

# ENVIRONMENTAL ASSESSMENT REPORT

## Sunshine Coast Airport - Airport North Precinct Master Plan



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## REPORT

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28 August 2026

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# 1 INTRODUCTION

The Sunshine Coast Airport (SCA) is a Priority Development Area (PDA) under the Economic Development Act 2012. The SCA PDA is intended to support the growth and expansion of the Airport, with development promoting the airport as an economic enabler. The Airport North Precinct is one of six precincts within the SCA PDA and represents an opportunity for a diverse mix of land uses whilst ensuring the preservation of adjoining areas of environmental significance.

## 1.1 Objective

The objective of the environmental constraints assessment is to describe the potential environmental constraints from development of land within the SCA's Airport North Precinct (the Site) and identify mitigation strategies in relation to:

- Commonwealth EPBC Act Matters of National Environmental Significance (MNES); and
- Queensland environmental requirements and values as prescribed in the PDA.

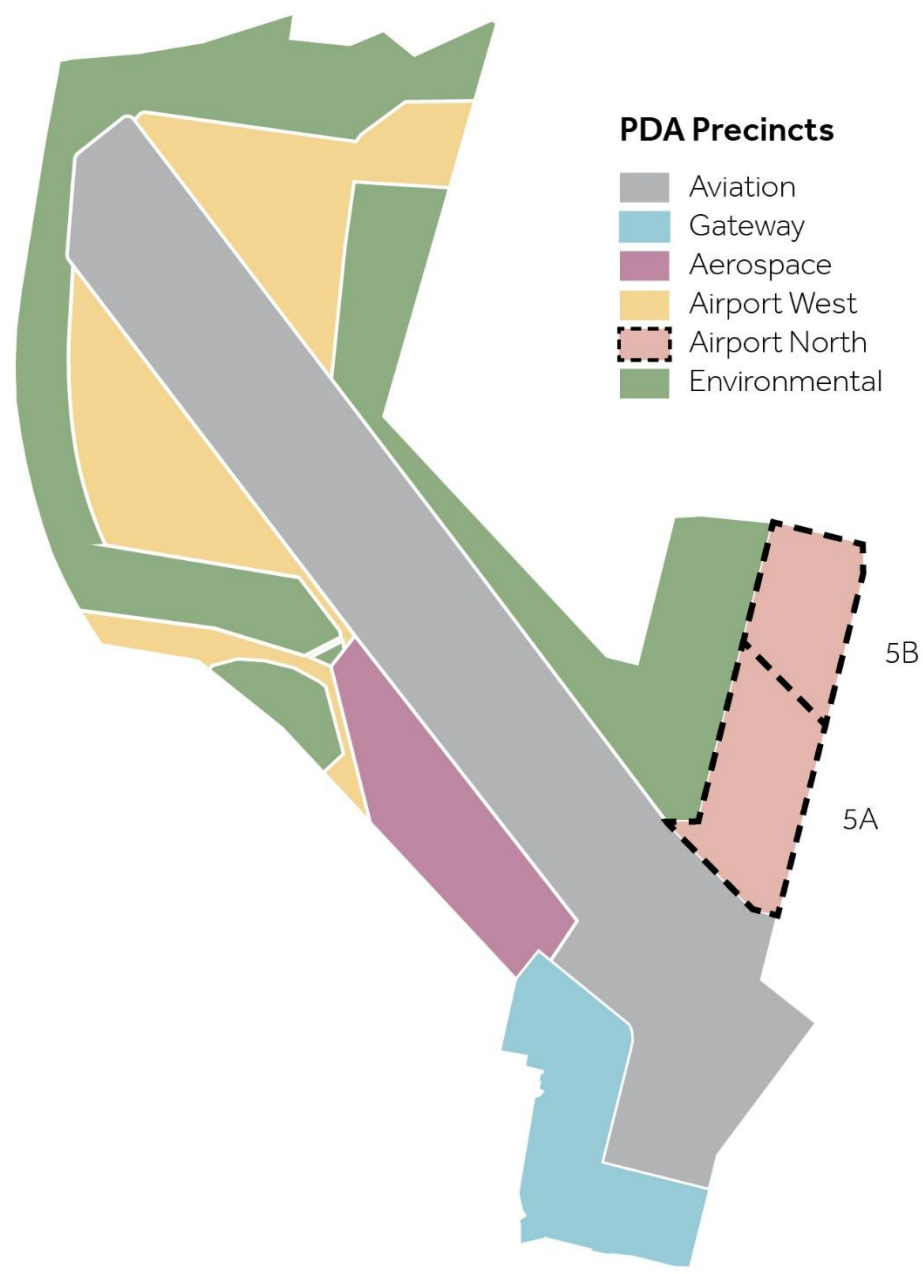
## 1.2 Site & Surrounds

The Sunshine Coast Airport is located in Southeast Queensland, Australia, within the Sunshine Coast Council Local Government area, and the traditional lands of the Kabi Kabi people.

The Airport occupies a 457-hectare site within the north-east of the Maroochy River floodplain. The site is generally flat and slopes gently to the south-west towards the Maroochy River. Areas of Wallum heath remain at the end of the new runway and within the former Airservices Australia land to the west of the existing runway. In the west of the Airport site adjacent to Finland Road, areas of closed and open heath vegetation communities remain.

The Airport and the lands generally to the east, north-east and south of it are relatively urban in nature, while land north and west of the site includes the Sunshine Motorway, the northern and southern components of Mt Coolum National Park and Marcoola Bushland Reserve.

This assessment focuses on works within the Airport North Precinct boundary as depicted in figure below.



PDA Precincts -  
Precinct 5: Airport North Precinct

Figure 1: Airport North Precinct, PDA Precinct boundaries

## 2 PROPOSED ACTION

The proposed action being assessed is the implementation of Airport North Precinct Master Plan to provide developments for tourism, commercial, retail purposes and short-term accommodation.

The pedestrian-oriented mixed-use and retail precinct aims to activate the area, fostering community connection, lifestyle amenity, and commercial opportunity.

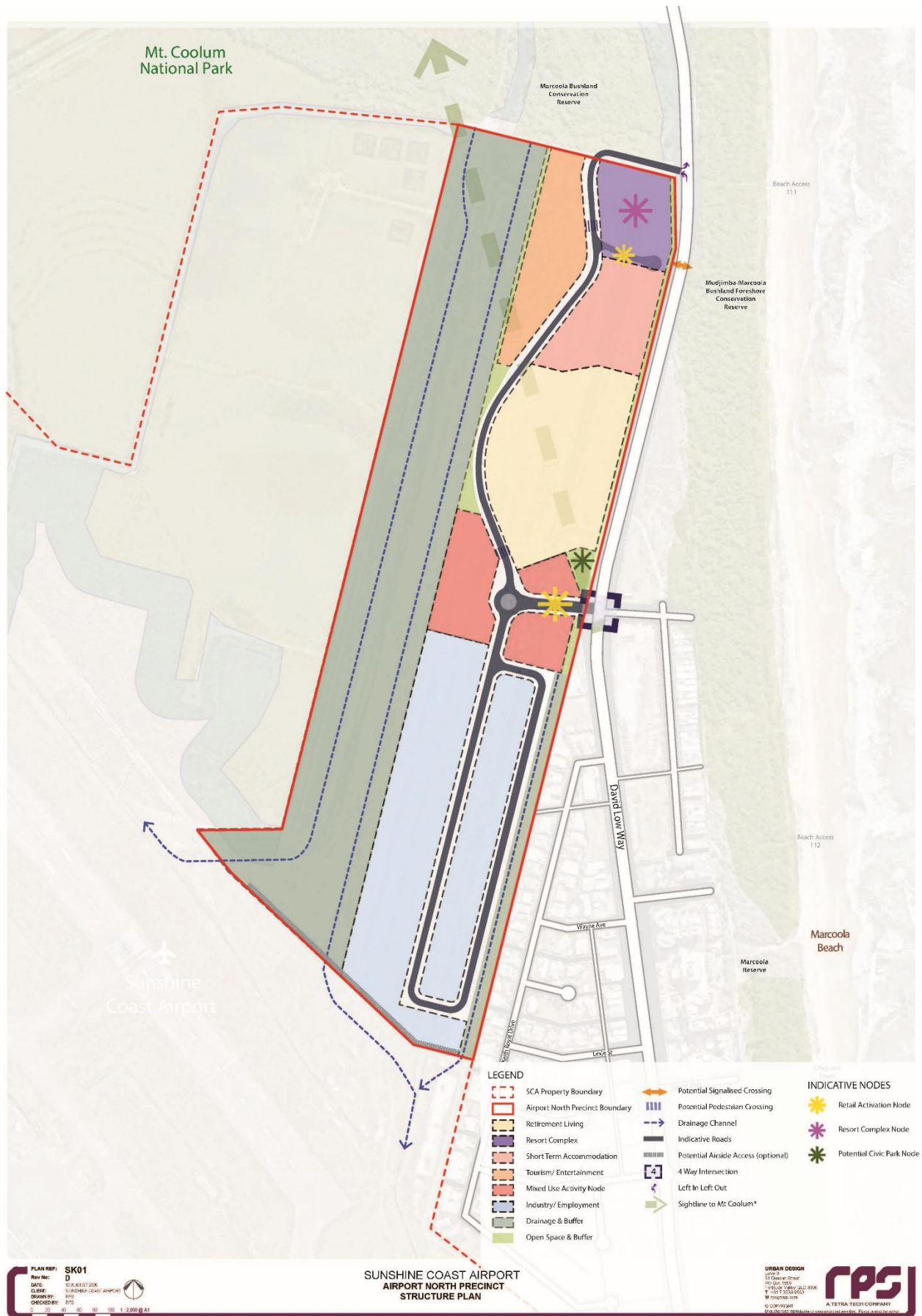


Figure 2: Airport North Precinct Concept Master Plan

## 3 METHODOLOGY

### 3.1 General Approach

The development of this assessment has included:

1. A desktop review of existing environmental studies and reports to identify environmental matters on and surrounding Airport North precinct (the Site).
2. Preparation of an environmental constraints assessment:
  - a. In accordance with Significant Impact Guidelines 1.1 Matters of National Environmental Significance (SIG 1.1) (Department of Environment and Energy (DoEE) then DoE, 2013), and
  - b. Informed by the PDA environmental and community criteria.

#### 3.1.1 Database searches

Desktop assessments were conducted through accessing the following National databases, State databases and online mapping tools to identify protected flora and fauna species with potential to occur within or surrounding the Site:

- The DoEE's Protected Matters Search Tool to identify matters of national environmental significance (Appendix A).
- Queensland Globe database was used to identify Matters of State Environmental Significance.
- The Atlas of Living Australia was used to identify the likelihood of occurrence of the database records for EPBC Act listed species and NC Act listed species.

## **4 REGULATORY AND POLICY FRAMEWORK**

### **4.1 Commonwealth Legislation, Policies and Guidelines**

#### **4.1.1 Environment Protection & Biodiversity Conservation Act 1999 (EPBC Act)**

The EPBC Act protects certain nationally significant (protected) animals, plants, habitats or places – known as matters of National environmental significance (MNES).

Proposed actions that may have a significant impact on MNES must be referred to Cth Environment Minister to determine whether approval is required under the Act.

There is no Commonwealth land on or adjacent to the Site. Accordingly, assessment of potential impacts upon the ‘whole of the environment’ as defined under the EPBC Act is not required to determine whether approval is required under the Act.

#### **4.1.2 National Light Pollution Guidelines for Wildlife**

These guidelines provide users with the theoretical, technical and practical information required to assess whether artificial lighting is likely to affect wildlife, and the management tools to minimise and mitigate that effect.

