

Appendix D

Gladstone State Development Area Preferred Development Intent Assessment

2.5 SDA wide assessment criteria

Criteria	Response
2.5.1 Services	
1. Development is designed to maximise efficiency and minimise cost for telecommunications, transport, water, wastewater, recycled water and energy networks.	<p>Complies</p> <p>The Project has been located on a site which contains:</p> <ul style="list-style-type: none"> • an existing transmission line and substation. • access to a main road <p>The Project will utilise existing infrastructure on site as well as construction additional electricity infrastructure to support the size of the development.</p>
2. Development plans for and manages the impacts of the development on existing and future known telecommunications, transport, water, wastewater, recycled water and energy networks.	<p>Complies</p> <p>The project footprint has been developed to ensure minimal works within the Powerlink easement (for internal access purposes) and planned rail network upgrades.</p>
3. Development is adequately serviced by telecommunications, transport, water, wastewater, recycled water and energy networks as relevant.	<p>Complies</p> <p>The Project is adequately serviced by existing trunk services as required.</p>
4. Development does not compromise the establishment and operation of existing and/or future linear infrastructure in the Materials Transportation and Services Corridor Precinct.	<p>Complies</p> <p>The north west boundary of the Project is contained within the Materials Transportation and Service Corridor Precinct. This precinct contains three high pressure gas pipelines within an easement which will not be impacted by the construction and operation of the Project.</p>
5. Development in proximity to a strategic port does not prejudice the efficient operations of the port.	<p>Not applicable</p>
6. Development protects transport corridors which link a strategic port to broader transport networks.	<p>Complies</p> <p>The development will not impact on the ongoing operation of the Materials Transportation and Services corridor or the North Coast Line. It is noted that the development footprint has been developed to allow future railway infrastructure.</p>
7. Development is to avoid or minimise adverse impacts on existing or proposed state or local government services.	<p>Complies</p> <p>The Project has been designed to integrate into existing infrastructure on the site such as the existing electricity infrastructure. The site contains Powerlink infrastructure which will be utilised to facilitate grid connection for the Project.</p>

Criteria	Response
2.5.2 Transport	
1. Increased traffic arising from development is able to be accommodated within existing road networks or works are undertaken to minimise adverse impacts.	<p>Complies Conditional to the completion of the recommended infrastructure upgrade works outlined in the Traffic Impact Assessment (Appendix G), the proposed solar farm will have a minimal impact on the operation of the adjacent road network.</p> <p>Refer to Appendix G – Traffic Impact Assessment</p>
2. Local road networks within the SDA are to be designed to accommodate the proposed vehicle type and predicted traffic volumes associated with the development and the precinct/s.	
3. Development is designed to facilitate safe and efficient vehicular ingress and egress and does not unduly impact on the safe and efficient operation of the use of external roads, rail, transport infrastructure or services.	
4. Adequate car parking for the number and nature of vehicles expected are provided on site.	
2.5.3 Emissions	
1. Development is designed to avoid or minimise adverse impacts from air, noise and other emissions that will affect the health and safety, wellbeing and amenity of communities and individuals, and conflicts arising from (but not limited to) spray drift, odour, noise, dust, smoke or ash emissions with sensitive uses.	<p>Complies The proposal involves establishment of a renewable energy facility (solar farm) which by its nature, will not generate adverse noise or air emissions. A Construction Environmental Management Plan will be prepared by the appointed contractor to ensure construction activities do not generate adverse emissions.</p>
2. Development supports the achievement of the relevant acoustic and air quality objectives of the Environmental Protection (Noise) Policy 2008 and the Environmental Protection (Air) Policy 2008.	<p>Complies The proposal involves establishment of a renewable energy facility (solar farm) which by its nature, will not generate adverse noise or air emissions. A Construction Environmental Management Plan will be prepared by the appointed contractor to ensure construction activities do not generate adverse emissions and meet the requirements of relevant policies/legislation.</p>
3. Development with high levels of emissions is to, in accordance with current best practice, avoid adverse impacts on the cumulative ¹ air quality of the Gladstone air shed.	<p>Not applicable The Project will not generate high levels of emissions.</p>
2.5.4 Flooding	
1. Development, in accordance with best practice, is to: <ul style="list-style-type: none"> i. achieve an appropriate level of flood immunity and ii. not adversely affect existing flow rates, flood heights or cause or contribute 	<p>Complies The Project area is not mapped within a flood hazard area under the Gladstone Planning Scheme or the State Planning Policy Mapping. A hydraulic assessment</p>

¹ Consideration of cumulative impacts includes the impacts of one or more existing and future pressures and the interactions between those pressures.

