



Title of Proposal - Park Ridge Project

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Residential Development

1.2 Provide a detailed description of the proposed action, including all proposed activities.

The Park Ridge project site covers 157.29 hectares over multiple allotments within Park Ridge, Queensland. The referral area is located approximately 24 kilometres south of Brisbane and 30 kilometres east of Ipswich City. The site is traversed by an existing power easement and proposed future major transport corridor, which runs north south through the centre of the site.

The referral area includes Lot 14 on RP96003. This unoccupied lot is not controlled by Pointcorp but has been included in the referral area as any impact caused by the proposed action is likely to affect the area.

The proposed action is for a predominately residential development consisting of approximately 1,500 lots with a commercial precinct, open space, conservation and associated transport and stormwater infrastructure. Access will be via Green Road to the north and Clarke Road to the south. The project will be carried out over an 8-10 year period (subject to market demand). Proposed features include:

- ? Mixed product residential (medium density and low-medium density)
- ? Commercial Precinct (local centre and service centre)
- ? Conservation open space
- ? Stormwater open space
- ? Active open space
- ? Internal roads
- ? Stormwater detention basins

The referral area is shown as Plan 1.

To maintain wildlife habitat and connectivity for potential threatened species and local fauna, the site will retain 16.2 ha of conversation within the western portion of the site. This area forms part of Council's mapped Biodiversity Corridor network and will ensure wildlife connectivity is maintained and habitat for local and threatened species is retained throughout the region. In addition to this, retention of the eastern waterway will maintain localised north-south connectivity within the eastern portion of the site.

Construction is expected to commence in Mid 2018 (upon resolution of this referral) and



continue in accordance with market demand.

For the purposes of this referral, impacts on MNES can be summarised as:

- ? Direct clearing of 110 ha of remnant and non-remnant vegetation which meets the definition of critical habitat for the survival of the Koala
- ? Development which potentially results in the functional loss of 130.45 ha of remnant and non-remnant vegetation which meets the definition of critical habitat for the survival of the Koala
- ? New roads, trunk infrastructure and stormwater detention basins
- ? An increase in the numbers of domestic animals
- ? An increase in hardstand and stormwater run-off in close proximity to existing site drainage lines.

Importantly, a number of mitigation and management measures are proposed as part of the development to minimise of these impacts. These are discussed further in Section 4.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Project Site	1	-27.690979459067	153.05655570482
Project Site	2	-27.691055459265	153.05646987413
Project Site	3	-27.694133422842	153.07754130815
Project Site	4	-27.700365083345	153.07651133989
Project Site	5	-27.699985114233	153.07475181078
Project Site	6	-27.702074927981	153.07415099596
Project Site	7	-27.702682866284	153.07492347215
Project Site	8	-27.700935034534	153.0644950435
Project Site	9	-27.700365083345	153.06466670488
Project Site	10	-27.700137102037	153.06535335039
Project Site	11	-27.699149177528	153.06531043504
Project Site	12	-27.699111180253	153.06501002763
Project Site	13	-27.697819265029	153.06518168901
Project Site	14	-27.697211299632	153.05994601701
Project Site	15	-27.696185350345	153.0600318477
Project Site	16	-27.695539377328	153.05561156724
Project Site	17	-27.690979459067	153.05655570482

1.5 Provide a brief physical description of the property on which the proposed action will



take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

The referral area covers 157.29 hectares and is located approximately 25 kilometres south of Brisbane and 30 kilometres east of Ipswich City. The site is located within the Logan City Council Local Government Area and Park Ridge Structure Plan Area.

High-density urban development exists directly to the north-west and north-east of the site within the suburbs of Heritage Park and Crestmead. Properties adjacent to the eastern and southern site boundaries are currently rural residential allotments, generally less than 10 ha but zoned for development within the Logan City Planning Scheme and Park Ridge Structure Plan.

The referral area itself is comprised of multiple rural residential allotments bounded by Green Road to the north and Clarke Road to the west. A power easement and future major transport corridor traverse the centre of the site, running north-south. The referral area encompasses freehold land, parts of which are heavily disturbed because of historical rural residential land uses. The site is traversed by a number of access tracks, including unlawful 4WD trails. While predominately vegetated, evidence of dumped rubbish including garden waste with weeds was observed around former house pads. The land is currently vacant.

