Referral of proposed action

Proposed action title:	Taxiway Zulu and Northern Compound, Melbourne Airport

1 Summary of proposed action

1.1 **Short description**

The project will involve expansion of taxiways, taxi lanes and apron infrastructure to facilitate the expansion of Terminal 2 at Melbourne Airport (Taxiway Zulu). The project also includes development of the Northern Compound and roadway, which will include a secure entry gate and upgrading of an existing road connecting Sunbury Road to the north with the site. Construction traffic will be directed through the Northern Compound security gate to minimise disruption to airport operations.

1.2 **Latitude and longitude**

The study area consists of three discrete polygons of varying size and shape. Please refer to Attachment 1 which contains a list of 50 bounding coordinates for these three polygons. Please also refer to the GIS files submitted with this referral as Attachment 2, in accordance with the GIS data supply guidelines.

1.3 **Locality and property description**

The project area is located within Melbourne Airport (Tullamarine) approximately 20 km north-west of the Melbourne CBD. The location of the proposed action is shown in Figure 2 of Biosis (2016a, Attachment 3). It is within the:

- Victorian Volcanic Plains Bioregion
- Maribyrnong River Basin
- Management area of Melbourne Water.

1.4	**Size of the development footprint or work area (hectares)**	36.38 hectares
1.5	**Street address of the site**	Melbourne Airport (APAM) address is: Departure Drive, Melbourne Airport, Tullamarine VIC 3045

1.6 **Lot description**

17/TP801448
19/TP801448
20/TP801448
21/TP801448
22/TP801448
23/TP801448

1.7 **Local Government Area and Council contact (if known)**

The land is owned by the Government of Australia (Commonwealth land) leased to Australia Pacific Airports Melbourne (APAM). It is therefore not included within any Victorian municipality but is otherwise surrounded by land within the municipalities of Hume City Council and Brimbank City Council.

1.8 **Time frame**

Construction is planned to commence in 2017 and is to be completed by 2023.

1.9	**Alternatives to proposed action**	**X**	No
			Yes, please also complete section 2.2
1.10	**Alternative time frames, locations or activities**	**X**	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3 and 5 (where relevant).
1.11	**Commonwealth, State or Territory assessment**	**X**	No
			Yes, please also complete section 2.5
1.12	**Component of larger action**	**X**	No
			Yes, please also complete section 2.7
1.13	**Related actions/proposals**	**X**	No
			Yes, please also complete section 2.8
1.14	**Australian Government funding**	**X**	No
			Yes, please provide details
1.15	**Great Barrier Reef Marine Park**	**X**	No
			Yes, please also complete section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

2.1 Description of proposed action

The Melbourne Airport Master Plan 2013 (APAM 2013) identifies that passenger levels will grow from the current 30 million passengers per annum to 64 million passengers per annum over the next 20 years. International passengers are expected to be a key contributor to this growth, expanding from 7 million to 15 million passengers per annum.

To accommodate forecast growth, significant infrastructure upgrade and expansion is required of landside, terminal and airside facilities. Specifically for airside, this relates to additional capacity in the form of aircraft parking positions and taxiway infrastructure to support growth in aircraft traffic. The number of aircraft contact (aerobridge) gates will need to increase from the current 15 to 25 contact gates serving Terminal 2 (T2).

The scope of the proposed action is to provide critical taxiway infrastructure to facilitate and support future planned expansion of terminal apron capacity. The proposed action will essentially replace an existing taxiway that will be lost due to expansion of T2.

Specifically the proposed action will:

- Enable future expansion of T2 apron areas by providing new and reconfigured taxiways around the proposed apron expansion area;
- Improve access for Qantas aircraft to/from Terminal 1 Aprons;
- Remove Civil Aviation Safety Authority (CASA) non-conformance for TUG node at D13 and D15 (noting that these bays will be removed with T2 Expansion project);
- Enable improved aircraft access to the existing east-west runway (Runway 09L/27R) which is critical to supporting future parallel runway mode operations in accordance with the Approved Master Plan (2013);
- Facilitate replacement of old / degrading concrete slabs on existing Taxiway Alpha and Taxiway Papa; and
- Develop a new construction site facility for accommodating construction traffic and personnel for this and other projects in the northern precinct;
- Upgrade an existing vehicular track that will connect the new access gate from Sunbury Road to the construction site.

