …….

The Project Construction Manager is responsible for assuring the investigation and response to complaints. In some circumstances complaint response may be performed by the client and findings shared with the Project Construction Manager for record.

Records of complaints must be held for five (5) years.

Appendix B - Aboriginal Cultural Heritage Identification Template