CONSTRUCTION MANAGEMENT PLAN

Coleambally Micro Solar Farm Project



Document History					
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0	17/03/2021	Issued for review	Arsalan Usmani	Liang Zhao	Liang Zhao

Distribution List	
Name	**Organisation**

Authorised Release		
Position	**Authorised by**	**Signature**
Project Manager	Liang Zhao	
Construction Manager	Brenton Moratto	
Engineering Manager	Rodd Zhang	
Quality Manager	Arsalan Usmani	

Please note that the above ACLE Services staff can only authorise the release of the final document

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1 ABBREVIATIONS

ACLE	EPC contractor
CEMP	Construction Environmental Management Plan
CMP	Construction Management plan
DA	Development Approval
DC	Direct Current
EPC	Engineer, Procure & Construct
HSE	Health, Safety and Environment
HV	High Voltage
ITP	Inspection and Test Plan
JHA	Job Hazard Analysis
kV	Kilo Volt
O&M	Operation and Maintenance
Project	Coleambally Solar Farm Project
Project Owner	TBD
PV	Photo Voltaic
QMP	Quality Management Plan
SF	Solar Farm
SIMOPS	Simultaneous Operations
SWMS	Safe Work Method Statements
SWMS	Safe Work Method Statement
WHSMP	Work Health and Safety Management Plan

2 INTRODUCTION

2.1 PURPOSE

The Construction Management Plan defines the standard processes and obligations that must be adhered to ensure the project is controlled in an efficient manner. It is not intended to be rigid in its reading but is flexible and open to development with the project team and further development as the project traverses various phases of construction.

This plan is intended to demonstrate the commitment to the project and to identify the key issues to be managed to ensure our client, local and statutory requirements, regulations and standards are followed ensuring a quality product is achieved in a safe and timely manner.

2.2 SCOPE

ACLE services have been engaged to construct a 4.950 MVA Micro Solar Farm at 1207 Donald Ross Road, Coleambally. The scope of works is as follows:

Project Objectives	Delivery of a 4.950MVA ground mounting solar project
Timeframe	OCT 2021 - MAR 2022
Project Location	1207 Donald Ross Road, Coleambally
Key Stakeholders	Murrumbidgee Council, Essential Energy
Project Scope	Site levelling/compaction if required (up to 18 hectares). Installation of security chain mesh fence and swing entrance gates Construction of road and crossing for access track, carpark, unloading area & site access Landscaping – plant as per the design drawings Drainage and stormwater installation as per the design Install single-axis trackers for PV solar panels Installation of all PV solar panels Installation of an inverter station container Installation of the DC battery containers Installation of all required cable and cable tray Installation of an HV switchgear Kiosk

Powerline easement For the connection to 33kV grid	Easement for the Essential energy 33kV overhead line is within the scope of the Essential energy construction project. Essential Energy will construct a 33kV overhead transmission line, which will be connected to the onsite HV switchboard. The point of connection is the start of the overhead line. There will be three poles established within the Solar Farm boundary and Tee off to the existing Essential Energy 33kV transmission line. Poles will be the standard height and will be installed by the Essential Energy HV contractor and as per the Australian Standard and New Service rules. After the installation, Essential Energy will perform an inspection and sign off the construction work. ACLE will then connect the cables from the HV switchgear to the Essential Energy 33kV transmission line.

2.3 PROJECT OVERVIEW

The site layout has been endorsed by Murrumbidgee Council. Please refer to DA condition discharge document package – Amended Plan.

The site layout includes

- Overall PV array layout and dimension
- The solar panel and mounting system layout and elevation,
- Central Inverter layout, colour and elevation,
- Essential energy pole layout and elevation,
- The access road layout,
- The site carpark layout,
- The site fence layout,
- The setback from the nearby residential building

2.4 MANAGEMENT PLANS

The table below lists the project related management plans developed for the Coleambally solar project.

ACLE Site Project Quality Management Plan, Workplace Safety and Health Management Plan and Construction Environmental Management Plan detail information that has been specifically adapted in the Construction Management Plan to suit the requirements of this project.

The management plans shall be reviewed and revised as required throughout the project as materials, installation and delivery methods and other requirements are further refined.

