



Referral of proposed action

What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate. (Further references to 'the Minister' in this form include references to the Minister's delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister's decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- 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)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
 - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
 - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department's website:

- the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.

- the Policy Statement titled Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.
- the Policy Statement titled Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources.
- the interactive map tool (enter a location to obtain a report on what matters of NES may occur in that location).

Can I refer part of a larger action?

In certain circumstances, **the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act)**. If you wish to make a referral for a staged or component referral, read 'Fact Sheet 6 Staged Developments/Split Referrals' and contact the Referrals Gateway (1800 803 772).

Do I need a permit?

Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department's web site.

Is your action in the Great Barrier Reef Marine Park?

If your action is in the Great Barrier Reef Marine Park it may require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from <http://www.gbrmpa.gov.au/> or by contacting GBRMPA's Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority

2-68 Flinders Street PO Box 1379

Townsville QLD 4810

AUSTRALIA

Phone: + 61 7 4750 0700

Fax: + 61 7 4772 6093

www.gbrmpa.gov.au

What information do I need to provide?

Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/A.

You can complete your referral by entering your information into this Word file.

Instructions

Instructions are provided in blue text throughout the form.

Attachments/supporting information

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department's website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.

Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.

How do I pay for my referral?

From 1 October 2014 the Australian Government commenced cost recovery arrangements for environmental assessments and some strategic assessments under the EPBC Act. If an action is referred on or after 1 October 2014, then cost recovery will apply to both the referral and any assessment activities undertaken. Further information regarding cost recovery can be found on the [Department's website](#).

Payment of the referral fee can be made using one of the following methods:

- **EFT Payments can be made to:**

BSB: 092-009
Bank Account No. 115859
Amount: \$7352
Account Name: Department of the Environment.
Bank: Reserve Bank of Australia
Bank Address: 20-22 London Circuit Canberra ACT 2601
Description: The reference number provided (see note below)

- **Cheque** - Payable to "Department of the Environment". Include the reference number provided (see note below), and if posted, address:

The Referrals Gateway
Environment Assessment Branch
Department of the Environment
GPO Box 787
Canberra ACT 2601

- **Credit Card**

Please contact the Collector of Public Money (CPM) directly (call (02) 6274 2930 or 6274 20260 and provide the reference number (see note below).

Note: in order to receive a reference number, submit your referral and the Referrals Gateway will email you the reference number.

How do I submit a referral?

Referrals may be submitted by mail or email.

Mail to:

Referrals Gateway
Environment Assessment Branch
Department of Environment
GPO Box 787
CANBERRA ACT 2601

- If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

Email to: epbc.referrals@environment.gov.au

- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- **Follow up with a mailed hardcopy including copies of any attachments or supporting reports.**

What happens next?

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department's web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

The proposed action is LIKELY to have a significant impact and does NEED approval

If the action is likely to have a significant impact a decision will be made that it is a *controlled action*. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the *controlling provisions*.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department's web site.)

The proposed action would have UNACCEPTABLE impacts and CANNOT proceed

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

Compliance audits

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See "*Is your action in the Great Barrier Reef Marine Park*," p.2, for more details).

For more information

- call the Department of the Environment Community Information Unit on 1800 803 772 or
- visit the web site <http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999>

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.

Referral of proposed action

Project title:

1 Summary of proposed action

1.1 Short description

A proposed community cluster residential subdivision at 579 & 593 Halcrows Road, Cattai, within The Hills Local Government Area, Sydney.

The landholding is approximately 95 hectares in size, of which approximately 11.3 hectares would be subdivided into 21 residential allotments with access roads, and the remaining 83.7 hectares would be registered as a community lot to be maintained for conservation values in perpetuity.

Refer to **Attachment 1**.

Use 2 or 3 sentences to uniquely identify the proposed action and its location.

1.2 Latitude and longitude

Latitude and longitude details are used to accurately map the boundary of the proposed action. If these coordinates are inaccurate or insufficient it may delay the processing of your referral.

Clockwise

location point	Latitude			Longitude		
	degrees	minutes	seconds	degrees	minutes	seconds
1	-33.542265441			150.9313659		
2	-33.542569477			150.935957842		
3	-33.541335441			150.938489847		
4	-33.551582767			150.936451368		
5	-33.551082053			150.93200963		
6	-33.55433664			150.9313659		
7	-33.554586988			150.926645212		
8	-33.553156419			150.926924162		
9	-33.553102772			150.926473551		
10	-33.545878036			150.927846842		
11	-33.546199943			150.930571966		

The Interactive Mapping Tool may provide assistance in determining the coordinates for your project area.

If the area is less than 5 hectares, provide the location as a single pair of latitude and longitude references. If the area is greater than 5 hectares, provide bounding location points.

There should be no more than 50 sets of bounding location coordinate points per proposal area.

Bounding location coordinate points should be provided sequentially in either a clockwise or anticlockwise direction.

If the proposed action is linear (eg. a road or pipeline), provide coordinates for each turning point.

Also attach the associated GIS-compliant file that delineates the proposed referral area. If the area is less than 5 hectares, please provide the location as a point layer. If greater than 5 hectares, please provide a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer (refer to GIS data supply guidelines at [Attachment A](#)).

The GIS-compliant file is provided as **Attachment 2**.

Do not use AMG coordinates.

1.3 **Locality and property description**

The landholding is located approximately 45km northwest of Sydney CBD, and approximately 7km northeast of Pitt Town.

The landholding is characterised by low-lying river-flats and swamps across the north, and sandstone ridges in the central area and in its south.

Fairs Creek meanders northwards through the landholding, forming the freshwater Broadwater Swamp at its confluence with Little Cattai Creek (which forms the northern boundary of the landholding).

Broadwater Swamp occupies approximately 25 hectares, extending across the western boundary of the landholding onto adjoining privately owned land.

Two relatively steep-sided rocky spurlines occur within the landholding, one across the central part of the landholding, and one in the south. Both ridgelines contain approximately 20 hectares of remnant and regrowth native woodland/forest vegetation

The remainder of the landholding consists of open grassland and sedgeland/wetland, with occasional isolated shrubs and trees.

The proposed residential subdivision would be located on the southern ridgeline only.

[Provide a brief physical description of the property on which the proposed action will take place and the project location \(eg. proximity to major towns, or for off-shore projects, shortest distance to mainland\).](#)

1.4	Size of the development footprint or work area (hectares)	Landholding = 95 hectares Subdivision footprint = 11.3ha
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1.5	Street address of the site	579 & 593 Halcrows Road, Cattai
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1.6	Lot description Describe the lot numbers and title description, if known. Lots 101 & 102 DP 802862, and Lot 7 DP 63853
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1.7	Local Government Area and Council contact (if known) If the project is subject to local government planning approval, provide the name of the relevant council contact officer. The Hills Shire Council. Contact: Joshua Owen
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1.8	Time frame Specify the time frame in which the action will be taken including the estimated start date of construction/operation. Intended start date: June 2016 Duration of subdivision works: 5 months
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1.9	Alternatives to proposed action Were any feasible alternatives to taking the proposed action (including not taking the action) considered but are not proposed?		No
			Yes, you must also complete section 2.2
1.10	Alternative time frames etc Does the proposed action include alternative time frames, locations or activities?		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 3.3 (where relevant).
1.11	State assessment Is the action subject to a state or territory environmental impact assessment?		No
			Yes, you must also complete Section 2.5
1.12	Component of larger action Is the proposed action a component of a larger action?		No
			Yes, you must also complete Section 2.7
1.13	Related actions/proposals Is the proposed action related to other actions or proposals in the region (if known)?		No
			Yes, provide details:
1.14	Australian Government funding Has the person proposing to take the action received any Australian Government grant funding to undertake this project?		No
			Yes, provide details:
1.15	Great Barrier Reef Marine Park Is the proposed action inside the Great Barrier Reef Marine Park?		No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

NOTE: It is important that the description is complete and includes all components and activities associated with the action. If certain related components are not intended to be included within the scope of the referral, this should be clearly explained in section 2.7.

2.1 Description of proposed action

This should be a detailed description outlining all activities and aspects of the proposed action and should reference figures and/or attachments, as appropriate.