### **4.2 Queensland Legislation, Policies and Guidelines**

#### **4.2.1 Sunshine Coast Airport Priority Development Area Development Scheme September 2024, Economic Development Queensland.**

The Sunshine Coast Airport PDA (the PDA) was declared by regulation under the ED Act on 28 July 2023. The PDA contains development requirements for protecting whole of the environment across the airport and specific to development precincts such as Airport North Precinct

Relevant matters of state interest (e.g. protection and conservation of environmental and cultural values associated with the airport and surrounds) have been considered in the preparation of this development scheme, including the prescribed development requirements across the airport and specific to airport precincts.

Extracts from the PDA that are relevant to this report follow.

#### 4.2.1.1 Airport – wide PDA criteria

### 2.5.7 Environment, Cultural Heritage Protection and Conservation

1. Development does not negatively impact on the habitat requirements of threatened native species including the Emu Mountain she-oak, Swamp stringybark Ground parrot, Wallum sedgefrog, Wallum froglet and Wallum rocketfrog in Precinct 6 and the adjoining Mt Coolum National Park.<sup>41</sup>
2. Areas of environmental significance, including but not limited to those areas identified in Precinct 6 and areas that have associated conservation, biodiversity, habitat, offset and scenic amenity or cultural heritage values are protected from inappropriate development<sup>42</sup> and from impacts of development within the PDA.
3. Stormwater discharges, wastewater discharges and groundwater management achieve water quality objectives, management hierarchy and management intent and prescribed in the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019*<sup>43</sup> and management of prescribed water contaminants consistent with section 440ZG of the *Environmental Protection Act*.<sup>44</sup>
4. Development incorporates appropriate buffers to ensure no adverse impacts on areas containing matters of state or national environmental significance and any Aboriginal cultural heritage sites, features or values<sup>45</sup> or adjoining conservation areas.
5. Development maintains existing vegetation management and offset areas.
6. Stormwater discharges and hydraulic solutions do not adversely affect the hydrology of wetland and heathland ecosystems in a manner harmful to flora and fauna of those ecosystems.<sup>46</sup>
7. Development is located, designed, constructed and operated to provide net-benefit for environmental outcomes compared to pre-development state and to avoid, or where avoidance is not reasonably possible, minimise and mitigate<sup>47</sup> adverse impacts on:
  - a) the environmental values of receiving waters<sup>48</sup>
  - b) the habitat values of significant vegetation (including in waterways)<sup>49</sup>
  - c) the ability for fish and other marine animals to move unimpeded along waterways<sup>50</sup>
  - d) groundwater, surface water and soils, including from salinity or saline intrusion<sup>51</sup> and
  - e) the Aboriginal cultural heritage sites, values and significance of the lands and waters.

## 2.5.8 Community Safety and Development Constraints

### Emissions and hazards

1. Development preserves environmental quality and community safety by ensuring emissions (including air, water and soil pollutants, noise, vibration, heat, light, radioactivity and electromagnetic radiation) and hazards are in accordance with:
  - a) the *Environmental Protection Act 1994* for management of prescribed water contaminants,
  - b) the *Environmental Protection (Air) Policy 2019*
  - c) the *Environmental Protection (Noise) Policy 2019*
  - d) the maximum acceptable levels of vibrations resulting from development set down in *Australian Standard AS2670 Evaluation of human exposure to whole of body vibration, Part 2: continuous and shock induced vibration in buildings (1- 80Hz)* and the *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2011* and
  - e) the Department of Transport and Main Roads 2013, *Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise)* and Department of Transport and Main Roads 2016, *Transport Noise Management Code of Practice: Volume 2 (Construction Noise and Vibration)*.
2. The siting, design, construction and operation of development supports community safety and gives appropriate consideration to development constraints by avoiding, to the greatest extent practicable, then minimising and mitigating:
  - a) the risk of dust or odour impacts on the airport generally and on adjoining properties
  - b) emissions from all plant, equipment and machinery
  - c) emissions so that there is no negative impact on natural environment or public health
  - d) the impact of noise and vibration and ensuring appropriate noise mitigation measures are incorporated into the overall building design and
  - e) adverse impacts from light nuisance by ensuring lighting devices are located, designed and installed to:
    - i) ensure lighting does not adversely impact on the airport operations
    - ii) minimise light spillage on surrounding premises and environmental areas
    - iii) ensure lighting does not create a safety hazard by distracting users of the state-controlled road
    - iv) preserve an acceptable degree of lighting amenity at surrounding premises
    - v) provide covers or shading around lights
    - vi) direct lights downwards
    - vii) position lights away from possible affected areas
    - viii) enable the brightness of lights to be adjusted to low levels and
    - ix) minimise environmental impacts.
3. Any works which is likely to disturb or mobilise soil, must be accompanied by Erosion and Sediment Control Plan (ESCP).<sup>52</sup>
4. Development involving hazardous chemicals and other hazardous materials<sup>53</sup> is located and designed to ensure it does not impact the health and safety of sensitive land uses.
5. Development ensures air quality is maintained at acceptable levels and does not result in odour or airborne particles or emissions that causes environmental harm or nuisance with respect to surrounding land uses.
6. Established high impact industry within and outside the PDA is protected from encroachment by incompatible land use that would compromise its ability to function safely and effectively.

### Acid sulfate soils

7. Development is managed to avoid or minimise the release of acid and metal contaminants, where disturbance of acid sulfate soils (ASS) is unavoidable.
8. Development that may disturb potential or actual ASS:
  - a) is supported by ASS investigation report in accordance with current best practice in Queensland and include an assessment of the source of acidity
  - b) is in accordance with an ASS management plan<sup>54</sup>
  - c) ensures ASS is treated in accordance with current best practice in Queensland, to avoid impacts to surface water and groundwater
  - d) ensures the disturbance of ASS is avoided to the greatest extent practical, and where avoidance is not reasonably possible, managed to reduce risks posed to the natural environment and
  - e) manages any neutralisation of ASS and potential ASS to ensure no adverse, cumulative impacts on wetlands either on site or adjoining the PDA, so that the natural acidity of wetlands is maintained.
9. Development involving filling or excavation:<sup>55</sup>
  - a) does not adversely impact on the natural environment, including waterways, or adjoining land
  - b) avoids or minimises and manages environmental harm and the environmental values of water and retained significant vegetation are protected and
  - c) is in accordance with an ASS management plan.

### Contaminated land<sup>56</sup>

10. Development:
  - a) avoids, to the greatest extent practicable, then minimises and mitigates adverse impacts on people, property and the environment from contaminated land
  - b) manages contaminated land to ensure all land is suitable for its proposed future use and
  - c) ensures that best practice management measures are implemented to prevent contamination spreading beyond its existing extent due to development activities.
11. Development occurring within the PDA is in accordance with a whole-of-PDA PFAS management plan<sup>57</sup> which details the management and/or remediation of the site to a standard suitable for the development in accordance with the relevant standards and guidelines for the assessment and management of PFAS in Queensland.

*Note: Prior to development disturbing hazardous contaminants, in accordance with the Environmental Protection Act 1994, a contaminated land investigation document and a site management plan approved by the Administering Authority to manage the land is in place.*

### 2.5.9 Flood management

1. Development protects people and avoids or mitigates the potential adverse impacts of flood and storm tide inundation on property, economic activity and the environment, taking into account the predicted effects of climate change and appropriately mitigates development risk.<sup>60</sup>
2. All development avoids to the greatest extent practicable, then manages or mitigates adverse impacts from flooding, including:
  - a) ensuring a non-worsening on upstream or downstream private properties and infrastructure
  - b) mitigating the risk to people and damage to property, from flood and storm tide events up to and including the probable maximum flood level
  - c) supporting, and not hindering, or unduly burdening disaster management response and recovery capacity and capability
  - d) protecting floodplain storage, waterway flood conveyance capacity and maintaining or enhancing the protective function of landforms and vegetation that can mitigate risks associated with the hazards of flood and storm tide and improve resilience to climate change
  - e) directly, indirectly and cumulatively avoiding an increase in the exposure or severity of the natural hazard and the potential for damage on the site or to other properties and infrastructure and ecological values<sup>61</sup>
  - f) ensuring essential network and community infrastructure maintains effective function during and immediately after flood and storm tide events, taking into account the predicted effects of climate change, including sea level rise and rainfall intensification
  - g) avoiding risks to public health and safety and the environment from the location of hazardous materials and the release of these materials as a result of a flood hazard, taking into account the predicted effects of climate change
  - h) providing public realm surfaces which are durable and flood resilient and
  - i) ensuring habitable rooms and non-habitable areas have acceptable levels of flood immunity.<sup>62</sup>
3. Development is to occur in accordance with an endorsed hydraulic assessment study.<sup>63</sup> A detailed flood risk assessment study is to be prepared and submitted to EDQ for endorsement at the time of precinct master-planning or PoD for the whole of the PDA.<sup>64</sup>
4. Development ensures the protection of State transport infrastructure.<sup>65</sup>
5. Development ensures stormwater is:
  - a) discharged to a legal point of discharge
  - b) treated to achieve the required water quality standards prior to discharge and
  - c) ensures adjoining properties are not impacted by increased flooding and nuisance flows.

#### 4.2.1.2 Airport North Precinct Development – PDA site specific criteria

- 1 g) be designed and operated to avoid or mitigate any potential adverse impacts on adjoining sensitive uses
- 1 h) be designed to minimise harm to sea turtle nesting and sea turtle activity by avoiding adverse impacts generated from artificial lighting
- 1 i) ii) ensure development is compatible with and minimises adverse impacts on surrounding residential and tourist areas.

#### 4.2.2 Environmental Protection Act 1994

The Act establishes a general environmental duty to take reasonable and practicable measures to avoid environmental impacts, as well as an approvals and management hierarchy associated with pollution prevention and environmentally relevant activities. Key obligations under the Act include:

- A general environmental duty (s. 319):
  - A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm (the general environmental duty).

- A person must immediately classify waste against the “regulated waste” list (Reg 2019, Sch 7), if it is regulated there must be an Environmental Authority for its transport (ERA 63) and/or disposal to land (ERA 19) (s 20 EPA). A person must strictly comply with EA conditions, retain all records for the prescribed period, promptly report and remediate any spills (s 328 EPA), and maintain due-diligence systems to avoid heavy fines.
- A person must take all reasonably practicable measures to prevent or minimise environmental harm or nuisance from noise, dust, vibration, odour or discharges to air, water and land. Complying with any relevant Environment Protection Policies, hold and abide by licences for prescribed environmentally relevant activities, monitor and record emissions, notify and clean up any spills or breaches promptly, and implement abatement or management plans.
- Not depositing a prescribed water contaminant in waters, stormwater drainage, or at another place, and in a way, so that the contaminant could reasonably be expected to wash, blow, fall or otherwise move to State waters (refer to section 440ZG), except in circumstances where the operator of the undertaking has the required approval.
- Offence to place contaminant where environmental harm or nuisance may be caused.

### 4.2.3 Vegetation Management Act 1999

Its purpose is to conserve remnant vegetation, prevent the loss of vegetation and allow for sustainable land use. Protects remnant vegetation mapped as Regional Ecosystems (REs). These REs contain distinct assemblage of remnant vegetation types that assist with the likelihood of occurrence of EPBC Act listed threatened ecological communities.

### 4.2.4 Nature Conservation Act 1992

The Nature Conservation Act 1992 provides the legislative basis for the conservation of nature through the dedication, declaration and management of protected areas and the protection of native wildlife and its habitat. The regulations associated with the Act describe the proposed management intent for listed threatened species that includes to monitor and review environmental impact procedures to ensure they:

- accurately assess the extent of the impact, on the threatened species, of the activities to which the procedures relate;
- provide effective measures to mitigate any adverse impact of the activities on the threatened species; and
- if there is an adverse impact of the activities on an area in which the threatened species normally lives, provide for the enhancement of other areas where the species normally lives.

