PLANNING REPORT

SUBJECT: TILT RENEWABLES AUSTRALIA PTY LTD - MATERIAL CHANGE OF USE - RENEWABLE ENERGY FACILITY (SOLAR FARM) & RECONFIGURING A LOT (2 LOTS INTO 3 LOTS) & ACCESS EASEMENT - LOT 156 ON SP124698 & ACCESS VIA LOT 251 ON SP129910 - 15 CANE ROAD, MAREEBA - MCU/17/0008

- MEETING: Ordinary
- **MEETING DATE:** 20 December 2017

REPORT OFFICER'S TITLE: Senior Planner

DEPARTMENT: Corporate and Community Services

APPLICATION DETAILS

APPLICATION		PREMISES		
APPLICANT	Tilt Renewables Australia Pty Ltd	ADDRESS	15 Cane Road, Mareeba	
DATE LODGED	19 September 2017	tember 2017 RPD Lot 156 on SP12469 & access via Lot 25 on SP129910		
TYPE OF APPROVAL	Development Permit			
PROPOSED DEVELOPMENT	Material Change of Use for Renewable Energy Facility (Solar Farm) and associated substation, and Reconfiguring a Lot - Subdivision by Lease (2 lots into 3 lots) & Access Easement			

FILE NO	MCU/17/0008	AREA	Lot 156 - 267.684 ha	
			Lot 251 - 17.3 ha	
LODGED BY	Environmental Resources	OWNER	Lot 156 - A & S Price	
	Management Australia Pty Ltd		Lot 251 - State of Qld	
PLANNING	Mareeba Shire Council Planning Scheme 2016			
SCHEME				
ZONE	Rural zone (Lot 156) & Community Facilities zone (Lot 251)			
LEVEL OF	Impact Assessment			
ASSESSMENT				
SUBMISSIONS	Three (3)			

ATTACHMENTS:

- 1. Proposal Plan/s
- 2. Department of Infrastructure, Local Government and Planning Referral Agency Response – 1 November 2017
- 3. Submitter letters and applicant's response

EXECUTIVE SUMMARY

Council is in receipt of a development application described in the above application details.

Tilt Renewables Australia Pty Ltd (the applicants) propose to construct a 75 MW solar farm, comprising of approximately 200,000 solar PV panels, which is expected to provide enough clean energy to power 21,000 homes and save 100,000 tonnes of annual greenhouse gas emissions over the 25 year life of the facility.

The application is impact assessable and three (3) properly made submissions were received in response to public notification of the application.

It has been assessed against the relevant statutory planning instruments, including the Regional Plan and the Planning Scheme and does not conflict with any relevant planning instrument.

Key planning issues to consider are ensuring the developments impacts on Council's road network during its construction stage are appropriately managed, and that the solar farm infrastructure is appropriately screened from adjoining properties. It is considered these issues can be adequately managed through conditions of approval.

Once operational, the solar farm will have a negligible impact on Council's road network, is not likely to produce any negative environmental outputs such as dust, noise and odour, and will have minimal impact on surrounding agricultural uses.

Draft conditions were provided to the Applicant/care of their consultant and have been agreed.

It is recommended that the application be approved in full with conditions.

OFFICER'S RECOMMENDATION

APPLICATION		PREMISES			
APPLICANT	Tilt Renewables Australia	ADDRESS	15	Cane	Road,
	Pty Ltd		Mare	eba	
DATE LODGED	19 September 2017	RPD	Lot 1	56 on SF	124698
			& ac	cess via	Lot 251
			on S	P129910	
TYPE OF	Development Permit	Development Permit			
APPROVAL					
PROPOSED	Material Change of Use for Renewable Energy Facility (Solar Farm)				
DEVELOPMENT	and associated substation, and Reconfiguring a Lot - Subdivision by				
	Lease (2 lots into 3 lots) & Access Easement				

"1. That in relation to the following development application:

and in accordance with the Planning Act 2016, the applicant be notified that the application for a development permit for the development specified in (A) is:

Approved by Council in accordance with the approved plans/documents listed in (B), subject to assessment manager conditions in (C), assessment manager's advice in (D), referral agency conditions in (E), relevant period in (F), further permits in (G), and further approvals from Council listed in (H);

And

The assessment manager does not consider that the assessment manager's decision conflicts with a relevant instrument.

(A) APPROVED DEVELOPMENT: Development Permit for Material Change of Use for Renewable Energy Facility (Solar Farm) and associated substation, and Reconfiguring a Lot - Subdivision by Lease (2 lots into 3 lots) & Access Easement

(B) APPROVED PLANS:

Plan/Document Number	Plan/Document Title	Prepared by	Dated
AP01	Project Layout Plan	ERM	01/09/2017
AP02	Preliminary Subdivision Plan	ERM	11/09/2017

- (C) ASSESSMENT MANAGER'S CONDITIONS (COUNCIL)
 - (a) <u>Development Permit for Reconfiguring a Lot Subdivision by lease (2 lots into 3 lots) and Access Easement</u>
 - 1. Development must be carried out substantially in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, subject to any alterations:
 - found necessary by Council's delegated officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements; and
 - to ensure compliance with the following conditions of approval.
 - 2. Timing of Effect
 - 2.1 The conditions of the development permit must be complied with to the satisfaction of Council's delegated officer prior to the endorsement of the plan of survey, except where specified otherwise in these conditions of approval.
 - 2.2 The proposed substation must be substantially constructed within the proposed substation lot prior to the endorsement of the plan of survey
 - 3. General
 - 3.1 The applicant is responsible for the cost of necessary alterations to existing public utility mains, services or installations required by works in relation to the proposed development or any works required by condition(s) of this approval.
 - 3.2 All payments or bonds required to be made to the Council pursuant to any condition of this approval must be made prior to the endorsement of the plan of survey and at the rate applicable at the time of payment.
 - 3.3 The applicant must relocate (in accordance with FNQROC standards) any services such as water, sewer, drainage, telecommunications and

electricity that are not wholly located within the lots that are being created/serviced where required by the relevant authority, unless approved by Council's delegated officer.

- 3.4 Where utilities (such as sewers on non-standard alignments) traverse lots to service another lot, easements must be created in favour of Council for access and maintenance purposes. The applicant is to pay all costs (including Council's legal expenses) to prepare and register the easement documents.
- 3.6 All works must be designed, constructed and carried out in accordance with FNQROC Development Manual requirements (as amended) and to the satisfaction of Council's delegated officer.
- 3.7 Rural Addressing

The applicant must pay the relevant fee per additional lot for provision of rural addressing at the rate identified in the Fees and Charges Schedule at the time of payment.

3.8 Charges

All outstanding rates, charges and expenses pertaining to the land are to be paid in full.

- 4. Infrastructure Services and Standards
 - 4.1 Access Easement

An access easement in favour of the proposed substation lot must be provided within the solar farm lot for the purposes of access/drainage/services.

An all-weather (minimum gravel surface) access track must be constructed within the proposed access easement.

The approved easement document must be submitted at the same time applicant seeks approval for signing and dating of the plan of survey and must be lodged and registered in the Department of Natural Resource and Mines in conjunction with the plan of survey.

- (b) <u>Development Permit for Material Change of Use for Renewable Energy Facility</u> (Solar Farm) and associated substation
 - 1. Development must be carried out substantially in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, subject to any alterations:
 - found necessary by Council's delegated officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements; and
 - to ensure compliance with the following conditions of approval.
 - 2. Timing of Effect

- 2.1 The conditions of the development permit must be complied with to the satisfaction of Council's delegated officer prior to the commencement of the use except where specified otherwise in these conditions of approval (i.e. prior to operational/building work commencing).
- 2.2 Prior to the commencement of use, the applicant must demonstrate to Council that all the conditions of the development permit have been complied with, except where specified otherwise in these conditions of approval.

Note: 'Construction stage' means the stage in which all operational works and building works relating to the development, including the transport of building materials on/off the site is undertaken.

- 3. General
 - 3.1 The applicant is responsible for the cost of necessary alterations to existing public utility mains, services or installations required by works in relation to the proposed development or any works required by condition(s) of this approval.
 - 3.2 All payments or bonds required to be made to the Council pursuant to any condition of this approval must be made prior to commencement of the use and at the rate applicable at the time of payment.
 - 3.3 All works must be designed, constructed and carried out in accordance with FNQROC Development Manual requirements (as amended) and to the satisfaction of Council's delegated officer.
 - 3.4 Amenity Service Equipment
 - (a) All service equipment, including air conditioning units, waste disposal units (bins) and lighting must be located so as not to cause a nuisance to the occupants of adjoining and neighbouring premises.
 - (b) All mechanical plant must comply with the noise criteria below:

Period	Time	Maximum noise limits at noise sensitive receiver (measured as LA90)
Day	7am – 6pm	51dB(A) + 5dB(A) = 56dB(A)
Evening	6pm – 10pm	46dB(A) + 5dB(A) = 51dB(A)
Night	10pm – 7am	40dB(A) + 5dB(A) = 45dB(A)

Mechanical Plant Noise Limits

3.5 Bushfire Management

Prior to the commencement of the use, a detailed Bushfire Management Plan (BMP), prepared by a suitably qualified professional must be prepared and submitted for the development. The BMP must include but not be limited to the following:

(i) Bushfire fuel maintenance and management/reduction practices and procedures including firebreaks;

- (ii) Water storage requirements for fire fighting purposes;
- (iii) Staff evacuation procedures; and
- (iv) Accessibility by emergency services personnel and fire fighting equipment.

The BMP should consider any screening established in response to Condition 4.5 of this approval.

The approved use must comply with the requirements of the BMP at all times.

3.6 Signage

Advisory signage must be erected on the road approach to the proposed development to direct any sightseers to the Bunny Seary Lookout on Chewko Road.

The erection of any signage must comply with the Building Act and all other relevant Acts, Regulations and these approval conditions. The sign must be removed at the decommissioning and rehabilitation stage of the development.