Criteria	Response
to other flooding impacts on upstream, downstream, or adjacent properties. This includes potential impacts from changes to stormwater flows and local flooding.	has been conducted which identified the Project area as being subject to some inundation from Larcom Creek and its tributaries (only for 1% annual exceedance probability). In particular the north east part of the site (characterised by broad, flat and extensively cleared floodplain areas of the main Larcom Creek channel) is noted to experience the greatest extent of inundation. This hydraulic assessment has aided the solar farm design and layout within the site, to avoid areas of highest flood risk/hazard.
2. The risk of, and the adverse impacts from, flooding are avoided, minimised or mitigated to protect people and property, and enhance the community's resilience to flooding.	Complies As per response to 2.5.4 above.
3. Development maintains the safety of noxious and hazardous materials and chemicals manufactured or stored in bulk during flood events.	Complies There will be no bulk storage of hazardous or dangerous goods or materials on site during the operation of the Project
2.5.5 Natural hazards	
1. Development, in accordance with current best practice: i. identifies relevant natural hazards that may impact upon the project ii. appropriately manages risk associated with identified hazards iii. avoids increasing the severity of the natural hazard and iv. for coastal hazards, avoids erosion prone areas where ever possible.	Complies A site-specific bushfire hazard assessment has been prepared for the site which identifies strategies that will be implemented during construction and operation of the proposed development to mitigate the potential impacts of bushfire on life, property and the environment.
2.5.6 Contaminated land	
1. Development on land likely to be contaminated or recorded on the Environmental Management Register or Contaminated Land Register does not adversely impact on human health or the environment by exposure, management, or movement of contaminants.	Complies The site is not listed on the Environmental Management Register or Contaminated Land Register. It is understood that the Site has not been subject to any notifiable activities.
2. Where required, develop a strategy to manage any existing contamination and the potential for additional contamination such that human health and the environment are not adversely affected.	Not applicable Refer previous response
2.5.7 Acid sulfate soils	
1. Development, in accordance with current best practice, is to: i. avoid the disturbance of acid sulfate soils (ASS) or ii. ensure that the disturbance of ASS avoids or minimises the mobilisation and release of acid and metal contaminants.	Complies Review of the Australian Soil Resource Information System (ASRIS) indicates that there is a low to extremely low probability of Acid Sulfate Soils presence. This is likely due to the elevated topography of the Study Area (>10m R.L., with minimum 90m R.L. observed onsite), distance from the coastline,

Criteria	Response
	geomorphological layout and water course framework.
2.5.8 Water quality	
<p>1. Development, consistent with the Environmental Protection (Water) Policy 2009, avoids or otherwise minimises adverse impacts on the environmental values and water quality objectives of receiving waters, arising from:</p> <ul style="list-style-type: none"> i. altered stormwater quality or flow ii. wastewater (other than contaminated stormwater and sewage) and iii. the creation or expansion of non-tidal artificial waterways. 	<p>Complies</p> <p>A Surface water assessment has been undertaken and is provided in Appendix I. The assessment was undertaken to understand the potential impacts of stormwater discharge from the Project on the receiving environment surface water quality and quantity. The potential impacts associated with the construction, operation and decommissioning phases can be appropriately managed through implementation of a range of suitable mitigation measures.</p>
<p>2. Development protects the ecological and hydraulic function of waterway corridors in and adjacent to the Gladstone SDA.</p>	<p>Not Applicable</p> <p>This is not applicable to the Project.</p>
<p>3. Development incorporates current best practice integrated water cycle management strategies and integrates water sensitive urban design principles.</p>	<p>No impact is expected from the development to water quality of surrounding waterways or the Great Barrier Reef. No contaminants or pollutants will be utilised as a part of the Project, therefore limiting any potential impact from contaminated surface water.</p>
2.5.9 Energy and water efficiency	
<p>1. Where practicable, building, site design and layout maximises energy efficiency having regard to:</p> <ul style="list-style-type: none"> i. building orientation and passive solar design ii. maximising opportunities for cross ventilation iii. appropriate shade treatments and iv. landscaping treatments to the western side of the building. 	<p>Not Applicable</p> <p>This is not applicable to the Project.</p>
<p>2. Water efficiency is optimised through the use of alternative water supply sources, including:</p> <ul style="list-style-type: none"> i. rainwater harvesting systems and ii. recycled water sources. 	<p>Not Applicable</p> <p>This is not applicable to the Project.</p>
2.5.10 Environment, cultural heritage and community	
<p>1. Environmental values, cultural heritage values and community values of the premises on which the development is undertaken and immediate surrounds are identified and managed, consistent with current best practice.</p>	<p>Complies</p> <p>The design process has taken into consideration environmental and cultural heritage values. The final design footprint has avoided impacts to sensitive areas (i.e. waterways, heritage sites) and implemented appropriated buffers to ensure impacts will be minimised and mitigated.</p>