### 4.2.5 Environmental Protection (Water and Wetland Biodiversity) Policy 2019

This is the principle legislative basis for water quality management in Queensland. The EPP (Water) provides a framework for identifying environmental values of waterways and establishing corresponding water quality objectives (WQOs) to enhance or protect identified environmental values. Environmental values and WQOs have been established for the Maroochy River catchment (Basin No. 141 (part), including all tributaries of the Maroochy River). The Site lies within the Lower Maroochy Estuary sub-catchment and the following environmental values have been identified:

- Aquatic ecosystems.
- Seagrass.
- Aquaculture.
- Human consumer.
- Oystering.
- Primary and secondary recreation.

- Visual recreation.
- Cultural and spiritual values.

### **4.2.6 Sunshine Coast Council Marine Turtle Conservation Plan 2023-2033**

This Plan provides the framework of actions for maintaining and recovering the marine turtle stocks of the Sunshine Coast marine turtle nesting bioregion. It is consistent with the national Marine Turtle Recovery Plan and the Queensland Turtle Conservation Strategy. The focus of this Plan is on the nesting populations of loggerhead and green turtles.

One of Plans' themes for management is Turtle-sensitive lighting and coastal development. Desired outcomes for this theme are:

- Development and implementation of lighting policies and standards that deliver a commitment to Dark Sky objectives and a naturally dark coastline at night, with minimisation of direct light sources and ambient light visible from sensitive nesting beaches and adjacent marine areas
- The identified threats (that are under the influence of the Sunshine Coast Council) reduced to lowest residual risk level to minimise negative impacts on nesting marine turtle populations.

## 5 DESCRIPTION OF THE ENVIRONMENT

### 5.1 Physical Characteristics

The SCA site is within the coastal zone of South East Queensland (SEQ). SCA predominantly lies on a large coastal plain of sand and mud, at levels below 5m AHD. The land is subject to SCC Acid Sulfate Soils Overlay.

The Site has been cleared of remnant vegetation and was formerly part of the former runway RWY 18/36. Remnant vegetation occurs on the western, northern and north-east boundary of the Site.

Groundwater levels across the site range from approximately 0.25 to 2.25 metres below ground level (mbgl), indicating a shallow aquifer. The water table is closer to the ground surface in the west, adjacent to the Maroochy River. Shallow groundwater through the region, combined with the high horizontal permeability indicates a strong interaction and co-dependency between surface waters (i.e. wetlands, creeks, drainage lines) and groundwater.

The former RWY 18/36 creates a ridge where groundwater flows east to the coast or west to NPD and wallum heath area.

Two drainage channels:

- Eastern Perimeter Drain; runs north-south along the eastern perimeter of the Site; discharging under David Low Way to a Council-controlled drain and then into the Twin Waters canal estate. Water in this estate eventually discharges to the Maroochy River then the ocean.
- Northern Perimeter drain runs east-west along the northern perimeter of SCA, discharges to Marcoola Drain that enters the Maroochy River and finally the ocean.

Surface water drains would intercept groundwater flows where they extend below the permanent or seasonally/temporarily elevated groundwater level. Refer to Figure for groundwater and land drain flow directions.

Low density residential areas, and medium to high density tourist accommodation adjoin the eastern boundary of the Site. Airport operations have been in place since 1961 and pre-date much of the residential development of the Marcoola and Mudjimba townships. Outside of the airport, there is existing noise from the David Low Way arterial road along the eastern boundaries of the Site.

### 5.2 Environment & Heritage Values

#### 5.2.1 Matters of National Environmental Significance (EPBC Act)

A search of the EPBC Act Protected Matters Search Tool (5 km radius buffer) was undertaken for the proposed action on 11<sup>th</sup> February 2026. The search identified:

**Table 1: Summary of Matters of National Environmental Significance (MNES)**

| MNES                                     |      |
|------------------------------------------|------|
| World Heritage Properties                | None |
| National Heritage Places                 | None |
| Wetlands of International Importance     | None |
| Great Barrier Reef Marine Park           | None |
| Listed Threatened Ecological Communities | 5    |
| Listed Threatened Species                | 103  |
| Listed Migratory Species                 | 75   |

Commentary on the identified MNES values follow.

#### Wetlands of International Importance

There are no wetlands of international importance within or adjacent to the project site.

#### Listed Threatened Ecological Communities

The EPBC Act PMST results lists five (5) TECs as potentially occurring within 5 km buffer radius of the site:

- Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and Southeast Queensland ecological community (Endangered). [Wallum Heath]
- Coastal Swamp Sclerophyll Forest of In feature area New South Wales and South East Queensland (Endangered)
- Lowland Rainforest of Subtropical In Australia (Critically Endangered)
- Subtropical and Temperate Coastal Saltmarsh (Vulnerable)
- Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions

Of the above 5 TECs, only one is known to occur within the Airport; Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and Southeast Queensland ecological community. However, it is not located on the Site and within the vegetation bordering the site [to be confirmed].

The PMST Report identified 103 threatened species that are potentially present within 5 km of the Site. A review of this list has been undertaken through a search of online biodiversity databases and reports held by Sunshine Coast Airport. The following threatened species are of interest due to their reported occurrence on the Site and within the downstream receiving environment.

**Table 2: EPBC Act threatened species**

| Threatened species     | Occurrence                                                        |
|------------------------|-------------------------------------------------------------------|
| <b>Crustacean</b>      |                                                                   |
| Sandy Yabby            | Stormwater drains within the Site provides breeding habitat value |
| <b>Frog</b>            |                                                                   |
| Wallum Sedge Frog      | Species occurs within Wallum Heath Management Area.               |
| <b>Turtles</b>         |                                                                   |
| Loggerhead Turtle      | Breeding known to occur within area                               |
| Green Turtle           | Breeding known to occur within area                               |
| Flatback Turtle        | Breeding known to occur within area                               |
| Leatherback Turtle     | Foraging, feeding or related behaviour known to occur within area |
| Hawksbill Turtle       | Foraging, feeding or related behaviour known to occur within area |
| Oliver Ridley Turtle   | Foraging, feeding or related behaviour known to occur within area |
| <b>Bats</b>            |                                                                   |
| Grey-headed Flying Fox | Foraging, feeding or related behaviour known to occur within area |

### Listed Migratory Species

The PMST Report identified a number of migratory species that were potentially present in the PMST area. The listed migratory species include 13 migratory marine bird species, 10 migratory marine species, 2 migratory terrestrial species, 10 migratory wetlands species. A recent desktop assessment by FPE<sup>1</sup> did not identify listed migratory terrestrial or avian species on or surrounding the Site. The following listed migratory species are of relevance to the development on the Site.

**Table 3: EPBC Act listed migratory species**

| Migratory Species    | Occurrence                                                                                                                     |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Turtle</b>        |                                                                                                                                |
| Loggerhead Turtle    | Nesting on Sunshine Coast beaches; foraging and breeding in surrounding inshore and offshore reefs, rocky shores, and islands. |
| Green Turtle         | Nesting on Sunshine Coast beaches; foraging and breeding in surrounding inshore and offshore reefs, rocky shores, and islands. |
| Flatback Turtle      | foraging and breeding in surrounding inshore and offshore reefs, rocky shores, and islands                                     |
| Leatherback Turtle   | vagrants uncommonly found in adjacent waters                                                                                   |
| Hawksbill Turtle     | vagrants uncommonly found in adjacent waters                                                                                   |
| Oliver Ridley Turtle | occasionally foraging and migrating in adjacent waters                                                                         |

<sup>1</sup> Future Plus Environmental (FPE), Acid Frog & Crayfish Impact Management Plan, Sunshine Coast Airport, Ref:6515, 23/9/2025,

## 5.2.2 QLD Matters of State Environmental Significance

The Site and surrounding area contain a number of values that are protected under State legislation.

### Wetlands and Waterways

The Site does not contain MSES wetlands.

MSES high ecological significance wetlands occur on the western and northern boundary of the Site (**Appendix 1**). Noted, that the coastal waters are mapped as MSES high ecological value waters.

The Site does contain stormwater drains that have been assessed and mapped as high and moderate breeding habitat value<sup>2</sup> (**Appendix 2**).

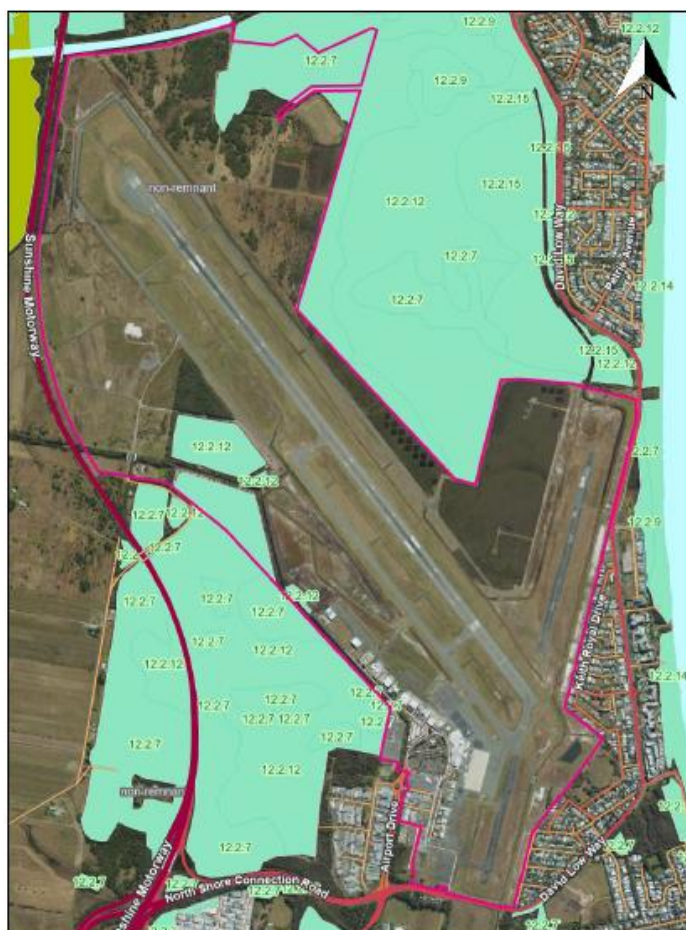
### Regional Ecosystems

There are no Regional Ecosystems on the Site

REs does occur on the western and northern boundary of the Site.

The majority of the SCA site is mapped as non-remnant vegetation under the *Biodiversity status of 2021 remnant regional ecosystems – Queensland* spatial layer (Queensland Herbarium, 2024). Several remnant patches of vegetation, comprising two REs remain mapped on the site (**Figure 3**), as outlined below:

- RE 12.2.12 – Closed heath on seasonally waterlogged sand plains; and
- RE 12.2.7 – Melaleuca quinquenervia or rarely M. dealbata open forest on sand plains.



**Figure 3: Remnant Regional Ecosystems<sup>3</sup>**

<sup>2</sup> FPE Report, Acid Frogs and Crayfish Impact Management Plan, Species Management Program - High Risk of Impacts, 2025

<sup>3</sup> FPE Report, Acid Frogs and Crayfish Impact Management Plan, Species Management Program - High Risk of Impacts, 2025

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### Regulated Vegetation

There are no MSES regulated vegetation on Site.

However, MSES regulated vegetation – essential habitat occurs on the western and northern boundaries of the Site (**Appendix 2**).

### State listed Flora and Fauna

The Site does not contain MSES wildlife habitats.

However, the mapped wildlife habitats – endangered or vulnerable, occur on the western, northern and north-eastern boundary of the Site (**Appendix 3**).

The coastal strip is mapped as MSES wildlife habitat – sea turtle nesting areas.

The following table contains listed species under the Nature Conservation Act that are known to occur on or adjacent to the Site or within the coastal waters.