3.7 Damage to Council Infrastructure

Any damage which is caused to Council's infrastructure as a result of the development must be repaired to its original condition prior to the commencement of the use.

3.8 Solar Glare Nuisance Monitoring and Mitigation

When requested by Council, nuisance monitoring must be undertaken in the form of a Solar Glare Assessment report to investigate any genuine complaint of nuisance caused by solar glare. An analysis of the monitoring data and a report, including nuisance mitigation measures, must be provided to Council within four (4) weeks from the date of Council's request, unless otherwise agreed. Any genuine complaint of nuisance caused by solar glare will require landscape mitigation measures, or other measures accepted by Council.

- 4. Infrastructure Services and Standards
 - 4.1 Traffic Management Plan & Road Rehabilitation Program
 - 4.1.1 Prior to the commencement of the construction stage of the development, the applicant must prepare and submit a Traffic Management Plan (TMP) prepared and certified by a Registered Professional Engineer of Queensland (RPEQ). The TMP must include, but is not limited to:
 - 'Existing condition' surveys of Cane Road between the Chewko Road intersection and the property boundary, inclusive of the intersection, including details of the suitability, design, condition and construction standard of these roads;

- Details of how the construction of the project will be managed with respect to the Council controlled road network, including any intersections with the State controlled road network;
- (iii) Details of traffic routes for heavy vehicles, including any necessary route or timing restrictions for oversized loads;
- (iv) Details of how any potential safety hazards resulting from the increased vehicles movements along Cane Road and Chewko Road will be mitigated during the construction phase;
- (v) Procedures for informing the public where any road access will be restricted as a result of the project.

The TMP must be adhered to at all times during the operational works/building works stage of the development, including any works required by the TMP, to the satisfaction of Council's delegated officer.

4.1.2 As soon as reasonably practical following the completion of the construction stage of the development, as determined by Council's delegated officer, a rehabilitation program must be developed and certified by an RPEQ, to rehabilitate Cane Road from the Chewko Road intersection to the property boundary, inclusive of the intersection, to the pre-construction condition identified by the surveys required under Condition 4.1.1(i), to the satisfaction of Council's delegated officer.

Any works required to be completed as part of the program must be completed within 6 months of completion of construction stage of the development, to the satisfaction of Council's delegated officer.

Prior to the commencement of any works required by condition 4.1.1 and 4.1.2, plans for these works must be approved as part of a subsequent application for operational works.

4.2 Construction Management Plan

Prior to the commencement of construction stage of the development, the applicant is to prepare and implement a Construction Management Plan (CMP) for the subject site. The CMP must be prepared and certified by a Registered Professional Engineer of Queensland (RPEQ), submitted to the Council and available on site at all times. The CMP must include, but not be limited to the following details for the construction stage of the development:

- Details of all relevant activities to be undertaken on site during construction including the anticipated staging for bulk earthworks and the construction works program;
- (ii) A description of the roles and responsibilities for all relevant employees involved in the construction stage of the development

including relevant training and induction provisions for ensuring that all employees, contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions and any Referral Agency conditions;

- (iii) Details of any construction sites and mitigation (including dust suppression measures for Cane Road), monitoring, management and rehabilitation measures specific to the site that would be implemented;
- Statutory and other obligations that the applicant is required to fulfil during construction including all relevant approvals, consultations, and agreements required from authorities and other stakeholders, and key legislation and policies;
- (v) Details of how the environmental performance of construction will be monitored, and what actions will be taken to address potential adverse environmental impacts including soil and water contamination, dust and noise;
- (vi) Emergency management measures including measures to control bushfires during the construction stage.
- (vii) Establishment of a communication protocol with the general public, adjoining owners, rail authority, emergency services and local businesses to advise of agreed construction times, impacts on traffic and services and other relevant issues.
- (viii) Identification of complaint management procedures including:
 - (a) contact details for the on-site manager; and
 - (b) dispute resolution procedures.
- 4.3 Stormwater Drainage/Water Quality
 - 4.3.1 Prior to the commencement of construction stage of the development, the applicant must submit a Stormwater Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) that meets or exceeds the standards of design and construction set out in the Queensland Urban Drainage Manual (QUDM) and the FNQROC Development Manual to the satisfaction of Council's delegated officer.
 - 4.3.2 The Stormwater Management Plan must ensure a non-worsening effect on surrounding land as a consequence of the development, and must take all reasonable and practicable measures to ensure discharge occurs in compliance with the Queensland Urban Drainage Manual (QUDM) and the FNQROC Development Manual.
 - 4.3.3 Prior to the commencement of construction stage of the development, the applicant must also provide a Stormwater Quality Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) that meets or exceeds the standards of design and construction set out in the Urban

Stormwater Quality Planning Guideline and the Queensland Water Quality Guideline to the satisfaction of Council's delegated officer.

- 4.3.4 The Stormwater Quality Management Plan must include an Erosion and Sediment Control Plan that meets or exceeds the Soil Erosion and Sedimentation Control Guidelines (Institute of Engineers Australia) to the satisfaction of Council's delegated officer.
- 4.3.5 The applicant must construct the stormwater drainage infrastructure for the development in accordance with the approved Stormwater Management Plan and/or Stormwater Quality Management Plan and Report.
- 4.3.6 All stormwater drainage must be collected from site and discharged to an approved legal point of discharge. The ponding or runoff of stormwater onto existing Ergon Energy infrastructure and easement/s must be avoided at all times.
- 4.4 Car Parking/Internal Driveways
 - 4.4.1 Prior the commencement of construction stage of the development, the applicant must ensure adequate space is provided on site for the parking of all vehicles, including staff vehicles, trucks, machinery and plant associated with the development.

No vehicles, trucks, machinery or plant associated with the construction of the development are permitted to park within a Council road reserve.

- 4.4.2 The car parking spaces must be constructed to a compacted gravel standard, delineated and appropriately drained and maintained in this condition for the life of the development, to the satisfaction of Council's delegated officer.
- 4.4.3 All internal roads and access tracks associated with the approved use are to be surface treated and maintained so that the risk of erosion and dust generation is minimised, to the satisfaction of Council's delegated officer.
- 4.5 Screening and Fencing
 - 4.5.1 Prior to the commencement of construction stage of the development, the applicant must prepare and submit a screening and fencing plan for consideration and approval by Council's delegated officer. The plan must include the following:
 - (i) Screening works to be provided in response to the concerns raised in the three (3) properly made submissions.
 - (ii) Fencing of the proposed substation and details of any other fencing to be established.

All screening and fencing works shall be undertaken during construction stage of the development in order to be established prior to the commencement of the use of the use and maintained for the life of the development and to the satisfaction of Council's Delegated Officer.

- 4.5.2 Any security/perimeter fencing must be chain wire mesh and maintained in good order and repair for the life of the development, to the satisfaction of Council's delegated officer.
- 4.6 Lighting

Where outdoor lighting is required the applicant shall locate, design and install lighting to operate from dusk to dawn within all areas where the public will be given access, which prevents the potential for light spillage to cause nuisance to neighbours and must be provided in accordance with Australian Standard 1158.1 – Lighting for Roads and Public Spaces.

Illumination resulting from direct, reflected or other incidental light emanating from the subject land does not exceed 8 lux when measured at any point 1.5m outside the property boundary of the subject site. The lighting fixtures installed on site must meet appropriate lux levels as documented within Australian Standard 4282 – Control of the Obtrusive Effects of Outdoor Lighting.

4.7 On-Site Wastewater Management

All on site effluent disposal associated with the approved use must be in compliance with the latest version of On-Site Domestic Wastewater Management Standard (ASNZ1547) to the satisfaction of the Council's delegated officer.

- 4.8 Decommissioning and Rehabilitation
 - 4.8.1 At the end of the lifecycle of the solar farm, or if it is not used for the generation of electricity for a continuous period of 12 months, whichever occurs first, the use shall be considered decommissioned.
 - 4.8.2 Within one month of the use being decommissioned, the applicant must submit a Decommissioning and Rehabilitation Management Plan prepared and certified by a suitable qualified person. The plan must include but is not limited to:
 - (i) The identification of structures, including but not limited to all solar panels and trackers/frames, substations, inverters, battery storage, offices, control buildings, fencing and electronic infrastructure including above ground infrastructure to be removed, except where any infrastructure has been transferred to or is in the control of Ergon Energy, and how that infrastructure will be removed;
 - (ii) Measures to reduce impacts of the development on the environment and surrounding land uses; and

- (iii) Details of how the land will be rehabilitated back to its predevelopment condition, including slope and soil profile.
- 4.8.3 Within 18 months of the development being decommissioned, the site shall be returned as far as practically possible back to its predevelopment condition in accordance with the certified Decommissioning and Rehabilitation Management Plan.

(D) ASSESSMENT MANAGER'S ADVICE

- (a) A number of other charges or payments may be payable as conditions of approval. The applicable fee is set out in Council's Fees & Charges Schedule for each respective financial year.
- (b) Easement Documents

Council has developed standard easement documentation to assist in the drafting of formal easement documents for Council easements. Please contact the Planning Section for more information regarding the drafting of easement documents for Council easements.

(c) Endorsement Fees

Council charges a fee for the endorsement of Community Management Statements, easement documents, and covenants. The fee is set out in Council's Fees & Charges Schedule applicable for each respective financial year.

(d) Compliance with applicable codes/policies

The development must be carried out to ensure compliance with the provisions of Council's Local Laws, Planning Scheme Policies, Planning Scheme and Planning Scheme Codes to the extent they have not been varied by a condition of this approval.

(e) Compliance with Acts and Regulations

The erection and use of the building must comply with the Building Act and all other relevant Acts, Regulations and Laws, and these approval conditions.

(f) Environmental Protection and Biodiversity Conservation Act 1999

The applicant is advised that referral may be required under the *Environmental Protection and Biodiversity Conservation Act 1999* if the proposed activities are likely to have a significant impact on a matter of national environmental significance. Further information on these matters can be obtained from www.environment.gov.au.

