

Appendix 5.7 Woodland Management Plan: Proposed Strategic Housing Development, St Teresa's, Temple Hill, Monkstown, Blackrock, Co. Dublin

1.1 Introduction

This Woodland Management Plan (WMP) has been produced to support the application for permission for the proposed Strategic Housing Development (SHD) (herein "the proposed development") on lands at St. Teresa's, Temple Hill, Monkstown, Blackrock, Co. Dublin.

Objective NHC8 of the Blackrock Local Area Plan (Dún Laoghaire-Rathdown, 2015) states that "*it is an objective of the Council to protect and enhance biodiversity within the Plan boundary in accordance with the Green City Guidelines. Habitats including watercourses, hedgerows and woodlands act as corridors and links for wildlife and are essential for the migration, dispersal and genetic exchange of wild species*". In light of the presence of a small area of woodland (c. 0.4 hectares) within the lands, and the relative scarcity of this habitat within the Blackrock area and Dún Laoghaire-Rathdown County area in general, Dún Laoghaire-Rathdown County Council requested a WMP be submitted alongside the Environmental Impact Assessment Biodiversity Chapter for the proposed development.

This report should be read in conjunction with the Landscape Plan (Mitchell and Associates, 2021), the Environmental Impact Assessment Biodiversity Chapter (Scott Cawley, 2021) and the tree impact assessment report (The Tree File, 2021) for the proposed development. The points set out below should be followed to ensure all works within the woodland conform to National and European legislation and to meet the expectations of Dún Laoghaire-Rathdown County Council (DLRCC).

1.2 Vision

The intention of this Plan is to ensure that the woodland retained within the lands at St. Teresa's is protected from damage during the construction phase of the proposed development, and that it continues to function as an ecologically functional and diverse woodland following completion of the proposed development.

1.3 Management Objectives

No.	Objective
1	To retain the tree flora of the retained woodland throughout the construction phase of the proposed development
2	To ensure that the woodland remains suitable for local protected fauna
3	To enhance the canopy structure/diversity of the woodland through implementation of a planting and coppicing/clearance schedule

1.4 Timeframe

The plan will comprise the period during construction to ten years post-construction, with a review after five years. The review will assess whether objectives set out in Section 1.3 are being met, and the need for changes to actions.

1.5 Key Personnel

The contacts for the management of the woodland are as follows:

- Dún Laoghaire-Rathdown County Council (DLRCC) Biodiversity Officer
- Consultant Ecologist – Scott Cawley Ltd.
- Landscape Architects – Mitchell and Associates
- Arborist – The Tree File Ltd.

The DLRCC Biodiversity Officer will be contacted for relevant advice prior to the following:

- Ground works and soil removal (provide min of 7 days' notice prior to this) during construction
- Invasive Species removal during construction
- Monitoring of habitats, invasive species, bats and badger
- Replacement planting of trees and undergrowth within the woodland
- Coppicing or clearance of woodland trees

The advice of the consultant Ecologist will be sought in advance of:

- Conduct of works within woodland & demarcating sensitive areas on site
- Commencement of works within woodland

- Tree felling/woodland works (7 days' notice required)
- Wildlife Monitoring
- Replacement planting of trees and undergrowth within the woodland

The Landscape Architect will be contacted regarding:

- Soil removal (provide min of 7 days' notice prior to this)
- Woodland Works Specification Queries
- Landscape queries

The Arborist will be contacted for advice regarding:

- Arboricultural works
- Tree protection measures
- Woodland tree planting queries

