### Application for a

# **Section 91 Licence**

under the *Threatened Species Conservation Act* 1995 to harm or pick a threatened species, population or ecological community<sup>\*</sup> or damage habitat.

1. Applicant's Name ^: (if additional persons require authorisation by this licence, please attach details of names and addresses)	Shawn Mahoney	
2. Australian Business Number (ABN):	64003917628	
3. Organisation name and position of applicant ^: <i>(if applicable)</i>	Terrey Hills Golf and Country Club Holding Pty Ltd	
4. Postal address ^:	PO Box 646 Terrey Hills NSW, 2084	Telephone ^:
5. Location of the action (including grid reference and local government area and delineated on a map).	Lot 31 DP 836316 116 Booralie Road Duffys Forest	1

A threatened species, population or ecological community means a species, population or ecological community identified in Schedule 1, 1A or Schedule 2 of the *Threatened Species Conservation Act 1995*.

<sup>&</sup>lt;sup>^</sup>The personal details of all Section 91 licences will be displayed in the register of Section 91 licences required under Section 104 of the *Threatened Species Conservation Act 1995*. See notes.

6. Full description of the action and its purpose (e.g. environmental assessment, development, etc.)	<ul> <li>On 16 March 2014 a localised wind storm swept through the Terrey Hills Golf and Country Club (THGCC) resulting in significant damage to a number of mature trees within the remnant Duffys Forest vegetation present.</li> <li>The damaged trees and holes in the ground from uprooted trees, pose an injury risk to visitors to the THGCC. Additionally fallen trunks and branches have damaged understorey vegetation and a boundary fence.</li> <li>The purpose of this is action is: <ol> <li>Prune standing barrels to a height that is below the level of internal fractures and fissures,</li> <li>Prune or remove trunks that have been made unstable due to uneven weight distribution as a result of a portion of a tree being damaged,</li> <li>Prune barrels to below a level where epicormic growth (which resulting in fragile and poorly attached limbs) cannot occur above head level,</li> <li>Re-orientate large trunks/barrels lying on the ground to improve habitat values,</li> <li>Remove damaged timber that is less than 30mm in diameter from the remnant to encourage seedling growth and reduce bushfire fuel.</li> <li>Remove branches from the boundary fence,</li> <li>Repair fence by replacing bent/damaged uprights.</li> </ol></li></ul> <li>All access to the remnant vegetation will be by foot. Where required a crane will be used to reach over standing vegetation to safely secure large branches while sections are being pruned. The crane will also be used to re-orientate the fallen barrels within the remnant to minimise ground disturbance.</li>
7. Details of the area to be affected by the action <i>(in hectares)</i> .	The total area to be affected by this action is approximately 1.4 ha of remnant vegetation adjacent to the 17 <sup>th</sup> hole. See attached map.
8. Duration and timing of the action <i>(including</i> <i>staging, if any)</i> .	All work in this area will be undertaken within 1 month immediately following the issue of the certificate (21 April 2014)
9. Is the action to occur	

on land declared as critical habitat <sup>*</sup> ? <i>(tick appropriate box)</i>	🗌 Yes	🛛 No		
10. Threatened species, populations or ecological communities to be harmed or picked.	<u>Scientific name</u>	<u>Common name</u> (if known)	Conservation status (i.e. critically endangered, endangered or vulnerable)	Details of no. of individual animals, or proportion and type of plant (e.g. fertile branchlets for herbarium specimens or whole plants or plant parts)
	Duffys Forest Ecological Community in the Sydney Basin Region		Endangered Ecological Community	It is estimated a total of 40 trees will be impacted undertaking this work.
<ul> <li>11. Species impact: (please tick appropriate box)</li> <li>a) For action proposed on land declared as critical habtat;</li> <li>or</li> <li>b) For action proposed on land <u>not</u> declared as critical habitat.</li> </ul>	an SIS is attached Items 12 to 25 har	d	] No I ⊠ Yes	□ No

N.B: Provision of a species impact statement is a statutory requirement of a licence application if the action is proposed on critical habitat.

The provision of information addressing items 12 to 17 is a statutory requirement of a licence application if the action proposed is <u>not</u> on land that is critical habitat. Information addressing any of the questions below must be attached to the application.

<sup>\*</sup> Critical habitat means habitat declared as critical habitat under Part 3 of the *Threatened Species Conservation Act 1995*.