Criteria	Response
	<p>The Project will impact environmental values that are not able to be reasonably avoided.</p> <p>The Project will involve the clearing of regulated vegetation which cannot reasonably be avoided. It is noted that the clearing of regulated vegetation is exempt from development approval.</p>
<p>2. Development should be designed to avoid or minimise the impacts on native vegetation where possible and, in particular, to avoid fragmentation of vegetation and maintain maximum connectivity.</p>	<p>Complies</p> <p>The proposed site layout has been configured to minimise disturbance to areas of ecological significance, where practicable, by avoiding or establishing buffers associated with areas including:</p> <ul style="list-style-type: none"> • Remnant vegetation; • Riparian vegetation; and • Identified wetlands/waterways.
<p>3. Areas of Essential Habitat for important species should be recognised and development designed to minimise impacts on known species of important flora and fauna.</p>	<p>Complies</p> <p>An ecological assessment undertaken on the Project area identified Essential Habitat mapping (refer to Appendix F).</p>
<p>4. Where the development triggers the need for a buffer to mitigate the impacts of the development, that buffer is to be incorporated within the development site to minimise impacts on surrounding uses.</p>	<p>Complies</p> <p>A 50 m buffer zone has been established within the development site between waterways and the project footprint.</p>
<p>5. Development in coastal areas manages environmental, social and economic coastal resources.</p>	<p>Not Applicable</p> <p>The Project is not located within a coastal area.</p>
<p>6. Development in wetland protection areas is planned, designed, constructed and operated to prevent the loss or degradation of wetland environmental values.</p>	<p>Complies</p> <p>The Project is not located within a wetland protection area. The nearest wetland protection area is over 4km south west of the Project area.</p>
<p>7. Where the clearing of native vegetation cannot be avoided the works are conducted in a manner that:</p> <ol style="list-style-type: none"> i. protects natural landforms including steep land, waterways and gullies ii. prevents soil degradation iii. controls erosion, slippage and sedimentation and iv. minimises impacts on native fauna. 	<p>Complies</p> <p>No environmental offset are triggered as a result of this development application.</p> <p>The Project will involve the clearing of native vegetation which is exempt development based on feedback from the Office of the Coordinator General.</p>
<p>8. Any environmental offsets required as a result of development impacts must be offset in accordance with current best practice and relevant</p>	<p>Complies</p>

Criteria	Response
Queensland or Commonwealth Government policy.	A referral was lodged for the Project on 6 July 2018 to the Department of the Environment and Energy. The referral concluded that no significant impacts on MNES were likely to result from the Project. The Department of the Environment and Energy determined that the Project was not a Controlled Action on 25 September 2018.
2.5.11 Non-resident workforce accommodation	
1. Non-resident workforce accommodation is: i. located to be easily accessible to projects for which the accommodation is required and ii. temporary for the construction and decommissioning of projects only.	Not Applicable The Project does not involve the use of non-residential workforce accommodation.
2. Non-resident workforce accommodation is compatible with any existing and potential surrounding development and does not compromise or limit other development from operating.	Not Applicable The Project does not involve the use of non-residential workforce accommodation.
3. Non-resident workforce accommodation is designed to provide a high level of residential amenity and to provide high quality facilities and services to support the physical, social and environmental wellbeing of residents.	Not Applicable The Project does not involve the use of non-residential workforce accommodation.
2.5.12 Built form	
1. Visual impacts of buildings and any built structures are minimised through landscaping when viewed from a publicly accessible view point, such as major roads.	Complies The Project is not anticipated to create a visual impact as it is located within high and medium-high impact industry precincts. A Landscape and Visual Impact Assessment has been prepared for the Project (Appendix H). No significant visual effects were identified.
2. The scale and character of built form is consistent with the preferred land use intent of the precinct.	Non-Compliant A renewable energy facility is not consistent with the preferred land use intent of the precinct as the built form is of a lesser scale than what is anticipated within a Medium - High and High Impact Industry Precinct.
3. Development must be designed and built in accordance with current best practice.	Complies The design of the Project will be consistent with the current industry of solar farm designs.
2.5.13 Engineering standards	
1. Development is to be designed and constructed in accordance with the	Complies