Project Quality Management Plan	The purpose of this Project Quality Management Plan (PQMP) is to provide guidelines and direction to all ACLE personnel, in relation to the requirements of the Project Owner contract.
Work Health and Safety Management Plan	This plan's purpose is to provide ACLE personnel and sub-contractors direction on the management of work health & safety hazards and associated risks and provide all personnel with the awareness of the controls that apply to the daily activities associated with this project. ACLE Management has a responsibility and are accountable for providing the quality process, practices, structure, equipment, education, information, instruction, training and supervision, such

	that our employees & sub-contractors are free from the risk of a workplace injury or illness.
Construction Environmental Management Plan	The purpose of the Construction Environmental Management Plan (CEMP) is to define the essential requirements of environmental management in order to assure control of impacts arising in, from, or because of, the activities of ACLE and all its related subsidiaries.
Commissioning Plan	The Commissioning Plan serves to encompass all aspects of the commissioning process for the project and includes references to relevant documentation. The completion and commissioning plan will function as the recorded document that assures the equipment and systems installed during the construction process have been inspected for compliance to the specifications and drawings, in accordance with manufacturers' requirements, design criteria and made ready for operation.

3 PROJECT ORGANISATION AND RESPONSIBILITIES

3.1 CONSTRUCTION CONTACTS

During construction, the Project Manager will be the key Client and Stakeholder interface for the ACLE team. During times that the ACLE Project Manager is not available on-site, the ACLE Construction Manager will be the authorised representative to act as the Client / Stakeholder interface and the site management team.

Role	Responsible Person	Phone number	Email Address
Project Manager	Liang Zhao	0420 507 389	Liang@acle.com.au
Construction Manager	Brenton Moratto	0403 787 071	Brenton@acle.com.au
Health and Safety Manager	David Westaway	0411 578 146	david.westaway@acleservices.com.au

There will be a total up to 50 people working onsite at the same time.

3.2 KEY PERSONNEL

The ACLE project team identified on the organisation chart in the Project Quality Management Plan will be responsible for the delivery of the works in accordance with the scope and project schedule. The organisation structure is designed to provide focal contact points for the management of sub-contractors and direct labour.

3.2.1 PROJECT MANAGER

- Demonstrate proactive support for environmental requirements, including ensuring sufficient resourcing for the Environmental Team, Engineering and Construction Teams;
- On-site project management and control;
- Decision-making authority relating to the performance of the construction program;
- Report on the project's performance and ensures potential risks are minimised;
- Authority over project construction and site activities in accordance with the CMP;
- Ensure relevant training is provided to all project staff prior to commencing individual activities.
- Ensures appropriate contractor resources are allocated;
- Orders STOP WORK for any environmental breaches and reports incidents;

3.2.2 CONSTRUCTION MANAGER

- Responsible for planning and scheduling of construction, and to ensure operations are conducted in accordance with statutory requirements and the CMP;
- Ensures that all objectives associated with the Project are achieved.
- Day-to-day decision-making authority relating to performance of construction activities and direct site activities and construction in accordance with the CMP;
- To provide resources to ensure compliance and continuous improvement;
- Ensure all personnel are aware of any changes to CMP and improved procedures.

3.2.3 HEALTH, SAFETY AND ENVIRONMENTAL (HSE) MANAGER

- Provides HSE advice, assistance and direction to project manager to ensure construction activities are conducted in accordance with regulatory legislation and CMP;
- Reports on the performance of the CMP. Recommend changes or improvements to the project manager;
- Co-ordinates internal audits of the CMP;
- Ensures that HSE measures are effectively implemented and monitored for the whole of the project;
- Develop strong working relationships with regulatory agencies and stakeholders;
- Collate all documents which are required to be kept under approval conditions;
- Identify and propose solutions to HSE issues in consultation with key construction personnel;
- Ensure HSE risks are appropriately identified, communicated and effectively managed;
- The HSE can order Stop Work for any HSE breaches
- Manage specialist HSE sub-consultants;
- Instruct and advise the management team on compliance issues, with power to cease work to prevent non-compliance and environmental harm;
- Ensure construction manager, superintendents and field supervisors fully understand the environmental constraints and how construction practices must ensure any such constraints are considered and mitigated against during construction;
- Have input to design development to ensure that all applicable environmental mitigation measures are incorporated into the design.

3.2.4 SUBCONTRACTORS

All of the construction works will be completed by ACLE personnel and there will be two working on-site:

- HV contractor
- Fencing contractor

The nominated fencing contractor (up to 4 people) will be working on the fencing works as per the council endorsed fencing drawings. All the environmental and health & safety requirements have been included in the Subcontract. ACLE services will also allocate an experienced supervisor on-site to ensure they apply the same level of diligence and compliance in relation to health and safety and environmental management plan.

The volume of the HV works onsite would be minimal due to the scale of the project. The HV contractor (up to 4 people) will be accompanied with ACLE services work crew on-site ensuring they work in a safe manner.