12. Describe the type and condition of habitats in and adjacent to the land to be affected by the action.	The area to be affected is in two locations separated by the fairway associated with the 17 <sup>th</sup> hole of the golf course. The vegetation on the eastern side of the 17 <sup>th</sup> green is the western edge of an expanse of remnant vegetation within an inaccessible portion of the Kuring-gai Chase National Park. The vegetation and habitats in this portion of the Ku-ring-gai Chase National Park are in excellent to pristine condition. The western portion of the vegetation comprises of two isolated pockets surrounded by a golf course. See attached map.
13. Provide details of any known records of a threatened species in the same or similar known habitats in the locality (include reference sources).	The remnant vegetation of the golf course has been previously surveyed for three species of protected flora known to occur in the vicinity. The three species are: 1. Epacris purpurascens var purpurascens 2. Grevillea caleyi and 3. Tetratheca glandulosa None of the above three species were identified as occurring in the portion of the remnant this application is referring to. The attached map shows the locations of population of <i>Epacris</i> <i>purpurescens</i> var <i>purpescens</i> identified from field surveys.
14. Provide details of any known or potential habitat for a threatened species on the land to be affected by the action (include reference sources).	The remnant consists of potential habitat for three priority flora species however ground surveys have failed to locate any of the species within the areas associated with this application.
15. Provide details of the amount of such habitat to be affected by the action proposed in relation to the known distribution of the species and its habitat in the locality.	Approximately 1.4ha See Attached map

16. Provide an assessment of the likely nature and intensity of the effect of the action on the lifecycle and habitat of the species.	The storm damaged trees have opened up sections of the canopy and disturbance of the forest floor may result in germination from the soil stored seed bank. There is no evidence of weeds in the areas to be impacted and as such any new seedling recruitment in the open areas opened up as a result of the storm will be natives with the potential for new populations of the priority flora species listed in question 13 to establish in these areas.
17. Provide details of possible measures to avoid or ameliorate the effect of the action.	All access for work within the remnant vegetation will be undertaken by foot with care taken to minimise trampling. Care will be taken to ensure all barrels and felled branches are lowered to the ground in a controlled manner using winches, ropes and a crane to reach over the vegetation if required. The remnants will be monitored on an ongoing basis to identify any new occurrence of weeds. Weeds should they occur will be controlled in accordance with the Biodiversity Management Plan (in preparation).

N.B: The Director-General must determine whether the action proposed is likely to significantly affect threatened species, populations or ecological communities, or their habitats. To enable this assessment the Applicant is required to address items 18 to 24. Any additional information referred to in addressing these items must be attached to the application.

19. In the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.	Not applicable
<ul> <li>20. In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:</li> <li>(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or</li> <li>(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.</li> </ul>	<ul> <li>(i) The pruning of trees within the remnant will not impact on the extent of the Duffys Forest Ecological Community and will not place it at risk of extinction</li> <li>(ii) The pruning of trees within the Duffys Forest remnant will reduce the numbers of mature trees in localised prokets, however the opening up of the canopy will allow for immature trees already present and to occupy the space created. The localised effect will not be a long term and will not place the Duffys Forest Ecological Community at risk of extinction.</li> </ul>

<ul> <li>(i) The extent to which the habitat will be modified will be minimal (ie less than 0.6%). 1.4ha of the approximately 240ha of the community that remains</li> <li>(ii) Only individual trees within the remnant will be pruned all other part of the remnant will remain intact, as such the habitat will not become isolated from other areas as a result of this action.</li> <li>(iii) The canopy and ground disturbance will be a one off event which coupled with opening of the canopy may result in opportunistic germination of species. The long term survival of the ecological community (and possibly individual species within it) will be improved.</li> </ul>
This action will not have an adverse effect on any critical habitat either directly or indirectly.
There is no recovery plan or threat abatement plan for Duffys Forest Ecological Community.

24. Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.	
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#### Important information for the applicant

#### Processing times and fees

The *Threatened Species Conservation Act 1995* provides that the Director-General must make a decision on the licence application within 120 days where a species impact statement (SIS) has been received. No timeframes have been set for those applications which do not require a SIS. The Director-General will assess your application as soon as possible. You can assist this process by providing clear and concise information in your application.

Applicants may be charged a processing fee. The Director-General is required to advise prospective applicants of the maximum fee payable before the licence application is lodged. Therefore, prospective applicants should contact the Office of Environment and Heritage (OEH) prior to submitting a licence application.

A \$30 licence application fee must accompany a licence application.

#### Protected fauna and protected native plants

Licensing provisions for protected fauna and protected native plants are contained within the *National Parks and Wildlife Act 1974.* However, a Section 91 Licence may be extended to include protected fauna and protected native plants when these will be affected by the action.

If you are applying for a licence to cover both threatened and protected species please provide the information requested in Item 10 *as well as* a list of protected species and details of the number of individuals animals or proportion and type of plant material which are likely to be harmed or picked.