The proposed community cluster subdivision would create twenty-one (21) residential lots on a previously disturbed and partially cleared ridgeline in the south of the landholding (numbers 2 to 22 – ranging in size from approx 4,000m² to 9,300m²). The remaining northern part of the landholding would be retained within a Community Lot (proposed Lot 1 – 83.7 hectares), and managed for conservation values (management to include weed control and some revegetation, as set out in the Vegetation Management Plan, Hayes 2016 – **Attachment 3**).

A new loop road would be constructed from Halcrows Road, to provide access to the subdivision.

A building envelope has been designated for each of the residential lots, placed to minimise impacts on native vegetation, taking into consideration bushfire asset protection zones.

Wastewater treatment systems and irrigation areas or mounds would be located on existing cleared land, or within Asset Protection Zone areas that are designated to be cleared. No further clearing would be required. The irrigation areas or mounds shall be located as far as practicable away from native vegetation, to minimise adverse indirect impacts.

Indirect impacts on vegetation and habitats from the proposed subdivision include stormwater run-off potentially containing fertilisers, pesticides, detergents and other pollutants, possible escape of garden plants, and increased trampling of vegetation.

The subdivision has been designed on the guiding principles of Water Sensitive Urban Design (WSUD). Roof water from new residences would be directed to new 100,000L rainwater tanks for re-use within the residences. Stormwater from driveways and any overflow from residences would be piped to raingardens designed to treat the water prior to discharge via a spreader trench. The reduction of gross pollutants, total suspended solids, phosphorus and nitrogen would be greater than the minimum targets adopted by Council (refer to the separate Stormwater report prepared by Engineering Studio - **Attachment 4**). Further reduction in phosphorus and nitrogen would occur through uptake by lawn and vegetation buffers between discharge points and natural creeklines. The final location of spreader trenches would be determined in consultation with an ecologist specialising in amphibians.

To further minimise potential for nutrient discharge from residential lands, absorption trenches planted with sedges would be installed at strategic locations along the up-slope edge of retained vegetation within proposed Lots 8 to 18, and 20 to 22, to detain and treat overland flows from lawns and gardens (which may have been over-fertilised, or contain excessive dog faeces).

Stormwater run-off from the proposed new private loop road would be treated in two separate stages, initially by kerb inlet pits fitted with enviropod filter baskets, and then by a treatment tank with filter cartridges (stormwater 360). Treated water would be discharged at existing low points via a level spreader. The reduction of gross pollutants, total suspended solids, phosphorus and nitrogen would be greater than the minimum targets adopted by Council. Further reduction in phosphorus and nitrogen would occur through uptake by vegetation buffers between discharge points and natural creeklines.

Potential indirect impacts on native fauna include increased human activities, noise, light and domestic pets. Retained areas of bushland within private allotments shall be fenced to exclude domestic dogs (refer to the Vegetation Management Plan in Attachment 3). Dogs shall be kept on leash at all times whilst within the Community Lot. It is noted that this requirement was omitted from the Vegetation Management Plan. It is intended to either submit a variation to the VMP, or introduce the condition as part of the Community Lot covenant.

It has been recommended that all new residents are provided with an Environment Protection package as part of the sale contract. The package shall include information relating to the biodiversity values of their land and of the community Lot, and outline ways in which indirect residential impacts can be minimised – for example, through careful use of lawn and garden fertiliser, control of domestic pets, and avoidance of unnecessary outdoor lights being directed into bushland. The package should also include lists of plants that should not be used in landscaping, lists of suitable native plants, and lists of lawn grass options that have lower nutrient and watering requirements.

In summary, the proposed subdivision would have following biodiversity results:

- Retention of 83.7 ha of land within a Community Lot to be managed for conservation in perpetuity (through implementation of a Vegetation Management Plan, Hayes 2016 - **Attachment 3**). The Community Lot contains 32.1 ha of Sydney Hinterland Transition Woodland in generally good condition, 30 ha of Freshwater Wetlands EEC and 0.2 ha of River-flat Eucalypt Forest EEC;
- Retention of 3.6 ha of Sydney Hinterland Transition Woodland in varying condition within private residential lots. Whilst less secure than vegetation retained within the Community Lot, this vegetation would be protected through existing environmental legislation, requiring Council approval for further clearing or disturbance, and through binding conditions set out in the VMP as part of the Community Title covenant;
- Clearing of 6.7 ha of Sydney Hinterland Transition Woodland in varying condition from the development footprint. Much of this area has been previously disturbed through partial clearing and underscrubbing, and is currently in a degraded and weed infested condition;
- Revegetation of approximately 3.4 ha of the more elevated grasslands within the Community Lot, as detailed in the Vegetation Management Plan (**Attachment 3**). It is not considered appropriate to revegetate the other lower lying grasslands prone to regular flooding which surround the wetland areas, as these grasslands are likely to be part of the foraging habitat for migratory wading birds known to utilise the wetlands.

The relative areas of vegetation retention, loss and revegetation are shown on **Attachment 5**.

2.2 Alternatives to taking the proposed action

This should be a detailed description outlining any feasible alternatives to taking the proposed action (including not taking the action) that were considered but are not proposed (note, this is distinct from any proposed alternatives relating to location, time frames, or activities – see section 2.3).

A proposed community cluster subdivision in the same location but yielding 30 residential lots over a larger land area was originally proposed. This was replaced by the current proposed smaller subdivision of 21 residential lots over 11.3 ha, to reduce environmental impacts.

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

If you have identified that the proposed action includes alternative time frames, locations or activities (in section 1.10) you must complete this section. Describe any alternatives related to the physical location of the action, time frames within which the action is to be taken and alternative methods or activities for undertaking the action. For each alternative location, time frame or activity identified, you must also complete (where relevant) the details in sections 1.2-1.9, 2.4-2.7, 3.3 and 4. Please note, if the action that you propose to take is determined to be a controlled action, any alternative locations, time frames or activities that are identified here may be subject to environmental assessment and a decision on whether to approve the alternative.

Not applicable.

2.4 Context, planning framework and state/local government requirements

Explain the context in which the action is proposed, including any relevant planning framework at the state and/or local government level (e.g. within scope of a management plan, planning initiative or policy framework). Describe any Commonwealth or state legislation or policies under which approvals are required or will be considered against.

The southern part of the landholding (being the land subject to the proposed subdivision) is zoned RU2 – Rural Landscape under The Hills LEP 2012, which permits the proposed subdivision with Council consent. Low-lying lands to the north (all of which are to be included in the Community Lot) are zoned E2 – Environmental Conservation.

A development application for the original 30 lot subdivision has been lodged with The Hills Shire Council. The application is to be modified to the current 22 lot subdivision (21 residential lots and 1 community lot).

Relevant State legislation includes:

- *NSW Environmental Planning & Assessment Act 1979* (EP&A Act);
- *NSW Threatened Species Conservation Act 1995* (TSC Act).

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

If you have identified that the proposed action will be or has been subject to a state or territory environmental impact statement (in section 1.11) you must complete this section. Describe any environmental assessment of the relevant impacts of the project that has been, is being, or will be carried out under state or territory legislation. Specify the type and nature of the assessment, the relevant legislation and the current status of any assessments or approvals. Where possible, provide contact details for the state/territory assessment contact officer.

Describe or summarise any public consultation undertaken, or to be undertaken, during the assessment. Attach copies of relevant assessment documentation and outcomes of public consultations (if available).

A Flora and Fauna Assessment report has been prepared by Hayes Environmental (June 2016 – **Attachment 6**). The report addresses the requirements of the TSC Act and EP&A Act, and concluded that the impacts of the subdivision would not be significant.

The report was submitted to The Hills Shire Council in June 2016.

A summary of the report relevant to EPBC Act matters is provided here.

Project description:

refer to Section 2.1 above

Research and Field Surveys:

Desktop research included searches on the OEH Bionet database, discussions with Council, reference to previous reports in the vicinity, review of aerial photography and review of previous vegetation mapping projects.

An initial site inspection was conducted in August 2014, to note the general nature of the site and stratification, to guide design of the comprehensive field surveys.