A site context and aerial are provided in Attachment 1 (Ecological Assessment Report) as Figure 1 and Figure 2 respectively.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

157 ha

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. 64.750

1.8 Primary Jurisdiction.

Queensland

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?



No

1.10 Is the proposed action subject to local government planning approval?

Yes

1.10.1 Is there a local government area and council contact for the proposal?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 07/2018

End date 02/2028

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

In Queensland, statewide legislation establishes the framework and overarching policy for land use planning. The Planning Act 2016 provides for the making of documents, which guide all strategic planning and development assessment throughout the State. The primary document is the local planning scheme produced by each Local Government. The Assessable development is subject to the provisions of the Planning Regulation 2017, administered by the Department of Infrastructure, Local Government and Planning (DILGP). The Planning Regulation specifies state interests, which are assessed by the DILGP's State Assessment Referral Agency (SARA) under the State Development Assessment Provisions (SDAP) and respective State Codes. The SDAP provides an assessment framework for other legislation administered under the Planning Act 2016, including the Vegetation Management Act 1999, Fisheries Act 1994, Water Act 2000, Environmental Offsets Act 2014 and Nature Conservation (Koala) Conservation Plan 2017.

Local government assesses development applications where no overriding State government declaration for development has been made (i.e. Priority Development Area, Declared Master Plan Area, etc.). The development site is located within the jurisdiction of Logan City Council (LCC) and is subject to the provisions of Logan Planning Scheme 2015. Under the Logan Planning Scheme, the site is zoned Medium Impact Industry, Mixed use and Environmental Management and Conservation. The referral area is also located within the Urban Footprint under the South East Queensland Regional Plan 2017, which provides strategic assessment for development in the South East Queensland region.

The referral area sits within the Park Ridge Structure Plan. The Park Ridge Structure Plan formed an amendment to the former Logan Planning Scheme 2006 following Government gazettal on 11 November 2011. The aim of the Park Ridge Structure Plan is to guide an



integrated, well planned, well serviced urban community and employment area that is defined by an extensive environment, parks and waterways network. With gazettal of the Park Ridge Structure Plan area, detailed, site specific, investigations were undertaken as part of preparation of a number of land use maps which identified infrastructure requirements, land constraints and natural assets, as well as land use and residential densities. The Park Ridge Structure Plan was adopted as part of the Logan Planning Scheme 2015.

Under the Park Ridge Structure Plan, the site is zoned for Commercial, Industrial and Greenspace Network.

No applications have been made, nor do any approvals exist, over the land. Development will be subject to assessment by LCC against by the Logan Planning Scheme 2015 and Park Ridge Local Plan, and likely require referral to SARA for the following state interests with respect to environmental matters, where development cannot occur within applicable exemptions of accepted development criteria:

§ State Code 16: Native vegetation clearing

§ State Code 18: Constructing or raising waterway barrier works in fish habitats

Separate to the Planning Act 2016, the Nature Conservation Act (NCA) 1992 protects threatened flora and fauna species in Queensland. Future development application will be subject to provisions of the NCA 1992.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

There has not been any public consultation undertaken to date. Consultation will occur with all relevant stakeholders as required as part of future Federal and State assessment processes, which will require, at a minimum, public notification and opportunities to comment on the proposal.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

The project is not subject to an environmental impact assessment.



1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

No



Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The [interactive map tool](#) can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

- [Profiles of relevant species/communities](#) (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- [Significant Impact Guidelines 1.1 – Matters of National Environmental Significance](#);
- [Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies](#).

2.1 Is the proposed action likely to have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Koala (<i>Phascolarctos cinereus</i>) Swift Parrot	A likelihood of occurrence assessment was