#### Request for additional information

The Director-General may, after receiving the application, request additional information necessary for the determination of the licence application. **Species impact statement** 

Where the application is not accompanied by a SIS, the Director-General may decide, following an initial assessment of your application, that the action proposed is likely to have a significant effect on threatened species, populations or ecological communities, or their habitats. In such cases, the *Threatened Species Conservation Act 1995* requires that the applicant submit a SIS. Following initial review of the application, the Director-General will advise the applicant of the need to prepare a SIS.

#### **Director-General's requirements for a SIS**

Prior to the preparation of a SIS, a request for Director-General's requirements must be forwarded to the relevant OEH Office. The SIS must be prepared in accordance with section 109 and 110 of the TSC Act and must comply with any requirements notified by the Director-General of OEH.

#### Disclosure of Personal Information in the Public Register of s91 Licences

The Public Register provides a list of licence applications and licences granted. A person about whom personal information is contained in a public register may request that the information is removed or not placed on the register as publicly available.

Protected fauna means fauna of a species not named in Schedule 11 of the National Parks and Wildlife Act 1974.

Protected native plant means a native plant of a species named in Schedule 13 of the National Parks and Wildlife Service 1974.

Copies of all applications and licences issued under section 91 and certificates issued under section 95 of the Act are available on the OEH website at <a href="https://www.environment.nsw.gov.au/threatenedspecies/S91TscaRegisterByDate.htm">www.environment.nsw.gov.au/threatenedspecies/S91TscaRegisterByDate.htm</a> or in hardcopy form from The Librarian, OEH, 59 Goulburn St, Sydney.

#### Certificates

If the Director-General decides, following an assessment of your application, that the proposed action is not likely to significantly affect threatened species, populations or ecological communities, or their habitats, a Section 91 Licence is not required and the Director-General must, as soon as practicable after making the determination, issue the applicant with a certificate to that effect.

N.B: An action that is not required to be licensed under the Threatened Species Conservation Act 1995, may require licensing under the National Parks and Wildlife Act 1974, if it is likely to affect protected fauna or protected native plants.

I confirm that the information contained in this application is correct. I hereby apply for a licence under the provisions of Section 91 of the *Threatened Species Conservation Act 1995*.

Shown MAHONEY Applicant's name (Please print) Hills Co Contra dub - General Mi Applicant's Position & Organisation (if relevant) (Please print) Applicant's signature Date

For more information or to lodge this form, contact the nearest branch of OEH's Conservation and Regulation Division:

Metropolitan Branch P: 02 9995 6802 F: 02 9995 6900 PO Box 668 Parramatta **NSW 2124** North East Branch P: 02 6640 2500 F: 02 6642 7743 PO Box 498 Grafton NSW 2460 North East Branch P: 02 4908 6800 F: 02 4908 6810 PO Box 488G, Newcastle **NSW 2300** 

North West Branch P: 02 6883 5330 F: 02 6884 8675 PO Box 2111 Dubbo NSW 2830

South Branch Biodiversity Conservation Section P: 02 6122 3100 F: 02 6299 3525 PO Box 622 Queanbeyan NSW 2620

Office of Environment and Heritage (NSW) PO Box A290, Sydney South NSW 1232 Phone: 131 555 (Environment Line) Fax: 9995 5999 Email: <u>info@environment.nsw.gov.au</u>

To:	Melina Budden
Company:	Office of Environement and Heritage
via e-mail:	Melinda.budden@epa.nsw.gov.au
Job no:	C3594-THGCC
From:	Georgina Nielssen
Date	11 April 2014

## Re: Clarification and additional information for Section 91 Application Terrey Hills Golf and Country Club

Dear Melina,

The following notes are amendments to the information provided for the Section 91 Application the I prepared on behalf of the Terrey Hills Golf and Country Club.