Flora:

Initial flora field surveys were conducted over 3 days in September 2014. A general investigative drive with informal spot surveys was conducted around the whole of the landholding, to ground-truth previous vegetation mapping and confirm site stratification. This was followed by thorough walked random transects throughout the 'subject site' (being the area likely to be directly and indirectly affected by the proposed subdivision). These transects were not mapped, but consisted of a tight zig zag pattern designed to cover all areas of vegetation. These transects enabled compilation of a comprehensive plant species list for the site, targeted searches for threatened plant species in areas of potential habitat, and consideration of floristic changes across the site.

Additional botanical quadrat surveys were conducted in January 2016, to specifically address the question as to whether Shale Sandstone Transition Forest occurs on the site. Three 20m x 20m quadrats were set out, one in an area of relatively intact vegetation typical of the majority of the site, and one each in two areas of vegetation near the southern boundary of the site (closer to areas of mapped Shale Sandstone Transition Forest), where a slight variation in the floristic composition had been observed.

Flora field surveys were conducted in accordance with the DEC guidelines (2004 in draft), during appropriate seasons and weather conditions.

To provide further information with respect to the possible presence of Shale Sandstone Transition Forest, soil cores were investigated at six locations around the site.

Fauna:

Initial detailed fauna field surveys were conducted from February to May 2015. These included bird census, herpetofauna searches, hair tubes, infrared camera, SongMeters, spotlighting and stagwatching, call playback, recording of bat echolocation calls, harp traps, and identification of indirect evidence such as scats.

Subsequent additional targeted surveys for the Dural Woodland Snail *Pommerhelix duralensis* were conducted by recognised expert Dr Stephanie Clark in January 2016.

Subsequent additional targeted surveys for the Giant Burrowing Frog were conducted by Matthew Stanton in December 2015 – January 2016, followed by further surveys by recognised amphibian expert Dr Marion Anstis in April to May 2016, with assistance from Deryk Engel (who conducted the initial 2015 surveys).

Full details of fauna survey methods, timing and effort are provided in Table 1 on page 10 of the Flora and Fauna Assessment Report (Hayes Env, 2016 – **Attachment 6**).

Fauna field surveys were conducted in accordance with the DEC guidelines (2004 in draft), during appropriate seasons and weather conditions. In particular, the targeted amphibian surveys were

conducted during ideal conditions, with regular heavy summer storms and rainfall occurring throughout January and February 2016, during the period when SongMeters were deployed on site.

Targeted searches for the Giant Burrowing Frog (and its tadpoles) were conducted by recognised expert Dr Marion Anstis in April and May, following a call recording of this species in January. Giant Burrowing Frog tadpoles require at least 3-5 months to develop, so tadpole searches were conducted at an ideal time following the call record, and were within the usual peak Autumn breeding period.

EPBC Act Protected Matters:

- Dural Woodland Snail *Pommerhelix duralensis* – This species has been recorded within the landholding, including within the subdivision footprint. Dr Stephanie Clark has provided a report including a sighting map, and an assessment of significance under NSW legislation (**Attachment 7**). Dr Clark concludes that the proposed subdivision would not impose a significant impact upon the Dural Woodland Snail.
- Grey-headed Flying-fox *Pteropus poliocephalus* – Several individuals were recorded flying over the landholding on two occasions during the Hayes Env 2015 field surveys. This species was not observed foraging within the landholding, but is likely to do so at times when the eucalypts present are flowering on mass. No camps are known within or adjacent to the landholding. An Assessment of the significance of impacts conducted under NSW legislation concluded that the impacts would not be significant, primarily on the basis that 1) the species does not reside or camp within the site, and 2) the extent of foraging habitat that would be removed is negligible in relation to the extent that occurs in the locality, which includes substantial tracts on protected lands. Refer to Appendix 4 of the Flora and Fauna Assessment report (Hayes Env, 2016 – **Attachment 6**) for the full assessment.
- Large-eared Pied Bat *Chalinolobus dwyeri* – Recorded by Anabat detector within the landholding during the Hayes Env 2015 field surveys. No caves or cliffs occur within the subject site. Some areas of exposed sandstone rock occur in parts of the landholding, mainly around the steep sides of the ridgelines, outside of the subdivision footprint. An Assessment of the significance of impacts conducted under NSW legislation concluded that the impacts would not be significant, primarily on the basis that 1) the species is not likely to reside or breed within the site, and 2) the extent of foraging habitat that would be removed is negligible in relation to the extent that occurs in the locality, which includes substantial tracts on protected lands. Refer to Appendix 4 of the Flora and Fauna Assessment report (Hayes Env, 2016 – **Attachment 6**) for the full assessment.
- Giant Burrowing Frog *Heleioporus australiacus* – recorded by SongMeter at one location within the study area in January 2016. The site does not contain any known or likely breeding habitat for this species. The Giant Burrowing Frog was not recorded at any other SongMeter location, nor at later dates in the same location. An investigation and report is provided by amphibian expert Dr Marion Anstis (**Attachment 8**). It is believed that the record was of an individual swept into the site by heavy rainfalls and localised flooding which co-incided with the January recording. An Assessment of the significance of impacts conducted under NSW legislation concluded that the impacts would not be significant, on the basis that 1) the species is not likely to reside or breed within the site, and 2) the majority of habitat in which it may occasionally occur would be retained and protected as community land to be managed for conservation values. Refer to Appendix 4 of the Flora and Fauna Assessment report (Hayes Env, 2016 – **Attachment 6**) for the full assessment.

- Migratory Birds – The landholding provides habitat for a range of migratory birds, particularly wading birds which would periodically utilise the Broadwater Swamp. The proposed subdivision would retain the entirety of the Broadwater Swamp and its tributary creeklines within a Community Lot, which is to be managed for conservation values. A Vegetation Management Plan has been prepared to document the protection and ongoing management of the Community Lot (Hayes Env, 2016 – **Attachment 3**). Wetland areas within the site are well-buffered from the subdivision by adjacent grassland and by areas of retained native vegetation. Potential indirect impacts from residential run-off would be managed and minimised through the installation of raingardens and stormwater treatment systems, as described in Section 2.1 of this referral above. The proposed subdivision would result in removal of grazing pressure from existing grassland areas bordering the wetlands. There is therefore some potential for natural regeneration to occur, which could reduce the suitability of wetland margins for some migratory species. However, grazing pressure has been removed from the site for at least 10 years, with little evidence of natural regeneration, and the grasslands are subject to regular flooding, which would naturally control woody regrowth. With ongoing management in perpetuity via the Vegetation Management Plan, it is possible to specify that wetland margins are maintained as grassland. It is not likely that the proposed subdivision would adversely impact upon migratory birds.

- Shale Sandstone Transition Forest – There are two relevant regional mapping projects: (i) The Hills Shire Council (2010) have mapped the site as Sydney Sandstone Ridgetop Woodland with some Sydney Sandstone Gully Forest, and (ii) Tozer *et al* (2010) maps the site as Sydney Hinterland Transition Forest. Shale Sandstone Transition Forest is mapped as occurring to the south of the site, on the southern side of the ridgeline along which Halcrows Road runs (so in a different catchment to the site). It is noted that some areas of Sydney Hinterland Transition Forest can also correspond with the listed description for Shale Sandstone Transition Forest, which raises the question as to whether parts of the site contain Shale Sandstone Transition Forest. The site visibly appears to be sandstone derived. Much of the site consists of skeletal sandy soils over sandstone bedrock, with exposed sandstone sheets and outcrops. Deeper soils occur towards the south, and soil tests show that while the topsoil is sandy, and the bedrock is sandstone, there are some patches which contain a sandy clay or clayey sand subsoil. Three quadrats were surveyed and the data analysed to enable a detailed consideration as to whether Shale Sandstone Transition Forest is present on the site. Full details of the analysis are provided in Appendix 2 and in Chapter 3.3.2 on page 21 of the Flora and Fauna Assessment report (Hayes Env, 2016 – **Attachment 6**). In summary, it was concluded that the site does not contain Shale Sandstone Transition Forest, on the basis that:
 - i. all canopy trees recorded in all quadrats are listed as diagnostic species (Tozer *et al* 2010) for non-transitional sandstone communities, whilst also listed as characteristic for SSTF in the EPBC Act conservation advice, so are not determinant of the community. It is noted that the dominant tree in all three quadrats (*C. eximia*) is not listed as characteristic for the TSC Act description of SSTF, and is not listed as diagnostic for Tozer's corresponding CSSTF community. The EPBC Conservation Advice states “The canopy is a mix of native tree species typically including two or more of the following: *Eucalyptus punctata* (grey gum), *E. crebra* (narrow-leaved ironbark), *E. fibrosa* subsp. *fibrosa* (broad-leaved ironbark), *E. tereticornis* subsp. *tereticornis* (forest red gum), *E. resinifera* subsp. *resinifera* (red mahogany), *E. eugenioides* (or *E. globoidea* depending on local species present and degree of sandstone influence) and *Angophora bakeri* (narrow-leaved apple)”. The canopy does contain *E. punctata* as an occasional tree (representing 23%, 13% and 2% in the quadrats respectively), and a second species *A. bakeri* is dominant in the sub-canopy. However, the dominant tree present across the site and in each quadrat (*C. eximia*) is not included in the EPBC characteristic list, and none of the other six species which are listed

as characteristic occur in the quadrats. Whilst the canopy for all three quadrats does theoretically meet the EPBC description, it more strongly corresponds to canopy descriptions for Sydney Hinterland Transition Woodland and a non-transitional sandstone community.