2. General Measures

- 1) The Woodland Management Plan – which shall, at a minimum, contain all the measures set out in this document – is to be implemented by the Landscape Contractor.
- 2) The consultant Ecologist will be informed a minimum of seven days in advance of all construction/landscaping works intended to occur within the woodland. They will then notify the DLRCC Biodiversity Officer.
- 3) All materials and machinery are to be stored outside of the woodland and outside of the root protection area of the trees that make up the woodland.
- 4) No excavation, plant or vehicle movement, materials handling or storage is to occur within the woodland unless first agreed with the Arborist and consultant Ecologist who will notify Dún Laoghaire-Rathdown County Council prior to this work.
- 5) Contractors will not use the woodland as a means of passage between different sections of the site, in order to avoid causing unnecessary disturbance to the woodland (noise/vibration/litter/spoil/trampling etc.).
- 6) All measures for the protection of trees will be implemented in advance of commencement of ground works. These measures will include the use of temporary fencing at sufficient distance from trees to prevent damage to the root protection zone. The appropriate distance will be agreed with the arborist in advance of works.
- 7) Due care will be taken to avoid any potential disturbance to badgers and their setts. Six setts occur within the woodland, two of which may be active. Prior to sett closure for the duration of construction, a 30m exclusion zone will be maintained around the sett entrances from which all machinery will be excluded. Notice shall be provided to the consultant Ecologist and the DLRCC Biodiversity Officer in advance of any works within the woodland and within the 30m radius of badger setts. This includes works to remove trees. Further detail on sett closure is provided in point 2 of Section 3 Ecological Measures during Construction below.

3. Ecological Measures during Construction

- 1) The consultant Ecologist shall be notified a minimum of seven days prior to any works within the woodland. The consultant Ecologist will resurvey the woodland for invasive species in advance of any earth works in the area. It is recommended that this be undertaken in late spring (between March and May), when the plants are in their vegetative phase and clearly identifiable above ground. Once identified, invasive species (namely three-cornered leek *Allium triquetrum* and Spanish bluebell *Hyacinthoides hispanica*) will be targeted for initial removal by hand trowel by the site landscape contractor;
- 2) Following notification for commencement of works and monitoring of badger setts within the lands for a minimum of 10 consecutive days to establish if the setts are active, the consultant Ecologist will install one-way badger gates on setts within the woodland for the purpose of excluding badgers during the construction phase of the proposed development. Five of the six setts will be soft blocked (using a one-way badger gate (or a similar device) will be installed at each sett entrance after which the gate will be soft blocked with stones) for the duration of works, while the northernmost sett will be permanently closed through soft blocking and removal. The consultant Ecologist will liaise with the DLRCC Biodiversity Officer regarding sett closures.

- 3) An inspection will be carried out on all trees intended for felling which have been identified as containing potential roost features according to the Environmental Impact Assessment Biodiversity Chapter (Scott Cawley, 2021). Access will be provided to the consultant Ecologist for inspection of potential roost features at height (normally provided using a mobile elevated working platform or similar). It is advisable that tree felling be undertaken between mid-September and mid-November or between March and late April in order to avoid the hibernation and maternity season for bats, when they are at greatest risk from disturbance.
- 4) Where works within the woodland occur during the bird breeding season (1st March through 31st August, inclusive), the consultant Ecologist will be notified. The consultant Ecologist will undertake checks for breeding birds within the relevant area of proposed works. Where their absence is confirmed by the consultant Ecologist, works will proceed immediately and without delay (i.e. within 2-3 days of the survey). Where works are delayed, a further check may be necessary. Where birds are found to be nesting within the proposed works area, a temporary exclusion zone will be implemented (the size of which will depend on the bird species). No works will be undertaken within the exclusion zone until nesting has finished.
- 5) The consultant Ecologist will confirm that the habitat enhancement measures committed to within the Environmental Impact Assessment Biodiversity Chapter are carried out at the landscaping stage of construction. The consultant Ecologist will liaise with the DLRCC Biodiversity Officer regarding the use of supplementary seeding of grassy verges.