During the execution of the project it is expected that approximately 27,000 heavy vehicle movements will be required to transport excavated spoil from the site to the stockpile location, which will be located to the west of the existing east-west runway. An existing haul road that runs through the Melbourne Airport Grey-box woodland will also be utilised for this purpose, however the adjacent native vegetation in this area, which corresponds to the listed Grey Box (*Eucalyptus microcarpa)* Grassy Woodlands and Derived Native Grasslands of South-eastern Australia ecological community, will not be impacted.

Additional details on the construction site compound and access locations are provided in the attached Traffic Impact Assessment (AECOM 2014, Attachment 4).

The project area (Figure 2 in Biosis 2016a, Attachment 3) includes the new taxiway construction location, upgraded internal access road from Sunbury Road, the construction of the Northern Compound (access gate) and stockpile area to the west of the existing east-west runway. The project area also contains sufficient space for construction activities such as materials laydown areas, construction plant and construction vehicle movement locations.

2.2 Feasible alternatives to taking the proposed action

The design process has entailed a degree of evolution to the current design, which is considered to be the most appropriate to achieve the desired outcomes to facilitate increased capacity at Melbourne Airport. In light of this process, the current design and methodology are the only ones under consideration other than not taking the action, which is not considered feasible with continued pressure on airport facilities.

2.3 Alternative locations, time frames or activities that form part of the referred action

It should be noted that the original study area was much larger and contained 76 hectares of Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP), as well as a small wetland (0.13 hectares), which corresponds to the community Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (SHWFTLP). Since the original assessment, the study area, and thus the impact area, has been reduced as much as possible to minimise the impacts on NTGVVP. The current project area supports 18.21 hectares of NTGVVP and avoids the wetland.

The location of the proposed Northern Compound has been located to avoid NTGVVP.

2.4 Context, including any relevant planning framework and state/local government requirements

The *Airports Act* and associated *Airport (Environment Protection) Regulations 1997* requires federally leased airports to develop and implement Master Plans and Airport Environment Strategies. Where development is proposed on Commonwealth land in an Australian leased airport a Major Development Plan (MDP) may be required.

Section 89 of the Act outlines those proposed actions that trigger the need for an MDP.

The proposed action is replacing a taxiway that will be lost due to the future expansion of T2 at Melbourne Airport, and therefore this project alone will not result in a significant increase in the capacity of the airport to handle movements of passengers, freight or aircraft. On this basis, it has been determined by the Department of Infrastructure and Regional Development (DIRD) that an MDP is not required under S89 (1) (g) of the *Airports Act 1996* (DIRD 2014, Attachment 5).

As the site is Commonwealth land, it is not subject to the Victorian planning framework.

2.5 Environmental impact assessments under Commonwealth, State or Territory legislation

Not applicable

2.6 Public consultation (including with Indigenous stakeholders)

No public consultation has been undertaken as no potentially affected stakeholders have been identified.

2.7 A staged development or component of a larger action

The proposed action is not part of a larger action.

2.8 Related actions

Not applicable.

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

3.1 (a) World Heritage Properties

Description
The project does not have the capacity to result in direct or indirect significant impacts on any World Heritage Area.

Nature and extent of likely impact

None.

3.1 (b) National Heritage Places

Description

The project does not have capacity to result in direct or indirect significant impacts on any National Heritage Places.

Nature and extent of likely impact

None.

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description

Waterways within and adjacent to the project area flow ultimately into Port Philip Bay. The western portion of Port Philip Bay forms part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site.

The project area drains indirectly into the Ramsar site, located approximately 25 km downstream. There is negligible potential for a measurable change in the water quality of the Ramsar site due to a possible increase in suspended sediments associated with earthworks proposed. Measures to ensure no significant changes in water quality of the Ramsar site will include compliance with relevant regulations as well as best practice guidelines for management of sediment and pollution runoff for both the construction and operational phases of the proposed development.