**Table 4: Qld listed threatened species**

| Threatened species                                           | Occurrence                                                                                                                     |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Plants</b>                                                |                                                                                                                                |
| Tiny Wattle (V)<br><i>Acacia baueri</i> subsp. <i>baueri</i> | Wallum Heath Management Area                                                                                                   |
| <i>Durringtonia paludosa</i>                                 | Wallum Heath Management Area                                                                                                   |
| <b>Birds</b>                                                 |                                                                                                                                |
| Eastern Ground Parrot                                        | Wallum Heath Management Area                                                                                                   |
| <b>Crustacean</b>                                            |                                                                                                                                |
| Sandy Yabby                                                  | Wallum Heath Management Area, on-Site stormwater drains                                                                        |
| Swamp crayfish                                               | Wallum Heath Management Area, on-Site stormwater drains                                                                        |
| <b>Frogs</b>                                                 |                                                                                                                                |
| Wallum froglet                                               | Wallum Heath Management Area, on-Site stormwater drains                                                                        |
| Wallum sedgefrog                                             | Wallum Heath Management Area, on-Site stormwater drains                                                                        |
| Wallum rocketfrog                                            | Wallum Heath Management Area, on-Site stormwater drains                                                                        |
| <b>Turtles</b>                                               |                                                                                                                                |
| Green Turtle                                                 | Nesting on Sunshine Coast beaches; foraging and breeding in surrounding inshore and offshore reefs, rocky shores, and islands. |
| Flatback Turtle                                              | Nesting on Sunshine Coast beaches; foraging and breeding in surrounding inshore and offshore reefs, rocky shores, and islands. |
| Loggerhead Turtle                                            | foraging and breeding in surrounding inshore and offshore reefs, rocky shores, and islands                                     |
| Hawksbill Turtle                                             | vagrants uncommonly found in adjacent waters                                                                                   |
| Olive Ridley Turtle                                          | vagrants uncommonly found in adjacent waters                                                                                   |
| Leatherback Turtle                                           | occasionally foraging and migrating in adjacent waters                                                                         |

### **Conservation Areas**

#### Wallum Heath Management Area

SCA has established the Wallum Heath Management Area (WHMA) to protect breeding habitats for protected wallum acid frogs and eastern ground parrot. Relevant plans for management are Sunshine Coast Airport's: Wallum Sedgefrog Offset Management Plan and Offset Delivery Plan.

#### Sunshine Coast Marine Turtle Nesting Bioregion

The turtle nesting bioregion (**Figure 4**) is based upon the State mapped sea turtle nesting areas. Beaches directly opposite of the site mapped as marine turtle nesting areas including beaches north and south of Marcoola.

All Sunshine Coast beaches have the potential for turtle nests; there are physical conditions which favour some nesting beaches. Closest beach to the Site, Marcoola records turtle nesting abundance as <1 nest per year. Yaroomba beach to the north (5 km) records 1 – 10 nests/year. Mudjimba beach to the south records < 1 nest per year. Significant nesting abundance occurs at Buddina, >10 nests/year (**Figure 5**).

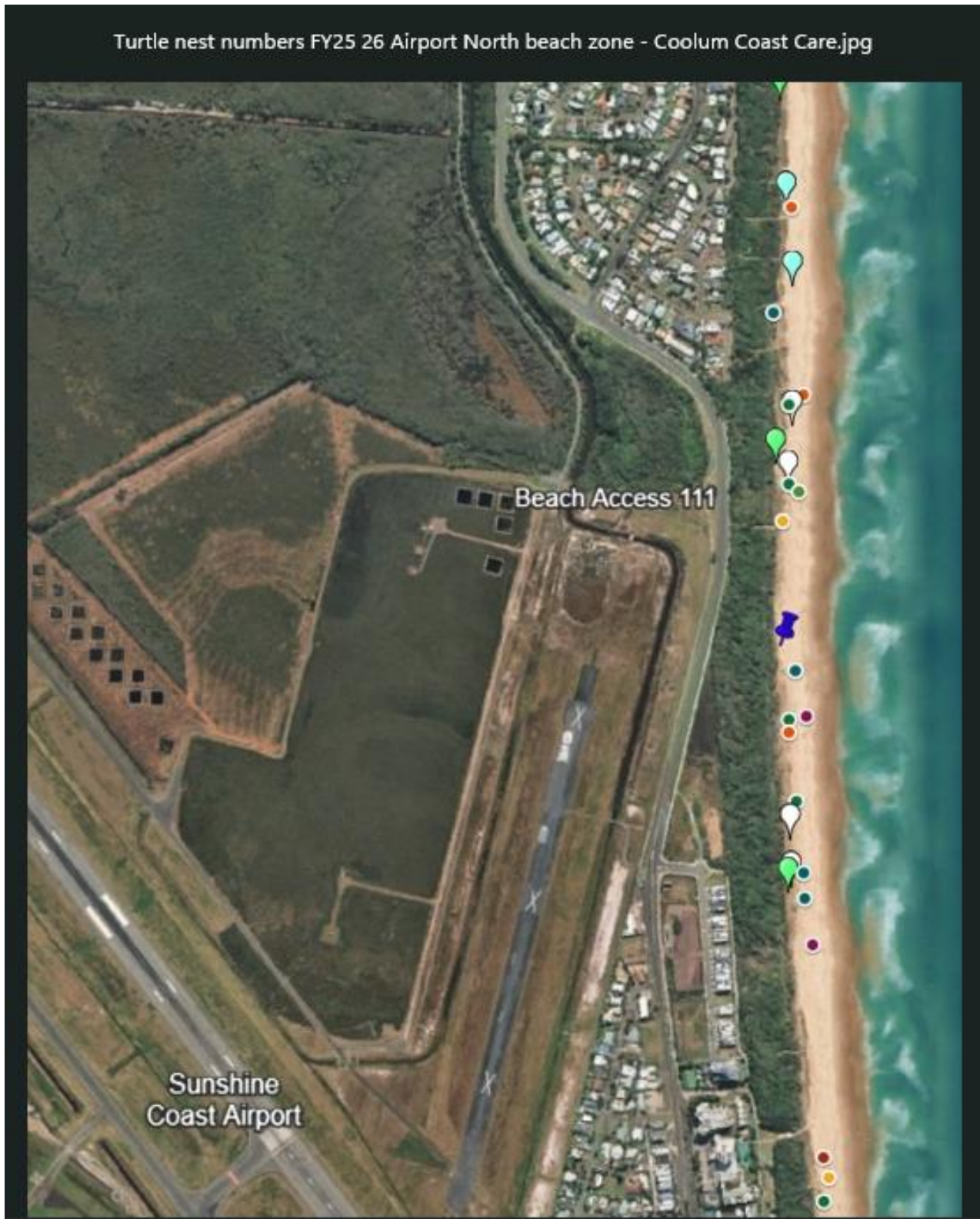
Additional mapping (June 2026) from the *The Coolum Coastal Care* website shows higher abundance of turtle nesting; 3 x green turtle nests and 9 x loggerhead turtle nests logged between Mudjimba and Marcoola Beaches (refer **Figure 6**).



**Figure 4: Sunshine Coast marine turtle nesting bioregion**



Figure 5: Sunshine Coast turtle nesting abundance



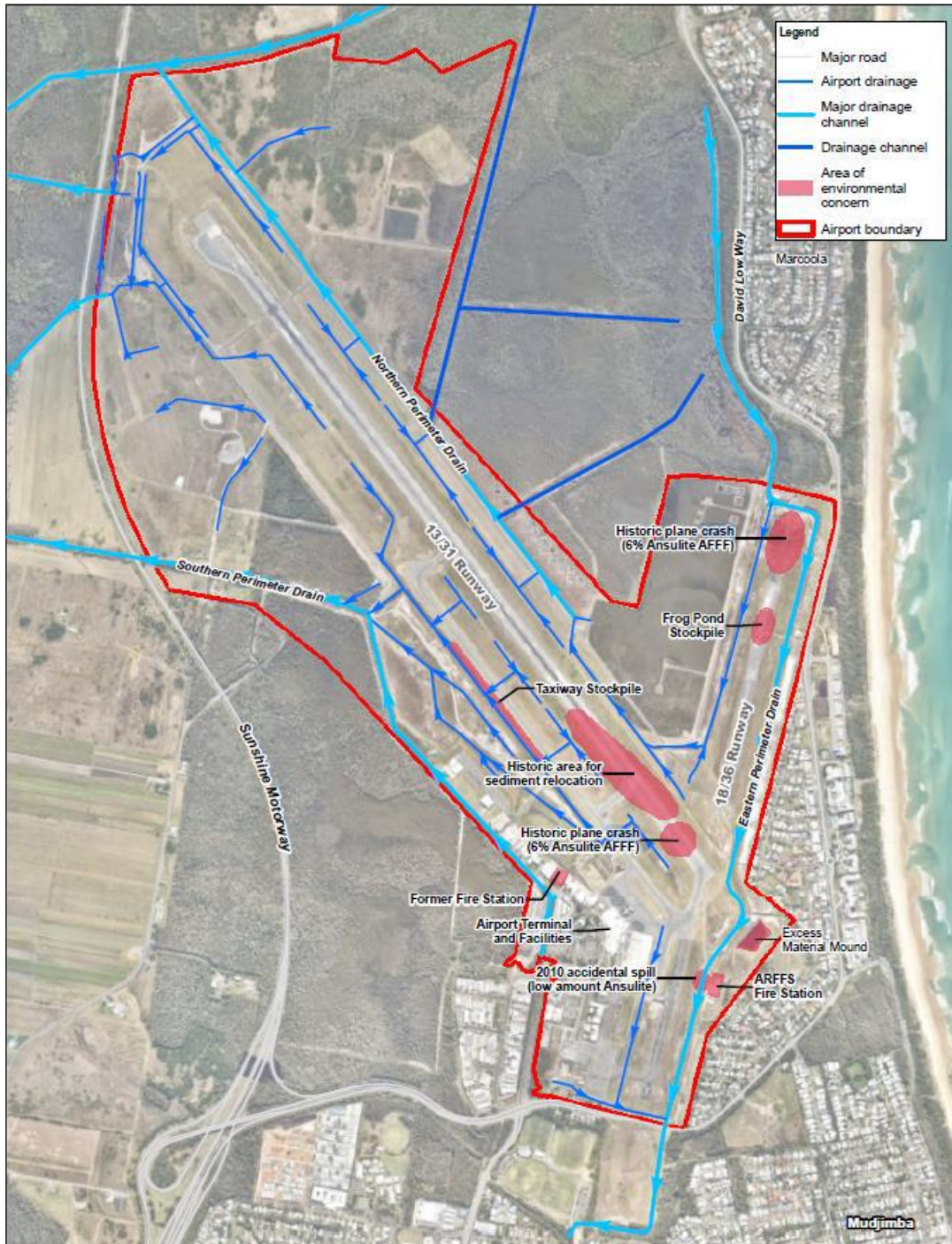
**Figure 6: Coolum Coastal Care mapping of turtle nests between Mudjimba and Marcoola beaches**

Note: each pin = 1 nest

### 5.3 Latent Contamination

Two areas of environmental concern for site contamination occur within the Site (**Figure 7**):

- Frog Pond Stockpile
- Historic Plane Crash (PFAS)



**Figure 7: Historical contaminated sites within SCA**

The Site occurs within Lot 699 on SP261024 that is listed on the EMR as follows:

The site has been subject to the following Notifiable Activity or Hazardous Contaminant.

PETROLEUM PRODUCT OR OIL STORAGE - storing petroleum products or oil HAZARDOUS

CONTAMINANT - This site has been subject to a hazardous contaminant. Concentrations

BTEX compounds and TPH in groundwater above screen levels referring to groundwater.

Monitoring Report Shell Maroochydore Airport, July 2011.

PFOS Soil Max 0.0125mg/kg, Groundwater Max 0.224ug/L, Surface Water 0.06ug/L. PFHxS

Soil Max 0.0125mg/kg

Within the Site, PFAS investigations have recorded the following maximum PFAS results:

| Soi        | Soil (mg/kg) | Groundwater (ug/L) | Surface water (ug/L) |
|------------|--------------|--------------------|----------------------|
| PFOS       | 0.0005       | 0.4                | 0.066                |
| PFOS+PFHxS | 0.001        | 0.41               | 0.068                |
| PFOA       | 0.0004       | 0.01               | 0.005                |

Two areas of contaminated sites occur with the Site:

- The Frog Pond Stockpile – contaminants of potential concern to be determined
- The Historic Plane Crash site - contaminants of potential concern – PFAS.