Species	Impact
(Lathamus discolour) Grey-headed Flying-fox (Pteropus poliocephalus)	<p>carried out by SHG using information for previous and contemporary ecological field surveys to assess the potential for listed threatened species and communities to utilise and / or occur on site (Attachment 2). The likelihood assessment has been extracted from the MNES Ecological Assessment Report (Attachment 1) and identified the following threatened species are considered likely to occur on or utilise the site: Koala – A search of Queensland's Wildlife Online Search Tool using a 5 km radius found 110 records of the Koala. A search of the Atlas of Living Australia (ALA) database indicates 47 records for the species within a 5 km radius of the site. The sightings recorded on the ALA database are concentrated in the area along Scrubby Creek, north of the site beyond the Browns Plains waste and recycling facility. Contemporary field surveys undertaken by Saunders Havill Group in 2016 and 2017 included searches using the Spot Assessment Technique (SAT). Twenty-one (21) scat meanders were conducted across the site. Eight (8) of the scat meanders resulted in the location of Koala scats. When scats were located a SAT survey was initiated. The results of the SAT surveys indicate that overall usage of the site is "Low" using the Australian Koala Foundation activity level classification table for East Coast (med-high) activity. No Koalas were recorded during field surveys. Field surveys confirmed that the site contains a number of different Regional Ecosystem communities, and with that, a variety of eucalypt and Corymbia species as well as other Koala food trees including Lophostemon, Angophora, and Melaleuca. Although low Koala use is associated with the site, Koala food trees dominate the flora species. In accordance with EPBC Act Referral Guidelines for the Vulnerable Koala, any habitat which receives a score of 5 or more using the Koala Habitat Assessment Tool is considered to be critical habitat. An assessment of the habitat in the referral area using the Habitat Assessment Tool was undertaken (Attachment</p>



Species	Impact
	<p>3). The results of this assessment show that the site received a score of 5 and therefore is considered, by the referral guidelines, to provide habitat that is critical to the survival of the species. This score was made by (+2) for Koala occurrence, (+2) for vegetation composition, (+1) key existing threats. To determine if the action has the potential to adversely affect habitat critical to the survival of the Koala, an assessment against the flow chart presented as Figure 2 in the EPBC Act Referral Guidelines for the Vulnerable Koala was undertaken. Overall, the assessment concluded that although the score calculated for the impact area is relatively low (5), the amount of habitat being removed (130 ha) suggests that the action has the potential to adversely affect critical habitat for the Koala. Additional threats include a risk of mortality during clearing and an increased risk of mortality from vehicle strike and dog attack from urbanisation of the area. The potential impacts of the project on Koalas that currently utilise feed trees will be mitigated by: ? Retention of 16.2 ha of Environmental management green space within the referral area. These areas connect the site to Powell Park and Heritage Boulevard Parks to the north. These parks are situated along drainage features and will necessarily incorporate drainage works such as detention basins. Where possible wildlife features on the site will be maintained to support biodiversity outcomes and local Council's strategic biodiversity corridors network. ? Adopting a landscape and urban design that retains as many of the primary food trees as possible within open space and Conservation areas. ? Preparation and implementation of fauna management controls under an approved Fauna Management Plan, which will include provision such as ensuring that the clearing of any trees during Project construction is performed under the guidance of a licenced fauna spotter; and ? Education and awareness to future residents and visitors of the functional role of Ecological Corridors for Koala including responsible pet</p>



Species	Impact
	<p>(i.e. dog) ownership. To determine if a significant impact will occur on Koala, as assessment against the EPBC Act Significant Impact Guidelines was undertaken (Attachment 4). This assessment identified that clearing a relatively large area of vegetation considered to be critical habitat for the survival of the species under the referral guidelines has the potential to have a significant impact on the Koala.</p> <p>Swift Parrot - The Swift Parrot is listed as Critically Endangered under the EPBC Act. While the species was not recorded on-site during field surveys, the Swift Parrot has potential to occur as a visitor during eucalypt flowering events. A search of the Atlas of Living Australia (ALA) database indicates that a single individual was sighted in 1988 outside of the referral area but within 5 km of its boundary. Swift Parrots breed in Tasmania during spring to early summer. During autumn and winter, the species migrates to the mainland where it follows a nomadic existence foraging on flowering trees in various locations. While the species is very uncommon in southeast Queensland, it's potential to infrequently use the referral area for foraging cannot be completely discounted. The potential impacts on the Swift Parrot by the proposed action are: ? The loss of foraging trees during their mainland winter-feeding period. The potential impacts of the Project on the Swift Parrot will be mitigated by: ? Ensuring that the clearing of any trees during Project construction is performed under the guidance of a licenced fauna spotter; and ? Retention of foraging host plants where possible to maintain a potential foraging site should Swift Parrots visit. To determine if a significant impact will occur on the Swift Parrot as a result of the action, an assessment was made against the EPBC Act Significant Impact Guidelines 1.1 (Attachment 4). This assessment identified that while clearing of vegetation considered to provide potential foraging habitat will occur, the site does not support a population or habitat critical to the survival of the species. Given the relatively broad list of foraging hosts and</p>