Nature and extent of likely impact

Potential impacts are not considered to meet any criterion for significant impacts under the Significant Impact Guideline 1.1 Criteria for wetlands of international importance.

3.1 (d) Listed threatened species and ecological communities

Description

The flora and fauna values of the project area have been documented by Biosis (2016a, Attachment 3). No EPBC Act-listed threatened flora or fauna species are present, or considered likely to occur, within the project area.

A total of nine flora species and 17 fauna species listed under the EPBC Act have been recorded or predicted to occur within 5 kilometres of the project area (Biosis 2016a, Attachment 3). Due to unsuitability of habitats present none of these species are considered likely to occur within the project area.

The patches of native grassland (EVC: Plains Grassland) mapped within the project area are dominated by native grasses of the genera *Austrostipa* and *Rytidosperma*. Weedy perennial grasses account for less than 50% of the perennial tussock cover of these patches while non-grassy weeds accounted for less than 30% of the total vegetation cover at the time of assessment. These patches of vegetation therefore satisfy the definition of the critically endangered EPBC Act-listed ecological community Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP). The project area contains 18.21 hectares of NTGVVP.

Nature and extent of likely impact

No impacts on listed threatened species are considered likely.

Up to 18.21 hectares of NTGVVP is to be permanently removed to enable construction of the Taxiway Zulu and Northern Compound project.

The direct impact on NTGVVP has been reduced from approximately 76 hectares to 18.21 hectares by reducing the study area and the development footprint. To mitigate the impact on NTGVVP, APAM are committed to securing an adequate off-site offset in accordance with the EPBC Act offset policy (Commonwealth of Australia 2012).

3.1 (e) Listed migratory species

Description

A database search of fauna records and the EPBC Act Protected Matters Search Tool identified 11 migratory species that may potentially occur within the project area (Biosis 2016a, Attachment 3).

While some of these species would be expected to use the project area on occasion, and some of them may do so regularly, it does not provide important habitat for a significant proportion of any of these species. The proposed development is not likely to result in a significant impact on any migratory species.

Nature and extent of likely impact

None

3.1 (f) Commonwealth marine area
(If the action is in the Commonwealth marine area, please complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

Description

The proposed action is not likely to affect any Commonwealth marine area.

Nature and extent of likely impact

None

3.1 (g) Commonwealth land
(If the action is on Commonwealth land, please complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land).

Description

The action is to be undertaken on Commonwealth land.

Nature and extent of likely impact

Refer to 3.2(d)

3.1 (h) The Great Barrier Reef Marine Park

Description

The proposed action is not within the Great Barrier Reef Marine Park and it is not likely to affect any matters protected within the Great Barrier Reef Marine Park.

Nature and extent of likely impact

None.

3.1 (i) A water resource, in relation to coal seam gas development or large coal mining development

Description

The proposed action does not involve a water resource, in relation to coal seam gas development and large coal mining development.

Nature and extent of likely impact

None.

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

3.2 (a)	**Is the proposed action a nuclear action?**	**X**	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (b)	**Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?**	**X**	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (c)	**Is the proposed action to be taken in a Commonwealth marine area?**	**X**	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))

3.2 (d)	**Is the proposed action to be taken on Commonwealth land?**		No
		X	Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))

The project will take place within land managed by Melbourne Airport in the context of a large operational airport in mostly the airside zone, but also some landside areas. The project area is a highly modified and managed environment, which has undergone significant development and disturbance. In addition, the proposed development will be managed in such a way as to ensure that impacts to water resources and low-level contaminated soils will be carefully managed on site. As such, it is considered unlikely that the project will result in a significant impact to the whole environment on Commonwealth land. Features of the environment in the area where the action will take place are discussed further below.

Ecosystems and natural resources

The flora and fauna values of the project area have been assessed and reported by Biosis (2016a, Attachment 3). These values are outlined in Sections 3.1(d), 3.1(e), 3.3(a) and 3.3 (e) of this referral.

Stormwater Drainage

Jacobs (2015) have prepared a stormwater drainage design report for the Taxiway Zulu project (Attachment 6).