(g) Cultural Heritage

In carrying out the activity the applicant must take all reasonable and practicable measures to ensure that no harm is done to Aboriginal cultural heritage (the "cultural heritage duty of care"). The applicant will comply with the cultural heritage duty of care if the applicant acts in accordance with gazetted cultural heritage duty of care guidelines. An assessment of the proposed activity against the duty of care

guidelines will determine whether or to what extent Aboriginal cultural heritage may be harmed by the activity. Further information on cultural heritage, together with a copy of the duty of care guidelines and cultural heritage search forms, may be obtained from www.datsip.qld.gov.au.

(h) Transportation of Soil

All soil transported to or from the site must be covered to prevent dust or spillage during transport. If soil is tracked or spilt onto the road pavements as a result of works on the subject site, it must be removed prior to the end of the working day and within four (4) hours of a request from a Council Officer.

(E) REFERRAL AGENCY CONDITIONS

Department of Infrastructure, Local Government and Planning conditions dated 1 November 2017.

(F) RELEVANT PERIOD

When approval lapses if development not started (s.85)

- Material Change of Use and Reconfiguring a Lot six (6) years (starting the day the approval takes effect);
- (G) OTHER NECESSARY DEVELOPMENT PERMITS AND/OR COMPLIANCE PERMITS
 - Development Permit for Building Work
 - Development Permit for Operational Works
- (H) OTHER APPROVALS REQUIRED FROM COUNCIL
 - Nil"

THE SITE

The subject site is situated at 15 Cane Road, Mareeba and is described as Lot 156 on SP124698 and Lot 251 on SP129910, situated approximately 6km south-west of Mareeba.

Lot 251 on SP129910 is State rail corridor land and is included in the application for access purposes only, specifically for the Cane Road crossing, which is used when accessing Lot 156. Cane Road is constructed to bitumen sealed standard for its initial 100 metres, before reverting to gravel standard.

Lot 156 on SP124798 will accommodate the proposed solar farm. Lot 156 is a large rural property with a total area of 267.684 ha, and is primarily used for cattle grazing and avocado plantation, with a dwelling and associated rural buildings located on the eastern boundary.

The site is characterised by rolling slopes towards the low stream order watercourses within the site, which flow towards Atherton Creek in the north-eastern corner of the site. Steeper slopes are present in the south-west and north-west corners of Lot 156.

The property is within a rural locality and is surrounded by farming and grazing use. A cluster of rural living lots are located immediately to the north of Lot 156.

The Mungana Branch Railway line adjoins the western boundary of Lot 156. The Mareeba Airport is located 3km east of the subject site. A 132kV transmission line traverses the north-eastern corner of Lot 156.

Lot 156 is identified in the *Mareeba Shire Planning Scheme 2016* as Class A Agricultural Land. Exposed granite is visible in the elevated areas of the site, particularly in the south-west areas, within the upper waterways and vegetated areas.

The subject site is within the Einasleigh Uplands bioregion, Hodgkinson Basin sub-bioregion, and is dominated by non-native pasture grassland. Remnant vegetation is largely in patches on the west and southern parts of Lot 156. Regulated regrowth vegetation exists along the low order watercourses.

The site is not connected to a reticulated water or sewer network, with localised on-site services provided on the property where required for domestic and rural farming purposes.



Map Disclaimer:

Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) (2009). In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.



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BACKGROUND AND CONTEXT

Nil

PREVIOUS APPLICATIONS & APPROVALS

Nil

DESCRIPTION OF PROPOSED DEVELOPMENT

The development application seeks a Development Permit for Material Change of Use -Renewable Energy Facility (Solar Farm) and associated Substation and Reconfiguring a Lot -Subdivision by lease (2 lots into 3 lots) and access easement in accordance with the plans shown in **Attachment 1**.

Tilt Renewables Australia Pty Ltd (the applicants) proposes the construction of a solar farm on a 267-hectare rural property approximately 6 kilometres south-west of Mareeba.

The detailed design, specific layout and electricity generating capacity have not yet been confirmed; however, the project will involve a typical solar farm with an approximate capacity of 75MW with arrays, switch yard/substation, potential battery storage, control building, amenities and car park area to facilitate the operation.

The main aspects of the project are as follows:

- Development footprint of approximately 150hectares;
- 75MW capacity approx.;

- 200,000 solar PV panels approx. single axis or fixed tracking system;
- Max height 5 m;
- Substation and new lot (80m x 80m) 6,400 square metres;
- Substation access easement 10 metres wide by 2.3km long.

The installation of approximately 200,000 solar PV panels will provide enough clean energy to power 21,000 homes and save 100,000 tonnes of annual greenhouse gas emissions over the life of the facility.

The applicant advises that final design work will be undertaken by an engineering, procurement and construction (EPC) contractor who will be engaged by Tilt Renewables following the receipt of the Development Permit for Material Change of Use and Reconfiguring a Lot. However, the development footprint is proposed to be setback a minimum of 10 metres from the northern property boundary, with a 10 metre buffer provided to the Category 1 waterways, 25 metre buffer provided to the Category 2 waterways, and a bushfire setback to existing Category B vegetation of 1.5 times the height or 20 metres, whichever is greater.

The development footprint has been located on the site following a detailed assessment of the ecological values of the site, with the intent to preserve the ecological values of the site.

The proposed development involves the subdivision of Lot 156 by lease agreement to facilitate Project, with 234ha lease area proposed, along with a separate 6,400m² freehold lot to accommodate the substation and switchyard. The creation of the separate lot is proposed as a result of requirements by the electricity provider as part of the grid connection. An access easement is also required over the proposed access track in order to provide lawful access to the new lot, with the easement to be over Lot 156 on SP124698 in favour of the new lot for access purposes only.

The Project's design will be similar to other approved solar farm projects in Queensland. It will be designed to ensure minimal environmental impacts, in keeping with the sustainable nature of the development. Specific assessments undertaken in support of the development application include:

- Traffic Impact Assessment
- Ecology Assessment
- Glare Analysis Location Assessments

Energy collected from the solar farm will be fed back into the grid network via the Ergon Energy Turkinje Substation situated 5 kilometres east of the subject site.

Whilst the delivery timeframe is dependent on multiple factors, the applicant expects an 8-12 month construction period following the provision of all relevant approvals and the finalisation of the detailed design. The development may be undertaken in stages, allowing part construction upfront, and the addition of further infrastructure (i.e. battery storage) at a later date.

The solar farm will operate during daylight hours, seven (7) days per week, 365 days per year unless disconnected for maintenance or grid disruption issues. The solar farm utilises passive equipment, with 1-2 permanent employees required on-site to operate the facility.

Operational activities of the solar farm will generally be limited to:

- Operation and control of the electricity generating equipment from the control room;
- solar module washing (once or twice a year);
- vegetation, weed, and pest management;

- equipment maintenance and inspection; and
- responding to automated electronic alerts based on monitored data, including actual versus expected tolerances for system output and other key performance metrics.

The solar farm has an asset life of approximately 25 years following which it will either be refurbished or decommissioned. If decommissioned, all above ground infrastructure would be removed, disturbed land revegetation and the land returned to agricultural use.

REGIONAL PLAN DESIGNATION

The subject site is included within the Regional Landscape and Rural Production Area land use category in the Far North Queensland Regional Plan 2009-2031. The Regional Plan Map 3-'Areas of Ecological Significance' also identifies the site as:

- Strategic Rehabilitation Area
- State & Regional Conservation Corridors
- Wetland Area of General Ecological Significance
- Terrestrial Area of General Ecological Significance

Land Use Categories **Rural Other Rural Agricultural Area** Natural Environment Elements Strategic Framework: **Biodiversity Areas** Habitat Linkage **Natural Resource Elements** Key Resource Area Community Facilities zone and Rural Zone: zone Agricultural land overlay Airport environs overlay Bushfire hazard overlay Environmental significance overlay Overlays: Extractive resources overlay Hill and slope overlay Regional infrastructure corridors and substation overlay Transport infrastructure overlay

PLANNING SCHEME DESIGNATIONS

Planning Scheme Definitions

The proposed use is defined as:-

Column 1 Use	Column 2 Definition	Column 3 Examples include	Column 4 Does not include the following examples
Renewable energy facility	Premises used for the generation of electricity or energy from renewable (naturally reoccurring) sources.	Solar farm, wind farm, tidal power	Wind turbine or solar panels supplying energy to domestic or rural activities on the same site

ELEVANT PLANNING INSTRUMENTS

Assessment of the proposed development against the relevant planning instruments is summarised as follows:-

(a) Far North Queensland Regional Plan 2009-2031

Separate assessment against the Regional Plan is not required because the Mareeba Shire Council Planning Scheme appropriately advances the Far North Queensland Regional Plan 2009-2031, as it applies to the planning scheme area.

(b) State Planning Policy

Separate assessment against the State Planning Policy (SPP) is not required because the Mareeba Shire Council Planning Scheme appropriately integrates all relevant aspects of the SPP.

(c) Mareeba Shire Council Planning Scheme 2016

Strategic Framework

3.6 Transport and infrastructure

3.6.1 Strategic outcomes

(8) The generation and consumption of energy is sustainable and efficient. Over reliance on distant coal-fired power stations for electricity supply is minimised through the establishment of renewable energy generation facilities and localised and domestic-scale energy generation, where the integrity and function of local electricity networks is not compromised. Power stations, high-voltage transmission lines and substations, including electricity infrastructure and energy generation facilities, are protected from incompatible development.

3.6.10 Element – Energy supply

3.6.10.1 Specific outcomes

(3) The shire's net carbon emissions are reduced by establishment of renewable energy generation facilities, maintaining compact urban areas and encouraging development that embraces energy efficient design features.

(4) Renewable energy facilities are connected to an existing, nearby, high voltage electricity network (with adequate capacity) without significant environmental, social or amenity impact.

<u>Comment</u>

The proposed development complies.