Species	Impact
	<p>widespread distribution of the Swift Parrot when foraging, the action is not considered to have a significant impact on the species or its habitat.</p> <p>Grey-headed Flying-fox - The Grey-headed Flying-fox is listed as Vulnerable under the EPBC Act. The species requires foraging resources and roosting sites feeding amongst the canopy on fruit and nectar. Grey-headed Flying foxes utilise vegetation communities including rainforests, open forests, closed and open woodlands, Melaleuca swamps and Banksia woodlands. It also feeds on commercial fruit crops and on introduced tree species. An Individual Grey-headed Flying-fox was observed flying over the referral area during spotlighting surveys. The site does not currently support a flying fox roosting camp and foraging habitat for the species is widespread in the greater Logan and Brisbane region. The potential impacts of the proposed action on the Grey-headed Flying-fox are: ? The removal of potential foraging habitat. The potential impacts of the proposed action on Grey-headed Flying foxes that potentially utilise the site will be mitigated by: ? Ensuring that the clearing of any trees during Project construction is performed under the guidance of a licenced fauna spotter; and ? Only clearing during daylight hours when animals are not active and roosting off site. To determine if a significant impact will occur on Grey-headed Flying-fox as a result of the action, an assessment was made against the EPBC Act Significant Impact Guidelines 1. 1 (Attachment 4). This assessment identified that while clearing of vegetation considered to provide potential foraging habitat will occur, the site does not support an important population nor habitat critical to the survival of the species. Therefore, the proposal is not considered to have a significant impact on Grey-headed Flying-fox.</p>

2.4.2 Do you consider this impact to be significant?



Yes

2.5 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed migratory species, or their habitat?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action to be taken on or near Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No



Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

The MNES Ecological Assessment Report, prepared by Saunders Havill Group, provides details of all flora and fauna relevant to the project area (Attachment 1). Extracts from this report have been included below for ease of reference to key details.

Flora Observations

With respect to MNES:

§ Thirteen (13) threatened plants and listed under the provisions of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) are considered by mapped vegetation and species distributions to have potential to occur within the vicinity of the referral area.

§ In addition, three (3) listed Threatened Ecological Community (TEC) described as Lowland Rainforest of Subtropical Australia, Swamp Tea-tree (*Melaleuca irbyana*) Forest of South-east Queensland and White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland were considered to have potential to occur on-site.

§ None of the EPBC listed flora nor TECs were observed on or in vicinity to the site. Previous and continuing disturbances make it unlikely that the subject site contains areas consistent with the habitat requirements of listed flora species and TECs.

The site is mapped as containing areas of Category X (non-remnant) and Category B (remnant) vegetation under the Vegetation Management Act 1999 (Qld). Category B vegetation is listed as comprised of Endangered Regional Ecosystem (RE) 12.9-10-12, Of Concern RE 12.3.11, and Least Concern RE 12.9-10.4, RE12.9-10.17 and RE12.3.6. The site is also mapped as containing areas of Essential Habitat for the Koala and *Crinia tinnula* (Wallum Froglet), as well as wetland vegetation associated within Least Concern RE12.3.6. Field survey confirmed that mapped REs were relatively accurately reflected on ground.



Vegetation on the site is open forest to woodland. *Eucalyptus racemosa* (Scribbly Gum), *Eucalyptus siderophloia* (Grey Ironbark) and *Corymbia intermedia* (Pink Bloodwood) dominate the sloping areas with associated species including *Eucalyptus seeana* (Narrow-leaved Red Gum) and *Angophora leiocarpa* (Smooth-barked Apple). The ridge-line vegetation is dominated *Eucalyptus fibrosa*, (Broad-leaved Red Ironbark), *Eucalyptus carnea* (Broad-leaved White Mahogany) with *Corymbia citriodora*, (Spotted Gum), *Eucalyptus siderophloia* (Grey Ironbark), *Eucalyptus seeana* (Narrow-leaved Red Gum) and *Corymbia intermedia* (Pink Bloodwood) also present.

Three mapped waterways traverse the referral area with variable ecological value. Plant species within the waterways include *Melaleuca quinquenervia*, (Broad-leaved Paperbark), *Melaleuca nodosa*, (Prickly-leaved paperbark), *Gahnia aspera* (Saw sedge) and *Lophostemon suaveolens*, (Brush Box).

Fauna Observations

With respect to MNES:

§ Twenty (20) threatened fauna listed under the provisions of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) are considered to have the potential to occur in the vicinity referral.