- ii. the dominant sub-canopy trees recorded in all quadrats are listed as diagnostic species (Tozer et al 2010) for non-transitional sandstone communities, whilst also listed as characteristic for SSTF in the EPBC Act conservation advice, so are not determinant of the community. Quadrats 2 and 3 only contain one species in the sub-canopy (*A bakeri*), whilst Quadrat 1 contains six species. The EPBC Conservation Advice states "A small tree stratum may be present in the mid layer, with a mean height of 10.9 m (Tozer, 2010). It is most often dominated by *Eucalypt* species as well as *Allocasuarina littoralis* (black she-oak) with *Syncarpia glomulifera* (turpentine) occurring less frequently in the ecological community". In none of the three quadrats is the sub-canopy dominated by eucalypt species. In none of the three quadrats does *S glomulifera* occur. In Quadrat 1, *A littoralis* is a co-dominant. However, this species is also diagnostic for a non-transitional sandstone community, and the next most common species after the two co-dominants (*Elaeocarpus reticulatus*) is listed as diagnostic for a non-transitional sandstone community, and is not listed as diagnostic or characteristic for SSTF. In neither Quadrats 2 or 3 does the vegetation meet the EPBC description for SSTF. Whilst in Quadrat 1 the sub-canopy could be regarded as meeting the EPBC description, it more strongly corresponds to sub-canopy descriptions for a non-transitional sandstone community.
- iii. The shrub-layer in all three quadrats contains 4 out of 16, 2 out of 14, and 1 out of 11 (respectively) shrub species being characteristic for SSTF, whilst containing 11 out of 16, 11 out of 14, and 10 out of 11 shrub species being diagnostic of a non-transitional sandstone community. The dominant shrub species (*Leptospermum trinervium*) is diagnostic for a non-transitional sandstone community and is not listed as characteristic for SSTF. The EPBC conservation advice states "Where present, the shrub layer is typically well-developed, diverse and dominated by *Bursaria spinosa* (blackthorn) in areas with low sandstone influence. Other common species include *Kunzea ambigua* (tick bush), *Persoonia linearis* (narrow-leaved geebung), *Ozothamnus diosmifolius* (rice flower, sago bush, white dogwood), *Hibbertia aspera* (rough guinea flower), *Leucopogon juniperinus* and *Pultenaea villosa* (Tozer, 2003; Tozer et al., 2010)". In none of the three quadrats does *B spinosa* occur. *K ambigua* and *P linearis* occur in Quadrats 1 and 2, and *P linearis* only in Quadrat 3. *P linearis* is diagnostic for a non-transitional sandstone community as well as being listed characteristic for SSTF. The other 4 species listed as characteristic for SSTF do not occur in any of the quadrats. The shrub layer strongly indicates that the vegetation is sandstone-derived, and not SSTF.
- iv. The groundcover contains a mix of species and is not clearly determinant. The dominant groundcover species in all three quadrats (*Austrostipa pubescens*) is diagnostic for non-transitional sandstone communities whilst also listed as characteristic for SSTF. The EPBC conservation advice states "The ground layer is often diverse and dominated by grasses and herbs including *Aristida vagans* (three-awned spear grass), *Austrostipa pubescens* (spear grass), *Cheilanthes sieberi* subsp. *sieberi* (poison rock fern), *Dichondra repens* (kidney weed), *Echinopogon ovatus* (forest hedgehog grass), *Entolasia marginata* (bordered panic), *Entolasia stricta* (wiry panic), *Lepidosperma laterale* (saw sedge), *Lomandra multiflora*, *Microlaena stipoides* var. *stipoides* (weeping grass), *Oxalis perennans* (wood-sorrel), *Pimelea linifolia* subsp. *linifolia*, *Phyllanthus hirtellus*, *Pomax umbellata*, *Pratia purpurascens* (white root), *Solanum prinophyllum* (forest nightshade) and *Themeda triandra* syn *T. australis* (kangaroo grass) (Tozer, 2003; Tozer et al., 2010)". Quadrat 1 contains 8 out of the 17 species listed above. Quadrat 2 contains 5 out of 17 species listed above. Quadrat 3 contains 4 out of 17 species listed above.

- v. Application of the Tozer *et al* (2010) statistical test results are that, Quadrat 1 is negative to SSTF, and positive for both Sydney Hinterland Transition Forest and a non-transitional sandstone community, Quadrat 2 is negative to SSTF, positive to Sydney Hinterland Transition Forest, and just insufficient for a non-transitional sandstone community, Quadrat 3 contains insufficient native species for a statistical determination, but is a very strong match to Sydney Hinterland Transition Forest, a strong match for a non-transitional sandstone community, whilst being a weak match for SSTF. On this basis, all three quadrats contain Sydney Hinterland Transition Forest and do not contain SSTF.

2.6 Public consultation (including with Indigenous stakeholders)

Your referral must include a description of any public consultation that has been, or is being, undertaken. Where Indigenous stakeholders are likely to be affected by your proposed action, your referral should describe any consultations undertaken with Indigenous stakeholders. Identify the relevant stakeholders and the status of consultations at the time of the referral. Where appropriate include copies of documents recording the outcomes of any consultations.

The Hills Shire Council notified neighbours of the proposed 30 lot subdivision. Due to the extent of community interest, a public meeting was also held to discuss the proposal.

The subdivision was modified to address Council and community concerns. The new 22 lot subdivision has recently (June 2016) been re-notified to neighbours.

2.7 A staged development or component of a larger project

If you have identified that the proposed action is a component of a larger action (in section 1.12) you must complete this section. Provide information about the larger action and details of any interdependency between the stages/components and the larger action. You may also provide justification as to why you believe it is reasonable for the referred action to be considered separately from the larger proposal (eg. the referred action is 'stand-alone' and viable in its own right, there are separate responsibilities for component actions or approvals have been split in a similar way at the state or local government levels).

Not Applicable.

3 Description of environment & likely impacts

3.1 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.

Your assessment of likely impacts should refer to the following resources (available from the Department's web site):

- specific values of individual World Heritage properties and National Heritage places and the ecological character of Ramsar wetlands;
- 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*; and
- associated sectoral and species policy statements available on the web site, as relevant.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The Minister has prepared four marine bioregional plans (MBP) in accordance with section 176. It is likely that the MBP's will be more commonly relevant where listed threatened species, listed migratory species or a Commonwealth marine area is considered.

Note that even if your proposal will not be taken in a World Heritage area, Ramsar wetland, Commonwealth marine area, the Great Barrier Reef Marine Park or on Commonwealth land, it could still impact upon these areas (for example, through downstream impacts). Consideration of likely impacts should include both direct and indirect impacts.

3.1 (a) World Heritage Properties

Description

None.

Nature and extent of likely impact

Address any impacts on the World Heritage values of any World Heritage property.

3.1 (b) National Heritage Places

Description

None.

Nature and extent of likely impact

Address any impacts on the National Heritage values of any National Heritage place.

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

Description

Longneck Lagoon occurs in the vicinity of the study area. This wetland is located on a separate and upstream tributary of the Hawkesbury River, and would not be affected by the proposed subdivision.