3.7 Economic development

3.7.1 Strategic outcomes

(10) Mareeba Shire positions itself as a major sustainable energy region of Australia, providing a significant portion of the shire's electricity supply through various renewable sources. Sustainable energy generation also contributes to the economy of the shire and provides an increasing source of employment. Energy generation facilities, including the Barron Gorge Hydroelectric Power Station, and any newly established power generation facilities are protected from incompatible development.

3.7.13 Element – Energy generation

3.7.13.1 Specific outcomes

(1) Renewable energy facilities are established in locations where impacts on surrounding land and ecological values are mitigated.

<u>Comment</u>

The proposed development complies.

Relevant Development Codes

The following Development Codes are considered to be applicable to the assessment of the application:

- 6.2.2 Community facilities zone code
- 6.2.9 Rural zone code
- 8.2.1 Agricultural land overlay code
- 8.2.2 Airport environs overlay code
- 8.2.3 Bushfire hazard overlay code
- 8.2.4 Environmental significance overlay code
- 8.2.5 Extractive resources overlay code
- 8.2.8 Hill and slope overlay code
- 8.2.9 Regional infrastructure corridors and substations overlay code
- 8.2.12 Transport infrastructure overlay code
- 9.3.4 Energy and infrastructure activities code
- 9.4.2 Landscaping code
- 9.4.3 Parking and access code
- 9.4.4 Reconfiguring a lot code
- 9.4.5 Works, services and infrastructure code

The application included a planning report and assessment against the planning scheme. An officer assessment has found that the application satisfies the relevant acceptable outcomes or performance criteria where no acceptable solution applies) of the relevant codes set out below, provided reasonable and relevant conditions are attached to any approval.

Relevant Codes	Comments		
Community facilities zone code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		
Rural zone code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		
Agricultural land overlay code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		
Airport environs overlay code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		
Bushfire hazard overlay code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		
Environmental significance overlay code	The application can be conditioned to comply with the relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome provided) apart from the following:		
	 Acceptable Outcomes AO1.1 		
	 Acceptable Outcome AO2 		
	Refer to planning discussion section of report.		
Extractive resources overlay code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		
Hill and slope overlay code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		
Regional infrastructure corridors and substations overlay code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).		

Transport infrastructure overlay code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).	
Energy and infrastructure activities code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).	
Landscaping code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).	
Parking and access code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).	
Reconfiguring a lot code	The application can be conditioned to comply with the relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome provided) apart from the following:	
	Acceptable Outcomes AO1.1	
	Refer to planning discussion section of report.	
Works, services and infrastructure code	The application can be conditioned to comply with the codes relevant acceptable outcomes and/or performance outcomes (where no acceptable outcome is provided).	

(e) Planning Scheme Policies

The following planning scheme policies are relevant to the application:

Planning Scheme Policy 4 - FNQROC Regional Development Manual

Where relevant, conditions will be attached to any approval requiring all development works be designed and constructed in accordance with the FNQROC Development Manual.

REFERRALS

The application triggered a State Agency Referral to the Department of Infrastructure, Local Government and Planning as a referral agency.

That Department advised in a letter dated 1 November 2017 that they require the conditions to be attached to any approval **(Attachment 2)**.

Internal Consultation

Technical services

PUBLIC NOTIFICATION

The development proposal was placed on public notification from 25 October 2017 to 15 November 2017. The applicant submitted the notice of compliance on 15 November 2017 advising that the public notification requirements were carried out in accordance with the requirements of the Act.

Three (3) properly made submissions were received.

The grounds of the submission are summarised and commented on below:

Grounds for submission	Comment
Request for screening (2 metre high bund wall & 1.8 metre high timber fence) along boundary of Lots 14 & 15 on RP880992.	The applicants have contacted the owners of Lots 14 & 15 on RP880992 and have agreed to construct reasonable screening to address the submitters concerns. The development will be conditioned to require the preparation and submission of a suitable screening plan.
Concerns about sightseeing traffic using Cane Road. Request for signage at Chewko Road/Cane Road intersection to direct sightseers to Bunny Seary Lookout. Request for sealing of Cane Road for dust minimisation.	The applicants have contacted the submitter and agreed in principle to the erection of advisory signage to direct sightseers to Bunny Seary Lookout. The control of construction phase dust impacts will be undertaken through the use of dust suppression measures.
Request for substation to be sited at least 1,000 metres from Lots 11 & 12 on SP160459. Cane Road should be sealed for dust/damage minimisation. Access should be restricted to Cane Road, with no correct via Martin Boad unlose	The substation aspect of the solar farm is accepted development in the Rural zone and could be built without the need for a town planning development approval. It is therefore unreasonable to require the 1,000 metre buffer as proposed. The development will be conditioned to require Cane Road to be assessed pre construction and post construction and
With no access via Martin Road, unless Martin Road upgraded. Concern regarding glare impact and it is not reasonable for submitters to have to maintain existing vegetation on their property to mitigate any glare. Buffering (100 metres vegetation) should be provided on solar farm site.	any damage caused as a result of the solar farm construction repaired at the applicants expense. It is not proposed to use Martin Road. The development will be conditioned to require the preparation and submission of a suitable screening plan.

Tilt Renewables Australia Pty Ltd have provided a response to the submissions (**Attachment 3**). Note: The Tilt Renewables Australia Pty Ltd response includes a copy of all three (3) submissions.

Submitters

	Name of principal submitter	Address
1.	R & J Bailey	141 Martin Road, Mareeba QLD 4880
2.	L Pershouse	PO Box 1395, Mareeba QLD 4880
3.	AK & K Ebersbach	C/- Victor G Feros Town Planning Consultants, PO Box 1256, Cairns QLD 4870

PLANNING DISCUSSION

Non-compliance with the relevant acceptable outcomes contained within the relevant assessment benchmarks are summarised below. Where the development does not comply with an acceptable outcome, compliance with the higher order probable outcome can be achieved.

Environmental Significance Overlay Code

- **PO1** Vegetation clearing in areas mapped as 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** is avoided unless:
 - (a) it is demonstrated that the area does not support regulated vegetation as mapped;
 - (b) the loss or reduction in regulated vegetation is for community infrastructure and associated access facilities that cannot be avoided;
 - (c) wildlife interconnectivity is maintained or enhanced at a local and regional scale; and
 - (d) the loss or reduction in regulated vegetation is minimised and any residual impacts are offset.

Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.

AO1.1 No clearing of native vegetation is undertaken within areas of 'Regulated vegetation' identified on the Environmental Significance Overlay Maps (OM-004a-o).

Comment

The proposed development will involve the clearing of some areas mapped as regulated vegetation.

It will not involve the clearing of Category B vegetation, however the clearing of Category R regulated regrowth vegetation associated with the waterways within the site are proposed to be cleared, in accordance with the 'Managing Category R regrowth vegetation – A self-assessable code' which allows clearing of up to 10 metres from the top of bank for the mapped vegetation areas.

An Ecological Assessment Report has been submitted as part of the development application.

The development will be conditioned to comply as per the recommendations of the ecological assessment report

The proposed development complies with PO1.

- **PO2** Development on sites adjacent to areas of 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** protects the environmental significance of regulated vegetation and:
 - (a) does not interrupt, interfere, alter or otherwise impact on underlying natural ecosystem processes such as water quality, hydrology, geomorphology and biophysical processes;
 - (b) does not negatively impact the movement of wildlife at a local or regional scale; and
 - (c) avoids noise, light, vibration or other edge affects, including weed and pest incursion on identified environmental values.

Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.

AO2 Development (excluding roads, earthworks, drainage infrastructure and underground infrastructure) is not located within 20 metres of 'Regulated vegetation' areas identified on the Environmental Significance Overlay Maps (OM-004a-o).

Comment

The Project includes a minimum setback of 20 metres to Category B vegetation, with a 15m setback provided to the Category 2 waterway on the site, however a setback to Category R regulated regrowth vegetation for the Category 1 waterways has not been provided in order to maximum the development footprint and viability of the Project.

An Ecological Assessment Report has been submitted as part of the development application.

The development will be conditioned to comply as per the recommendations of the ecological assessment report.

The proposed development complies with PO2.

Reconfiguring a Lot Code

PO1 Lots include an area and frontage that:

- (a) is consistent with the design of lots in the surrounding area;
- (b) allows the desired amenity of the zone to be achieved;
- (c) is able to accommodate all buildings, structures and works associated with the intended land use;
- (d) allow the site to be provided with sufficient access;
- (e) considers the proximity of the land to:
 - (i) centres;
 - (ii) public transport services; and
 - (iii) open space; and
- (f) allows for the protection of environmental features; and
- (g) accommodates site constraints.

AO1.1 Lots provide a minimum area and frontage in accordance with Table 9.4.4.3B.

<u>Comment</u>

The proposed additional allotment will accommodate a new substation and must be sited where proposed due to the location of the solar farm and the existing high voltage transmission lines.

Notwithstanding its small area for a rural zoned allotment, the proposed lot will accommodate community energy infrastructure and is therefore appropriate.

The development complies with PO1.

Traffic Impact Assessment

Cambray Consulting has prepared a Traffic Impact Assessment for the proposed Solar Farm. The key findings/conclusions are summarised below:

- B-Double access to and egress between the site and the Kennedy Highway is appropriate via Rankin Street and Chewko Road, noting this is an existing haul route for the Dimbulah Key Resource Area;
- It is recommended that a short auxiliary left turn treatment be constructed at the Chewko Road/Cane Road intersection to facilitate construction traffic access;
- Available sight distance at the Chewko Road / Cane Road intersection is sufficient, noting the 85th percentile speed recorded on Chewko Road in proximity to the intersection.

However, we recommend that consideration be given to reducing the speed limit on Chewko Road to 80km/h during at least the construction period;

- The likelihood of vehicle-train conflicts at the crossing of the Mareeba branch railway line on Cane Road is considered to be low. However, advanced warning signage for the approach from Chewko Road during the construction stage may be beneficial; and
- It would be appropriate for Mareeba Shire Council to condition Tilt Renewables to prepare a Construction Traffic Management Plan incorporating the above recommendations.

The preparation of a Construction Traffic Management Plan has been conditioned.