§ An assessment of likelihood of occurrence was conducted for the EPBC fauna species listed in search results. This assessment was based on database interrogations, presence or absence of suitable habitat, site features, results of the field surveys and professional judgement. Overall, the assessment identified the potential for three (3) species to utilise the site. Specifically, *Lathamus discolor* (Swift Parrot), *Pteropus poliocephalus* (Grey-headed Flying Fox) and *Phascolarctos cinereus* (Koala).

§ *Lathamus discolor* (Swift Parrot) was not observed and is considered to potentially utilise the site very infrequently, if at all. An individual *Pteropus poliocephalus* (Grey-headed Flying-fox) was recorded flying over the site during spotlighting and signs of *Phascolarctos cinereus* (Koala) activity (scats) were recorded on-site.

The following general observations were made:

§ Some large significant tree hollows were observed in areas associated with large *Eucalyptus racemosa* (Scribbly Gum) specimens.

§ No rocky outcrops were located on site and there was very limited amounts of woody debris on the ground.



§ A fox (*Vulpes vulpes*) and a Swamp Wallaby (*Wallabia bicolor*) were found dead, presumably killed by vehicle strike, by the side of Green Road on the northern boundary of the site.

§ Dogs have been observed utilising the site and dog prints have been recorded from all areas of the referral area.

§ A frog call back survey for utilising a megaphone to broadcast frog calls for Nature Conservation Act 1992 (Qld) threatened species *Adelotus brevis* (Tusked Frog) and *Crinia tinnula* (Wallum Froglet) was conducted on two separate site visits along each of the three mapped waterways. Neither species were recorded at any of the waterways. Common species, *Litoria fallax* (Eastern Sedgefrog) and declared pest species, *Rhinella marina* (Cane Toad) were recorded on site.

§ Active ultrasonic monitoring of potential bat flyways was conducted utilising the Wildlife Acoustics 'Echo Meter Touch' on an iOS platform, which allows for the identification of ultrasonic bat species. The ultrasonic detector assessment recorded potential evidence of a number of microbat individuals, but only a single recording was adequate to be identified. The other recordings were of bats during their approach phase or feeding buzz and could not be used for identification. The single individual that could be identified was a relatively common *Chalinolobus gouldii* (Gould's Wattle Bat) based on the characteristics.

A large bird nest, most likely made by a Wedge Tailed Eagle (*Aquila audax*) is present in the southern section of the site. No activity was observed at the nest over several days of site visits and there was no fresh nesting material nor evidence of feeding (orts) at the base of the host tree.

Please refer to the Ecological Technical Assessment Report.

3.2 Describe the hydrology relevant to the project area (including water flows).

Three mapped waterways traverse the referral area flowing from south to north. The waterways are tributaries to Scrubby Creek. Stormwater is not currently managed onsite and historical land use has resulted in these features being highly modified with several small dams.

Western Waterway

§ The western waterway is the most significant on the site and has been categorised as an Amber (moderate risk) waterway for waterway barrier works by the Department of Agriculture and Fisheries (Qld). The western waterway has areas of permanent water although was noted by field survey to be heavily infested with weeds along its entire path. Where the waterway leaves the site to the north, defined banks are more evident and there are small flood plains (10-20 m wide) along each bank. Deeper pools of permanent water are present in this section of



the waterway but the no flow was observed during any survey period.

Central Waterway

§ The central waterway is mapped as a Green (low risk) waterway for waterway barrier works. The waterway enters the site on the southern border and continues through to exit the site on the northern boundary. Where the waterway enters there are no defined banks and limited riparian vegetation. As the waterway progresses through the site, it is divided into sections reflective of small defined banks and pools. There is a 4WD track that crosses the waterway creating a barrier to aquatic species and water flow. There is no flow in the waterway and sections contain grassed areas indicating water does not persist in the channel.

Eastern Waterway

§ The eastern waterway is mapped as a Green (low risk) waterway for waterway barrier works. The only section of the waterway that has defined banks is part of the site used heavily by 4WDs. 4WD activity is so extensive that it has resulted in an altered flow regime in the section of the waterway where the two arms join at the northern boundary of Lot 12 on RP85321. The southern sections of the waterway not effected by 4WD activity do not have an obvious flow path and are instead made up of a series of pools/swales that do not hold permanent water. There a series of dams in the northern section of the waterway, the larger which, hold permanent water.