3.2.5 ALL SITE PERSONNEL

The responsibilities of all the personnel inducted to the site are as following:

- Follow required procedures; communicated during inductions, training, prestart meetings and site meetings.
- Report all health, safety and environmental incidents and hazards to supervisor and/or health and safety manager; and
- Participate in training as required before starting of particular task and when changing from one task to another task.

4 RISK MANAGEMENT

4.1 PROJECT RISK AND THE RISK REGISTER

Risk identification is carried out throughout the project lifecycle, all identified risks are captured in the Project Risk Register.

During construction HSE risk assessments will be conducted against the relevant documented construction methodologies. Any newly identified risks and associated controls will be added to the Risk Register.

Risks associated with any specific work activity will be managed as part of JSAs and safe work method statements (Safe Work Method Statement (SWMS)).

Further detail is available in the Workplace Health and Safety Management Plan.

4.2 SITE HEALTH SAFETY AND ENVIRONMENTAL RISK

These risks will be closely governed throughout construction. Key areas of focus shall include but are not limited to:

- Fitness for work
- Fatigue management
- Confined spaces (If Required)
- Working at heights
- Excavation and concealed services
- Equipment Operation
- Oil spill
- Bushfire
- Housekeeping

5 PROJECT EXECUTION

5.1 OVERVIEW

The proposed site access is off the Walkers Road as shown in Appendix A. The management hubs will be located on side of Walkers Road and will be the drop off point for all equipment delivery during construction and also all daily management activities during the operational life of the project.

The site plan in Appendix A shows the site layout, including associated building works and management hub, existing roads, proposed access roads, parking areas, existing and indicative landscaping and setbacks from boundaries including fire breaks, security fencing and perimeter roads.

The maximum height of the solar panel rows that are located across the site will be approximately 2.25 m.

The plant will connect to the local 33kV transmission system.

5.2 PRE MOBILISATION-PLANNING

Following project award and prior to mobilisation a review of all relevant project deliverables and approvals will be carried out by the project management team. This will include some of the management plans.

5.2.1 DOCUMENT REVIEW

The Project Management Team shall review all project documentation required to fully gain an understanding of the project requirements.

Specific attention shall be given to the following client issued documents:

Document	Requirement
Executed Contract	Agreed commercial conditions concerning the execution of the project are known and fully understood.
Scope of Work	Battery limits and work requirements fully understood and any uncertainty to be clarified with the client.
Project Specifications	Project-specific requirements are understood and how ACLE shall meet or exceed these requirements to be planned.
Construction Schedule	Project personnel to be aware of access dates, critical milestones and completion dates.
Drawings	Review of project details and what associated work is required in areas. Identify what drawings are required to be issued Approved for Construction.
Project Deliverables	To allow an understanding of what deliverables exist for the project and when they are required

5.3 APPROVALS

Council Approval and other legislative approval needs to be in place for the construction to proceed.

5.4 DESIGN

The design process is managed through the proprietary digital system called Procore. The site personnel access the drawings and any change in the drawing is also managed through Procore request for information that addresses to the design engineer.

5.5 PROCUREMENT

All critical procurement activities are detailed on the construction schedule and are linked to applicable construction activities. Procurement and expediting activities shall be closely monitored ensure construction activities are not impacted and project critical path is not affected.

5.5.1 SUPPLIED MATERIAL

The Project Manager and site team will utilise the detailed construction material take off, specifications, standards, the scope of work and other relevant information to ensure all material and equipment comply prior to purchase and dispatch to site.

All long lead items have been included in the construction schedule and must be procured in line with or better than the target dates to ensure critical activities are not impacted.

5.6 QUALITY

ACLE operates a Management System comprising a full suite of policies, procedures, work instructions, standard forms and check lists which complies with Australian and International Standards (ISO:9000) for managing the procedural aspects of our work.

It is the responsibility of the ACLE Project Manager and site team to ensure that the project complies with all relevant specifications and scopes of work.

The Project Quality Manager must ensure the project is complete and fit for purpose, including inspection and correction, prior to handover and acceptance by the client.

5.6.1 STANDARDS AND REGULATIONS

The required standards and regulations have been identified and obtained during the planning stage if not already at the tender and/or contract review stage. Throughout the course of the work, issues relating to standards and regulations should be reviewed by the project team.

5.7 PROJECT CONTROLS

5.7.1 CONSTRUCTION SCHEDULE

ACLE produced a detailed Construction Schedule optimising the sequence of the work. In order to successfully execute this project, ACLE believes that success depends upon adequate and detailed planning. ACLE also endeavours to achieve detailed planning by ensuring communication is established and maintained between all major stakeholders that exist within the boundaries that affect the project delivery.