Nature and extent of likely impact

Address any impacts on the ecological character of any Ramsar wetlands.

3.1 (d) Listed threatened species and ecological communities

Description

An outline of survey methods and effort is provided in the flora and fauna assessment summary in section 2.5 of this referral above. Full details are provided in the Flora and Fauna Assessment Report, (Hayes Env, 2016 – **Attachment 6**).

Four fauna species listed as threatened under the EPBC Act were recorded:

- Dural Land Snail *Pommerhelix duralensis* – This species has been recorded within the landholding, including within the subdivision footprint. See sighting map in the report by Ms Stephanie Clark (**Attachment 7**).
- Grey-headed Flying-fox *Pteropus poliocephalus* – Several individuals were recorded flying over the landholding on two occasions during the Hayes Environmental (2015) field surveys. This species was not observed foraging within the landholding, but is likely to do so at times when the eucalypts present are flowering on mass. No camps are known within or adjacent to the landholding.
- Large-eared Pied Bat *Chalinolobus dwyeri* – Recorded by Anabat detector within the landholding during the Hayes Environmental (2015) field surveys. No caves or cliffs occur within the landholding. Some areas of exposed sandstone rock occur in parts of the landholding, mainly around the steep sides of the ridgelines, outside of the subdivision footprint.
- Giant Burrowing Frog *Heleioporus australiacus* – recorded by SongMeter at one location in the southwest of the study area in January 2016. The site does not contain any known or likely breeding habitat for this species. The Giant Burrowing Frog was not recorded at any other SongMeter location, nor at later dates in the same location. It is believed that the record was of an individual swept into the site by heavy rainfalls and localised flooding which co-incided with the record.

Vegetation across the site has been identified as Sydney Hinterland Transition Woodland (SHTW), as described in Tozer *et al* (2010).

Due to some areas of the SHTW community also meeting the description for Shale Sandstone Transition Forest (a '*critically endangered*' ecological community), a detailed investigation including use of statistical data from quadrats was conducted to determine if any of the vegetation in the development footprint could also meet the description of Shale Sandstone Transition Forest.

On the basis of the data which indicates a stronger association with other sandstone-based communities than with Shale Sandstone Transition Forest, the vegetation is regarded as Sydney Hinterland Transition Woodland not corresponding to Shale Sandstone Transition Forest. For a more detailed discussion, refer to the flora and fauna assessment summary in section 2.5 of this referral above.

Nature and extent of likely impact

Address any impacts on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat.

- Dural Land Snail *Pommerhelix duralensis* - The proposed development would remove a small proportion (6.7 ha) of potential and known habitat for the Dural Land Snail, with likely loss of some individuals from this area. The majority of the habitat that would be affected is disturbed, or not suitable for the Dural Land Snail. Most of the more suitable habitat for this species is located outside of the proposed development footprint including in gully areas set aside for conservation. Dr Stephanie Clark has provided a report including an assessment of significance under NSW legislation (**Attachment 7**). Dr Clark concludes that the proposed subdivision would not impose a significant impact upon the Dural Woodland Snail.
- Grey-headed Flying-fox – No camps would be affected. Loss of 6.7 ha of seasonal/occasional foraging habitat. This is a minor proportion of the extent of similar and better quality habitats to be conserved within the landholding, and within the locality.
- Large-eared Pied Bat – No loss of known or likely roosting or breeding caves. Loss of 6.7 ha of foraging habitat. This is a minor proportion of the extent of similar and better quality habitats to be conserved within the landholding, and within the locality.
- Giant Burrowing Frog – it is not considered likely that there would be any ongoing impact on the Giant Burrowing Frog. Even if future heavy rains and flooding washed other individuals into the site, the creeklines are being retained and protected, such that individuals would be able to survive and would not be impeded from returning to their home range.

3.1 (e) Listed migratory species

Description

A large number of bird species listed as 'migratory' under the EPBC Act are known to occur in the locality. Some of these species are known and/or likely to occur within the landholding, in association with the extensive wetland and lowland habitats occurring across the north of the landholding. These habitats would be retained and protected within the proposed Community Lot.

Nature and extent of likely impact

Address any impacts on the members of any listed migratory species, or their habitat.

Areas of important habitat (such as Broadwater Swamp and the adjoining Fairs Creek wetlands) within the landholding would be retained and protected in perpetuity within a Community Lot, managed for conservation values.

A Vegetation Management Plan has been prepared to document the protection and ongoing management of the Community Lot (Hayes Env, 2016 – **Attachment 3**). Wetland areas within the site are well-buffered from the subdivision by adjacent grassland and by areas of retained native vegetation. Potential indirect impacts from residential run-off would be managed and minimised through the installation of raingardens and stormwater treatment systems, as described in Section 2.1 of

this referral above. The proposed subdivision would result in removal of grazing pressure from existing grassland areas bordering the wetlands. There is therefore some potential for natural regeneration to occur, which could reduce the suitability of wetland margins for some migratory species. However, grazing pressure has been removed from the site for at least 10 years, with little evidence of natural regeneration, and the grasslands are subject to regular flooding, which would naturally control woody regrowth. With ongoing management in perpetuity via the Vegetation Management Plan, it is possible to specify that wetland margins are maintained as grassland. It is not likely that the proposed subdivision would adversely impact upon migratory birds.

The proposed subdivision would not result in invasive species becoming established in areas of important habitat within the study area. The Vegetation Management Plan enables control and management of invasive species in perpetuity (refer to **Attachment 3**).

3.1 (f) Commonwealth marine area

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

Description

Not applicable.

Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth marine area.

3.1 (g) Commonwealth land

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

Description

If the action will affect Commonwealth land also describe the more general environment. The Policy Statement titled *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* provides further details on the type of information needed. If applicable, identify any potential impacts from actions taken outside the Australian jurisdiction on the environment in a Commonwealth Heritage Place overseas.

Not applicable.

Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth land. Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
 - natural and physical resources;
 - the qualities and characteristics of locations, places and areas;
 - the heritage values of places; and
 - the social, economic and cultural aspects of the above things.
-

3.1 (h) The Great Barrier Reef Marine Park

Description

Not applicable.

Nature and extent of likely impact

Address any impacts on any part of the environment of the Great Barrier Reef Marine Park.

Note: If your action occurs in the Great Barrier Reef Marine Park you may also require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If so, section 37AB of the GBRMP Act provides that your referral under the EPBC Act is deemed to be an application under the GBRMP Act and Regulations for necessary permissions and a single integrated process will generally apply. Further information is available at www.gbrmpa.gov.au

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

Description

If the action is a coal seam gas development or large coal mining development that has, or is likely to have, a significant impact on water resources, the draft *Policy Statement Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources* provides further details on the type of information needed.

Not applicable.

Nature and extent of likely impact

Address any impacts on water resources. Your assessment of impacts should refer to the draft *Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources*.

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

You must describe the nature and extent of likely impacts (both direct & indirect) on the whole environment if your project:

- is a nuclear action;
- will be taken by the Commonwealth or a Commonwealth agency;
- will be taken in a Commonwealth marine area;
- will be taken on Commonwealth land; or
- will be taken in the Great Barrier Reef marine Park.

Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

3.2 (a)	Is the proposed action a nuclear action?		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?		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?		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
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))			
3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?		No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))			

3.3 Other important features of the environment

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 above). If at Section 2.3 you identified any alternative locations, time frames or activities for your proposed action, you must complete each of the details below (where relevant) for each alternative identified.

3.3 (a) Flora and fauna

Flora and fauna surveys have been conducted across the landholding by Hayes Environmental, and have identified a range of species and habitats present. Species lists are provided as Appendices 2 and 3 of the Flora and Fauna Assessment report (Hayes Env, 2016 – **Attachment 6**).

Species listed as threatened and/or migratory under the EPBC Act have been identified and discussed in Chapter 3.1 above.

The development has been designed to retain the majority of habitats present within the landholding, and to protect these in perpetuity.

3.3 (b) Hydrology, including water flows

The landholding is bordered to the north by *Little Cattai Creek*, a permanent usually slow-flowing creekline. A permanent tributary *Fairs Creek* meanders to the north through the landholding, forming the freshwater *Broadwater Swamp* at its confluence with *Little Cattai Creek*.