Criteria	Response																
<p>relevant engineering standards (and any subsequent revisions to the relevant standards) stated in Table 14 below, unless it can be demonstrated that an alternative solution that at least produces the same outcome is appropriate.</p> <p>Table 14 Relevant engineering standards</p> <table border="1" data-bbox="129 403 1068 1086"> <tbody> <tr> <td data-bbox="129 403 376 448">Soil erosion</td> <td data-bbox="376 403 1068 448">International Erosion Control Association (IECA) – Best Practice Erosion and Sediment Control.</td> </tr> <tr> <td data-bbox="129 448 376 496">Filling</td> <td data-bbox="376 448 1068 496">AS3798 – Guidelines on Earthworks for Commercial and Residential Developments.</td> </tr> <tr> <td data-bbox="129 496 376 692">Stormwater quality</td> <td data-bbox="376 496 1068 692"> <ul style="list-style-type: none"> • Water sensitive urban design: Design objectives for urban stormwater management • Construction and Establishment Guidelines, Swales, Bioretention Systems and Wetlands • Concept Design Guidelines for Water Sensitive Urban Design • Standard Drawings for Water Sensitive Urban Design • Queensland Urban Drainage Manual (QUDM) • Australian Rainfall and Runoff (ARR) - where referenced by QUDM. </td> </tr> <tr> <td data-bbox="129 692 376 938">Roads (major)</td> <td data-bbox="376 692 1068 938"> <ul style="list-style-type: none"> • Department of Transport and Main Roads' (DTMR) Road Planning and Design Manual - A guide to Queensland Practice • DTMR Pavement Design Manual • DTMR Bridge Design Manual • QUDM - Chapter 7 • DTMR Drainage Design Manual • Manual of Uniform Traffic Control Devices • DTMR Guide to Pavement Markings • Australian Standard AS1158 (Street Lighting) • Complete Streets Manual 2010 (Section 17: Industrial Streets). </td> </tr> <tr> <td data-bbox="129 938 376 962">Roads (minor)</td> <td data-bbox="376 938 1068 962"> <ul style="list-style-type: none"> • Relevant local government construction standards. </td> </tr> <tr> <td data-bbox="129 962 376 986">Site access</td> <td data-bbox="376 962 1068 986"> <ul style="list-style-type: none"> • Relevant local government construction standards. </td> </tr> <tr> <td data-bbox="129 986 376 1010">Sewer and water</td> <td data-bbox="376 986 1068 1010"> <ul style="list-style-type: none"> • Standards of the relevant water and sewerage service provider </td> </tr> <tr> <td data-bbox="129 1010 376 1086">Footpaths and cycle paths</td> <td data-bbox="376 1010 1068 1086"> <ul style="list-style-type: none"> • Relevant local government construction standards • Austroads – Guide to Road Design Part 6A: Pedestrian and Cyclist Paths. </td> </tr> </tbody> </table>	Soil erosion	International Erosion Control Association (IECA) – Best Practice Erosion and Sediment Control.	Filling	AS3798 – Guidelines on Earthworks for Commercial and Residential Developments.	Stormwater quality	<ul style="list-style-type: none"> • Water sensitive urban design: Design objectives for urban stormwater management • Construction and Establishment Guidelines, Swales, Bioretention Systems and Wetlands • Concept Design Guidelines for Water Sensitive Urban Design • Standard Drawings for Water Sensitive Urban Design • Queensland Urban Drainage Manual (QUDM) • Australian Rainfall and Runoff (ARR) - where referenced by QUDM. 	