Hydrology will be altered as a result of the proposed action as a result of necessary bulk earthworks and hardstand areas. A Stormwater Quality Management Plan (SQMP) will developed for the site providing a conceptual assessment and plan of site runoff and how it will achieve stormwater quality management objectives during the operational phase of the development. Stormwater quality objectives for sites in Queensland are highly regulated and governed by the State Planning Policy (DSDIP 2013). Specific performance criteria include:

§ 80% reduction in total suspended solids;

§ 60% reduction in total phosphorus;

§ 45% reduction in total nitrogen; and

§ 90% reduction in gross pollutants.



Load reductions will be met and exceeded using a combination of public education and Water Sensitive Urban Design (WSUD) measures, such as bioretention basins.

No hydrological investigations have been conducted in the referral area to date as the project is still in the planning phases.

3.3 Describe the soil and vegetation characteristics relevant to the project area.

Logan City Council maps the referral area outside potential or actual acid sulphate soils area. The closest area to the referral site mapped as having potential or actual acid sulphate soils is approximately 1 km east of the site in Crestmead Park. Logan City Council has mapped Crestmead Park and areas east as potential and actual acid sulphate soils >5 m AHD <= 20 m AHD.

The Australian Soil Resource Information System (ASRIS) maps the site as containing Kurosols. Kurosols are soils that have a strong texture contrast between surface and subsoil horizons and occur along the southern Queensland coast. The surface and subsoil pH is estimated to be about 3-4.8, indicating acidic soils. The surface soil texture has been mapped as sand, loamy sand or clayey sand with a clay content < 10% and the subsoil texture has been mapped as light clay to light medium clay with a clay content of 35 – 45%.

Vegetation characteristics are described in Section 3.1 and Section 3.5. Overall, The referral area is relatively disturbed due to past rural land uses, clearing and site maintenance. The site contains areas of remnant vegetation, unmaintained regrowth, cleared paddocks, waterways and dams. The majority of vegetation on site meets the definition of woodland under the Koala Referral Guidelines. Exotic flora were prevalent across the site, especially within waterways and around house pads.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

There are no outstanding natural features or other important values relevant to the project area. The area has been extremely disturbed through extensive unlawful 4WD and motorcycle activity which has altered flow paths of the waterways, historical and contemporary logging activities that have significantly reduced the amount of woody debris and older trees, and widespread dumping of domestic and industrial waste throughout the site area. These disturbances have reduced the ecological value of the site and no outstanding features have been identified.



3.5 Describe the status of native vegetation relevant to the project area.

Remnant vegetation occurs across the west and central portions of the referral area that is characterised well by the Queensland Government Regional Ecosystem (RE) mapping (refer Figure 4 in Attachment 1). There are five REs mapped on the site:

Endangered RE12.9-10.12 (*Eucalyptus seeana*, *Corymbia intermedia*, *Angophora leiocarpa* woodland on sedimentary rocks) Least Concern RE 12.9-10.4 (*Eucalyptus racemosa* subsp. *racemosa* woodland on sedimentary rocks) Least Concern RE 12.3.6 (*Melaleuca quinquenervia* +/- *Eucalyptus tereticornis*, *Lophostemon suaveolens*, *Corymbia intermedia* open forest on coastal alluvial plains) Of Concern RE 12.3.11 (*Eucalyptus tereticornis* +/- *Eucalyptus siderophloia*, *Corymbia intermedia* open forest on alluvial plains usually near coast); and Least Concern RE 12.9-10.17b (*Corymbia citriodora* subsp. *variegata* mixed open forest to woodland)

The eastern and southern portion of the site is mapped as non-remnant vegetation (Category X).

Refer to MNES Ecological Assessment Report (Attachment 1, Section 3.3) for a more detailed description of the status of native vegetation in the referral area.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The site contains ridgelines that slope toward drainage areas generally south to north with a total contour variation of approximately 25 metres.

3.7 Describe the current condition of the environment relevant to the project area.

A variety of disturbances from historical clearing and land use practices has diminished ecological values of the site. Historical and contemporary logging activities have reduced the prevalence of dead stags and hollow logs.



Fire has reduced the understorey and affected mature trees in areas of regrowth. This disturbance is generally restricted to the southern and eastern portions of the site in the non-remnant vegetation.