ACLE personnel in all instances shall work to a detailed work plan or construction schedule to which we request the client approves and accepts in consultation with our project management team.

Work activities	From	To
Civil Earthling works, fencing and landscaping	04/10/21	05/11/21
Delivery of long lead Materials	18/10/21	11/02/22
PV panel and LV cable installation	01/11/21	25/02/22
HV station installation, testing and Commissioning	15/02/22	21/03/22
Site Clean-up and demobilisation	14/03/22	30/03/22

Notes: Civil works might start any time between October 2021 and November 2021 due to the resource availability and will be completed within 4 weeks only.

5.7.2 CONSTRUCTION REPORTING & FEEDBACK

ACLE committed to delivering the project schedule. The schedule will be updated and reviewed regularly with the necessary changes and adjustments made to ensure project milestones are achieved.

All formal discussions will be recorded by minutes and all instructions, variations and delays will be recorded and signed off and approved as required.

5.7.3 CONSTRUCTION BENCHMARKING

Productivity must be closely monitored as it has a direct impact on project progress. Anomalies must be investigated and mitigation strategies implemented if required to prevent impacting project milestone(s).

This will ensure that any inefficiencies are identified and reduced or removed, or where new work methods have improved productivity, they can be harnessed to improve the overall productivity of the construction work.

5.7.4 PROJECT REPORTING

The project management and supervisory staff shall ensure that appropriate reports are completed and entered within a timely manner to ensure accurate reporting data is available by agreed reporting dates.

The Project Manager shall update the construction schedule typically every week. This will allow critical paths, slippages or delays to be analysed and reported. All critical path activities can be tracked and any delays identified so that contingency work plans can be formed to mitigate project delays.

5.8 MOBILISATION

Initial site works begin in early October which includes clearing of the site, the establishment of site roads and hardstand, fencing and the setup of the existing temporary site offices.

5.9 SITE DEMOBILISATION AND O&M HANDOVER

Site Demobilisation will commence shortly after practical completion of the final section of works with minimum site person remaining to carry out any remaining non-critical punchlist work and provide support during the performance testing of the plant planned for March 2022.

Handover of Manufacturers Data Records and O&M documentation will be progressive through the project with final documentation and Operator Training handed over shortly after Practical Completion.

6 KEY STRATEGIES

6.1 CONSTRUCTION

The project scope will be divided into manageable work areas to facilitate a controlled workflow and smooth handover from construction to commissioning through to operation.

6.2 SITE PREPARATION

The following site amenities will be provided:

- 1 x Site office
- 2 x Lunchroom
- Multiple ablution facilities and waste holding tank
- 1 x Site storage container
- 1 x Water tank – 22,500 L
- 1 x Diesel generator
- 2 x Waste bin (General waste bin x 1, Recycle waste bin x 1)

Multiple first aid kits as described in the Health and Safety Management Plan

Portable amenities will be installed as close as possible to the work site as shown on the construction layout drawings

The ablution waste holding tank will need to be pumped out and serviced regularly depending on the number of workers using the facilities.

The drinking water will be provided on-site to ensure each personnel has average 2L drink water a day.

6.2.1 SITE SIGNAGE

Construction management Contractor signage shall be displayed that is clearly visible from outside the construction site and indicates:

- The principal contractor’s name and telephone contact numbers (including an after hours telephone number);
- The location of the site office for the project

The following signage shall be established at the main project access point:

- Danger Construction Site
- High voltage sign
- PPE requirements
- Site traffic management showing walkway and heave vehicle movement
- A sensitive site with a prescribed tree protection zone

All Visitors and Construction Personnel must report to the site office or Site Manager before entering the work area.

The following HSE signage shall be established within the site:

- High voltage
- Security
- No parking
- Parking permitted
- Forklifts in use
- Loading zone
- UHF/acle
- ACLE
- Overhead powerlines ESV
- Smoking permitted
- First aid station
- Eyewash station
- Spill kit
- Qualified electrical personnel
- Appropriate PPE
- Fire extinguisher
- All visitors report to the office
- Report all accidents
- No walking while using a mobile phone
- No smoking
- Emergency assembly point
- 10 km hr speed limit
- 5 km hr speed limit
- Delivery this way
- Site office

Any signage installed will comply with AS 1319 – Safety signs for the occupational environment.