4. Ecological Measures Post-construction

- 1) Following completion of landscaping, the consultant Ecologist will check the planting within the vicinity of badger setts to ensure that a level of screening is provided at sett entrances. Where necessary, adjustments may be made to planting to ensure adequate planting density is reached in agreement with the DLRCC Biodiversity Officer.
- 2) Following completion of landscaping, the consultant Ecologist will check light spill from installed lighting bollards within the woodland to ensure compliance with specifications set out within the planning application. These specifications are that lights emit at 1 lux above ground level¹, and 2.5 lux on ground at footpath level.
- 3) In the first year following completion of works, canopy gaps within the woodland will be planted with a variety of tree species such as hazel *Corylus avellana*, wild cherry *Prunus avium*, birch *Betula pubescens*, and oak *Quercus robur*.
- 4) Replacement planting of canopy species will be completed on a phased basis, initially over the ten-year period following completion of the proposed development, with planting at years one, five and ten. This will target the replacement of young sycamore *Acer pseudoplatanus* trees, which have a tendency to form a monoculture within urban woodland, with a range of native species, including those mentioned in 3, above. The planting scheme will also target replacement of failed saplings, and standing dead or poor-condition trees.
- 5) Deadwood from the woodland will be retained within the woodland, in order to create microhabitats for local invertebrates. This may be done through stockpiling in a single area of the woodland, or through confining removal of dead wood to areas overhanging pathways, i.e. where it may form a risk to health and safety.
- 6) Machinery such as lawnmowers, or other vehicles which have the potential to disturb badgers or compact soil around tree roots, will not be used within the woodland post-construction. The woodland understorey will not be actively managed through mowing, cutting or mulching with woodchip following its establishment. The objective of this is to allow for the development of a woodland understorey and minimise the potential for disturbance to local fauna. The woodland understorey will consist largely of a carpet of woodrush *Luzula sylvatica* and spring-flowering bulbs.

5. Ecological Monitoring

- 1) Following notification for commencement of works, the consultant Ecologist will check that the measures for protection of woodland and treelines (i.e. restriction of working areas, installation of protective fencing) are being implemented and adhered to. These checks will be undertaken on an ongoing basis.

¹ Based on information provided by O'Connor Sutton Cronin Consulting Engineers on lighting design, 31st May 2021.

- 2) Monitoring of badger setts within the lands will be undertaken by infra-red motion triggered cameras throughout construction and for a period of six months following completion of the proposed development to determine if the sett is re-occupied by badgers. Where there are signs of reoccupation before completion of construction, exclusion of badgers from setts may be undertaken again, in agreement with the DLRCC Biodiversity Officer.
- 3) Badger setts will be monitored for a period of six months following completion of the proposed development and their re-opening to check for re-occupation.
- 4) Monitoring surveys of the proposed compensatory hedgerow along the western boundary will be undertaken in the first year following completion of the proposed development, then in year 3 and year 5. The aim of monitoring is to record the number of species per 30m section. Where fewer than five woody species occur within a 30m section of hedgerow, a recommendation for supplementary planting will be made.
- 5) Monitoring surveys of the proposed 1m grassy verge or edge habitat around recreational open spaces will be undertaken in the first year following completion of the proposed development, and then in year 3 and year 5. Surveys will be undertaken by the consultant Ecologist between June and September. Monitoring will be 1m x 1m relevés, at up to 10 locations throughout the site (to be determined in year 1 of monitoring), where species and their total cover (in domin or percentage scale) are recorded. Where species richness is found to decline over the survey period, recommendations may be made to change management of the verge.
- 6) Monitoring of bat activity within the woodland will be undertaken within the first year following completion of the proposed development, and then at year 3 and year 5. Monitoring will include measuring light spill both at ground level and at 2m height above ground level at locations to be determined within year 1 of monitoring. Additionally, two separate manual bat activity transects shall be undertaken within the lands during the season of peak bat activity (i.e. between May and August) in year 1, 3 and 5. Each survey will be separated by a period of at least one month to maximise spread through the survey season. The findings of the surveys will be reported to the DLRCC Biodiversity Officer.
- 7) A monitoring report will be issued to the DLRCC Biodiversity Officer within one month post completion of the surveys for the year for each year of monitoring.

6. Timetable of Actions

[illegible]

[illegible]

7. References

Mitchell and Associates (2021) *Landscape Masterplan for St. Teresa's Blackrock*. Drawing No. 0100. Produced by Mitchell and Associates Landscape Architecture for Oval Target Ltd.

National Roads Authority (2010) *The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads*. Revision 1, December 2010. Available online at <https://www.tii.ie/technical-services/environment/construction/Management-of-Noxious-Weeds-and-Non-Native-Invasive-Plant-Species-on-National-Road-Schemes.pdf>

Scott Cawley (2021) *Environmental Impact Assessment: Proposed Strategic Housing Development, St Teresa's, Temple Hill, Monkstown, Blackrock, Co. Dublin*. Chapter 5. Biodiversity. Report for Oval Target Ltd.

The Tree File (2021) *Arboricultural Report: Proposed Development at St. Teresa's, Temple Hill, Monkstown, Blackrock, Co. Dublin*. Report for Oval Target Ltd.