

PART E: 2026 European otter (*Lutra lutra*)
survey for the proposed works at Donore
Harriers Athletics club
Chapelizod, Dublin, 20
to inform a section 54 derogation
application



Prepared by Triturus Environmental Ltd. for Dublin City Council.

July 2026

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Table of contents

1. Introduction	3
1.1 Background	3
1.2 Otter legislative protection	4
1.3 Statement of authority	5
2. Methodology	6
2.1 Otter sign surveys	6
2.2 Total corridor otter survey (TCOS) methodology	6
2.3 Survey constraints	7
3. Results	9
3.1 Study area	9
3.2 Otter records	9
4. Discussion	17
5. Derogation licence application	18
5.1 Test 1 - Justification for Derogation	19
5.2 Test 2 - Assessment of Alternatives	20
5.3 Test 3 – Impact of a Derogation on Conservation Status	27
6. References	29
7. Appendix A – otter signs database	31

1. Introduction

1.1 Background

Triturus Environmental Ltd. were commissioned by Dublin City Council Parks Biodiversity and Landscape Services to conduct a pre-construction European otter (*Lutra lutra*) survey of the River Liffey (09L01) for resurfacing works of the Donore Harriers running track at Chapelizod, situated on the north bank of the River Liffey (**Figure 2.1**). The purpose of the survey was to establish the presence of the breeding and or resting places of otter to fulfil the post-consent planning conditions in accordance with the granted PART 8 planning commitments (Ref. 3723/24).

A low number of otter signs were recorded during the June 2026 survey, reflecting limited marking opportunities for otters in addition to relatively high levels of human-related disturbance. Most otter signs were concentrated in a poorly accessible woodland west of the Donore Harriers athletic club. This area on the north bank of the River Liffey also supported five legally protected holts (breeding areas), three of which showed some signs of activity. A legally protected couch (resting area) was also identified adjacent to the Donore Harriers running track on the north bank of the Liffey (**Figure 2.1**).

In light of current proposals for the athletic track refurbishment in July 2026, we are applying for a derogation covering the period 1st of August 2026 to the 31st December 2026. The otter survey ensured the otter survey was contemporary (i.e. within 12 months) line with CIEEM best practice for mobile species such as otter. The June 2026 otter survey therefore informed the current derogation application by providing current, site-specific evidence of otter presence, activity and habitat use.

The breeding and or resting areas of otter are protected under the Wildlife Acts 1976-2021 and are included in a system of strict protection pursuant to the requirements of Articles 12, 13 and 16 of the Habitats Directive (92/43/EEC) (NPWS, 2021). Therefore, given the location of the identified protected otter habitats in the vicinity of the proposed development (i.e. <150m) and given the potential for indirect effects only on otter via disturbance, a derogation licence is required under the European Communities (Birds and Natural Habitats) Regulations 2011-2021. This application is outlined in **section 5** of the report. As outlined, the current application is specific to the identified one couch site (C1) and five holt sites (H1-H5). Holts H1 and H4 were considered potentially active given signs of recent mammal activity. Holt H5 was also considered potentially active given its location in proximity to the regularly used couch site C1 (**section 3, results**).

1.2 Otter legislative protection

The Eurasian otter is a species of conservation concern and high priority, having suffered major declines in its range and population throughout Europe since the 1950s. It is classified as ‘near threatened’ by the IUCN Red List with a decreasing population trend and, as such, is listed in Appendix I of CITES, Appendix II of the Bern Convention (Council of Europe, 1979) and Annexes II and IV of the EU Habitats Directive (92/43/EEC).

Otters, along with their breeding and resting places, are also protected under provisions of the Irish Wildlife Acts 1976-2021. Otters have additional protection because of their inclusion in Annex II and Annex IV of the Habitats Directive 92/43/EEC, which is transposed into Irish law by the European Union (Birds and Natural Habitats) Regulations 2011-2021.