The existing catchment of the Taxiway Zulu area is defined by the ridge line formed by the existing east-west runway (Runway 09/27) and north-south runway (Runway 16/34). There is an extensive network of existing drainage pipes and subsoil drainage lines over the proposed project area. The runoff is generally captured by existing grated pits and trenches and largely conveyed south and south-west to the Arundel Creek Catchment and the Moonee Ponds Catchment as per the Master Drainage Plan 2015.

The attached report (Jacobs 2015, Attachment 6) sets out the proposed drainage plan for Taxiway Zulu and follows the general philosophy of directing all overland flow to low points in grassed areas. The runoff will then be captured by grated pits at these low points. Further details on how the stormwater drainage design will coordinate with the Airport Master Drainage Plan are provided in the attached report.

Traffic

AECOM (2014, Attachment 4) prepared a Traffic Impact Assessment for the project. This report will aid the development of a Construction Traffic Management Plan (CTMP) which will form a sub-plan to a Construction Environmental Management Plan (CEMP) for the project.

The preferred option for accessing the site was determined to be Option 2, which proposed to access the construction site compound via a reconfigured arm to the existing Sunbury Road / Oaklands Road roundabout and also provide a dedicated new access road within Melbourne Airport (through upgrading an existing track) down to the site compound via Perimeter Road.

The results of the capacity analysis for this option indicate that the proposed Sunbury Road / Oaklands Road / Site Access roundabout is predicted to operate well within capacity in both the morning (0730-0830) and evening (1700-1800) peak periods with the anticipated construction related traffic volumes. The results of the future traffic growth analysis (5 and 10 year horizons) also show that the proposed Sunbury Road / Oaklands Road / Site Access roundabout is predicted to operate well within capacity in the future years of 2019 and 2024.

The attached memorandum from Mott MacDonald (2016, Attachment 7) contains a review of the environmental impact of the two key access options: (a) utilise existing Gate 22 from the southern end of the Airport, or (b) construct a new Northern Compound security gate to be accessed from Sunbury Road to the north of the Airport. The Northern Compound access gate will be constructed as enabling works for the Taxiway Zulu project, and while the construction of the new facility will result in a larger overall impact, the long term use of this gate will reduce the impact of construction work and the carbon footprint of the project due to reduced distances to be travelled and the numbers of vehicles required to complete the works. This has also been shown to provide a safer option as interactions with operational aircraft will be minimised.

This memorandum also contains a map illustrating the proposed traffic routes to the stockpile area to the west of the project area.

Heritage Values

There are no recorded heritage values in the Taxiway Zulu area. There are both Indigenous and historic values located to the north-west of the proposed taxiway location, but they will not be affected by the proposed works (Biosis 2014).

3.2 (e)	**Is the proposed action to be taken in the Great Barrier Reef Marine Park?**	**X**	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))

3.3 Description of the project area and affected area for the proposed action

3.3 (a) Flora and fauna

The flora and fauna values of the project area have been documented by Biosis (2016a, Attachment 3). A total of 36 indigenous and 47 weed species of flora were identified during the field assessment, which was undertaken in 2014.

The project area is a highly modified and managed environment which has undergone significant development and disturbance. Broader areas of grass-dominated vegetation occur between the established airport infrastructure which includes runways, taxiways, high intensity approach lighting (HIAL), management roads and various buildings and other structures.

Despite this level of disturbance much of the site remains dominated by indigenous grasses such as Wallaby Grasses *Rytidosperma* spp. and Kneed Spear-grass *Austrostipa bigeniculata*. Other common grass species include Silky Blue-grass *Dichanthium sericeum*, Windmill Grass *Chloris truncata*, Red-leg Grass *Bothriochloa macra* and Rigid Panic *Walwhalleya proluta*. Other herbaceous species (forbs) are relatively uncommon and include Tufted Bluebell *Wahlenbergia communis*, Grassland Wood-sorrel *Oxalis perennans*, Kidney-weed *Dichondra repens*, Common Woodruff *Asperula conferta*, Berry Saltbush *Atriplex semibaccata*, Grassland Crane's-bill *Geranium retrorsum*, Sheep's Burr *Acaena echinata* and Varied Raspwort *Haloragis heterophylla*.