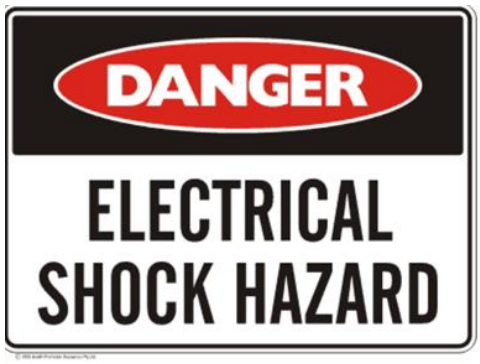
The proposed sign required by DA Condition will be placed at and will be as follows, it will contain details of ‘sensitive’ tree protection zones and fences:








NOTICE
ALL VISITORS
PLEASE REPORT
TO SITE OFFICE


DANGER
ELECTRICAL
SHOCK HAZARD


ENVIRONMENT
AWARE NOTICE
YOU ARE NOW ENTERING
A SENSITIVE SITE WITH
PRESCRIBED TREE PROTECTION
ZONES & BARRIERS


SPILL
KIT

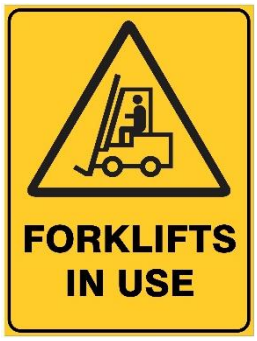

EYE WASH
STATION


EMERGENCY
ASSEMBLY
POINT

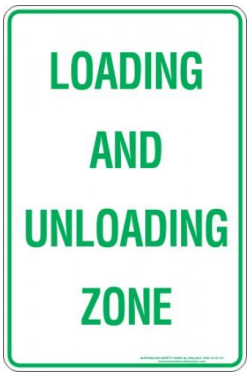
The following signage will be installed next to the smoking designated area



The following signage will be installed next to forklifts or telehandlers showing Mechanical hazard signage



The unloading and loading area would be marked by the following signage



6.2.2 SITE ACCESS

There will be a logbook placed at the main entrance gate. All the vehicles must be self-registered first, following the speed limit and park in the designated car park spot. The weight vehicle must not exceed the weight showing on the signage.

After arrival, the visitor must report to the Site Manager first. All the permit and licence will be checked and documented.

The Site Manager will ensure that workers have completed the general construction induction training before starting construction work. The worker must have:

- A general construction induction training card; or
- A general construction induction training certification that has been issued with the preceding 60 days if the worker has applied for but not yet been issued with a general induction training card
- And carried out construction work in the past 2 years
- Site induction plan – LV contractor

A visitor is anyone who enters the site on a once-off or infrequent occasion for purposes that do not involve any form of construction work activity or work connected with construction activities (e.g. a visit from shire to check progress).

All visitors accessing the project work areas are to be accompanied at all times by a fully inducted organisation representative who is familiar with the project and hazards present. The organisational person receiving the visitor(s) is responsible for providing a visitor induction to each visitor with instructions on specific safety requirements and any notable hazards associated with the site.

6.2.3 VEHICLE PARKING

A designated area within the site will be marked for vehicle parking and will be indicated in the drawings.

6.2.4 SITE SECURITY

Physical security will be provided at the site. At the start of construction, the local Police Service representatives will be provided details of the project security planning. Contract phone numbers will be displayed on site signage for access in the event of an emergency.

The site will be fully fenced along the lot boundary, which is designed to keep stock, unauthorised vehicles and people out of the lot. The fence will be a 1.8m chain link fence as per Australian Standards AS1725-2010.

Site security will be managed by physical access control to the site using locked security gates and locked storage containers for tools and equipment. A perimeter beam security system and CCTV monitoring system will be installed as part of the site build specification. This will include a “back to base” alarm function.

Security patrolling outside working hours will also be deployed on-site during the construction period.

6.2.5 SITE MAINTENANCE AND HYGIENE

Good housekeeping is critical for construction safety. The site manager organises to:

- Clean the Jobsite after major tasks or at least daily; avoid the build-up of hazardous, flammable, or combustible materials.
- Stack scrap lumbers out of the way and removes protruding nails.
- Keep walkways, stairs, and work areas clear.

Ensure that walking surfaces are as level as possible.

At the same time, a local cleaning company has been engaged to perform regular cleaning - twice a week for the followings:

- Toilet
- Lunch Room
- Washing Facilities

A designated smoking area is shown on the construction layout drawing

6.3 WORK HOURS

Major civil works, materials delivery and other heavy vehicle movements will only occur between the hours of 7:00am to 6:00pm Monday to Friday, and 8:00am to 1:00pm Saturday. To maximise productivity less noise intensive activities including cabling, testing and commissioning may be conducted outside these hours and between 7:00am to 7:00pm Monday to Sunday as required.

Any out of hours work must be approved by the Site Manager and the Responsible Authority from the council before it commences and must consider noise impacts to neighbours and fatigue management issues for workers.