The majority of the low-lying grassy and sedgeland areas within the site form part of the floodplain for *Little Cattai Creek*.

These features can be clearly seen on the aerial photograph of the site provided as **Attachment 1**.

3.3 (c) Soil and Vegetation characteristics

The underlying bedrock of the ridgelines is sandstone, with shallow overlying silty sand soils. In some areas in the far south of the landholding there is a clay influence in the subsoil. Soil test results are provided in Table 3 on page 22 of the Flora and Fauna Assessment Report (Hayes Env, 2016 - **Attachment 6**).

Low-lying parts of the landholding are part of the Little Cattai Creek floodplain and contain alluvial soils. Soil tests were not conducted in these areas. These areas support sedgelands and grasslands. Grassland areas contain a mixture of native and introduced pasture species.

The ridgelines support native sclerophyll woodland and forest vegetation communities, with some mesic influences on sheltered south-facing slopes.

Detailed vegetation community descriptions are provided in Chapter 3.3 of the Flora and Fauna Assessment Report (Hayes Env, 2016 – **Attachment 6**).

3.3 (d) Outstanding natural features

Wetland areas in the north of the landholding are part of the locally renowned Broadwater Swamp. This is regarded as significant by local residents and by Council. It has not been classed as State or Nationally significant.

The wetland provides habitat for a range of semi-aquatic and wading birds, including species listed as threatened and/or migratory under NSW and Commonwealth legislation.

3.3 (e) Remnant native vegetation

Vegetation across the site has been identified as Sydney Hinterland Transition Woodland (SHTW), as described in Tozer *et al* (2010).

This identification is consistent with previous mapping of the site by Tozer *et al* (2010) as Sydney Hinterland Transition Woodland), and by Council (2010) as Sydney Sandstone Ridgetop Woodland with some areas of Sydney Sandstone Gully Forest.

Detailed vegetation community descriptions are provided in Chapter 3.3 of the Flora and Fauna Assessment Report (Hayes Env, 2016 – **Attachment 6**).

Vegetation across the tops of the two ridgelines has been previously cleared and disturbed. Vegetation across the ridgeline in the central part of the landholding is regenerating well with minimal weed invasion. The southern ridgeline has been more substantially disturbed, with construction of a dwelling and associated structures. Some areas remain as open grassland or bare ground, and there are extensive patches of weed invasion.

Floodplain areas within the site contain native sedgeland, and grassland with varying proportions of native and introduced pasture grass species.

A plan showing the extent, distribution and condition of vegetation communities across the landholding is provided as Figure 5 of the Flora and Fauna Assessment Report (Hayes Env, 2016 - **Attachment 6**).

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

The proposed subdivision would occupy the plateau area on the top of the southern ridgeline within the landholding. Gradients vary from 3.7-19.42% across block depths and housing platforms have been provided that are at less than 20% grade for each allotment.

The allotment layout has been designed to take advantage of the existing ridgeline. Steeper slopes around the sides of the ridgeline have been excluded from the development area. A notable example of this is the area between proposed Lot 8 and Lot 9, which has been excluded from the development footprint due to the slope of the land, which is approximately 25%.

The steeper areas within the landholding are to be retained and protected within a Community Lot. These areas would not be developed or cleared and would be subject to a Vegetation Management Plan (Hayes Env, 2016 - **Attachment 3**) for the long term care, control and maintenance by the community association.

3.3 (g) Current state of the environment

Include information about the extent of erosion, whether the area is infested with weeds or feral animals and whether the area is covered by native vegetation or crops.

The majority of the ridgeline areas within the landholding contain native vegetation. The plateau areas on the top of both ridgelines have been previously cleared and disturbed. The central ridgeline is regenerating well. Several areas on the plateau of the southern ridgeline are affected by weeds and by ongoing understorey disturbance. There are also several areas of open ground which have not regenerated, and some existing building pads and tracks.

Wetlands areas contain a variety of sedges and aquatic plants, with some areas of weed invasion. Grassland areas contain varying proportions of native and introduced pasture grass species.

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

Not applicable.

3.3 (i) Indigenous heritage values

A Preliminary Due Diligence Aboriginal Heritage Assessment was conducted across the site by Mary Dallas Consulting Archaeologists in June 2015.

The assessment concludes: *"the area to be affected by the current proposal within Lots 101 and 102 in DP802862 and Lot 7 DP63853 has been found to contain no evidence of past Aboriginal use, and*

very low likelihood for surviving deposits of Aboriginal stone artefacts. The inspection of the clearing of the sandstone platform in the north eastern section of the proposed subdivision area is considered warranted to exclude any Aboriginal constraints."

"If future works were proposed which may impact the rocky scarp below the proposed extent of the subdivision or the similarly rocky area to the west which are both currently outside the subdivision area, further archaeological investigation would need to be undertaken. These areas contain landforms and features that may have archaeological potential."

The Deerubbin Local Aboriginal Land Council have been advised of the proposed development, and have written that there is no objection on the grounds of Aboriginal cultural heritage (**Attachment 9**).

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

Describe any other key features of the environment affected by, or in proximity to the proposed action (for example, any national parks, conservation reserves, wetlands of national significance etc).

Mitchell Park (part of Cattai National Park) occurs south of the landholding, across Halcrows Road. Mitchell Park is separated from the landholding by a row of large freehold lots zoned RU2 supporting apparently intact native vegetation.

Halcrows Road forms a watershed, of which the landholding is on the northern side draining to Little Cattai Creek, and the adjoining landholdings and Mitchell Park are on the south, draining to Cattai Creek.

Wetlands within and adjacent to the landholding have not been classed as State or Nationally significant. They are, however, of local significance.

3.3 (k) Tenure of the action area (eg freehold, leasehold)

Freehold.

3.3 (l) Existing land/marine uses of area

Previously/currently used for agriculture – primarily stock grazing.

The plateaus on top of each ridgeline have been previously cleared and disturbed. The central ridgeline is regenerating well. The southern ridgeline is affected by weeds and ongoing understorey disturbance.

3.3 (m) Any proposed land/marine uses of area

A residential subdivision is proposed for the south of the landholding (across 11.3 ha). Refer to **Attachment 1**.

Remaining areas within the landholding (83.7 ha) would be retained as a Community Lot, to be managed for conservation in perpetuity.

4 Environmental outcomes

Provide descriptions of the proposed environmental outcomes that will be achieved for matters of national environmental significance as a result of the proposed action. Include details of the baseline data upon which the outcomes are based, and the confidence about the likely achievement of the proposed outcomes. Where outcomes cannot be identified or committed to, provide explanatory details including any commitments to identify outcomes through an assessment process.

If a proposed action is determined to be a controlled action, the Department may request further details to enable application of the draft *Outcomes-based Conditions Policy 2015* and *Outcomes-based Conditions Guidance 2015* (<http://www.environment.gov.au/epbc/consultation/policy-guidance-outcomes-based-conditions>), including about environmental outcomes to be achieved, details of baseline data, milestones, performance criteria, and monitoring and adaptive management to ensure the achievement of outcomes. If this information is available at the time of referral it should be included.

General commitments to achieving environmental outcomes, particularly relating to beneficial impacts of the proposed action, **CANNOT** be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, and conditions of approval, if your proposal proceeds to these stages).

The proposed development has been designed to enable retention and protection of the majority of the landholding, with long-term management for environmental values.

The landholding is approximately 95 hectares in size. The proposed subdivision would occupy 11.3 hectares, or 12% of this area (see **Attachment 1**).

The entirety of the important wetland area and associated grassland habitats would be retained within a Community Lot, to be managed for conservation in perpetuity. A Vegetation Management Plan has been prepared (Hayes Env, 2016 - **Attachment 3**) for the ongoing management of this land.

The whole of the central ridgeline with associated woodland and forest vegetation and habitats would also be included within the Community Lot, to be protected and managed in perpetuity.

Woodland areas surrounding the proposed subdivision on the southern ridgeline are also part of the Community Lot, and would be managed and monitored in accordance with the VMP. There may be edge effects in some of the immediately adjoining areas. However, many of the lots contain native vegetation that would be retained, and which would serve as a buffer zone that is internal to the development rather than external.