Glare

The Civil Aviation Safety Authority (CASA) has previously advised as follows in relation to modern solar farms:

"CASA has assessed a number of solar farms sites around Australia in close proximity to regulated airports (Certified or Registered), and none have created glare that in our opinion would, or have been reported to, cause concern to pilots. This has been measured using the SANDIA Laboratory modelling tool developed in the USA in conjunction with the FAA (Federal Aviation Administration). Because modern solar panels are designed to absorb light and not reflect it, the level of reflection has proven to not be an issue to date."

The Solar Glare Assessment submitted in support of the proposed development indicates that there is a Low Potential for glare impacts and any such impacts would be low level for short periods.

The following condition is recommended to address any unforeseen glare impacts:

When requested by Council, nuisance monitoring must be undertaken in the form of a Solar Glare Assessment report to investigate any genuine complaint of nuisance caused by solar glare. An analysis of the monitoring data and a report, including nuisance mitigation measures, must be provided to Council within four (4) weeks from the date of Council's request, unless otherwise agreed. Any genuine complaint of nuisance caused by solar glare will require landscape mitigation measures, or other measures accepted by Council.

Date Prepared: 5 December 2017

APPROVED PLANS

ATTACHMENT 1



ATTACHMENT 2

Department of Infrastructure, Local Government and Planning

Our reference:1710-1837 SRACouncil reference:MCU/17/0008Your reference:0414798 Chewko Solar Farm

1 November 2017

Chief Executive Officer Mareeba Shire Council PO Box 154 Mareeba QLD 4880 info@msc.qld.gov.au

Attention: Brian Millard

Dear Sir / Madam

Referral agency response-with conditions

(Given under section 56 of the Planning Act 2016)

The development application described below was properly referred to the Department of Infrastructure, Local Government and Planning on 6 October 2017.

Applicant details

Page 1 of 7

Applicant name:	Tilt Renewables Australia Pty Ltd c/- ERM Australia Pty Ltd
Applicant contact details:	PO Box 1400 SPRING HILL QLD 4004 michael.rookwood@erm.com
Location details	
Street address:	15 Cane Road and Byrnes Street, Chewko
Real property description:	Lot 156 on SP124698 on Lot 251 on SP129910
Local government area:	Mareeba Shire Council
Application details	
Development permit	Material change of use for renewable energy facility (solar farm) and associated substation, and Reconfiguring a lot (2 lots into 3 lots - subdivision by lease agreement and access easement)

Far North Queensland regional office Ground Floor, Cnr Grafton and Hartley Street, Cairns PO Box 2358, Cairns QLD 4870

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Referral triggers

The development application was referred to the department under the following provisions of the Planning Regulation 2017:

- Schedule 10, Part 9, Division 4, Subdivision 2, Table 1, Item 1 State transport corridors and future State transport corridors (reconfiguring a lot)
- Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 1 State transport corridors and future State transport corridors (material change of use)

No requirements

Under section 56(1)(a) of the *Planning Act 2016* (the Act), the department advises it has no requirements relating to the reconfiguring a lot aspect of the development application.

Conditions

Under section 56(1)(b)(i) of the *Planning Act 2016* (the Act), the conditions set out in Attachment 1 must be attached to any development approval.

Reasons for decision to impose conditions

The department must provide reasons for the decision to impose conditions. These reasons are set out in Attachment 2.

Advice to the assessment manager

Under section 56(3) of the Act, the department offers advice about the application to the assessment manager—see Attachment 3.

Approved plans and specifications

The department requires that the plans and specifications set out below and enclosed must be attached to any development approval.

Drawing/report title	Prepared by	Date	Reference no.	Version/issue
Aspect of development: Material change of use and Reconfiguring a lot				
Project Layout Plan	Environmental Resources Management Australia	06/10/2017	0414798b_PL LB_G001_R0. mxd	-

A copy of this response has been sent to the applicant for their information.

For further information please contact Joanne Manson, Principal Planning Officer, SARA Far North on 4037 3228 or via email CairnsSARA@dilgp.qld.gov.au who will be pleased to assist.

Yours sincerely

ghenna

Graeme Kenna Manager (Planning)

CC

Tilt Renewables Australia Pty Ltd C/- ERM Australia Pty Ltd, michael.rookwood@erm.com

Department of Infrastructure, Local Government and Planning

Page 2 of 7

enc Attachment 1—Conditions to be imposed Attachment 2—Reasons for decision to impose conditions Attachment 3—Advice to the assessment manager Approved plans and specifications

Department of Infrastructure, Local Government and Planning

Page 3 of 7

Attachment 1—Conditions to be imposed

onditions	Condition timing			
change of use for renewable energy facility (solar farm)				
Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 1 - State transport corridors and future State transport corridors —The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of the Department of Transport and Main Roads to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):				
 he development setbacks must be carried out generally in ccordance with the following plan: Project Layout Plan, prepared by Environmental Resources Management Australia, dated 06/10/2017, drawing number 0414798b_PLLB_G001_R0.mxd 	Prior to the commencement of use and to be maintained at all times.			
 a) A Construction Management Plan must be prepared by a Registered Professional Engineer of Queensland (RPEQ) and given to the Program Delivery and Operations Unit, Department of Transport and Main Roads, Far North Queensland Region (Far.North.Queensland.IDAS@tmr.qld.gov.au). b) The Construction Management Plan must address traffic management impacts and demonstrate that there will be no disruption to railway level crossing safety on the Mareeba Mungana Railway at Cane Road (ID:02338) and that unauthorised access to the Mungana Railway is prevented along the access track abutting the railway corridor during the course of construction. c) The construction of the development must be in accordance with the Construction Management Plan. 	 (a) and (b) Prior to obtaining development approval for building work or operational work, whichever occurs first (c) At all times during the construction of the development 			
 a) Provide a RPEQ certified pre-development dilapidation survey of the rail transport infrastructure on the railway level crossing of the Mungana Railway at Cane Road (ID:02338) to the Program Delivery and Operations Unit, Department of Transport and Main Roads, Far North District (Far.North.Queensland.IDAS@tmr.qld.gov.au). b) Provide a RPEQ certified post-development dilapidation survey of the rail transport infrastructure on the railway level crossing of the Mungana Railway at Cane Road (ID:02338) to the Program Delivery and Operations Unit, Department of Transport and Main Roads, Far North District (Far.North.Queensland.IDAS@tmr.qld.gov.au). c) Provide a RPEQ certified post-development dilapidation survey of the rail transport infrastructure on the railway level crossing of the Mungana Railway at Cane Road (ID:02338) to the Program Delivery and Operations Unit, Department of Transport and Main Roads, Far North District (Far.North.Queensland.IDAS@tmr.qld.gov.au). c) Where rectification works to the rail transport infrastructure are determined to be required (as a result of the pre and post development dilapidation surveys) to ensure the post development condition has a no worsening impact on the pre-development condition: i. the applicant is required to undertake all necessary rectification works to the rail transport infrastructure at the applicant's expense; and ii. RPEQ certification must be provided to the Program 	 (a) Prior to the commencement of works (b) (b) Within two weeks of the completion of works (c) Prior to the commencement of use 			
	 change of use for renewable energy facility (solar farm) change of use for renewable energy facility (solar farm) change of use for renewable energy facility (solar farm) change of use for renewable energy facility (solar farm) chow of the Department of Transport and Main Roads to be the evelopment to which this development approval relates for the administiter relating to the following condition(s): ne development setbacks must be carried out generally in evelopment approval previous previous environmental Resources Management Australia, dated 06/10/2017, drawing number 0414798b_PLLB_GO01_R0.mxd A Construction Management Plan must be prepared by a Registered Professional Engineer of Queensland (RPEQ) and given to the Program Delivery and Operations Unit, Department of Transport and Main Roads, Far North Queensland Region (Far.North.Queensland.IDAS@tmr.qld.gov.au). The Construction Management Plan must address traffic management impacts and demonstrate that there will be no disruption to railway level crossing safety on the Mareeba Mungana Railway at Cane Road (ID:02338) and that unauthorised access to the Mungana Railway is prevented along the access track abutting the railway corridor during the course of construction. The construction of the development must be in accordance with the Construction Management Plan. Provide a RPEQ certified pre-development dilapidation survey of the rail transport infrastructure on the railway level crossing of the Mungana Railway at Cane Road (ID:02338) to the Program Delivery and Operations Unit, Department of Transport and Main Roads, Far North District (Far.North.Queensland.IDAS@tmr.qld.gov.au). Provide a RPEQ certified post-development dilapidation survey of the rail transport infrastructure on the railway level crossing of the Mungana Railway at Cane Road (ID:02338) to the Program Delivery and Operations Unit, Department of Transport and Main Roads, Far North District (Far.N			

Department of Infrastructure, Local Government and Planning

	(Far.North.Queensland.IDAS@tmr.qld.gov.au) confirming that any necessary rectification works have been constructed.	
4.	 (a) Stormwater management of the development must ensure no worsening or actionable nuisance to the railway. (b) Any works on the land must not: (i) create any new discharge points for stormwater runoff onto the railway corridor; (ii) interfere with and/or cause damage to the existing stormwater drainage on the railway corridor; (iii) surcharge any existing culvert or drain on the railway corridor; (iv) reduce the quality of stormwater discharge onto the railway corridor. 	(a) and (b) At all times.

Page 5 of 7

Attachment 2—Reasons for decision to impose conditions

The reasons for this decision are:

- To ensure the development is carried out generally in accordance with the plan of development submitted with the application.
- To ensure the development does not compromise the safe and efficient operation and integrity of state transport infrastructure during construction.
- To ensure the safety and operational integrity of railway level crossing where development generated traffic may adversely impact on the track formation and structure.
- To ensure that the impacts of stormwater events associated with development are minimised and managed to avoid creating any adverse impacts on the state-transport corridor.