Roads (major)	<ul style="list-style-type: none"> • Department of Transport and Main Roads' (DTMR) Road Planning and Design Manual - A guide to Queensland Practice • DTMR Pavement Design Manual • DTMR Bridge Design Manual • QUDM - Chapter 7 • DTMR Drainage Design Manual • Manual of Uniform Traffic Control Devices • DTMR Guide to Pavement Markings • Australian Standard AS1158 (Street Lighting) • Complete Streets Manual 2010 (Section 17: Industrial Streets). 	Roads (minor)	<ul style="list-style-type: none"> • Relevant local government construction standards. 	Site access	<ul style="list-style-type: none"> • Relevant local government construction standards. 	Sewer and water	<ul style="list-style-type: none"> • Standards of the relevant water and sewerage service provider 	Footpaths and cycle paths	<ul style="list-style-type: none"> • Relevant local government construction standards • Austroads – Guide to Road Design Part 6A: Pedestrian and Cyclist Paths. 	<p>The Project will comply with all relevant engineering standards where required.</p>
Soil erosion	International Erosion Control Association (IECA) – Best Practice Erosion and Sediment Control.																
Filling	AS3798 – Guidelines on Earthworks for Commercial and Residential Developments.																
Stormwater quality	<ul style="list-style-type: none"> • Water sensitive urban design: Design objectives for urban stormwater management • Construction and Establishment Guidelines, Swales, Bioretention Systems and Wetlands • Concept Design Guidelines for Water Sensitive Urban Design • Standard Drawings for Water Sensitive Urban Design • Queensland Urban Drainage Manual (QUDM) • Australian Rainfall and Runoff (ARR) - where referenced by QUDM. 																
Roads (major)	<ul style="list-style-type: none"> • Department of Transport and Main Roads' (DTMR) Road Planning and Design Manual - A guide to Queensland Practice • DTMR Pavement Design Manual • DTMR Bridge Design Manual • QUDM - Chapter 7 • DTMR Drainage Design Manual • Manual of Uniform Traffic Control Devices • DTMR Guide to Pavement Markings • Australian Standard AS1158 (Street Lighting) • Complete Streets Manual 2010 (Section 17: Industrial Streets). 																
Roads (minor)	<ul style="list-style-type: none"> • Relevant local government construction standards. 																
Site access	<ul style="list-style-type: none"> • Relevant local government construction standards. 																
Sewer and water	<ul style="list-style-type: none"> • Standards of the relevant water and sewerage service provider 																
Footpaths and cycle paths	<ul style="list-style-type: none"> • Relevant local government construction standards • Austroads – Guide to Road Design Part 6A: Pedestrian and Cyclist Paths. 																
<p>2.5.14 Other government matters</p>																	
<p>1. Development is to demonstrate consistency with any other relevant legislative requirements that may be required for the development to proceed and operate and to the extent practicable, be consistent with regional plans, the State Planning Policy and the State Development Assessment Provisions where the State interests articulated by these instruments are likely to be affected by the development.</p>	<p>Compliant</p> <p>The Project has been assessed against other planning instruments including:</p> <ul style="list-style-type: none"> • Central Queensland Regional Plan 2013 (Section 5.2 of the Report) • State Planning Policy 2017 (Section 5.3 of the Report and Appendix E) • State Development Assessment Provisions (Section 5.5 of the Report) 																
<p>2. Development is to avoid or minimise adverse impacts on existing or</p>	<p>Compliant</p>																