The protection of otters is outlined in Article 51(1) and (2):

Protection of fauna referred to in the First Schedule;

51.(1) *The Minister shall take the requisite measures to establish a system of strict protection for the fauna consisting of the species referred to in Part 1 of the First Schedule.*

51.(2) *Notwithstanding any consent, statutory or otherwise, given to a person by a public authority or held by a person, except in accordance with a license granted by the Minister under Regulation 54, a person who in respect of the species referred to in Part 1 of the First Schedule (listed below). Items (b) and (d) may be considered most relevant to developments.*

- (a)** *deliberately captures or kills any specimen of these species in the wild,*
- (b)** *deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,*
- (c)** *deliberately takes or destroys eggs of those species from the wild,*
- (d)** *damages or destroys a breeding site or resting place of such an animal, or*
- (e)** *keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive, shall be guilty of an offence.*

In an Irish context, according to the most recent Article 17 reporting (NPWS, 2025), otters remain at ‘Favourable’ conservation status with a stable trend. Otters were considered to be previously ‘Near Threatened’ (Marnell, 2009) based on a 20-25% decline between 1980 and 2005 (Bailey & Rochford, 2006). However, the current conservation status in Ireland is now of ‘Least Concern’ (Marnell et al., 2019). This data was supported by the most recent Otter Survey of Ireland 2023-2024 covering 1,063 sites with otters present at 65% [95%CI 62 - 68%] of sites in ROI and 66% [58 - 74%] of sites in NI (Reid et al., 2025). The results were supportive of a ubiquitous otter distribution nationally, despite the report concluding that the occupancy had likely declined since the 1980s. Regardless of the positive national outlook overall, otters remain ‘Near Threatened’ at a global level according to the IUCN Red List (Loy et al., 2022).

1.3 Statement of authority

The author of this report, Ross Macklin PhD (candidate), B.Sc. (Hons) MCIEEM., MIFM, HDip GIS, PDip IPM is an aquatic, fisheries and mammalian ecologist with 21 years' professional experience in Ireland. He is director of Triturus Environmental Ltd. Ross has a B.Sc. in Applied Ecology and diplomas in integrated Pest Management and GIS. He is currently completing his Ph.D. in fisheries ecology. He has considerable experience in a wide range of ecological and environmental projects, including EIAR, EclA, CEMP and AA/NIS reporting, as well as biodiversity, water quality monitoring, invasive species, mammalian surveys and fisheries management. He also has expert identification skills in fisheries, macrophytes, freshwater invertebrates, protected species and habitats. His diverse project experience includes work on renewable energy developments, flood relief schemes, road schemes, waste management, blueways/greenways, biodiversity projects, non-volant mammal monitoring, fisheries management projects and catchment wide water quality management. He has worked extensively in Cork and Dublin on urban mammal monitoring projects and is considered an expert in his field nationally. He recently completed and was lead or co-author author of numerous catchment wide otter surveys including the Lower Lee FRS Otter Survey, Dublin City Otter Survey, Dún Laoghaire Rathdown Otter Survey, Tullamore Otter Survey, Fingal Otter Survey, River Boyne Otter Survey, Carlow Otter Survey and Monaghan Otter (in prep.) which are among the largest urban/ sub-urban otter surveys conducted in Ireland. He has also worked on several otter derogation projects that included holt closures, artificial holt construction and otter habitat restoration including management plans. Furthermore, he has worked on the first PFAS contamination studies of Irish riverine food chains including otter, fish and invertebrates using eDNA metabarcoding and PFAS testing at each trophic level. He has also worked on otter population genetic studies in Cork and Dublin, among the few urban otter population genetics studies carried out nationally.

2. Methodology

2.1 Otter sign surveys

A bank walkover and kayak-based otter survey was undertaken by two Triturus staff on the River Liffey adjoining the study area on Wednesday 10th and Thursday 11th June 2026. The survey area comprised 1.4km of linear riverine and riparian habitat between Chapelizod Industrial Estate and the Garda Boat Club, Chapelizod (**Figure 2.1**).