Common grassy weeds in this environment include Chilean Needle Grass *Nassella neesiana*, Rat-tail Grass *Sporobolus africanus*, Serrated Tussock *Nassella trichotoma*, Paspalum *Paspalum dilatatum*, Cocksfoot *Dactylis glomerata* and Couch *Cynodon dactylon*.

Common herbaceous weeds included Ribwort *Plantago lanceolata*, Onion Grass *Romulea rosea*, Soursob *Oxalis pes-caprae*, Buck's-horn Plantain *Plantago coronopus* and Narrow-leaf Clover *Trifolium angustifolium*. Less common weeds include Spear Thistle *Cirsium vulgare*, Artichoke Thistle *Cynara cardunculus*, Sweet Briar *Rosa rubiginosa* and Galenia *Galenia pubescens*. Broad–leaf weeds rarely provide more than 10-20% cover and where they do it is only over a limited area. These species generally have a cover of less than 5%.

The northern section of the study area also contains 18 small scattered Grey Box *Eucalyptus microcarpa* trees. At the time of assessment, these trees did not meet the requirements to be assessed as a patch of native vegetation and do not meet the extent criteria to qualify as an area of EPBC Act listed Grey Box (*Eucalyptus microcarpa)* Grassy Woodlands and Derived Native Grasslands of South-eastern Australia ecological community.

The project area is highly modified and while it does support vegetation largely dominated by indigenous grasses, ongoing management and uses of this habitat make the site of limited value for native fauna. A number of common bird species are present but habitat modifications and management actions conducted by the airport (i.e. regular mowing, insect and bird management) for safety reasons have reduced the habitat suitability of this area for a wide range of species.

3.3 (b) Hydrology, including water flows

As above, the existing catchment of the Taxiway Zulu area is defined by the ridge line formed by Runway 09/27 (east-west) and Runway 16/34 (north-south). There is an extensive network of existing drainage pipes and subsoil drainage lines over the proposed project area. The runoff is generally captured by existing grated pits and trenches and largely conveyed south and south west to the Arundel Creek Catchment and the Moonee Ponds Catchment as per the Master Drainage Plan 2015.

3.3 (c) Soil and Vegetation characteristics

The project area is located on the Stony rises (Mt. Eccles, Pomborneit, Mt. Rouse; 6.1.2) unit of the Volcanic Plains. These rises are formed from the lava flows from the most recent volcanic activity. The younger the lava flow the rockier and more undulating the landscape. Young landscapes are characterised by stony mounds with little or no soil and no surface drainage development. Older stony rises have some soil development and some small ephemeral lakes, swamps and wetlands which have formed in the depressions, but no significant surface drainage systems. Associated soil types are shallow dark gradational and self-mulching (and cracking) clay soils. The development of the Airport has resulted in the removal of most topsoil in the Taxiway area.

3.3 (d) Outstanding natural features

There are no outstanding natural features within the project area. The values of the project area have been outlined in other sections of this referral.

3.3 (e) Remnant native vegetation

It is considered unlikely that any of the native vegetation within the project area can be considered 'remnant' due to the history of development and modification of the Melbourne Airport airside zones. Construction of the runway and associated infrastructure would have required substantial remodelling of the local topography and therefore native grassland that has recolonised these areas would be considered adventive or secondary grassland, rather than remnant.

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The topography of the project area is generally level due to its use as an aircraft runway and landing zone.

3.3 (g) Current state of the environment

The project area is a highly modified and managed environment which has undergone significant development and disturbance to enable development of Melbourne Airport. Broader areas of grass-dominated vegetation occur between the established airport infrastructure which includes runways, taxiways, high intensity approach lighting (HIAL), management roads and various buildings and other structures. A total of 36 indigenous and 47 weed species of flora were identified during the field assessment. Of the weeds recorded, 8 species are listed under the *Catchment and Land Protection Act 1994*.