· · · · · · · · · · · · · · · · · · ·	On 40 March 2044 a leasting during storm sweet through the Tarrow Lille Calf
	On 16 March 2014 a localised wind storm swept through the Terrey Hills Golf
<ol><li>Full description of the</li></ol>	and Country Club (THGCC) resulting in significant damage to a number of
action and its purpose	mature trees within the remnant Duffys Forest vegetation present.
(e.g. environmental	The damaged trees and holes in the ground from uprooted trees, pose an
assessment,	injury risk to visitors to the THGCC. Additionally fallen trunks and branches
development, etc.)	have damaged understorey vegetation and a boundary fence.
	The purpose of this is action is:
	<ol> <li>Prune standing barrels to a height that is below the level of internal fractures and fissures,</li> </ol>
	2. Prune or remove trunks that have been made unstable due to uneven
	weight distribution as a result of a portion of a tree being damaged,
	3. Prune barrels to below a level where epicormic growth (which resulting
	in fragile and poorly attached limbs) cannot occur above head level,
	4. Re-orientate large trunks/barrels lying on the ground to improve
	habitat values,
	5. In order to maintain the recommended benchmark for coarse woody
	debris in dry schlerophyll forest, damaged timber that is greater than
	25-30cm in diameter will be left insitu, smaller timer and branches will
	be removed to encourage seedling growth and reduce bushfire fuel.
	6. Remove branches from the boundary fence,
	7. Repair fence by replacing bent/damaged uprights.
	8. Remove an entire dead tree which is situated close to the 17 <sup>th</sup> tee.
	All access to the remnant vegetation will be by foot. Where required a crane
	will be used to reach over standing vegetation to safely secure large branches
	while sections are being pruned. The crane will also be used to re-orientate
	the fallen barrels within the remnant to minimise ground disturbance.

16. Provide an assessment of the likely nature and intensity of the effect of the action on the lifecycle and habitat of the species.	The storm damaged trees have opened up sections of the canopy and disturbance of the forest floor may result in germination from the soil stored seed bank. There is no evidence of weeds in the areas to be impacted and as such any new seedling recruitment in the open areas opened up as a result of the storm will be natives with the potential for new populations of the priority flora species listed in question 13 to establish in these areas. A whole dead tree will be removed from the edge of the remnant adjacent to the 17 <sup>th</sup> tee. This will reduce landing sites for birds.
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<ul> <li>In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:</li> <li>(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or</li> </ul>	<ul> <li>(i) The pruning of trees within the remnant will not impact on the extent of the Duffys Forest Ecological Community and will not place it at risk of extinction</li> <li>(ii) The pruning of trees within the Duffys Forest remnant will reduce the numbers of mature trees in localised pockets within a 1.4ha area, however the opening up of the canopy will allow for immature trees already present and to occupy the space created. The localised effect will not be a long term and will not place the Duffys Forest Ecological Community at risk of extinction.</li> </ul>
(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.	

21. In relation to the habitat of a threatened species,	<ul> <li>(i) The extent to which the habitat will be modified will be minimal (ie less than 0.6%).</li> <li>1.4ha of the approximately 240ha of the community that remains</li> <li>(ii) Official control of the less than 0.6%.</li> </ul>
population or ecological community:	(ii) Other than a single dead tree which will be removed only individual trees within the remnant will be pruned all other part of the remnant will remain intact, as such the habitat will not become
(i) the extent to which	isolated from other areas as a result of this action.
habitat is likely to be	(iii) The canopy and ground disturbance will be a one off event which
removed or modified as a	coupled with opening of the canopy may result in opportunistic
result of the action	germination of species. The long term survival of the ecological
proposed, and	community (and possibly individual species within it) will be improved.
(ii) whether an area of	
habitat is likely to become	
fragmented or isolated from other areas of habita	+
as a result of the propose	
action, and	
(iii) the importance of the	
habitat to be removed,	
modified, fragmented or	
isolated to the long-term	
survival of the species,	
population or ecological	
community in the locality.	

Table of Coordinates of trees to be pruned in the remnant adjacent to the 17 hole.

Tree	East	North
1st tree	332893	6273791
2nd tree	332918	6273748
3rd tree	333083	6273555
4th tree	332924	6273743
5th tree	332961	6273714
6th tree	333009	6273638
7th tree	333032	6273622
8th tree	333068	6273556
9th tree	333091	6273549
10th tree	333091	6273546
11th tree	333136	6273476

The following plates are photos of the trees within the remnant adjacent to the 17<sup>th</sup> hole. The coordinates for these trees are in the above table. (Photos and coodrinate supplied by M.Budden OEH)



Plate 1 Tree No 1



Plate 2 Second Storm Damaged Tree



Plate 3 Third Storm Damaged Tree



Plate 4 4<sup>th</sup> Storm damaged Tree



Plate 5 4th Storm Damaged Tree



Plate 6 5<sup>th</sup> Storm damaged tree



Plate 7 6<sup>th</sup> Storm Damaged Tree



Plate 8 7<sup>th</sup> Storm damaged tree



Plate 9 7th Storm damaged tree



Plate 10 8th Storm damaged tree



Plate 11 8<sup>th</sup> storm damaged tree



Plate 12 9th Storm damaged tree



Plate 13 10<sup>th</sup> storm damaged tree



Plate 14 11<sup>th</sup> storm damaged tree



Plate 15 11<sup>th</sup> storm damaged tree