Attachment 3—Advice to the assessment manager

General advice			
Ref	Construction Management Plan		
1.	In relation to compliance with the concurrence agency condition 2 requiring the preparation of a construction management plan, the applicant should consult with the railway manager (Queensland Rail) prior to the preparation of the Construction Management Plan. The applicant should contact Queensland Rail property team on telephone number (07) 3072 1229 or at qrpropertywayleaves@qr.com.au in relation to the management measures that will be implemented during construction to ensure the safety and operational integrity of the railway.		
Furth	er development permits, compliance permits or compliance certificates required		
Ref	Works on a railway		
1.	Pursuant to section 255 of the <i>Transport Infrastructure Act 1994</i> , the railway manager's written approval is required to carry out works in or on a railway corridor or otherwise interfere with the railway or its operations.		
	The development generated traffic will implicate the existing railway crossing at Cane Road (ID:02338) on the Mareeba Mungana Railway.		

Department of Infrastructure, Local Government and Planning

Page 7 of 7

Department of Infrastructure, Local Government and Planning

Department of Infrastructure, Local Government and Planning Statement of reasons for application 1710-1837 SRA

(Given under section 56 of the Planning Act 2016)

Departmental role:	Referral agency	
Applicant details		
Applicant name:	Tilt Renewables Australia Pty Ltd c/- ERM Australia Pty Ltd	
Applicant contact details:	PO Box 1400 SPRING HILL QLD 4004 michael.rookwood@erm.com	
Location details		
Street address:	15 Cane Road and Byrnes Street, Chewko	
Real property description:	Lot 156 on SP124698 and Lot 251 on SP129910	
Local government area:	Mareeba Shire Council	
Development details		
Development permit	Material change of use for renewable energy facility (solar farm) and associated substation, and Reconfiguring a lot (2 lots into 3 lots - subdivision by lease agreement and access easement)	

Assessment matters

Aspect of development requiring code assessment	Applicable codes
1. Material change of use	State Development Assessment Provisions version 2.1, effective 11 August 2017 – State code 2: Development in a railway environment
2. Reconfiguring a lot	State Development Assessment Provisions version 2.1, effective 11 August 2017 – State code 2: Development in a railway environment

Reasons for the department's decision

The reasons for the decision are:

- The premises is located within 25 metres of a State transport corridor; being the Mareeba Mungana Railway and access to the premises is provided by the existing access location from Chewko Road via Cane Road within the railway corridor in the north-western corner.
- The proposed development footprint is setback approximately 10m from the railway corridor at its closest point and does not propose infrastructure within the 10m setback.

Far North Queensland regional office Ground Floor, Cnr Grafton and Hartley Street, Cairns PO Box 2358, Cairns QLD 4870

Page 1 of 2

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- The maximum height of the project infrastructure is approximately 5m and unlikely to cause damage to the railway in the event of a collision.
- Development setbacks to the railway corridor provide sufficient distance for maintenance to occur without requiring access to the railway corridor.
- The proposed development does not compromise the state's ability to maintain and operate the railway, or significantly increase the cost to main and operate the railway.
- With conditions, the proposed development complies with the relevant provisions in the State Development Assessment Provisions, State code 2: Development in a railway environment.

Decision

- The development application is for a material change of use for a renewable energy facility (solar farm) and substation, and a reconfiguring a lot (2 lots into 3 lots) for a lease agreement in excess of 10 years and access easement.
- The department issued a referral agency response with conditions, dated 1 November 2017, to attach any approval development approval.

Relevant material

- Development application material including a planning report prepared by ERM and plans showing the proposed development setback from the State transport corridor (railway).
- State Development Assessment Provisions published by the Department of Infrastructure, Local Government and Planning (v2.1).
- Planning Act 2016
- Planning Regulation 2017
- Development Assessment Rules version 1.1

Department of Infrastructure, Local Government and Planning

ATTACHMENT 3

21 November 2017

Chief Executive Officer Mareeba Shire Council PO Box 154 MAREEBA QLD 4880

Our Reference: 0414798_Chewko Solar Farm Your Reference: MCU2017/0008

Attention: Carl Ewin

Dear Carl,

RESPONSE TO PUBLIC SUBMISSIONS - CHEWKO SOLAR FARM

Tilt Renewables Australia Pty Ltd writes in relation to the public submissions received for the Development Application (DA) for Material Change of Use for a Renewable Energy Facility (Solar Farm) and associated Substation, and Reconfiguring a Lot (2 lots into 3 lots), Subdivision by Lease Agreement and Access Easement, over part of land described as Lot 156 on SP124698 and part of Lot 251 on SP129910 (access only), 15 Cane Road, Chewko.

PUBLIC NOTIFICATION INFORMATION

In accordance with the *Planning Act 2017*, public notification of the above application took place between 25 October and 15 November, which included notifying the 10 adjoining landowners, plus a further nine (9) properties which were identified as been directly affected by the development, by letter dated 20 October, placing a notice in The Express newspaper on 25 October, and erecting notification signage at the property on 24 October 2017. During this notification period, three (3) properly made submissions were received by Council (refer to *Attachment B*).

Having reviewed the submissions received, we would like to take this opportunity to respond to some of the issues raised to assist Council in making an informed decision in relation to this Development Application.

RESPONSE TO SUBMISSIONS

Bailey submission

Council received a submission from Robert and Joanne Bailey, owners of land at 141 Martin Road, Chewko, formally described as Lot 14 and 15 on RP880992 on 30 October 2017. The submission requested consideration for the construction of a 2 metre high bund wall and 1.8 metre timber fence to be constructed directly behind the effected house to screen the facility.

Tilt Renewables has been in contact with Mr. Bailey to discuss his concerns, in which we agreed to work with Mr. Bailey to construct screening along the common property boundary. In this regard, it is requested that the specific screening treatment at the boundary not be conditioned in this instance, to allow flexibility in the type and location of treatment following further discussions with Mr. Bailey.

Tilt Renewables Limited ABN: 15 101 038 331

PO Box 16080 Collins Street West Melbourne, VIC, 8007

Phone: 1300 660 623

Pershouse Submission

Council received a submission from Lesa Pershouse, owner of property at 7 Cane Road, formally described as Lot 20 on RP708044, on 14 November 2017. In the submission Ms. Pershouse acknowledged that she has no objections to the project, following consultation with Tilt Renewables prior to lodgement of the application with Council, however raised a few concerns in relation to the likelihood of 'sightseeing traffic' entering Cane Road to view the facility. Ms. Pershouse submission requests signage be erected at the Chewko and Cane Road intersection advising tourists that no access is permitted to the solar farm, with direction provided to the 'Bunny' Seary lookout on Chewko Road to view the facility. In addition, Ms Pershouse requests that Cane Road be sealed to avoid dust issues associated with the facility.

Tilt Renewables have discussed this issue with Ms Pershouse and agreed in principle to erect signage at the intersection of Cane and Chewko Road to deter 'sightseeing traffic', pending Council approval. In addition, Tilt Renewables is keen to work collaboratively with Council in relation to the 'Bunny' Seary lookout.

Additionally, where not already suitable for the increase in traffic volumes, Tilt Renewables has committed to upgrading Cane Road, however see's the request to bituminise the short section between the railway crossing and the site boundary as unnecessary. Suitable dust suppression measures will be used throughout construction to minimise the impact to Mrs Pershouse.

It is further noted that Tilt Renewables has also committed to discussing appropriate fencing and screening solutions with the submitter to reduce potential impacts during construction, as raised in the submission.

Ebersbach submission

Council received a submission from Victor G Feros Town Planning Consultants on behalf of Andrew and Karin Ebersbach, owners of land at 84 Martin Road, Chewko, formally described as Lot 11 and 12 on SP160459 on 14 November 2017. The submission raised a number of items which are addressed below:

The substation and associated infrastructure should not be located less than 1,000
metres from the submitters land on the basis that it could cause noise and visual
impacts, and adversely affect the rural and residential use of the submitter's land. It was
further submitted that the substation should be screened by native vegetation.

The substation and associated infrastructure is required to connect the solar farm to the electricity grid network and therefore be located as close to the existing transmission line easement as possible. It is noted that the substation will be constructed by the applicant, however will be owned by Powerlink in perpetuity. Screening of the substation is considered unnecessary, particularly if a screen is provided on the northern property boundary.

It is further noted that although included in the application for completeness and transparency, the construction of a substation in the Rural Zone is 'Accepted Development' therefore not requiring development approval, and should therefore not be subject to specific conditions associated with its operation.

 The applicant should be required to upgrade Cane Road to an appropriate standard to ensure the road is not damaged during construction and ensure excessive dust is mitigated.

Tilt Renewables Limited ABN: 15 101 038 331

PO Box 16080 Collins Street West Melbourne, VIC, 8007

Phone: 1300 660 623

Where necessary, Tilt Renewables have agreed to upgrade Cane Road, from the Chewko Road intersection to the facility boundary, to facilitate safe transport to and from site. Suitable dust mitigate measures will be mobilised to minimise the impact of construction traffic on neighbouring residents.

 Concerns were raised in relation to the use of the existing transmission easements through adjoining properties for access during the construction phase, with access to be restricted to Cane Road via Chewko Road only unless the remaining section of Martin Road was upgraded to an appropriate standard.

Tilt Renewables does not propose to use Martin Road to access the facility, nor the existing transmission line easement. It is noted that public notification signage was erected at the Martin Road intersection which may have resulted in some confusion in relation to this issue; however the notification signage was erected as a result of the rail corridor having been included in the Development Application to permit lawful access to the facility from the Chewko and Cane Road intersection.

4. It was submitted that the impact of glare on the submitter's property is not acceptable and it is not reasonable for the submitter to maintain vegetation on the submitters land to mitigate solar glare impacts of the proposal and that a 100 metre landscape buffer be required to mitigate impacts generated by the use on the submitters land and other lots adjoining or adjacent to the northern boundary of the site.

Although it is acknowledged that the solar glare assessment prepared for the Development Application indicated that low levels of glare may be experienced from the property as a result of the facility, the modelling does not account for existing foliage. Due to the dwellings on both Lot 11 and Lot 12 on SP160459 being surrounded by mature foliage it is considered extremely low likelihood that the residents would be visually impacted.