The grass within the landside area is subject to an intense management regime by Melbourne Airport including regular slashing to deter birds in order to minimise aircraft collision risk.

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

There are no Commonwealth Heritage Places or other places recognised as having heritage values in the project area. Local historic heritage values associated with the former Oaklands Junction site are located to the north-west of the proposed taxiway location, and will not be affected by the proposed action.

3.3 (i) Indigenous heritage values

There are no Indigenous heritage values in the project area. Indigenous heritage values are located to the north-west of the proposed taxiway location in the Grey-Box Woodland, and will not be affected by proposed action.

3.3 (j) Other important or unique values of the environment

The Melbourne Airport Grey-box Woodland, which corresponds to the listed Grey Box (*Eucalyptus microcarpa)* Grassy Woodlands and Derived Native Grasslands of South-eastern Australia ecological community, is located to the north-west of the proposed taxiway location. An existing access road runs through the centre of this woodland, which will be used to access the proposed material stockpile area. The adjacent woodland will not be impacted by this use of the existing road, as no widening or additional road maintenance is required. This requirement will be included as a requirement of the construction contract. Melbourne Airport has an Environmental Management Plan in place guiding the management and enhancement of the Melbourne Airport Grey-box Woodland (Biosis 2013).

Deep Creek is located to the west of the proposed stockpile area, but is sufficiently separated from the proposed works due to distance and a very steep embankment. A Construction Environment Management Plan (CEMP) will be prepared to ensure no adverse impacts to Deep Creek occur as a result of the proposed action.

3.3 (k) Tenure of the action area (e.g. freehold, leasehold)

The entire project area is Commonwealth land leased to Melbourne Airport.

3.3 (l) Existing uses of area of proposed action

The entire project area is part of the operational Melbourne Airport. The eastern parts of the project area are mostly located within the operational airside zone. The proposed stockpile area to the west of the existing east-west runway is currently vacant land that has previously been used for stockpiling of material and supports no native vegetation.

3.3 (m) Any proposed uses of area of proposed action

The project is an enabling project to improve efficiency and increase future capacity at Melbourne Airport.

4 Environmental outcomes

The key Matter of National Environmental Significance of relevance to the Taxiway Zulu project is the occurrence of 18.21 hectares of Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP) within the airside zone of Melbourne Airport.

It is proposed to remove NTGVVP from the project site to enable construction of the proposed development. The design of the project has evolved such that the area of NTGVVP to be removed has been reduced as much as possible. The development footprint contains sufficient buffers to ensure that all impacts during construction will be confined within the proposed footprint. In reality, the impact on NTGVVP is likely to be smaller than that outlined within this referral, but will definitely not be any larger than that stated here.

No other impacts on environmental values are considered likely as a result of the proposed development.

5 Measures to avoid or reduce impacts

The key measure to reduce impacts on NTGVVP is to minimise removal of, and disturbance to, this ecological community during construction of the project. The impact area has already been minimised as much as possible to reduce the impact to NTGVVP, however additional buffers have been built into the project design and further reductions will be made wherever possible.

To offset the removal of up to 18.21 hectares APAM has committed to securing an adequate off-site offset in accordance with the EPBC Act offsets policy. The offset area is likely to be located at Tiverton, a pastoral property at 1316 Darlington – Nerrin Road, Dundonnel in western Victoria, where APAM have previously sought offsets for other Airport projects. The offset area will be protected in perpetuity by an agreement under Section 173 of the *Planning and Environment Act 1988* with Moyne Shire Council (MSC). An Offset Management Plan will be prepared for the offset site, which will ensure the offset site will be managed to achieve habitat improvement gains over an initial 10-year period. The responsibility of the offset vegetation management works will lie with the landowner and will be overseen by a qualified ecologist and MSC.

An example OMP from another Airport project (Business Park Warehouse Site 2) has been attached to this referral as an indication of the OMP likely to be prepared for the offset site for this project (Biosis 2016b, Attachment 8).

To avoid inadvertent damage to areas of NTGVVP outside of the development footprint during works, controls will be set out within a project-specific Construction Environmental Management Plan (CEMP). The CEMP will include controls, among many others, such as:

- fencing of areas of NTGVVP to be protected during works
- induction of all construction workers with respect to the location of NTGVVP to be protected and 'no go' areas
- sedimentation controls and bunding around stockpile areas.