## 5.4 Acid Sulphate Soils

The Queensland NRM&E 1999 1:100 000 scale Acid Sulfate Soils - Map 2 “Maroochy - Caloundra” map highlights the majority of the airport site, including Airport North Precinct as S<sub>DL</sub> (purple shaded area), being “Disturbed land likely to contain ASS” (Figure 7).

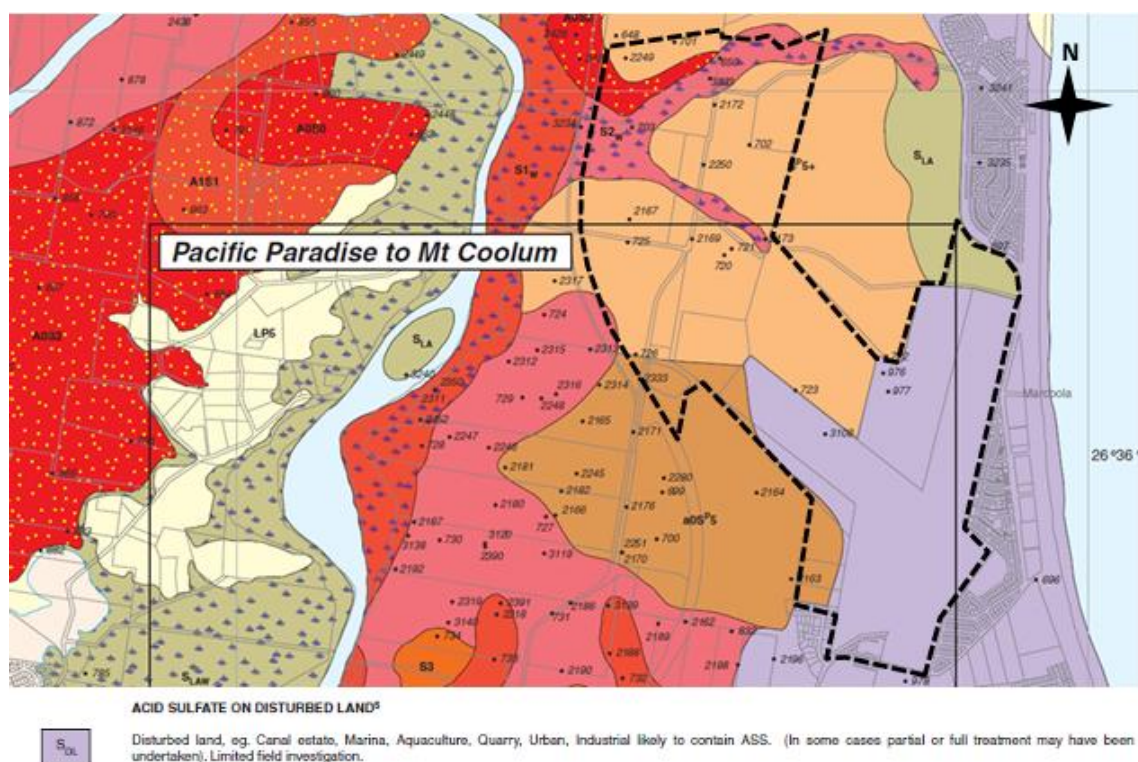


Figure 8: Acid sulfate soil map<sup>4</sup>

## 5.5 Fire ants

Sunshine Coast Airport currently does not occur within a declared Red Imported Fire Ant (RIFA) Biosecurity Zone. Therefore, no requirements for construction to follow a Biosecurity Queensland–approved RIFA Management Plan that currently requires:

<sup>4</sup> Core Consultants, Acid Sulfate Soils Detailed Summary Report, Sunshine Coast Airport, February 2024

- Requires an authorised officer to conduct a pre-disturbance survey, certification of all imported soils and equipment wash-downs, scheduled baiting and inspections, immediate on-site nest treatment and 24-hour reporting of any finds to Biosecurity Queensland, together with comprehensive record-keeping and compliance reporting for a minimum of two years to satisfy statutory eradication and spread-prevention requirements.

However, it is noted that fire ant biosecurity zones occur on the Sunshine Coast:

- The new fire ant biosecurity zone covers a 5 km radius around the North Arm development. Parts of Bridges, Cooloolabin, Eerwah Vale, Eumundi, Maroochy River, Valdora, Verrierdale, Yandina, and Yandina Creek are included.

Currently, the Site is not an area being actively developed and potential threats are minimal. However, the proposed development will provide potential opportunities for fire ants to be inadvertently introduced to the site through importation of materials that can carry fire ants such as; soil, mulch, manure, quarry materials, turf, and potted plants.

### 5.6 Heritage

The SCA is part of Kabi Kabi country which is known to contain a range of historical artefacts important to the Kabi Kabi people. Additionally, the land occurs within a broader mosaic of important retained vegetation communities associated with the Maroochy River and Mount Colum.

A search of the Australian Heritage Places Inventory and Queensland Heritage Register did not identify items of indigenous or non-indigenous cultural heritage,

No registered cultural heritage sites are recorded on the Queensland Department of Women, Aboriginal & Torres Strait Island Partnerships and Multiculturalism (DWATSIPM) cultural heritage register and database within the SCA site.

## 6 ENVIRONMENTAL ASSESSMENT OF NATIONAL AND STATE ENVIRONMENTAL MATTERS

The assessment criteria in the tables below are used to determine the nature of environmental constraint the proposed development is have in relation to

- Commonwealth EPBC Act Matters of National Environmental Significance (MNES); and
- Queensland environmental matters as prescribed in the PDA.

Assessment criteria as follows in table below.

**Table 5: Constraints assessment analysis criteria**

| Constraint | Description                                                                                                                                                                                                                                                                                      |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No         | The relevant Cwth MNES State Matters of State Environmental Significance (MSES) are either not located in the vicinity of the Project development or is not relevant to the works associated with the Project.<br><br>No assessment required.                                                    |
| Unlikely   | Low potential for MNES or MSES to pose a significant risk to the Project development in terms of siting or design.<br><br>No further assessment required.                                                                                                                                        |
| May        | Moderate potential for environmental matters to pose a significant risk to the Project development and will need further consideration.<br><br>Subject to further assessment, likely to be able to be managed or engineered to minimise potential environmental impact to receiving environment. |
| Likely     | High potential for environmental matters to have a significant impact on Project development. Further assessment required. May impact on final siting or be a significant time and cost constraint.<br><br>Considerations for statutory referral or permits may be necessary.                    |

## 6.1 Matters of National Environmental Significance

### 6.1.1 World Heritage Properties

**Table 6: Significant impact assessment - World Heritage Properties**

| Assessment Criteria                                                                                                                                                                                                                                                                                                                                                           | Assessment of nature and extent of impacts                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will result in:</p> <ul style="list-style-type: none"> <li>one or more of the World Heritage values to be lost</li> <li>one or more of the World Heritage values to be degraded or damaged, or</li> <li>one or more of the World Heritage values to be notably altered, modified, obscured or diminished.</li> </ul> | <p><b>No constraint.</b></p> <p>No declared World Heritage properties or values are located within or adjacent to the Site.</p> <p>Accordingly, no significant impacts upon a world heritage listed property.</p> |

### 6.1.2 National Heritage Places

**Table 7: Significant impact assessment - National Heritage Places**

| Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                    | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will result in:</p> <ul style="list-style-type: none"> <li>one or more of the National Heritage values to be lost</li> <li>one or more of the National Heritage values to be degraded or damaged, or</li> <li>one or more of the National Heritage values to be notably altered, modified, obscured or diminished.</li> </ul> | <p><b>No.</b></p> <p>No National Heritage properties or values are located within or adjacent to the Site. The nearest National Heritage Place is the Glass House Mountains, more than 30 km south of the Site.</p> <p>Accordingly, no significant impacts upon National Heritage Places.</p> |

### 6.1.3 Wetlands of International Importance (Ramsar wetlands)

**Table 8: Significant impact assessment - Wetlands of International Importance (Ramsar wetlands)**

| Assessment Criteria                                                          | Assessment of nature and extent of impacts |
|------------------------------------------------------------------------------|--------------------------------------------|
| <p>Is there a real chance or possibility that the action will result in:</p> | <p><b>No.</b></p>                          |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• areas of the wetland being destroyed or substantially modified</li> <li>• a substantial and measurable change in the hydrological regime of the wetland, for example, a substantial change to the volume, timing, duration and frequency of ground and surface water flows to and within the wetland</li> <li>• the habitat or lifecycle of native species, including invertebrate fauna and fish species, dependent upon the wetland being seriously affected</li> <li>• a substantial and measurable change in the water quality of the wetland – for example, a substantial change in the level of salinity, pollutants, or nutrients in the wetland, or water temperature which may adversely impact on biodiversity, ecological integrity, social amenity or human health, or</li> <li>• an invasive species that is harmful to the ecological character of the wetland being established (or an existing invasive species being spread) in the wetland</li> </ul> | <p>No listed Ramsar wetlands of international importance are located within or adjacent to the Site. The nearest being within Moreton Bay, the northern extent of which is approximately 15km south of the Site.</p> <p>Accordingly, no significant impacts upon Ramsar wetlands.</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 6.1.4 Great Barrier Reef Marine Park

**Table 9: Significant impact assessment - Great Barrier Reef Marine Park**

| Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Assessment of nature and extent of impacts                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Is there a real chance or possibility that the action will result in:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>No.</b>                                                                                                                                           |
| <ul style="list-style-type: none"> <li>• modify, destroy, fragment, isolate or disturb an important, substantial, sensitive or vulnerable area of habitat or ecosystem component such that an adverse impact on marine ecosystem health, functioning or integrity in the Great Barrier Reef Marine Park results</li> <li>• have a substantial adverse effect on a population of a species or cetacean including its life cycle (for example, breeding, feeding, migration behaviour, life expectancy) and spatial distribution</li> <li>• result in a substantial change in air quality or water quality (including temperature) which may adversely impact on biodiversity, ecological health or integrity or social amenity or human health</li> <li>• result in a known or potential pest species being introduced or becoming established in the Great Barrier Reef Marine Park</li> </ul> | <p>The Site is not located within the catchment of the Great Barrier Reef Marine Park.</p> <p>Accordingly, no significant impacts upon the Park.</p> |

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- result in persistent organic chemicals, heavy metals, or other potentially harmful chemicals accumulating in the marine environment such that biodiversity, ecological integrity, or social amenity or human health may be adversely affected, or
- have a substantial adverse impact on heritage values of the Great Barrier Reef Marine Park, including damage or destruction of an historic shipwreck

### 6.1.5 Commonwealth Marine Area

**Table 10: Significant impact assessment - Commonwealth Marine Area**

| Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Assessment of nature and extent of impacts                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will result in:</p> <ul style="list-style-type: none"><li>• result in a known or potential pest species becoming established in the Commonwealth marine area</li><li>• modify, destroy, fragment, isolate or disturb an important or substantial area of habitat such that an adverse impact on marine ecosystem functioning or integrity in a Commonwealth marine area results</li><li>• have a substantial adverse effect on a population of a marine species or cetacean including its life cycle (for example, breeding, feeding, migration behaviour, life expectancy) and spatial distribution</li><li>• result in a substantial change in air quality or water quality (including temperature) which may adversely impact on biodiversity, ecological integrity, social amenity or human health</li><li>• result in persistent organic chemicals, heavy metals, or other potentially harmful chemicals accumulating in the marine environment such that biodiversity, ecological integrity, social amenity or human health may be adversely affected, or</li><li>• have a substantial adverse impact on heritage values of the Commonwealth marine area, including damage or destruction of an historic shipwreck.</li></ul> | <p><b>No.</b></p> <p>The Commonwealth marine area stretches from 3 to 200 nautical miles from the coast. The Site is located approximately 100 m inland from the shore</p> <p>Accordingly, no significant impacts upon a Commonwealth Marine Area.</p> |