Therefore, the inclusion of a 100 metre vegetated buffer for the purpose of screening is considered extremely excessive and unnecessary. However, as indicated in the above response to the Bailey submission, Tilt Renewables is willing to work with affected landowners to provide effective screening measures were deemed appropriate.

ATTACHED DOCUMENTATION

Please find attached the following documentation that comprises the Development Application:

- Submitter Property Locations (refer to Attachment A); and
- Copy of public submissions (refer to Attachment B)

If you have any queries regarding this application please feel free to contact me on the below details.

Yours sincerely,

Jeremy Ellis Environmental Advisor Phone: +61 (0)439 589 771 Email: jeremy.ellis@tiltrenewables.com

Tilt Renewables Limited ABN: 15 101 038 331

PO Box 16080 Collins Street West Melbourne, VIC, 8007

Phone: 1300 660 623

Attachment A

SUBMITTER PROPERTY LOCATIONS

COPY OF PUBLIC SUBMISSIONS

Attachment B

Robert John Bailey Joanne Louise Bailey 141 Martin Road MAREEBA QLD 4880

30th September, 2017

To CEO Mareeba Shire Council

RE: Proposed Solar Farm Chewko Road

As we own the adjoining property to this proposed Solar Farm, we are not objecting to its proposal. We are very concerned about the glare, its visual aspect, as well as the impact on our privacy.

We would like as part of the condition of its construction, that the company erects a 2metre dirt bund wall with a 1.8metre timber fence on top (similar to the fence near the Barron River Bridge at Mareeba) directly behind our house.

We would be very grateful if you would take this request into consideration as part of the conditions to the approval of this Solar Farm.

Kind regards

f. Bailey

Robert and Joanne Bailey.

Please send any correspondence to PO Box 711, MAREEBA 4880

Version: 4, Version Date: 13/12/2017

42

From:Lesa PershouseSent:15 Nov 2017 00:17:59 +1000To:Info (Shared)Subject:MCU/17/0008 - non objection submission - Lesa PershouseAttachments:Letter to the Council re Solar Farm application.pdf

Dear Mareeba Shire Council,

Please find attached a letter for Council consideration in relation to the Tilt Renewables application MCU/17/0008. Regards Lesa Lesa Pershouse 0419741101

Document Set ID: 3328858 Version: 1, Version Date: 15/11/2017

Lesa Pershouse PO BOX 1395 Mareeba,4880 0419 741 101

14/11/2017

Dear Mareeba Shire Council,

I am writing in response to the planning application for the Tilt Solar Farm on 15 Chewko Road.

I have met with Jeremy from Tilt renewables and discussed the project back in September. It was a very positive meeting and in principle I have no objections to the project and believe that our Shire is leading the way with renewable energy which is a positive step for our community.

I do have some concerns regarding the development and I have expressed these to Jeremy mainly about ongoing impact on my quiet rural lifestyle. I am fully aware of the impact of the construction timelines and understand this is necessary. I also note that once construction is completed the traffic accessing the solar site will reduce significantly.

My main concern is in relation to the 'sightseeing' traffic that will result once construction is completed. This aspect was downplayed but I know that such a large solar farm close to town that can be seen from Chewko Road will result in curious sightseers. Mareeba Shire Council has positioned itself as a renewable energies leader and these initiatives (like this solar farm and the Mount Emerald Wind Farm) are promoted by Councils under the notion of 'renewable energy tourism'. I can foresee that the drive out to the solar farm on Chewko and heading towards Walkamin to see the wind farm will be a popular tourist drive.

In my discussions with Jeremy he suggested that large tourist signage can be erected at the Cane Road intersection stating 'No access to Solar Farm' or the like, with an arrow stating that Solar Farm viewing is available at the Bunny Seary Lookout. A 'No Through' Road sign and 'NO ACCESS to SOLAR FARM' could be located on Cane Road in case they miss the signage on Chewko Road. The suggestion is that the Bunny Seary's lookout could be upgraded with signage about the Solar Farm. This will promote the Solar Farm and allow locals and visitors to view the farm rather than drive down past my place attempting to see the farm. This will reduce the unnecessary traffic post construction.

I would like to clarify why this is an issue for me. I have had issues with random people coming out to my place thinking that the western side of my property is accessible. When challenged their response has been 'we thought it was just bush', also I have had to speak with people in campervans that think there is free camping outside my place on the railway reserve or up towards the top of Cane Road. I see in the application that the farm will be gated so they will not be able to access the Solar Farm or see it from Cane Road. They are not going to know this before driving down Cane Road if there is not appropriate signage. Some will ignore signage but it will help for those who actually read them and divert access. I have installed a fence around the house area on my property in anticipation of the Council approval for the Solar Farm.

I have requested from Tilt that they assist with some basic fencing along Cane Road to stop people driving onto my property attempting to access the farm. This may not eventuate but would certainly give me peace of mind. Tilt is also committed within reason considering shielding options(vegetation) out the front of my property to reduce the impact during construction. I am grateful for this offer and hope it comes to fruition. My only other concern is in regards to the dust situation with Cane Road. Please ensure that all dust management protocols are applied. Ideally, I would like Cane Road bitumen up to the entry gate, this would totally sort the dust issue but understand this is a Council decision.

In summary, can the Mareeba Shire Council please consider the following:

- Erection of signage at the top of Cane Road and then just over the crossing regarding the access to the Solar Farm.
- Upgrade the lookout to incorporate information signage about the Solar Farm.
- Consider the dust management, maybe a bitumen area just over the crossing area.

Other than the above mentioned issues I am in full support of the Solar Farm and will do my best to deal with the impact of construction for the 9-12 months which I am sure will drive me mad!!

Regards

Lesa Pershouse 7 Cane Road Mareeba 0419741101

Victor G Feros Town Planning Consultants

195 Dornoch Terrace corner Gladstone Road Highgate Hill **Brisbane** 4101 Queensland Australia Telephone 07 3844 2882 Facsimile 07 3846 1840 brisbane@ferosplanning.com.au Level 1 127 Abbott Street PO Box 1256 Caims 4870 Queensland Australia Telephone 07 4031 3663 Facsimile 07 4031 2238 caimseferosplanning.com.au

14 November 2017

Chief Executive Officer Mareeba Shire Council PO Box 154 MAREEBA Q 4880

Attention: Brian Millard

Our Reference VGF - C1104

Dear Sir,

RE: SUBMISSION IN RESPONSE TO DEVELOPMENT APPLICATION BY TILT RENEWABLES PTY LTD C/- ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LTD FOR DEVELOPMENT PERMIT FOR MATERIAL CHANGE OF USE – RENEWABLE ENERGY FACILITY (SOLAR FARM) AND ASSOCIATED SUBSTATION, RECONFIGURING A LOT (2 LOTS INTO 3 LOTS), SUBDIVISION BY LEASE AGREEMENT AND ACCESS EASEMENT ON LAND DESCRIBED AS LOT 156 ON SP124698 AND LOT 251 ON SP129910 AND LOCATED AT LAND DESCRIBED AS 15 CANE ROAD, CHEWKO, QUEENSLAND COUNCIL FILE REFERENCE: MCU/17/0008

1.00 INTRODUCTION

We advise that we act on behalf of the AK & K Ebersbach, the "submitter" in response to an application by Tilt Renewables Pty Ltd c/- Environmental Resources Management Australia Pty Ltd, the "applicant" for Development Permit for Material Change of Use – Renewable Energy Facility (Solar Farm) and Associated Substation, Reconfiguring a Lot (2 lots into 3 lots), Subdivision by Lease Agreement and Access Easement located at 15 Cane Road, Chewko, Queensland and described as Lot 156 on SP124698 (to contain the proposed uses) and Lot 251 on SP129910 (containing the Mungana Branch rail line to provide access), the "subject site".

The submitter is the owner of land described as Lot 11 and Lot 12 on SP160459 and located to the north of the subject site as shown by Figure 1 – Location and Figure 2 – Locality. Lot 11 on SP160459 contains a range of rural uses, including, on Lot 11 on SP160459, a horse agistment, with the capacity to accommodate 20 horses, club house and ancillary facilities, an orchard located in the northern part of the land within an area of approximately 1ha and a centrally located dwelling. Lot 12 on SP160459 contains a dwelling and an orchard with an area of approximately 0.9ha. While the submitter's land does not adjoin the subject site, the southern boundary is separated by two (2) 10m wide water allocation access strips connecting with Atherton Creek to the east. These elements as shown by Figure 3 – Submitter Land Features.

A letter of authority to lodge this submission on behalf of the submitter is attached as Appendix A.

Reference is made to the letter dated 20 October 2017 received by the submitter from the applicant advising of the Public Notification of the application attached as **Appendix B**.