The survey was completed during optimal base flow conditions (dry, mild, bright & settled) which ensured that a good representation of habitat marked by otter could be recorded in the field, including territorial marking or marking of feeding areas. The survey also deliberately coincided with a dry period to minimise rain washout of otter signs. Each otter sign was logged by type, location (handheld GPS), condition and approximate age for later interpretation to distinguish differences in habitat use and activity. Spraints were subjectively assessed as either fresh (very recent), mixed-age (recent & older spraints, typically indicative of a regular marking site) or old (spraint degrading and not recently deposited). Furthermore, indicative counts of spraint (i.e. number of individual spraints) and the number of sprainting sites (often separate clusters in one area) were noted. This helped indicate the frequency of otter marking that can clarify preferential use of habitat over time. High marking frequency often demarcates important territory.

2.2 Total corridor otter survey (TCOS) methodology

The survey broadly followed the best practice 'standard survey' methodology for otter as recommended by Bailey & Rochford (2006), Chanin (2003) and Lenton et al. (1980) (all based on observations by Erlinge, 1967). However, methodology differed in that the entire waterline was surveyed rather than the standard 500-600m sections selected at regular (5-8km) intervals from accessible points (e.g. bridges). The novel survey technique, known as a total corridor otter survey (TCOS) (Macklin et al., 2019), involved a continuous, unbiased survey effort along a survey reach, encompassing the entire channel/waterbody and riparian zones in addition to any adjoining waterbodies. Triturus have employed this comprehensive otter survey methodology in many other large scale projects across Ireland, including the Dublin Otter Survey (2018-2019), DLR Otter Survey (2019-2020), Fingal Otter Survey (2024-2025) and Carlow Otter Survey (2025). Whilst labour intensive, this methodology greatly increases the likelihood of otter sign detection and facilitates a more accurate estimation of otter usage and activity in a given area of habitat. This is especially true of more cryptic signs such as legally protected holts and couches that are often located in poorly accessible areas often not covered by a standard survey approach.

2.3 Survey constraints

The June¹ survey fell outside the optimal survey period for otter sign surveys, i.e. October to April (Triturus, pers. obs.). However, whilst this typically reduces the number of detectable marking signs (e.g. spraint, latrine), permanent landscape features such as legally protected holts and couches are less affected in terms of detectability apart from vegetation growth that can mask such dwelling places. Despite these shortcomings very experienced surveyors can still detect breeding and resting areas using a combination of smell and visual observation.

¹ Otters are known to scent mark more frequently during the late autumn, winter and early spring period rather than summer or autumn (i.e. pre-breeding, Triturus pers. obs.; Kim & Hong, 2024; Sittenthaler et al., 2020; Almeida et al., 2012; Hutchings & White, 2000; Macdonald & Mason, 1987; Mason & Macdonald, 1987).