The field crew will access the site from 6:30am to 7:00am and from 6:00pm to 6:30pm depending on the weather. Major material truck delivery (solar panel, mounting structure and battery) is expected to be scheduled within three weeks period, whereas delivery of large materials is to be undertaken intermittently over the construction period. Material delivery events are scheduled to occur during the period of 7:00am to 6:00pm Monday to Friday, and 8:00am to 1:00pm Saturday. During the major material delivery stage, a site traffic controller will be scheduled for performing material coordination works so that the materials can be offloaded to the designated material loading zone.

The limited number of vehicles will be deployed to provide transportation for PV panel installers and electricians, which will significantly reduce traffic access to the site.

Access to and from the site will be via the main access, only – in accordance with the plans endorsed with the planning permit. Speed sign will be put up on the fence to limit the speed.

6.4 DELIVERY OF MATERIALS

Majority of the goods will be delivered to the site in advance. Prior to it, the site security fence would have been set up and a local security company will be employed to protect the site.

A designated driveway and loading bay will be constructed for the materials offload as per the construction site layout drawing.

The delivery and material storage compound surface must be sufficiently stable and durable to withstand the vehicle movements to prevent the generation of mud in this area. As the vehicles will be moving from this area out to public roads and must not track mud out onto public roads.

6.4.1 THE FOLLOWING MATERIALS WILL BE DELIVERED TO SITE:

- PV solar panels
- Mounting structure – Single-axis Trackers
- Inverter container
- Cable and cable trays
- Battery containers
- HV Switchgear Kiosk

6.4.2 DELIVERY METHODOLOGY OF MATERIALS

The material deliveries will be collected from the Sydney port to the warehouse in Narrandera using B-double trucks. The route is shown in Appendix B.

From the Narrandera warehouse, the material deliveries will be taken to the site at 1207 Donald Ross Road, Coleambally using semi-trucks via the route as shown in the picture below:



The semi-trucks will be turning left from the Sturt Hwy towards Main Canal Rd as shown in the figure below:



For detailed site plan refer to Appendix A.

6.4.3 DELIVERY FREQUENCY

- From Sydney Port to Narrandera central warehouse: 15 B-double trucks
- From Narrandera central warehouse to site: 30 Semi-trucks for major material delivery within 3 weeks on average 2 trucks per day

The rest of the materials will be delivered via up to 15 semi-trucks.

6.4.4 THERE ARE SEVERAL MEASURES TO BE IMPLEMENTED TO MINIMISE DUST ALONG THE ROADS:

- Vehicle storage is not required as any semi-truck delivery will be scheduled from 8:00 am onwards. Our construction crew will start from 7:00 am, ensure the gate is open before the delivery.
- Reduce the number of vehicles accessing the site. All the material delivery trucks will be scheduled for delivery as close to morning as possible, when moisture is high. Meanwhile, the number of trucks will be limited up to 5 as per the proposed delivery schedule. In relation to the field crew's vehicles, instead of driving individually, minivans will be deployed to for field crew travelling.
- During the dry weather conditions, if required water spray truck to be utilised to control dust to control the dust. The Project Manager has already established a service agreement with the water truck service provider.
- If complaints from the public or notices from the regulator about dust are received, these should be copied to the HSE Advisor and entered in the HSE Project Actions Register. The Register shall include details of follow up action taken, and whether such action was successful in alleviating the problem. Copies of notices from the regulator or other authorities should be forwarded to the HSE Advisor and Project Manager.

6.5 WASTE MANAGEMENT DURING CONSTRUCTION AND DURING OPERATION AND MAINTENANCE

During construction, all waste will be collected and stored in appropriately segregated and labelled waste containers. There will be two waste bins located in the management hub area, one of them will be general waste bin and the other will recycle waste bin. The bins will be checked and logged every day by the appropriate personnel. Once the bins are about to get full, ACLE will arrange the local waste collector to collect and dispose of the waste appropriately.

There will be mobile wheeled waste bins placed on site to dispose of the waste while unpacking the materials which will be then brought and tipped in the bins in the management hub area. The fence will be analyzed regularly to look for any debris built up and will be cleaned if required.

During operation and maintenance, the procedure for the waste management will be similar but the frequency of logging the waste will be once in a month.

6.6 CIVIL

The civil packages will be the first to be executed as there is a significant scheduling advantage completing this work first. The work fronts will not be restricted by trackers allowing the use of larger machines and more efficient installation methods.

6.7 STRUCTURAL

Solar tracker installation will commence as soon as practical with the delivery and set out of the piers within the block. Coordination with the civil team will be required to ensure trackers are not installed where unrestricted civil access is required.