6 Conclusion on the likelihood of significant impacts

6.1 Do you THINK your proposed action is a controlled action?

	No, complete section 5.2
X	Yes, complete section 5.3

6.2 Proposed action IS NOT a controlled action.

6.3 Proposed action IS a controlled action

	Matters likely to be significantly impacted
	World Heritage values (sections 12 and 15A)
	National Heritage places (sections 15B and 15C)
	Wetlands of international importance (sections 16 and 17B)
x	Listed threatened species and communities (sections 18 and 18A)
	Listed migratory species (sections 20 and 20A)
	Protection of the environment from nuclear actions (sections 21 and 22A)
	Commonwealth marine environment (sections 23 and 24A)
	Great Barrier Reef Marine Park (sections 24B and 24C)
	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
	Protection of the environment from Commonwealth actions (section 28)
	Commonwealth Heritage places overseas (sections 27B and 27C)

The Taxiway Zulu and Northern Compound project will result in the removal of up to 18.21 hectares of adventive native grassland vegetation that satisfies the definition of Natural Temperate Grassland of the Victorian Volcanic Plain (Commonwealth of Australia 2011). The proposed action will therefore result in a reduction in the extent of a listed ecological community and qualifies as a significant impact in accordance with significant impact criteria for critically endangered and endangered ecological communities (Commonwealth of Australia 2013).

7 Environmental record of the person proposing to take the action

		Yes	No
7.1	**Does the party taking the action have a satisfactory record of responsible environmental management?** **Provide details** Every five years APAM releases a new Environment Strategy as part of the Melbourne Airport Master Plan, has an Environmental Policy in place and was the first leased Commonwealth Australian airport to have a certified Environmental Management System to ISO14001:2004.	**X**	
7.2	**Provide details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:** **(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.** **If yes, provide details**		**X**
7.3	**If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework and if and how the framework applies to the action.** The Taxiway Zulu and Northern Compound project is consistent with the Melbourne Airport Master Plan (APAM 2013) and associated Environment Strategy.	**X**	
7.4	**Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?** **Provide name of proposal and EPBC reference number (if known)** 2001/394 – Australia Pacific Airports (Melbourne)/Buildings/Melbourne Airport Warehouse Construction. 2014/7316 – Melbourne Airport Runway Development Program.	**X**	

8 Information sources and attachments

(For the information provided above)

8.1 References

AECOM 2014 (Attachment 4). Northern Precincts Program MDP Project: Traffic Impact Assessment. Report prepared for Australia Pacific Airports (Melbourne). AECOM Australia Pty Ltd, Melbourne.

APAM 2013. Melbourne Airport Master Plan 2013: People, Place, Prosperity. Melbourne Airport, Tullamarine. Australia Pacific Airports (Melbourne). Available at: http://melbourneairport.com.au/docs/140206_Melbourne%20Airport%20Master%20Plan_Final.pdf

Biosis 2013. Grey Box Woodland, Melbourne Airport: Environmental Management Plan. Prepared for Australia Pacific Airports (Melbourne) Pty Ltd.

Biosis 2014. Taxiway Zulu, Melbourne Airport, Victoria: Due Diligence Assessment. Report prepared for Australia Pacific Airports (Melbourne). Authors: K. F. Robb & R. Ashton, Biosis Pty Ltd, Melbourne. Project no. 18179.

Biosis 2016a (Attachment 3). Melbourne Airport Taxiway Zulu and Northern Compound: Biodiversity Assessment. Report to Australia Pacific Airports (Melbourne). Authors: Mueck, S. & Kay, K. Biosis Pty Ltd, Melbourne, Project no. 21367.

Biosis 2016b (Attachment 8). Melbourne Airport Business Park, TNT Distribution Centre: Offset Management Plan for part of Lot 3 of TP318450H within Tiverton, 1316 Darlington - Nerrin Road, Dundonnell. Plan for APAM. Author: K. Kay, Biosis Pty Ltd, Melbourne. Project No. 20998.