### 6.1.6 Listed threatened ecological communities (TECs)

**Table 11: Significant impact assessment - Listed threatened ecological communities (TECs)**

| Assessment Criteria | Assessment of nature and extent of impacts |
|---------------------|--------------------------------------------|
|---------------------|--------------------------------------------|

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>• reduce the extent of an ecological community</li> <li>• fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines</li> <li>• adversely affect habitat critical to the survival of an ecological community</li> <li>• modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns</li> <li>• cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting</li> <li>• cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to: <ul style="list-style-type: none"> <li>• assisting invasive species, that are harmful to the listed ecological community, to become established, or</li> <li>• causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or</li> </ul> </li> <li>• interfere with the recovery of an ecological community.</li> </ul> | <p><b>Unlikely</b></p> <p>The Coastal Oak threatened ecological community is known to occur on the Airport but not within the Site.</p> <p>Accordingly, impacts to this TEC are unlikely.</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 6.1.7 Listed Threatened Species

**Table 12: Significant impact assessment - Listed Threatened Species**

| Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                      | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will result in:</p> <ul style="list-style-type: none"> <li>• lead to a long-term decrease in the size of a population</li> <li>• reduce the area of occupancy of the species</li> <li>• fragment an existing population into two or more populations</li> <li>• adversely affect habitat critical to the survival of a species</li> <li>• disrupt the breeding cycle of a population</li> </ul> | <p><b>May</b></p> <p><u>Terrestrial species</u></p> <ul style="list-style-type: none"> <li>• On-site Drains</li> </ul> <p>The on-Site drains provide breeding habitat value for listed threatened species; Sandy Yabby and Wallum Sedge Frog. The eastern perimeter drain has limited/low breeding habitat value. The northern perimeter drain provides high breeding habitat value along the western boundary of the site and moderate breeding habitat value along the southern boundary of the site. Civil works are planned to modify these Site drains to allow for the planned development. Disturbance of drains may disrupt the breeding cycle of populations or decrease the available habitat for breeding while development of the Site is underway.</p> |

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline</li> <li>• result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat</li> <li>• introduce disease that may cause the species to decline, or</li> <li>• interfere with the recovery of the species.</li> </ul> | <p>Recommendation: A) The loss of breeding habitat value for Sandy Yabby and Wallum Sedge Frog associated with the on-Site drains areas compensated in accordance with SCA's Offset Management Plan. B) Following modification of on-Site drains, they are landscaped in a manner to provide breeding habitat value for Sandy Yabby and Wallum Sedge Frog.</p> <ul style="list-style-type: none"> <li>• <b>Wallum Heath Management Area</b><br/>Adjacent to the western boundary of the Site, is the Wallum Heath Management Area (WHMA), a biodiversity Offset Area established under the EPBC Act as an approval condition of the SCAEP for the management of Wallum Sedge Frog breeding habitat. Also secured in perpetuity in accordance with the Queensland Environmental Offsets Act 2014 (Environmental Offsets Act). Potential impacts upon WHMA are changes to the hydrological regime from drainage works on the western boundary associated with the northern perimeter drain (NPD). A function of the NPD is to prevent lateral movement of sub-surface and surface water to prevent nutrients or pollutants entering the WHMA<sup>5</sup>.</li> </ul> <p><u>Recommendation:</u> Drainage works along the NPD are to maintain the function of preventing lateral movement of sub-surface water and surface water carrying pollutants and nutrients into the WMA.</p> <p>The proposed action will transform the site from 'undeveloped land' to urban and resort developments. <i>The degradation of wallum habitat at sites impacted by urban and resort development and other human activities could impact negatively on wallum frog species in a variety of ways. Of particular concern in this regard, are the trampling of reed beds, changes in hydrology, altered water chemistry, and increases in soil and water nutrient levels<sup>6</sup>.</i></p> <p>As the proposed development is occurring adjacent to the WHMA, the design and construction of the development should occur in a manner that does not threaten the integrity of the WHMA. Opportunity exists for use of buffer zones planted with wallum heath species and WSUD to mitigate potential impacts upon WHMA.</p> <p>Light pollution has been identified as an impacting process upon Wallum sedgefrog populations. Mitigation measures include fitting lights with low wattage bulbs and glare guards.<sup>7</sup></p> <p>During construction and operation, there will be increased exposure from materials brought onto site, machinery and public movements that potential introduce disease (e.g. soil-borne fungus) or invasive species (e.g. fire ants) that are threat to the biosecurity of WHMA. The following recommendations have been informed from Stockland residential communities at Caloundra South.<sup>7</sup></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

<sup>5</sup> SCAEP, Wallum Sedge Frog Offset Management Plan, 2018

<sup>6</sup> Meyer E (et al), 2006. National recovery plan for the wallum sedgefrog and other wallum-dependent frog species. Report to Department of the Environment and Water Resources, Canberra. Queensland Parks and Wildlife Service, Brisbane.

<sup>7</sup> Wallum Sedgefrog Management Plan, May 2020, Stockland Residential Communities, Stockland Sunshine Coast.

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|  | <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>• Buffer of a minimum of 50 metres from areas of intensive land use (e.g. roads, urban areas)</li> <li>• Implement Water Sensitive Urban Design (WSUD) features to improve the quality of surface water runoff – for the construction and operation phases of development.</li> <li>• Within buffer areas, planting of wallum-native plant species tolerant of low-nutrient soils in preference to non-wallum native species.</li> <li>• Plant dense vegetation between WHMA and adjacent development.</li> <li>• Minimise light pollution onto WHMA – light pollution identified as impacting process.</li> <li>• Exclusion of surface water flows which have the potential to carry contaminants into WHMA and negatively affect water chemistry and quality within WHMA.</li> <li>• Exclusion fencing and signage (including community education) so that WHMA are not impacted by trampling or disturbance.</li> <li>• Development of a Biosecurity Plan to prevent introduction of invasive species or diseases that could threatened the integrity of the WHMA.</li> <li>• An environmental impact assessment process as described in the <i>National Light Pollution Guidelines for Wildlife</i> should be undertaken by appropriately qualified personnel to determine the potential for impacts upon threatened frog species within WHMA to determine whether significant impacts are likely under the EPBC Act.</li> <li>• Light management plan should be developed and reviewed by appropriately qualified lighting practitioners, who should consult with an appropriately qualified biologist or ecologist.</li> </ul> <p><u>Marine turtle species</u></p> <p>The following listed threatened species are known to occur along the beaches and marine waters of Sunshine Coast: Green Turtle, Flatback Turtle, Loggerhead Turtle, Hawksbill Turtle, Olive Ridley Turtle and Leatherback Turtle. The EPBC Act identifies the Sunshine Coast beaches and coastal waters as habitat critical to the survival of the Loggerhead Turtle.</p> <p>Marine turtles nesting on beaches in south-east Queensland have been identified as being at highest risk from the effects of light pollution from urban development. As hatchlings orient towards the lowest light horizon rather than being directly attracted to bright lights, lights of any wavelength can affect behaviour and light glow can disrupt marine turtles when it out-competes natural light sources<sup>8</sup>.</p> <p>Hatchling marine turtles are vulnerable to light pollution as it disrupts natural light cues used for finding the ocean and dispersing through the nearshore environment Artificial light may also deter adult marine turtles from nesting on lit beaches. The effect of light on turtle behaviour has been observed from lights up to 18km away<sup>9</sup>.</p> |
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<sup>8</sup> Recovery Plan for Marine Turtles in Australia, 2017-2027, Commonwealth of Australia 2017.

<sup>9</sup> DCCEEW 2023, National Light Pollution Guidelines for Wildlife, Department of Climate Change, Energy, the Environment and Water, Canberra, May

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|  | <p>Infrastructure with artificial lighting that is externally visible should implement Best practice lighting design as a minimum design requirement. Where there is important habitat for turtles within 20 km of a project, an environmental impact assessment should be undertaken. The 20 km buffer for considering important habitat is based on skyglow approximately 15 km from the nesting beach affecting hatchling behaviour and light disrupting turtle orientation 18 km away.</p> <p>The closest turtle nesting beach to the proposed development, Marcoola, has a nesting abundance of &lt;1 nest/year Yaroomba, next beach north of Marcoola has nesting abundance of 1-10 nests per year. Mudjimba, next beach south of Marcoola, has a nesting abundance of &lt; 1 nest/yr. The beach with the highest nesting abundance of 10+nests per year is Buddina, south of the Site. All locations within 20 km buffer radius.</p> <p>Existing artificial light at night (ALAN) impacts are occurring along the Sunshine Coast coastline including upon the nesting beaches. The proposed development will introduce infrastructure that includes resort hotel complex up to 10 storeys height, that will provide additional ALAN impacts. The cumulative effect of these additional impacts is unknown at this stage to make a determination whether impacts are likely to be significant under the EPBC Act. Where artificial light is likely to influence marine turtle behaviour, consideration should be given to employing mitigation measures as early as possible in a project's life cycle, including to inform the design phase.</p> <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>An environmental impact assessment process as described in the <i>National Light Pollution Guidelines for Wildlife</i> should be undertaken by appropriately qualified personnel to determine the potential for impacts upon marine turtles, to determine whether significant impacts are likely upon threatened marine turtle species under the EPBC Act.</li> <li>Light management plan should be developed and reviewed by appropriately qualified lighting practitioners, who should consult with an appropriately qualified marine biologist or ecologist.</li> </ul> |
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### 6.1.8 Listed Migratory Species

**Table 13: Significant impact assessment - Listed Migratory Species**

| Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                                                                                         |
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| <p>Is there a real chance or possibility that the action will result in:</p> <ul style="list-style-type: none"> <li>substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species</li> <li>result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species, or</li> </ul> | <p><b>May</b></p> <p>The following listed migratory species are known to occur along the beaches and marine waters of Sunshine Coast: Green Turtle, Flatback Turtle, Loggerhead Turtle, Hawksbill Turtle, Olive Ridley Turtle and Leatherback Turtle.</p> <p>Impacts and mitigation measures are discussed in the previous section – Listed Threatened Species</p> |

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| <ul style="list-style-type: none"><li>seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.</li></ul> |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

### 6.1.9 Nuclear Action

#### Description

The action will not involve any nuclear actions.

#### Nature and extent of likely impact.

Not applicable.

### 6.1.10 Protection of water resources from coal seam gas development and large coal mining development

#### Description

The action will not involve any coal seam gas development or large coal mining development.

#### Nature and extent of likely impact.

Not applicable.

## 6.2 Matters of State environmental values

The assessment criteria in the following tables cover the following state environmental matters:

- Matters of state environmental significance (MSES) are state-significant environmental values that are identified by the Queensland Government to aid in the protection of biodiversity through the planning system and environmental offsets framework
- State heritage places managed through World Heritage List, National Heritage List, Queensland Heritage Register, and Aboriginal & Torres Strait Islander Cultural Heritage Register
- Environmental Protection Act – general environmental duty; not to carry out an activity that may cause environmental harm without taking all reasonably practicable measures to prevent or minimise the harm
- PDA development requirements for protecting whole of the environment across the airport and specific to development precincts such as Airport North. Threshold for protection is to avoid impacts or where avoidance is not reasonable possible, minimise and mitigate adverse impacts.