The site is utilised heavily as by 4WDs and motorcycle riders. This activity has resulted in numerous tracks throughout the site causing significant damage to the mapped waterways. The continued heavy use of historically cleared areas has limited regrowth of native vegetation.

Rubbish has been dumped across the site. Domestic items are most common but there are several abandoned vehicles and garden waste has created sources of weed infestation. Industrial waste (building materials) has also been dumped on site.

Refer to MNES Ecological Assessment Report (Attachment 1, Section 4) for more detailed description of the current condition of native vegetation in the referral area.

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

No Commonwealth Heritage Places are located on or adjacent to the site.

3.9 Describe any Indigenous heritage values relevant to the project area.

SHG are not aware of any indigenous heritage values in the referral area.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

The development footprint is comprised solely of freehold land and easements on title. Refer Section 1.7 for further detail.

3.11 Describe any existing or any proposed uses relevant to the project area.

The land is currently vacant except for a single residence on Lot 1 of RP96003.



Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

Management measures specific to the various MNES that have the potential to be impacted by the action are outlined throughout this referral. In addition to these measures, it is expected that further detailed studies will be carried out as part of detailed design and conditioned as part of subsequent approval requirements, including:

1. Vegetation Clearing and Management Plan

An approved Vegetation Clearing and Management Plan (VC&MP) must be implemented during Operational Works, which includes details on:

- § Locations of protected vegetation, vegetation to be retained and vegetation to be removed
- § Details on vegetation types
- § Location of significant vegetation (remnant vegetation, city wide significant species etc.)
- § Particulars on how vegetation is proposed to be cleared (clearing sequence plan)
- § Methods for protecting or relocating plants
- § Disposal methods

2. Fauna Management Plan

All works must be undertaken in accordance with the approved Fauna Management Plan. This includes details on:



-
- § Species surveyed as using the site
 - § A plan showing existing habitat areas
 - § Details of threats to existing fauna
 - § Clearing sequence plan
 - § Management and mitigation measures- e.g. temporary fauna exclusion fencing
 - § Fauna spotter role, contacts and certification:
 - o Pre-clearance surveys
 - o Attendance at pre-start meeting
 - o Attendance throughout vegetation clearing period
 - o Continued monitoring and reporting
 - § Specific fauna management procedures for potential or known habitat trees

The primary purpose of engaging a Fauna Spotter Catcher during all stages of clearing is to mitigate the risk of injury to or death of Koalas during vegetation clearing.

3. Stormwater Management Plan

All works must be carried out and completed in accordance with the approved Stormwater Management Plan. This provides details on:

- § Stormwater quality improvement devices
- § Mechanisms for monitoring and reporting

The implementation of the Stormwater Management Plan will ensure that water quality standards set by State and Local governments are achieved.

4. Erosion and Sediment Control Plan

Operational works applications must be accompanied by an Erosion and Sediment Control Plan and must contain details on:



-
- § Catchment boundary and overland flow path
 - § Estimated soil loss from each catchment
 - § Length, width and depth of each sediment basin
 - § Spillway details and levels
 - § Energy dissipation/ scour protection
 - § High flow bypass
 - § Cross section, capacity and spacing of each catch/ diversion drain
 - § Location and spacing of silt fences
 - § Frequency and location of water quality monitoring
 - § Maintenance requirements and frequency
 - § Maintenance access and
 - § Contingency measures in case of failure to achieve water quality objectives.

1. Conservation Area Rehabilitation Plan

The conservation area in the western portion of the referral area will be rehabilitated in accordance with future subsequent approval requirements and may include:

- § Removal of weeds
- § Stabilisation of erosion prone areas with weed matt and mulching
- § The encouragement of native plant regeneration.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

The project is expected to impact on the following MNES:

Listed threatened species



Further information regarding these impacts is provided in this referral. Pointcorp has committed to completing an environmental assessment as part of the approval process through which impacts to MNES will be assessed and environmental outcomes determined (refer to the response to section 4.1).

Where impacts to MNES or other environmental aspects are identified, these impacts will be addressed in accordance with the following mitigation hierarchy:

§ Avoid – measures taken to avoid creating impacts from the outset.

§ Minimise – measures taken to reduce the duration, intensity and/or extent of impacts that cannot be completely avoided.

§ Rehabilitate / restore – measures taken to improve degraded or removed ecosystems following exposure to impacts that cannot be completely avoided or minimised

§ Offset – measures taken to compensate for any residual, adverse impacts after full implementation of the previous three steps of the mitigation hierarchy.