Once civil activities are complete in an area the structural team will be advised and may commence installation of the remaining posts and combiner boxes.

The structural package includes the following activities:

- Solar tracker installation
- Module bracket installation
- Combiner Box installation
- Inverter station and inverter installation
- Weather Station installation

6.8 ELECTRICAL

As soon as the structural work is completed the electrical works start which involves activities such as:

- Installation of HV switchgear kiosk
- Installation of Battery containers
- Installation of an Inverter station
- Installation of DC combiner boxes
- Installation of Modules
- Installation of Weather station

6.8.1 CABLE TERMINATIONS

Cable termination crew will systematically work through the blocks as the work fronts become available. cables MUST NOT be terminated/connected in the combiner box at this point. This activity will be carried out by the QA team once all necessary QA checks have been completed and the block is deemed ready for energisation.

6.9 CONSTRUCTION PLANT AND EQUIPMENT

The following plant and equipment are planned to be used for construction activities. This list will be updated as required.

- Excavator
- Telehandler / Forklift
- Grader
- Tamping rammer / compactor
- Impact piling rig and crawler
- Water dust suppression truck
- Power hand tools
- Concrete truck and associated concrete pump

6.10 CONSTRUCTION VERIFICATION AND COMMISSIONING

During construction, all the construction activities must be checked in line with the project Inspection and Test Plan (ITP).

Due to the repetitive nature of the works, it is imperative that the QA checks closely follow construction to ensure any error is not repeated across the site.

Further information can be found in the Quality Management Plan.

6.11 CONTRACTING

ACLE services will ensure that all works conform to the Council's standards and specifications and that existing assets are maintained in a satisfactory condition whilst development of the municipality continues. In the event of any damage to the council assets especially the road and drainage, the local council will be notified intermediately.

To provide Council with an adequate reference tool, a Condition Report, accompanied by site photos will be provided to Council – this will occur both prior to, and upon completion of civil works.

All the vehicles accessing development site will comply with required mass limits for any Council-managed roads to minimise damage especially during the transportation of PV solar panels.

Should any damages occur on the gravel of any Council-managed road due to the transportation directly related to the development, the following steps will be carried out:

1. Application for works in road reserve permit from Council prior to the road repairs
2. An authorised traffic management persons/company will prepare a Traffic Management Plan for review and approval from the council.

3. Meanwhile, a detailed scope of works and methodology will also be prepared and sent to the council for approval prior to the repair.
4. During the repair works, a traffic management company may be engaged for the traffic control subject to council's approval. Furthermore, ALCE services will arrange the letter drop to the surrounding affected neighbours ensuring they are fully engaged well in advance.
5. ACLE services will issue a final inspection report to council upon the completion of the repair works.

Please note that ACLE services Pty Ltd and ACEnergy Pty Ltd will seek a required Permit from Council approved contractors – in the instance where repairs or works on Council roads are necessary. Alternatively, the Council may request a monetary contribution to cover the cost of any civil remediation works.

7 CONSULTATION AND COMMUNICATION

ACLE acknowledges that effective consultation and participation by personnel is essential for successful project management.

7.1 DAILY PRESTART MEETING

The construction team shall conduct a daily prestart meeting during which all activities for the day will be coordinated and discussed. The daily meeting will also provide a forum for open team communication and a review of the previous shift's activities.

Meeting structure will consist of:

- Safety
- Progress
- Activities for today
- Interfaces (subcontractors, vendors, deliveries, other)
- Areas of concern and action plans
- Visitors to site

7.2 WEEKLY CONSTRUCTION MEETINGS

The ACLE Project Manager & ACLE Construction Manager shall conduct a weekly progress meeting with the construction team and each subcontractor to review the weekly construction status report and the discussing following:

- Safety including statistics for the period
- Review of progress
- Achievements for the week
- Status of contract milestones
- Progress as determined through the tracking process
- Identified risks and opportunities
- Potential Delays
- Significant activities planned for the following week
- Contract Variations / Commercial Issues
- Quality
- Interfaces
- Delivery of Principle/Contractor supplied equipment

7.3 STAKEHOLDER COMMUNICATION

Concerned neighbours or other stakeholders may submit complaints about the project to the following contact details.

Postal Address	Suite 305/685 Burke Road Camberwell Vic 3124
Email	Liang@acle.com.au

ACLE Services will exercise this responsibility to cover any complaints that arise from the conduct of construction activities by any of its sub-contractors.