IN CONTINUOUS PRACTICE SINCE 1976

Principal Victor G Feros GCSJ BA MUS FPIA CMILT LGTP(Q) CPP

Adjunct Professor School of Geography, Planning and Environmental Management University of Queensland

US Bicentennial Fellowship Award 1976

Administrative Director Marion C Feros B Pram MBA MPS ASA AFACP Associate & Office Manager, Cairns Nick Hardy BRTP (Hong) MPJA LGTP(0) Senior Consultant Planner Ken Todd DOIT(T&CP) DIo.Soc.PL LFPIA LGTP(0)

1

Victor G Feros Town Planning Consultant Pty Ltd ABN 51 010 417 302

www.ferosplanning.com.au

2.00 APPLICATION AND SITE DETAILS

Applicant:	icant: Tilt Renewables Pty Ltd c/- Environmental Resources Manag Australia Pty Ltd		
Application: Type:	Material Change of Use Impact Assessment For Renewable Energy Facility (Solar Farm) and associated Substation, Reconfiguring a Lot (2 lots into 3 lots), Subdivision by Lease Agreement and Access Easement		
Council Application Reference	MCU170008		
Location: Real Property Description:	15 Cane Road, Chewko Lot 156 on SP124698 and Lot 251 on SP129910		
Area:	Lot 156 – 267.684ha		
Far North Queensland	Regional Landscape and Rural P	roduction Area	
Regional Plan: Mareeba Shire Council Planning Scheme (2016)	Strategic Framework	Rural Agricultural Area Rural Other Biodiversity Area Major Electricity Infrastructure	
	Zoning - Lot 156	Rural Zone	
	- Lot 251	Community Facilities	
	Agricultural Land Overlay	Class A Agricultural Land	
	Airport Environs Overlay	Bird and Bat Strike - Located 3.5km from Airport	
		Light Intensity - Located within 6km of Airport	
	Bushfire Hazard Overlay	High Potential Bushfire Intensity Medium Potential Bushfire Intensity Potential Impact Buffer (100 metres)	
	Environmental Significance Overlay	Ecological Corridor Habitat Linkage Regulated Vegetation Watercourse	
	Extractive Resources Overlay	Haulage Route	
	Hill and Slope Overlay	Hill and Slope	
	Regional Infrastructure Corridor and Substation Overlav	Major Electricity Infrastructure – High Voltage Powerline	

The application is proposing to construct approximately 200,000 solar Photo Voltaic panels, access road and substation on a lot containing approximately 267 ha. This is a most extensive and most intensive incursion of non rural development within a rural area and the impacts of the proposal on the adjoining and surrounding land owners should be given significant consideration.

The proposal is located on land sloping from the northern boundary to the southern boundary and will therefore be clearly visible from the submitter's land.

3.00 DOCUMENTS COMPRISING THE APPLICATION

It is our understanding that the application is comprised of the following documents:-

- a) Cover email dated 15 September 2017 lodging the application with Council;
- b) Cover letter dated 15 September 2017;
- c) DA Form 1;
- d) Land owner's consent; and
- e) Town Planning Report dated September 2017

This submission has been prepared on the basis of these documents.

4.00 GROUNDS OF SUBMISSION

4.01 Substation Location

The application proposes that the substation is located within the north east part of the subject site to connect with the Turkinje to Yalkula Tee 132kV overhead powerline (Refer **Figure 4**).

It is submitted that the location of the substation and associated infrastructure should not be relocated in any event less than 1,000m from the submitters land at its nearest point on the basis that it could cause noise and visual impacts and adversely affect the rural and residential use of the submitter's land. It is further submitted that the substation should be screened by native vegetation.

4.02 Cane Road

It is noted that in the application that access is gained to the site from Chewko Road via Cane Road for construction and maintenance purposes via Cane Road. (Refer **Figure 5**).

It is further noted that Cane Road is not sealed and that the applicant should be required to upgrade these roads to an appropriate standard. This will ensure that these roads are not damaged during the construction phase of the project and ensure that other adverse impacts on other surrounding land uses such as excessive dust are mitigated.

It is noted that lawful access is gained to the submitters land from Martin Road via Chewko Road. The Turkinje to Yalkula Tee 132kV overhead powerline is contained within a number of easements over land from Martin Road, including the submitters land, running in a north to south direction to the subject site. It is noted that most of Martin Road is unsealed with significant dust issues. Concern is raised that these easements, accessed by Martin Road, will be used to access the subject site during the construction phase as a more "convenient" means of access to the rear of the subject site. It is submitted that access to the subject site should be restricted to Cane Road accessed via Chewko Road only, unless the remaining unsealed section of Martin Road is sealed to an appropriate standard.

Version: 4, Version Date: 13/12/2017

4.03 Solar Glare

The applicant has specifically identified, within the Solar Glare Assessment Report dated September 2017 attached to the Town Planning Report, that many surrounding land uses are potentially affected by solar glare and other impacts of the proposal.

It is noted that lands owned by the submitter, Lot 11 and Lot 12, nearby the subject site are specifically identified in the Report as "having visibility of the project" (refer Figure 6). The residential dwellings on both lots are identified by the applicant as being subject to a "glare affect" of "low potential for temporary after image" predicted to occur between "March to mid-October between approximately 10:00am and 11:00am".

In relation to both lots the applicant has identified that existing vegetation on the submitter's land is "likely to provide effective screening of the Project and any potential glare impacts".

It is submitted that the impact of glare on the submitter's property is not acceptable and it is not reasonable for the submitter to maintain vegetation on the submitters land to mitigate solar glare impacts of the proposal. In this regard it is submitted that it is the proponent's responsibility to implement measures to mitigate the impact of the proposal on surrounding land uses.

On this basis it is requested that the applicant should be required to maintain a suitable effectively screened landscape buffer of a minimum 100m width within the subject site and adjoining the northern boundary to screen and mitigate solar glare impacts generated by the use on the submitters land and other lots adjoining or adjacent to the northern boundary of the site.

In order to mitigate the immediate impacts of the proposal the following features are required:-

- a) the use of large tree stock for planting to ensure that a suitable height of the buffer is established in a short period;
- b) the required height of the buffer is achieved within a 3 to 5 year period by on-going maintenance and watering;
- c) the buffer is of sufficient width to ensure that required solar glare mitigation is achieved;
- d) that Council require the provision of a suitable bond or bank guarantee to Council and to be held by Council for a suitable period to ensure that the landscape buffer is established and maintained to the satisfaction of Council.

5.00 CONCLUSION

Having regard to the facts and circumstances upon which this submission relates, it submitted that the proposal in the current form is not acceptable and that Council is requested to uphold the grounds of submission in relation to the application and include suitable conditions of approval as part of any approval for the establishment of a Renewable Energy Facility (Solar Farm) and associated Substation, Reconfiguring a Lot (2 lots into 3 lots), Subdivision by Lease Agreement and Access Easement on the subject site described as Lot 156 on SP124698 and Lot 251 on SP129910.

Council's favourable consideration of this submission is commended.

Yours faithfully VICTOR G FEROS TOWN PLANNING CONSULTANTS

7 TWH Nick Hardy Associate and Office Manager

cc: AK & K Ebersbach

FIGURES

APPENDIX A

AK & K Ebersbach ABN: 41 522 940 199

PO Box 1566 Mareeba, QLD 4880

Letter of Authority

Chief Executive Officer Mareeba Shire Council PO Box 154 MAREEBA QLD 4880

Dear Sir

RE: SUBMISSION IN RESPONSE TO DEVELOPMENT APPLICATION BY TILT RENEWABLES PTY LTD C/- ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LTD WITH THE MAREEBA SHIRE COUNCIL FOR MATERIAL CHANGE OF USE -RENEWABLE ENERGY FACILITY (SOLAR FARM) AND ASSOCIATED SUBSTATION, RECONFIGURING A LOT (2 LOTS INTO 3 LOTS), SUBDIVISION BY LEASE AGREEMENT AND ACCESS EASEMENT ON LAND DESCRIBED AS LOT 156 ON SP124698 AND LOT 251 ON SP129910 AND LOCATED AT LAND DESCRIBED AS 15 CANE ROAD, CHEWKO, QUEENSLAND COUNCIL FILE REFERENCE: MCU/17/0008

Find attached a submission in relation to the above Development Application, prepared and lodged

on our behalf by Victor G Feros Town Planning Consultants.

The attached submission contains the grounds of objection to the application.

Yours faithfully

Dr.K. Ebersbach Dr. A. Ebersbort

Signed on the 13 day of November 2017

APPENDIX B

20 October 2017

K & A. W Ebersbach PO Box 1566 MAREEBA QLD 4880

Dear landowner,

Proposed Solar Development - Chewko Solar Farm

We wish to advise you that a Development Application has been lodged with the Mareeba Shire Council for Development Permit for Material Change of Use – Renewable Energy Facility (Solar Farm) and associated Substation, and Reconfiguring a Lot (2 lots into 3 lots), subdivision by lease and access easement, over Lot 156 on SP124698 (Project Site) and Lot 251 on SP129910 (included for access purposes only), located at 15 Cane Road, Chewko.

The proposed solar farm will consist of approximately 200,000 solar PV panels over a 145 hectare area which will have a peak generating capacity of 75 MW. A small substation will be built to allow for connection into the National Electricity Market (NEM) via a 132kv transmission line running through the north eastern corner of the site.

Up to 250 site staff will be employed during an 8 to 12-month construction period, with 1 to 2 permanent full-time employees looking after the site maintenance for the 25 years of operation. The peak generation of Chewko Solar Farm is equivalent to powering approximately 21,000 homes (double the size of the township of Mareeba). This means offsetting 100,000 tonnes of CO2 emissions produced by coal fired electricity generation every year.

In accordance with the *Planning Act 2016*, you are advised as an adjoining landowner to the subject land. Please find attached a copy of the public notice setting out the details of the proposed development and how you may submit comments.

If you have any queries regarding this application please feel free to contact either Mareeba Shire Council or myself on the below details.

Yours sincerely,

Jene-fitz

Jeremy Ellis Environmental Advisor Phone: +61 (0)439 589 771 Email: jeremy.ellis@tiltrenewables.com

Tilt Renewables Limited ABN: 15 101 038 331

PO Box 16080 Collins Street West Melbourne, VIC, 8007

Phone: 1300 660 623

Proposed Development

MAKE A SUBMISSION FROM:

25th October to 15th November, 2017

Renewable Energy Facility (Solar Farm) & associated Substation, and Reconfiguring a Lot - 2 lots into 3 lots, subdivision by lease and access easement

Where: 15 Cane Road, Chewko On: Lot 156 on SP124698 and Lot 251 on SP129910

Approval Sought: Development Permit for Material Change of Use and Reconfiguring a Lot

Application Ref: MCU/17/0008

You may obtain a copy of the application and make a submission to:

Mareeba Shire Council PO Box 154, MAREEBA, QLD. 4880 E: info@msc.qld.gov.au P: 1300 308 461 W: www.msc.qld.gov.au

Please note written submissions may be made electronically by submitting to info@ msc.qld.gov.au. All submissions, including individual submitter's particulars, will be published on Council's website (PD Online) and therefore will be accessible to internet search engines.

Public notification requirements are in accordance with the Planning Act 2016.