Criteria	Response
<p>proposed State or local government infrastructure.</p>	<p>The Project has been designed to integrate into existing infrastructure on the site such as the existing electricity infrastructure. The site contains Powerlink infrastructure which will be utilised to facilitate grid connection for the Project.</p> <p>A summary of the proposed site access/egress locations to the external road network is provided below:</p> <ul style="list-style-type: none"> • The Narrows Road (Existing LNG Access) – construction access • Cullens Road (Egress Only) – construction egress • Flynn Road (South) – operational access • Flynn Road (North) – construction access • The Narrows Road – operational access

2.4.1 High Impact Industry Precinct – preferred development intent

The preferred development intent for the High Impact Industry Precinct is described below.

Criteria	Response
<p>a. This precinct is to accommodate high impact industrial development that is difficult to locate in conventional industrial estates such as; mineral and resource refining and processing, chemical and industrial material manufacturing, metal product manufacturing and processing, abattoir, rail dependant industries including rail marshalling yards, which require a very large land parcel and separation from sensitive receptors.</p>	<p>Alternate solution</p> <p>The proposed use (solar farm) is defined as a “Renewable Energy Facility” and “Substation” under Section 2 of the GSDA Development Scheme. It is noted that this use is not identified as a specific example within any of the Gladstone SDA precincts. The use is consistent with the purpose of the High Impact Industry Precinct on the following basis:</p> <ul style="list-style-type: none"> • solar farms require a large area of flat land for efficient power generation • solar farms preferably separated from sensitive receptors to alleviate any potential amenity impacts <p>Areas outside the Gladstone SDA are either not of a sufficient size (e.g. industrial estates) or do not have an appropriate land use zoning (e.g. rural zoned land). The proposed use is not of a sensitive in nature and therefore will not conflict, or cause reverse amenity concerns with existing and future surrounding industrial development.</p>
<p>b. Defined uses which are generally considered to meet the precinct intent include High Impact Industry, Infrastructure Facility, Rail Marshalling Yard and Special Industry.</p>	<p>Alternate solution</p> <p>The proposal involves a Renewable Energy Facility and substation which is not a defined use generally considered to meet the precinct intent. Refer to previous response for detail regarding how the proposed use meets the precinct intent and does not preclude preferred uses.</p>
<p>c. Linear infrastructure and other uses may also be supported where these require co-location with and do not compromise the uses generally considered to meet the precinct intent.</p>	<p>Complies</p> <ul style="list-style-type: none"> • The key driver for the Project is the location to existing electrical infrastructure, including high voltage powerlines and a substation. Co-location with this infrastructure is essential to the development of a solar farm to enable efficient and cost effective access to the NEM.

Criteria	Response
	<ul style="list-style-type: none"> • Solar farms allow a flexible development footprint, which can mould to otherwise less desirable land patterns and arrangements. The solar farm can be developed to utilise land which would otherwise have limited development capacity for typical industrial activities. The Project includes setbacks to watercourses, proposed rail infrastructure, electrical easements, and existing approval uses, whilst still creating an effective use of the remaining land on the site. • The Project is not anticipated to compromise the existing, proposed or approved future land uses within the Gladstone State Development Area. The Project is able to coexist with high impact industries (i.e. Steel making facility and rail corridor) without impacting the operational integrity of the facility.
<p>d. Development within this precinct will recognise and protect the cultural heritage values associated with the Euroa Homestead on Lot 200 on SP239672.</p>	<p>Complies</p> <ul style="list-style-type: none"> • The Project is located approximately 1.2 km (boundary to boundary) from the Euroa Homestead. The Project is not anticipated to impact on the Homestead due to the low invasive nature of both the construction and operation of the Project.
<p>e. Road access to this precinct will be via Aldoga Road, Cullens Road and Gladstone-Mt Larcom Road. Access from Gladstone-Mt Larcom Road to this precinct will be limited to 3 intersections at the following locations:</p> <ol style="list-style-type: none"> i. a proposed intersection approximately 3.8 kilometres from Bruce Highway ii. a proposed intersection approximately 8.4 kilometres from Bruce Highway (road/rail overpass) and iii. the intersection with Aldoga Road. 	<p>Complies</p> <p>A summary of the proposed site access/egress locations to the external road network is provided below:</p> <ul style="list-style-type: none"> • The Narrows Road (Existing LNG Access) – construction access • Cullens Road (Egress Only) – construction egress • Flynn Road (North) – construction access • Flynn Road (South) –operational access • The Narrows Road – operational access