The State environmental values and their management have been grouped into the following categories to assist with assessment of impacts

## 6.2.1 Impacts on landscapes and soils

**Table 14: Landscape and soils assessment criteria**

| Assessment criteria                                                                                                                                                                                                                                                                                                                                               | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>substantially alter natural landscape features.</li> <li>cause subsidence, instability or substantial erosion; or</li> <li>involve medium or large-scale excavation of soil or minerals?</li> <li>Substantially disturb acid sulphate soils?</li> </ul> | <p><b>May</b></p> <p>The proposed development is likely to substantially disturb acid sulphate soils. Excavation, stockpiling and dewatering activities associated with the development likely to disturb PASS with potential adverse impacts to groundwater or surface water quality onsite and downstream impacts upon receiving environment.</p> <p>A Site based PASS management plan is required to capture the acid sulphate soils requirements specified in the PDA. An ASS investigation report is required to support the PASS management plan.</p> <p>The PASS Plan is likely to influence the design and management of civil works on the Site.</p> <p>Recommendation: The PASS Plan is verified and approved by 30% design.</p> |

## 6.2.2 Impacts on coastal landscapes and processes

**Table 15: Coastal Landscape and Processes assessment criteria**

| Assessment criteria                                                                                                                                                                                                                                                                                                                                                                                       | Assessment of nature and extent of impacts                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>alter coastal processes, including wave action, sediment movement or accretion, or water circulation patterns.</li> <li>permanently alter tidal patterns, water flows or water quality in estuaries.</li> <li>extract large volumes of sand or substantially destabilise sand dunes?</li> </ul> | <p><b>Unlikely</b></p> <p>Site development occurs on airport land that has previously been modified for aviation purposes.</p> <p>Development of the precinct is unlikely to permanently modify coastal landscapes and processes.</p> |

## 6.2.3 Impacts on water resources

**Table 16: Water Resources impact assessment criteria**

| Assessment criteria                                                                                                                                                                                      | Assessment of nature and extent of impacts                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>measurably reduce the quantity, quality or availability of surface or ground water.</li> </ul> | <p><b>Unlikely.</b></p> <p>Drainage patterns on the Site will be modified to enhance flood mitigation and better utilisation of precinct space.</p> |

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| <ul style="list-style-type: none"> <li>channelise, divert or impound rivers or creeks or substantially alter drainage patterns; or</li> <li>measurably alter water table levels?</li> </ul> | <p>Flood modelling demonstrates<sup>10</sup>:</p> <ul style="list-style-type: none"> <li>an overall improvement to the drainage system servicing the Marcoola community because of the proposed mitigation works.</li> <li>reduce duration of local catchment flooding and hence improves the hydraulic efficiency of the drainage system during local catchment flood events</li> </ul> <p>Changes in both frequency and duration of modelled inundation across the northern and southern National Park areas were found to be negligible and it was concluded that the PDA development will not result in any appreciable difference in the flood characteristics within these areas.</p> <p>Adverse impacts are unlikely provided that the design plans and management documents meet the PDA criteria for Flood Management.</p> |
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## 6.2.4 Pollution, chemicals & toxic substances

**Table 17: Pollution, chemicals & toxic substances impact assessment criteria**

| Assessment criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>generate smoke, fumes, chemicals, nutrients, or other pollutants which will substantially reduce local air quality or water quality.</li> <li>result in the release, leakage, spillage, or explosion of flammable, explosive, toxic, radioactive, carcinogenic, or mutagenic substances, through use, storage, transport, or disposal.</li> <li>increase atmospheric concentrations of gases which will contribute to the greenhouse effect or ozone damage; or</li> <li>substantially disturb contaminated soils?</li> </ul> | <p><b>May</b></p> <p>The soils and groundwater on the Site are contaminated with PFAS and potentially other contaminants of concern such as metals, hydrocarbons.</p> <p>Excavation, stockpiling and dewatering activities associated with the development likely to disturb PFAS contaminated soil with potential downstream impacts upon receiving environments and their values within or external to the Airport.</p> <p>The PDA Site Contamination requirements include a Site Management Plan will be developed and approved by Qld Government to ensure development in a manner to prevent environmental harm.</p> <p>The SMP likely to influence design and management of civil works on the Site. The SMP is also likely to influence the ASS Plan and the ESC Plan. All three soil plans will need to be aligned to ensure no conflicting actions occur.</p> |

<sup>10</sup>BMT, Sunshine Coast Airport PDA Hydraulics Report, 26 June 2024

## 6.2.5 Impacts on protected plants and habitats

**Table 18: Plants assessment criteria**

| Assessment criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>involve medium or large-scale native vegetation clearance.</li> <li>involve any clearance of any vegetation containing a listed threatened species which is likely to result in a long-term decline in a population or which threatens the viability of the species;</li> <li>change the hydrological regimes that supports the habitat for protected plant species</li> <li>introduce potentially invasive species;</li> <li>involve the use of chemicals which substantially stunt the growth of native vegetation;- or</li> <li>involve large-scale controlled burning or any controlled burning in sensitive areas, including areas which contain listed threatened species?</li> </ul> | <p><b>May</b></p> <p>No MSES regulated vegetation on the Site.</p> <p>The proposed development will occur within the boundaries of the Site and clearance of MSES regulated vegetation on the western and northern boundaries of the Site is unlikely to occur.</p> <p>The Site does not contain MSES wildlife habitats. Mapped MSES wildlife habitats occur on the western, northern and north-eastern boundary of the site.</p> <ul style="list-style-type: none"> <li>Wallum Heath Management Area</li> </ul> <p>The wildlife habitat on the western boundary - Wallum Heath Management Area contains two listed plant threatened species under the Nature Conservation Act and is a biodiversity offset protected in perpetuity under Queensland law. The impacts and mitigation strategies are described in s6.1.7 Listed Threatened Species and apply here.</p> |

## 6.2.6 Impacts on protected animals and habitats

**Table 19: Protected Animals assessment criteria**

| Assessment criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>cause a long-term decrease in, or threaten the viability of, a native animal population or populations, through death, injury or other harm to individuals;</li> <li>displace or limit the movement or dispersal of native animal populations;</li> <li>reduce or fragment available habitat for native species;</li> <li>reduce or fragment available habitat for listed threatened species, which is likely to displace a population, result in a long-term decline in a population, or threaten the viability of the species;</li> </ul> | <p><b>May</b></p> <p><u>Terrestrial species</u></p> <ul style="list-style-type: none"> <li>On-site Drains; provide breeding habitat value for species listed under the Nature Conservation Act; Sandy Yabby, Wallum Froglet, Rocketfrog &amp; Wallum Sedge Frog,</li> <li>Wallum Heath Management Area; provides habitat for species listed under the Nature Conservation Act; Sandy Yabby, Wallum Froglet, Rocketfrog &amp; Wallum Sedge Frog, Eastern Ground Parrot.</li> </ul> <p>Impacts upon the above species and mitigation strategies are described in s6.1.7 Listed Threatened Species and apply here.</p> <p><u>Marine Turtle Species</u></p> |

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| <ul style="list-style-type: none"> <li>adversely impact the hydrological regimes that supports the habitat for protected animal species</li> <li>introduce exotic species which will reduce habitat or resources for native species; or</li> <li>undertake large-scale controlled burning or any controlled burning in areas containing listed threatened species?</li> </ul> | <p>The following listed threatened species under the Nature Conservation Act are known to occur along the beaches and marine waters of Sunshine Coast: Green Turtle, Flatback Turtle, Loggerhead Turtle, Hawksbill Turtle, Olive Ridley Turtle and Leatherback Turtle.</p> <p>Airport North Precinct PDA site specific criteria; be designed to minimise harm to sea turtle nesting and sea turtle activity by avoiding adverse impacts generated from artificial lighting.</p> <p>The impacts and mitigation strategies have been described in s6.1.7 Listed Threatened Species and apply here.</p> |
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## 6.2.7 Impacts on people and communities

**Table 20: People and Communities impact assessment criteria**

| Assessment criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Assessment of nature and extent of impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is there a real chance or possibility that the action will:</p> <ul style="list-style-type: none"> <li>substantially increase demand for, or reduce the availability of, community services or infrastructure which have direct or indirect impacts on the environment, including water supply, power supply, roads, waste disposal, and housing;</li> <li>affect the health, safety, welfare or quality of life of the members of a community, through factors such as noise, odours, fumes, smoke, or other pollutants;</li> <li>cause physical dislocation of individuals or communities; or</li> <li>substantially change or diminish cultural identity, social organisation or community resources?</li> </ul> | <p><b>Unlikely</b></p> <p>The vision of the Master Plan is to create a beneficial impact by increasing the public and commercial use and amenity of an underutilised property precinct on the airport that is not required for aviation purposes.</p> <p>Construction and operational activities on Site have potential to generate emissions and hazards to adjacent community. Changes to drainage flows on the Site have potential for off-site flooding impacts.</p> <p>Adverse impacts are unlikely to occur provided that design plans and management documents demonstrate compliance with the PDA criteria:</p> <ul style="list-style-type: none"> <li>s2.5.8 Community Safety &amp; Development Constraints</li> <li>s2.5.9 Flood Management</li> <li>Airport North Precinct PDA criteria; 1 i) ii) ensure development is compatible with and minimises adverse impacts on surrounding residential and tourist areas.</li> </ul> |

## 6.2.8 Heritage

**Table 21: Heritage impact assessment criteria**

| Assessment criteria                                         | Assessment of nature and extent of impacts |
|-------------------------------------------------------------|--------------------------------------------|
| Is there a real chance or possibility that the action will: | <b>Unlikely.</b>                           |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• permanently destroy, remove or substantially alter the fabric (physical material including structural elements and other components, fixtures, contents, and objects) of a heritage place;</li><li>• involve extension, renovation, or substantial alteration of a heritage place in a manner which is inconsistent with the heritage values of the place;</li><li>• involve the erection of buildings or other structures adjacent to, or within important sight lines of, a heritage place which are inconsistent with the heritage values of the place.</li><li>• substantially diminish the heritage value of a heritage place for a community or group for which it is significant.</li><li>• substantially alter the setting of a heritage place in a manner which is inconsistent with the heritage values of the place; or</li><li>• substantially restrict or inhibit the existing use of a heritage place as a cultural or ceremonial site?</li></ul> | <p>No listed heritage places identified on or adjacent to the Site.</p> <p>The proposed development will erect buildings that occur within important sight lines of Mudjimba Island and Mount Coolum, that have local indigenous cultural importance.</p> <p>The project will be designed to maintain these sightlines. Accordingly, adverse impacts are unlikely.</p> |
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## 7 CONCLUSION & RECOMMENDATIONS

An environmental constraints assessment has been completed in relation to:

- Commonwealth EPBC Act Matters of National Environmental Significance (MNES); and
- Queensland environmental requirements and values as prescribed in the PDA.

A summary of the findings of the constraints assessment and recommendations are provided below.