8 ENVIRONMENTAL CONTROLS

Refer to the construction environmental management plan for the management of the following point:

- Drainage, Erosion and Sediment Control
- Dust, Noise, Vibration and Light Management
- Biosecurity
- Vegetation Management
- Fauna Management
- Traffic Management
- Waste Management
- Hazardous Substances
- Emergency Preparedness and Management
- Rehabilitation

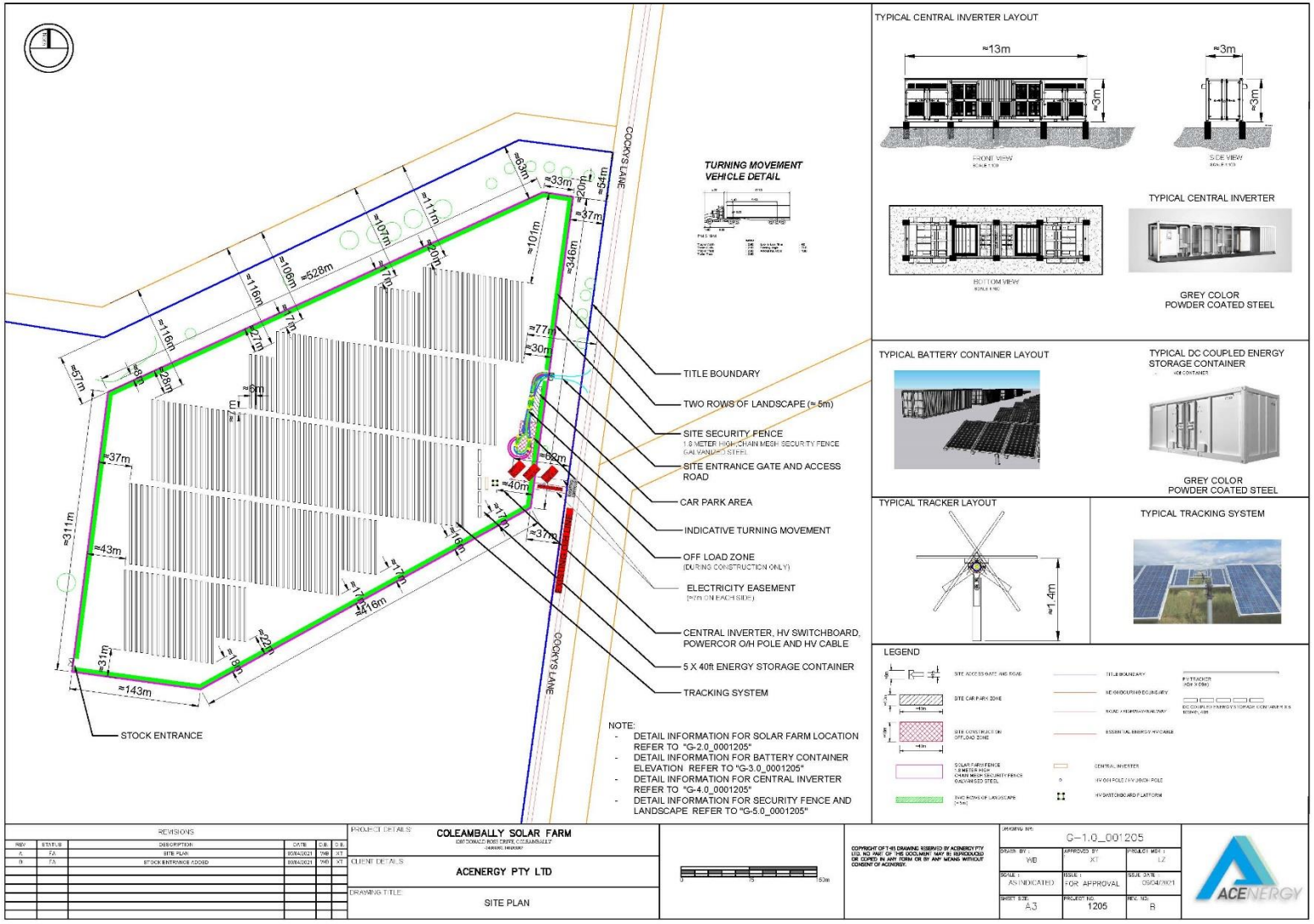
9 HSEQ SYSTEMS

Refer to construction health and safety management plan for the management of the following point:

- Training
- Inductions
- Safe Work Method Statement (SWMS)
- Daily Construction Pre-Start Meeting
- Toolbox Meetings
- Inspection and Monitoring and Auditing
- Incident Reporting
- Complaints Management

10 APPENDICES

APPENDIX A: SITE PLAN



APPENDIX B: TRAFFIC ROUTE