Commonwealth of Australia 2011. Nationally Threatened Ecological Communities of the Victorian Volcanic Plain: Natural Temperate Grassland and Grassy Eucalypt Woodland. A Guide to the Identification, Assessment and Management of Nationally Threatened Ecological Communities. *Environment Protection and Biodiversity Conservation Act 1999*. Australian Government Department of Sustainability, Environment, Water, Population and Communities, Canberra.

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Commonwealth of Australia 2013. Matters of National Environmental Significance: Significant Impact Guidelines 1.1. *Environment Protection and Biodiversity Conservation Act 1999*. Australian Government Department of the Environment, Canberra.

DIRD 2014 (Attachment 5). L. Horrocks to S. Renner, Subject: Northern Precinct Program. Department of Infrastructure and Regional Development, 29 August 2014.

Jacobs 2015 (Attachment 6). Taxiway Zulu & T2T Apron Project, Melbourne Airport. Taxiway Zulu & T2T Aprons – Stormwater Drainage Design Report. Report to Australia Pacific Airports (Melbourne). 27 November 2015.

Mott MacDonald 2016 (Attachment 7). Memorandum, Subject: Project Zulu Construction Access Option Analysis. 5 January 2016.

8.2 Reliability and date of information

Information presented and referenced in this referral is considered contemporary. The field investigations undertaken to inform the flora and fauna assessment were undertaken in May and August 2014. Limitations are stated in Section 2.6 of Biosis (2016, Attachment 3) but are not considered to present a significant limitation to assessing the overall biodiversity values of the site for the purpose of this referral.

8.3 Attachments

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the locality of the proposed action (section 1)	✓	**Attachment 3** – Biosis (2016a) Biodiversity Assessment Report (refer to Figure 1) **Attachment 2** – GIS files submitted with referral
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the proposed action in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	**Attachment 3** - Biosis (2016a) Biodiversity Assessment Report (refer to Figure 2)
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	✓	**Attachment 3** - Biosis (2016a) Biodiversity Assessment Report
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3) conclusions in the referral (section 3 and 4)		
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

9 Contacts, signatures and declarations

Proposed action title: Taxiway Zulu and Northern Compound, Melbourne Airport

9.1 Person proposing to take action

Name and Title:	Paula Bradshaw, Manager Environment
Organisation:	Australia Pacific Airports (Melbourne) Pty Ltd
Trust deed:	Not applicable
ACN / ABN:	076 999 114
Postal address:	Departure Drive, Melbourne Airport, VIC 3045
Telephone:	(03) 9297 1558 / 0409 053 016
Email:	paula.bradshaw@melair.com.au
I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:	□ an individual; OR □ a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR ✓ **not applicable.**
If you are small business entity you must provide the Date/Income Year that you became a small business entity:	✓ **not applicable.**
I would like to apply for a waiver of full or partial fees under regulation 5.21A of the EPBC Regulations. Under 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:	✓ **not applicable.**
Declaration:	I declare that to the best of my knowledge the information I have given on, or attached to this form 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: 6 December 2016

9.2 Designated proponent

Name of proposed proponent: Same as person proposing to take action listed in Section 9.1

ACN / ABN:

Postal address:

Telephone:

Email:

Declaration by the proposed proponent: I ....., the proposed proponent, consent to the proposed designation of myself as the proponent for the purposes of the action described in this referral.

Signature: Date:

Declaration by the person proposing to take the action: I ....., the person proposing to take the action, consent to the proposed designation of..... as proponent for the purposes of the action described in this referral.

Signature: Date:

9.3 Person preparing the referral information (if different from section 9.1)

Name: Clare McCutcheon

Title: Consultant Zoologist

Organisation: Biosis Pty Ltd

ACN / ABN: 006 175 097 / 65 006 175 097

Postal address: 38 Bertie Street, Port Melbourne, Victoria 3207

Telephone: (03) 8686 4811 / 0417 135 517

Email: cmccutcheon@biosis.com.au

Declaration: I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.

Signature:  Date: 5 December 2016