Pointcorp will explore the appropriateness of outcome-based conditions and advanced offsets as part of the ongoing assessment process.



Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

Listed threatened species and communities - Yes

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No



5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

Listed threatened species and communities was identified as a significant matter.



Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

Pointcorp is the party taking the action and has a satisfactory record of responsible environmental management. The company was established in 2009 and have developed more than 30 projects within Queensland.

Pointcorp has never been subjected to any proceedings under Commonwealth, State or Territory Law for the protection of the environment or the conservation and sustainable use of natural resources.

Pointcorp has established an environmental policy that promotes environmentally responsible business conduct.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

Pointcorp has not been subject to proceedings under a Commonwealth, State or Territory Law for the protection of the environment or the conservation and sustainable use of natural resources.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.



Pointcorp is not a publicly listed company and therefore there are no statutory requirements for it to have a formal environmental policy. However, Pointcorp takes the position that the protection of our environment is very important and is the cornerstone of our sustainable success into the future. The company is focused and aim to go above and beyond expectations in regards to environmental protection.

For more information, see Pointcorp's Environmental Policy attached

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

No



Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Newport J., Shorthouse D.J., Manning A.D. (2014). The effects of light and noise from urban development on biodiversity: Implications for protected areas in Australia. Ecological Management and Restoration. Vol: 15: 204-214.	High	Nil
Pennay M., Law B., Reinhold L. (2004). Bat calls of New South Wales: Regional based guide to the echolocation calls of microchiropteran bats. NSW Department of Environment and Conservation, Hurstville.	High	Nil
Species Profile and Threats Database (Accessed from June-October 2017) Australian Government: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl	High	Nil
Atlas of Living Australia Online species map. (Accessed from June-October 2017), https://www.ala.org.au/	Moderate	Nil
Koala Tracker, Crowdsourced Koala Map. (Accessed October 2017) http://www.koalatracker.com.au/	Moderate	The identification of species



Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?



Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Development Director

9.2.2 First Name

Oliver

9.2.3 Last Name

Johnson

9.2.4 E-mail

oliver@pointcorp.com.au

9.2.5 Postal Address

Letter Box 18, Logan House South

25 Donkin Street
West End QLD 4101
Australia

9.2.6 ABN/ACN

ABN

68608875921 - POINTCORP MANAGEMENT PTY LTD

9.2.7 Organisation Telephone



1800 773 779

9.2.8 Organisation E-mail

accounts@pointcorp.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date:

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, Oliver Johnson, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature:..... Date: 17/11/17.....

I, Oliver Johnson, the person proposing the action, consent to the designation of Pointcorp Management as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:..... Date: 17/11/17.....



9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Development Director

9.5.2 First Name

Oliver

9.5.3 Last Name

Johnson

9.5.4 E-mail

oliver@pointcorp.com.au

9.5.5 Postal Address

Letter Box 18, Logan House South

25 Donkin Street
West End QLD 4101
Australia

9.5.6 ABN/ACN

ABN

68608875921 - POINTCORP MANAGEMENT PTY LTD

9.5.7 Organisation Telephone

1800 773 779

9.5.8 Organisation E-mail

accounts@pointcorp.com.au

Proposed designated proponent - Declaration



I, Oliver Johnson, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral

Signature: [Signature] Date: 17/11/17

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Senior Environmental Scientist

9.8.2 First Name

Andrew

9.8.3 Last Name

Ridley

9.8.4 E-mail

andrewridley@saundershavill.com

9.8.5 Postal Address

9 Thompson Street
Bowen Hills QLD 4006
Australia

9.8.6 ABN/ACN

ABN

24144972949 - Saunders Havill Group Pty Ltd

9.8.7 Organisation Telephone

1300 123 744

9.8.8 Organisation E-mail



mail@saundershavill.com

Referring Party - Declaration

I, Andrew Ridley, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: AL Ridley Date: 16/11/2017



Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. 8392_e_01_referral_plan_b.pdf
2. 8392_ear_submission_reduced2.pdf
3. 8392_epbc_listed_species_likelihood_analysis_2017.10.20.pdf
4. 8392_koala_habitat_assessment_tool_2017.10.20_plans_attached.pdf
5. 8392_significant_impact_guidelines_assessment_2017.10.21.pdf
6. pointcorp_environmental_policy.pdf