In summary, the main environmental outcomes of the proposed subdivision are that:

- (i) the majority (88%) of the landholding would be zoned for conservation rather than agriculture, affording a higher level of protection; and
- (ii) a long term management program would be implemented for the retained lands, governed by an approved Vegetation Management Plan forming part of the Community Title covenant.

5 Measures to avoid or reduce impacts

Note: If you have identified alternatives in relation to location, time frames or activities for the proposed action at Section 2.3 you will need to complete this section in relation to each of the alternatives identified.

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.

For any measures intended to avoid or mitigate significant impacts on matters protected under the EPBC Act, specify:

- what the measure is,
- how the measure is expected to be effective, and
- the time frame or workplan for the measure.

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.

Provide information about the level of commitment by the person proposing to take the action to achieve the proposed environmental outcomes and implement the proposed mitigation measures. For example, if the measures are preliminary suggestions only that have not been fully researched, or are dependent on a third party's agreement (e.g. council or landowner), you should state that, that is the case.

Note, the Australian Government Environment Minister may decide that a proposed action is not likely to have significant impacts on a protected matter, as long as the action is taken in a particular manner (section 77A of the EPBC Act). The particular manner of taking the action may avoid or reduce certain impacts, in such a way that those impacts will not be 'significant'. More detail is provided on the Department's web site.

For the Minister to make such a decision (under section 77A), the proposed measures to avoid or reduce impacts must:

- clearly form part of the referred action (eg be identified in the referral and fall within the responsibility of the person proposing to take the action),
- be must be clear, unambiguous, and provide certainty in relation to reducing or avoiding impacts on the matters protected, and
- must be realistic and practical in terms of reporting, auditing and enforcement.

More general commitments (eg preparation of management plans or monitoring) and measures aimed at providing environmental offsets, compensation or off-site benefits CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, if your proposal proceeds to these stages).

The proposed development has been designed to avoid more sensitive parts of the site, such as riparian lands, steep land, and rocky gullies. The subdivision plan clearly shows where these areas have been avoided (**Attachment 1**). The design is also sensitive to locations of known threatened species habitat.

Building envelopes have been designated for each of the proposed residential lots, to ensure that impacts from asset protection zones, wastewater and stormwater systems and access are minimised.

The proposed subdivision layout and location of building envelopes is the result of a lengthy and detailed collaboration between the ecological consultant, the bushfire consultant, wastewater consultant, and design engineers.

The subdivision maintains a wide buffer zone between proposed residential land and the important wetland areas in the north of the landholding. The potential for indirect adverse impacts on the wetlands and other downslope habitats would be minimised through the installation of raingardens and stormwater management systems.

The development layout has been designed to retain two corridors of vegetation which connect the Community Lot to vegetated lands and then to Mitchell Park (Cattai National Park) across Halcrows Road to the south.

A Vegetation Management Plan has been prepared to set out management actions and performance criteria for ongoing protection and management of conservation values in the proposed Community Lot (**Attachment 3**). The plan addresses details such as fencing specifications, outdoor light spillage into retained bushland, and weed control.

A Tree Removal Protocol would be followed to avoid injury to individual animals that may be sheltering in vegetation on the site at the time of clearing operations. The protocol includes details of suitable timing of clearing works, to avoid the winter hibernation period of microchiropteran bats, and the spring breeding period of arboreal mammals and parrots.

The majority of the site (88%) would be retained as conservation land, to be protected and managed in perpetuity. This is a higher level of protection than is currently afforded to the site, particularly for the sensitive wetland areas.

6 Conclusion on the likelihood of significant impacts

Identify whether or not you believe the action is a controlled action (ie. whether you think that significant impacts on the matters protected under Part 3 of the EPBC Act are likely) and the reasons why.

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

- | | |
|-------------------------------------|---------------------------|
| ☒ | No, complete section 5.2 |
| ☐ | Yes, complete section 5.3 |

6.2 Proposed action IS NOT a controlled action.

Specify the key reasons why you think the proposed action is NOT LIKELY to have significant impacts on a matter protected under the EPBC Act.

- Dural Land Snail *Pommerhelix duralensis*

The proposed development would remove a small proportion (6.7 ha, or 16%) of habitat for the Dural Land Snail, with likely loss of some individuals from this area (to be minimised through pre-clearing searches and relocation to suitable adjacent protected areas). The majority of the potential habitat that would be affected is disturbed, or not suitable for the Dural Land Snail. Most of the more suitable habitat for this species is located outside of the proposed development footprint including in gully areas set aside for conservation

There are at least 16 locations known and confirmed to support the Dural Land Snail by Dr Stephanie Clark within a 10 km radius of the development site, including at least three locations towards the eastern end of Halcrows Rd collected in 1973-1974 and 1989. Based on google earth

imagery (accessed 28 Jan 2016) there are extensive areas of what appear to be intact vegetation that could harbour populations of the Dural Land Snail.

The extent of loss/modification of vegetation and habitat proposed (6.7 ha, or 16%) is a small proportion of the potential habitat that would be retained within the study area (35.7 ha, or 84%), and is negligible in relation to the extent of similar vegetation retained in the locality.

Dr Stephanie Clark was engaged to conduct a specialist survey and assessment of this species. Dr Clark concludes: *"the proposed development in its current form will not impose a significant impact upon the local population of the Dural Land Snail. Nor will it remove a significant portion of the total potential and known habitat present within the study area"*.

Dr Clark's report is provided as **Attachment 7**.

- Grey-headed Flying-fox *Pteropus poliocephalus*

The Grey-headed Flying-fox is likely to forage within the landholding at times when the eucalypts present are flowering on mass. No camps are known to occur in the study area or nearby, and no camps were recorded during the field surveys.

The extent of loss/modification of vegetation and habitat features proposed (6.7 ha) is a minor proportion (16%) of the woodland vegetation and habitats that would be retained within the study area (35.7 ha, or 84%), and is negligible in relation to the extent of vegetation retained in the locality and within the species' foraging range. The vegetation that would be affected by the proposed subdivision is not likely to be of particular or special importance for this species.

The proposed subdivision would not be likely to result in a significant impact upon this species. Refer to the detailed assessment provided in Appendix 4 of the Flora and Fauna Assessment Report (Hayes Env, 2016 – **Attachment 6**).

- Large-eared Pied Bat *Chalinolobus dwyeri*

This species was recorded by Anabat detector in the study area. There are abundant rocky cliffs and crevices on lands surrounding the proposed subdivision area and landholding. There are limited rocky habitats within the development footprint, which has been designed to utilise flatter lands across the sandstone plateau, rather than steeper rocky slopes around the sides of the ridgeline. This species may also roost in tree hollows. The majority of larger and older trees occur outside of the subdivision area, due to previous clearing across the sandstone plateau.

The extent of loss/modification of vegetation and habitat features proposed (6.7 ha) is a minor proportion (16%) of the woodland vegetation and habitats that would be retained within the study area (35.7 ha, or 84%), and is negligible in relation to the extent of vegetation retained in the locality, and within its foraging range.

The vegetation that would be affected by the proposed subdivision is not likely to be of particular or special importance for this species, nor critical to the survival of a population of this species. The proposed subdivision would affect a minor proportion of the foraging resource available for this species in the locality, but would not be likely to result in a significant impact upon this species.

Vegetation clearing works would be timed to avoid disruption to potential winter hibernation periods. It is specified in the Tree Removal Protocol that vegetation clearing works would occur from October to April.

Refer to the detailed assessment provided in Appendix 4 of the Flora and Fauna Assessment Report (Hayes Env, 2016 – **Attachment 6**).

- Giant Burrowing Frog *Heleioporus australiacus*

Recorded by SongMeter at one location in the southwest of the study area in January 2016. The site does not contain any known or likely breeding habitat for this species. The Giant Burrowing Frog was not recorded at any other SongMeter location, nor at later dates in the same location. It is believed that the record was of an individual swept into the site by heavy rainfalls and localised flooding which co-incided with the recording.

Refer to the detailed assessment provided in Appendix 4 of the Flora and Fauna Assessment Report (Hayes Env, 2016 – **Attachment 6**).

6.3 Proposed action IS a controlled action

Type 'x' in the box for the matter(s) protected under the EPBC Act that you think are likely to be significantly impacted. (The 'sections' identified below are the relevant sections of the EPBC Act.)