2.4.4 Medium – High Impact Industry Precinct – preferred development intent

Criteria	Response
1. The preferred development intent for the Medium – High Impact Industry Precinct is described below.	
a. This precinct is to accommodate medium and high impact industrial development such as boiler making or engineering works, storage of dangerous goods, food processing, manufacturing of wood, metal, glass, plastic, plastic products and workshops that require large land parcels, are difficult to locate in conventional industrial estates outside the Gladstone SDA and require separation from sensitive receptors.	<p>Alternate solution</p> <p>The proposed use (solar farm) is defined as a “Renewable Energy Facility” and “Substation” under Section 2 of the GSDA Development Scheme. It is noted that this use is not identified as a specific example within any of the Gladstone SDA precincts. The use is consistent with the purpose of the Medium-High Impact Industry Precinct on the following basis:</p> <ul style="list-style-type: none"> • solar farms require a large area of flat land for efficient power generation • solar farms preferably separated from sensitive receptors to alleviate any potential amenity impacts <p>Areas outside the Gladstone SDA are either not of a sufficient size (e.g. industrial estates) or do not have an appropriate land use zoning (e.g. rural zoned land). The proposed use is not of a sensitive in nature and therefore will not conflict, or cause reverse amenity concerns with existing and future surrounding industrial development.</p>
b. Defined uses which are generally considered to meet the precinct intent include High Impact Industry, Medium Impact Industry and Warehouse.	<p>Alternate solution</p> <p>The proposal involves a Renewable Energy Facility which is not a defined use generally considered to meet the precinct intent. Refer to previous response for detail regarding how the proposed use meets the precinct intent and does not preclude preferred uses.</p>
c. Linear infrastructure and other uses may also be supported where these require co-location with and do not compromise the uses generally considered to meet the precinct intent.	<p>Complies</p> <ul style="list-style-type: none"> • The key driver for the Project is the location to existing electrical infrastructure, including high voltage powerlines and a substation. Co-location with this infrastructure is essential to the development of a solar farm to enable efficient and cost effective access to the NEM. • Solar farms allow a flexible development footprint, which can mould to otherwise less desirable land patterns and arrangements. The solar farm can be developed to utilise land which would otherwise have limited development capacity for typical industrial activities. The Project includes

Criteria	Response
	<p>setbacks to watercourses, proposed rail infrastructure, electrical easements, and existing approval uses, whilst still creating an effective use of the remaining land on the site.</p> <ul style="list-style-type: none"> The Project is not anticipated to compromise the existing, proposed or approved future land uses within the Gladstone State Development Area. The Project is able to coexist with high impact industries (i.e. Steel making facility and rail corridor) without impacting the operational integrity of the facility.
<p>d. Road access to the precinct will be along either Cullens or Swan Road.</p>	<p>Complies Access to the portion of the project footprint within the Medium-High Impact Industry Precinct will be via Cullens Road.</p>

2.4.11 Materials Transportation and Services Corridor Precinct – preferred development intent

The preferred development intent for the Materials Transportation and Services Corridor Precinct is described below.

Criteria	Response
<p>a. This precinct is to provide an efficient and effective route for linear infrastructure to link infrastructure to industries within the Gladstone SDA and the Port of Gladstone. The precinct is to accommodate linear infrastructure such as gas transportation pipelines, potable and sea water pipelines, sewage pipelines and slurry pipelines, conveyors, rail lines, roads and haul roads.</p>	<p>Alternate solution</p> <p>The site is bounded to the north and west by the Materials Transportation and Services Corridor Precinct (MTSC). Whilst the MTSC is largely contained within Lot 1 on SP260750, a small portion overlaps onto Lot 1 on SP301578, opposite Lot 2 on RP614649 and Lot 1 on DT4038. This triangular shaped overlap is approximately 1,700m long with width of 90m at its widest point.</p> <p>The width of the MTSC at the southern extent of the overlap is approximately 540m. It is noted that the corridor width narrows to 210m to the north-east and 200m to the south-west. A pipeline alignment also runs within the MTSC, adjacent to the boundary to Lot 1 on SP301578 for the length of the overlap. Given the MTSC overlap area is effectively land-locked by an existing pipeline at its northern and southern extents, it is highly unlikely that the area would be suitable for linear infrastructure in the future.</p>
<p>b. Defined uses which are generally considered to meet the precinct intent include Linear Infrastructure Facility.</p>	<p>Alternate solution</p> <p>Refer to previous response</p>
<p>c. Development within the precinct will:</p> <ul style="list-style-type: none"> i. minimise construction and operation footprints and follow a logical sequence of development to maximise opportunities for future linear infrastructure ii. minimise impacts on existing and future linear infrastructure iii. provide access to the corridor for the construction, operation and maintenance of existing and future linear infrastructure iv. be designed to coexist with other linear infrastructure and v. recognise and protect cultural heritage values associated with the Mount Larcom Station Original Homestead Site on Lot 2 on SP147877. 	<p>Complies</p> <p>As noted above, the works within the MTSC will be limited to the area of overlap into Lot 1 on SP301578 described above. There will be no works on the less developed northern side of the MTSC within Lot 1 on SP260750. A pipeline alignment runs within the MTSC, adjacent to the boundary to Lot 1 on SP301578 for the length of the overlap. Given the MTSC overlap area is effectively land-locked by an existing pipeline at its northern and southern extents, it is highly unlikely that the area would be suitable for linear infrastructure in the future.</p> <p>The project site is located approximately 6km from Lot 2 on SP147877.</p>