**Table 22: Summary of constraints assessment & mitigation strategies**

|                                      | Constraints Outcome | Mitigation strategies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MNES</b>                          |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| World Heritage properties            | No                  | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| National Heritage places             | No                  | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Wetlands of international importance | No                  | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Listed threatened species            | May                 | <p><u>Marine Turtles</u></p> <p>Further environmental assessment required to determine whether significant impacts from light pollution upon marine turtles.</p> <ul style="list-style-type: none"> <li>• An environmental impact assessment process as described in the <i>National Light Pollution Guidelines for Wildlife</i> should be undertaken by appropriately qualified personnel to determine the potential for impacts upon marine turtles and whether significant impacts are likely upon threatened marine turtle species under the EPBC Act.</li> <li>• Light management plan should be developed and reviewed by appropriately qualified lighting practitioners, who should consult with an appropriately qualified marine biologist or ecologist.</li> </ul> <p><u>Terrestrial species</u></p> <ul style="list-style-type: none"> <li>• The loss of breeding habitat value for Sandy Yabby and Wallum Sedge Frog associated with the on-Site drain areas compensated in accordance with SCA's Offset Management Plan.</li> <li>• Following modification of on-Site drains, they are landscaped in a manner to provide breeding habitat value for Sandy Yabby and Wallum Sedge Frog.</li> </ul> <p><u>Wallum Heath Management Area</u></p> <ul style="list-style-type: none"> <li>• Drainage works along the NPD are to maintain the function of preventing later movement of sub-surface water and surface water carrying pollutants and nutrients into the WMA.</li> <li>• Buffer of a minimum of 50 metres from areas of intensive land use (e.g. roads, urban areas)</li> <li>• Implement Water Sensitive Urban Design (WSUD) features to improve the quality of surface water runoff – for the construction and operation phases of development.</li> <li>• Within buffer areas, planting of wallum-native plant species tolerant of low-nutrient soils in preference to non-wallum native species.</li> <li>• Plant dense vegetation between WHMA and adjacent development.</li> <li>• Minimise light pollution onto WHMA – light pollution identified as impacting process.</li> <li>• An environmental impact assessment process as described in the <i>National Light Pollution Guidelines for Wildlife</i> should be undertaken by appropriately qualified personnel to determine the potential for impacts upon threatened frog species within WHMA</li> </ul> |

| Constraints Outcome                                                                         |          | Mitigation strategies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                             |          | <p>to determine whether significant impacts are likely under the EPBC Act.</p> <ul style="list-style-type: none"> <li>• Light management plan should be developed and reviewed by appropriately qualified lighting practitioners, who should consult with an appropriately qualified biologist or ecologist.</li> <li>• Exclusion of surface water flows which have the potential to carry contaminants into WHMA and negatively affect water chemistry and quality within WHMA.</li> <li>• Exclusion fencing and signage (including community education) so that WHMA are not impacted by trampling or disturbance.</li> <li>• Development of a Biosecurity Plan to prevent introduction of invasive species or diseases that could threatened the integrity of the WHMA.</li> </ul> |
| Listed threatened ecological communities                                                    | No       | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Listed migratory species                                                                    | May      | Further environmental assessment required to determine whether significant impacts from light pollution upon marine turtles as described above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Great Barrier Reef Marine Park                                                              | No       | No further assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Nuclear action                                                                              | No       | No further assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Commonwealth marine areas                                                                   | No       | No further assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| A water resource, in relation to coal seam gas development or large coal mining development | No       | No further assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Queensland environmental matters</b>                                                     |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Landscapes and soils                                                                        | May      | Disturbance of potential acid sulphate soil (PASS) is likely. A site-based PASS investigation is required to support the PASS Plan. The PASS Plan likely to influence design and management requirements for civil works. PASS Plan approved by 30% project design.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Coastal landscapes and processes                                                            | No       | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Water resource                                                                              | No       | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Pollutants, chemicals, and toxic substances                                                 | Likely   | Disturbance of contaminated soils and groundwater is likely. Contaminated land investigation and site management plan to be developed for regulatory approval. The design and construction of the development will need to comply with the SMP. SMP approve by 30% project design. Note, the SMP is likely to interact with PASS plan & ESC Plan, as all three Plans deal with the management of soil. Need to ensure no conflicting actions.                                                                                                                                                                                                                                                                                                                                         |
| Protected plants & animals                                                                  | May      | Mitigation strategies as per MNES 'Listed Threatened Species'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| People and communities                                                                      | Unlikely | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Heritage                                                                                    | Unlikely | No further environmental assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Constraint | Description                                                                                                                                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No         | The relevant Cwith or State environmental matters are either not located in the vicinity of the Project development or is not relevant to the works associated with the Project. |
|            | No assessment required.                                                                                                                                                          |
| Unlikely   | Low potential for Cwth of State environmental matters to pose a significant risk to the Project development in terms of siting or design.                                        |
|            | No further assessment required.                                                                                                                                                  |

REPORT

---

|        |                                                                                                                                                                                                     |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May    | Moderate potential for environmental matters to pose a significant risk to the Project development and will need further consideration.                                                             |
|        | Subject to further assessment, likely to be able to be managed or engineered to minimise potential environmental impact to receiving environment.                                                   |
| Likely | High potential for environmental matters to have a significant impact on Project development. Further assessment required. May impact on final siting or be a significant time and cost constraint. |
|        | Considerations for statutory referral or permits may be necessary.                                                                                                                                  |

---

# 8 APPENDICES

## Appendix 1: Qld MSES Wetland Values

26°34'48"S 153°4'57"E

26°34'48"S 153°6'33"E



26°36'14"S 153°4'57"E

26°36'14"S 153°6'33"E

A product of

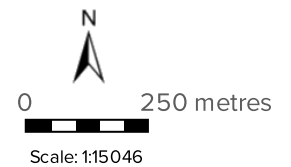


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MSES regulated  
vegetation [defined  
watercourse]



MSES declared high  
ecological value waters  
[watercourse]



MSES declared high  
ecological value waters  
[wetland]



MSES high ecological  
significance wetlands



MSES strategic  
environmental area  
[designated precinct]



Roads and tracks

-  Motorway
-  Highway
-  Secondary
-  Connector
-  Local
-  Restricted Access Road
-  Mall
-  Busway
-  Bikeway
-  Restricted Access
-  Bikeway
-  Walkway
-  Restricted Access
-  Walkway
-  Non-vehicular Track
-  Track
-  Restricted Access Track
-  Ferry

Tunnels



Railway stations



Railways



Vantor

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 Proposed Thoroughfare

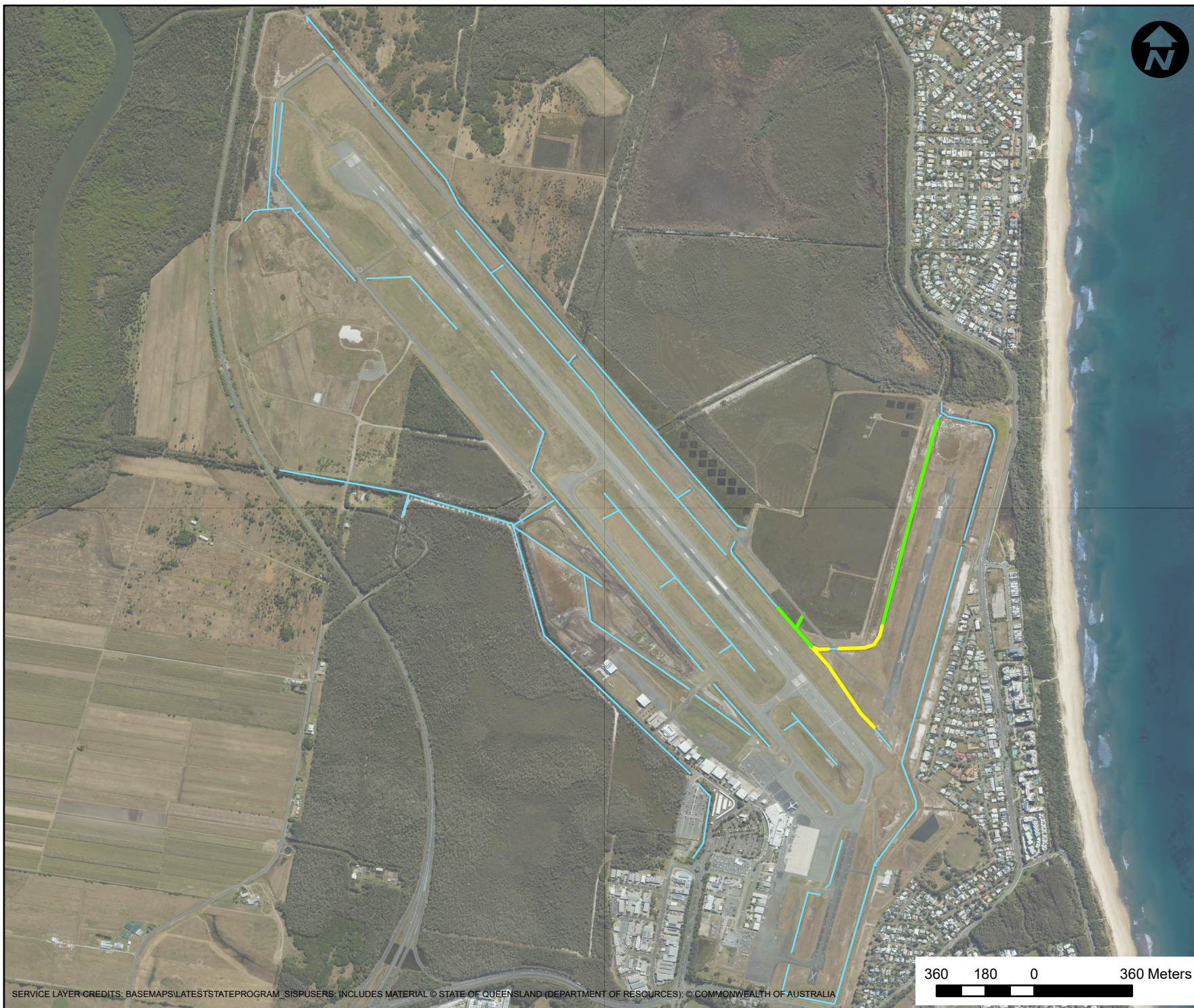
Green bridges



Bridges



## Appendix 2: Breeding habitat value of stormwater drains



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PROJECT NUMBER:  
6515

TITLE:  
Breeding Habitat  
Value of Stormwater Drains

ADDRESS:  
Sunshine Coast Airport,  
Marcoola, QLD

#### Legend

Habitat value  
— High breeding habitat  
value  
— Moderate breeding  
habitat value  
— Limited/Low  
breeding habitat  
value

DRAWING NUMBER:  
6515-250715-0.1

AUTHOR: JH | DATE: 28/08/2025

COORDINATE SYSTEM: GDA2020  
DATUM: GDA2020

## Appendix 3: Qld MSES Vegetation Habitats

# Qld MSES Vegetation Habitat

26°35'22"S 153°5'12"E

26°35'22"S 153°6'10"E

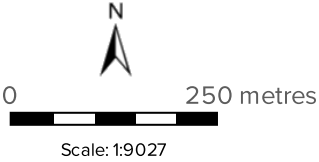


26°36'14"S 153°5'12"E

26°36'14"S 153°6'10"E

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# Qld MSES Vegetation Habitat

## Legend

MSES regulated vegetation [category B - endangered or of concern]



MSES regulated vegetation [category C- endangered or of concern]



MSES regulated vegetation [category R- GBR riverine]



MSES regulated vegetation [essential habitat]



MSES regulated vegetation [100m from wetland]



### Roads and tracks

 Motorway

 Highway

 Secondary

 Connector

 Local

 Restricted Access Road

 Mall

 Busway

 Bikeway

 Restricted Access

 Bikeway

 Walkway

 Restricted Access

 Walkway

 Non-vehicular Track

### Tunnels



### Railway stations



### Railways



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 Track

 Restricted Access Track

 Ferry

 Proposed Thoroughfare

Green bridges



Bridges



# Appendix 4: QLD MSES Wildlife Habitats

# QLD MSES - Wildlife Habitats

26°35'20"S 153°5'18"E

26°35'20"S 153°6'15"E

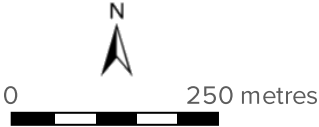


26°36'12"S 153°5'18"E

26°36'12"S 153°6'15"E

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# QLD MSES - Wildlife Habitats

## Legend

MSES wildlife habitat  
[endangered or  
vulnerable]



MSES wildlife habitat  
[special least concern  
animal]



MSES wildlife habitat  
[SEQ koala habitat - core]



MSES wildlife habitat  
[SEQ koala habitat -  
locally refined]



MSES wildlife habitat  
[sea turtle nesting areas]



### Roads and tracks

Motorway

Highway

Secondary

Connector

Local

Restricted Access Road

Mall

Busway

Bikeway

Restricted Access

Bikeway

Walkway

Restricted Access

Walkway

Non-vehicular Track

Track

Restricted Access Track

Ferry

### Tunnels



### Railway stations



### Railways



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 Proposed Thoroughfare

Green bridges



Bridges