Matters likely to be impacted

☐	World Heritage values (sections 12 and 15A)
☐	National Heritage places (sections 15B and 15C)
☐	Wetlands of international importance (sections 16 and 17B)
☐	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)

Specify the key reasons why you think the proposed action is likely to have a significant adverse impact on the matters identified above.

7 Environmental record of the responsible party

NOTE: If a decision is made that a proposal needs approval under the EPBC Act, the Environment Minister will also decide the assessment approach. The EPBC Regulations provide for the environmental history of the party proposing to take the action to be taken into account when deciding the assessment approach.

	Yes	No
7.1 Does the party taking the action have a satisfactory record of responsible environmental management? Provide details Previous similar Community Title projects have been undertaken within the same Local Government Area, where specific environmental and ecological outcomes were conditioned as part of the Development Approval by Council. All targets were met to Council's satisfaction.	✓	
7.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources? If yes, provide details		✓
7.3 If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework? If yes, provide details of environmental policy and planning framework Policy provided as Attachment 10.	✓	
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)		✓

8 Information sources and attachments

(For the information provided above)

8.1 References

- List the references used in preparing the referral.
- Highlight documents that are available to the public, including web references if relevant.

Public documents:

- Tozer *et al* (2010) Native vegetation of southeast NSW: a revised classification and map for the coast and eastern tablelands (M.G. Tozer, K. Turner, D.A. Keith, D. Tindall#, C. Pennay#, C.Simpson, B. MacKenzie, P. Beukers and S. Cox, NSW DECC), in *Cunninghamia* 11 (3): 2010
- Council (2014) Vegetation Cover Map, Sheet 13 (The Hills Shire Council, June 2014)
<http://www.thehills.nsw.gov.au/Building/Planning-Guidelines/Land-Mapping/Vegetation-Classification-Mapping>
- Hayes Env (2016) Flora and Fauna Assessment Report, including specialist reports from Dr Stephanie Clark, Dr Rod Kavanagh and Dr Marion Anstis. Provided as Attachment 6.
- Hayes Env (2016) Vegetation Management Plan. Provided as Attachment 3.
- Engineering Studio (2016) Stormwater Drainage Plan (Ref 15917/C00.01, February 2016).

8.2 Reliability and date of information

For information in section 3 specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

Information has been obtained largely from field surveys conducted in 2015 & 2016. Surveys were conducted in accordance with OEH guidelines, and with reference to regional vegetation mapping by Council (2014) and Tozer *et al* (2010).

Uncertainties are present due to the limited time-frames and seasonal variations of the surveys, as is usual with most flora and fauna assessment projects. Uncertainties are addressed through precautionary conservative assumptions, and by adherence to recommended survey repetitions and duration.

8.3 Attachments

Indicate the documents you have attached. All attachments must be less than three megabytes (3mb) so they can be published on the Department's website. Attachments larger than three megabytes (3mb) may delay the processing of your referral.

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	✓	Attachment 1
	GIS file delineating the boundary of the referral area (section 1)	✓	Attachment 2
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	Attachment 1 and Figures within Attachments 6 & 7.
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)	n/a	
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)	n/a	
	copies of any flora and fauna investigations and surveys (section 3)	✓	Attachments 6, 7 & 8
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)	✓	Attachment 4 Attachment 6 Attachment 7 Attachment 8
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)	✓	Attachment 9

Attachment List

- Attachment 1 A4 Aerial photo showing boundaries of landholding, proposed subdivision boundaries, building envelopes, boundary of retained vegetation within private lots subject to restrictions on title, creeklines and wetlands, and location of the Giant Burrowing Frog call recording by SongMeter.
- Attachment 2 Associated GIS-compliant file that delineates the proposed referral area as a polygon layer.
- Attachment 3 Vegetation Management Plan (Hayes Env, June 2016).
- Attachment 4 Stormwater Drainage Plan (Engineering Studio, February 2016).
- Attachment 5 Figure showing Vegetation Management (retention, revegetation and loss), prepared by Group Development Services (15/3/16).
- Attachment 6 Flora and Fauna Assessment Report (Hayes Env, June 2016).
- Attachment 7 Targeted survey for the Dural Land Snail (*Pommerhelix duralensis*) at 579 Halcrows Rd, Cattai (Dr Stephanie A Clark, Invertebrate Identification Australasia, March 2016).

- Attachment 8 Letter from Dr Marion Anstis regarding the Giant Burrowing Frog, dated 25 May 2016.
- Attachment 9 Letter from the Deerubbin Local Aboriginal Land Council, dated 26 February 2015.
- Attachment 10 Environmental Policy and Planning – MTE Developments Pty Ltd & SFN Projects Pty Ltd.

9 Contacts, signatures and declarations

NOTE: Providing false or misleading information is an offence punishable on conviction by imprisonment and fine (s 489, EPBC Act).

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action¹.

Project title:

9.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the Great Barrier Reef Marine Park Act², this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action³.

1. Name and Title: Tony Hili – Senior Project Manager
2. Organisation (if applicable): MTE Developments Pty Ltd & SFN Projects Pty Ltd
Organisation name should match entity identified in ABN/ACN search
3. EPBC Referral Number (if known):
4. ACN / ABN (if applicable): ABN: 34 734 419 407
5. Postal address: PO Box 993 Gladesville NSW 1675
6. Telephone: 0411 712 888
7. Email: tony@horizoneddevelopments.com
8. Name of designated proponent (if not the same person at item 1): n/a

¹ If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

² If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A, EPBC Act). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.

³ If a person other than the person proposing to take action is to be nominated as the proponent, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

above and if applicable):

9. ACN/ABN of
designated proponent (if
not the same person
named at item 1 above):

n/a

**COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE
FEE(S) THAT WOULD OTHERWISE BE PAYABLE**

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:

**Note: You must advise the Department within 10 business days if you cease to
be a small business entity. Failure to notify the Secretary of this is an offence
punishable on conviction by a fine (regulation 5.23B(3) *Environment
Protection and Biodiversity Conservation Regulations 2000 (Cth)*).**

COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

I would like to apply for a
waiver of full or partial
fees under Schedule 1,
5.21A of the [EPBC
Regulations](#). 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:

- ☐ 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 agree to be the proponent for this action.
I declare that I am not taking the action on behalf of or for the benefit of any other
person or entity.

Signature



Date

4TH July 2016

9.2 Person preparing the referral information (if different from 8.1)

Individual or organisation who has prepared the information contained in this referral form.

Name Rebecca Hogan
Title Principal Ecologist
Organisation Hayes Environmental
Organisation name should match entity identified in ABN/ACN search

Postal address PO Box 2575, Bowral NSW 2576

Telephone 02 4862 3488, 0412 600 173

Email rhogan@hayesenv.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 4th July 2016

REFERRAL CHECKLIST

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

HAVE YOU:

- ☒ Completed all required sections of the referral form?
- ☒ Included accurate coordinates (to allow the location of the proposed action to be mapped)?
- ☒ Provided a map showing the location and approximate boundaries of the project area?
- ☒ Provided a map/plan showing the location of the action in relation to any matters of NES?
- ☐ Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at Attachment A) delineating the boundaries of the referral area?
- ☒ Provided complete contact details and signed the form?
- ☒ Provided copies of any documents referenced in the referral form? – With the exception of the two regional mapping projects, which are referenced. A website link to the Council vegetation map is provided.
- ☐ Ensured that all attachments are less than three megabytes (3mb)? – The Vegetation Management Plan (Hayes Env, 2016 – Attachment 3) and the Flora and Fauna Assessment Report (Hayes Env, 2016 – Attachment 6) are both substantial documents that exceed 3MB. A summary of relevant matters is provided within the referral. Full documents are provided to assist with assessment by Commonwealth officers.
- ☐ Sent the referral to the Department (electronic and hard copy preferred)?

Geographic Information System (GIS) data supply guidelines

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:

- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:

- For data, uncompressed or lossless compressed formats is required - GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
 - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
 - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or 'information about data' will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. (http://www.anzlic.org.au/policies_guidelines#guidelines).

The Department's preferred method is using ANZMet Lite, however the Department's Service Provider may use any compliant system to generate metadata.

All data will be provide under a Creative Commons license (<http://creativecommons.org/licenses/by/3.0/au/>)