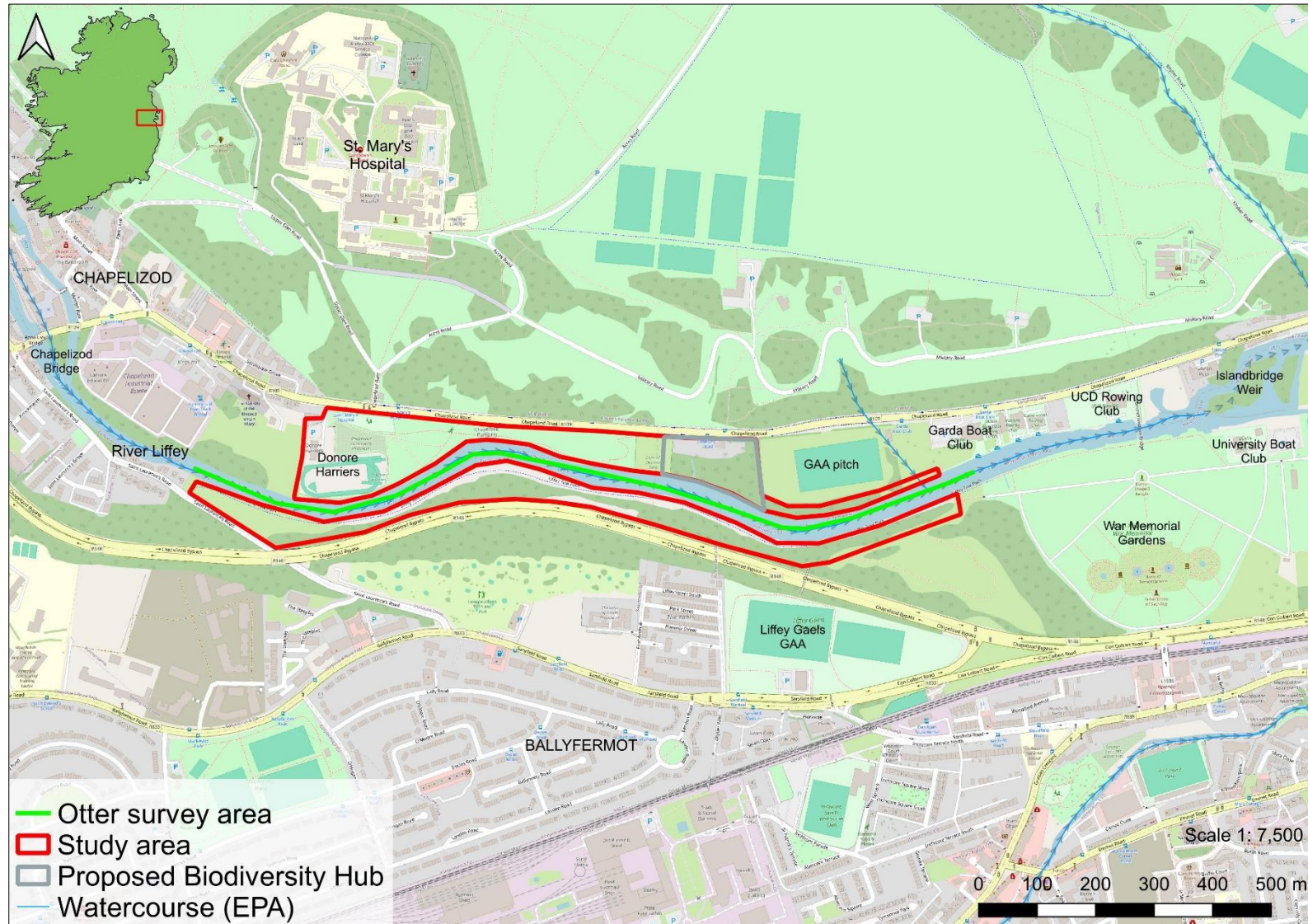


Figure 2.1 Otter survey area on the River Liffey near Chapelizod, June 2026

3. Results

3.1 Study area

The survey area comprised approximately 1.4km of linear riverine and riparian habitat extending between Chapelizod Industrial Estate and the Garda Boat Club, Chapelizod (**Figure 3.1**). The River Liffey corridor within the study area was characterised by well-developed riparian vegetation, including tall herb communities along the river margins, mature broadleaved trees, woodland pockets and localised areas of scrub. These habitats provide suitable commuting and resting habitat for otter. The northern bank in the vicinity of Donore Harriers was characterised by relatively undisturbed riparian habitat, with dense vegetation, mature broadleaved woodland and limited public access. This combination of vegetative cover, habitat connectivity and low levels of anthropogenic disturbance provides favourable conditions for otter, a species that typically selects secluded areas for breeding and resting (Macklin et al., 2019). East of the Donore Harriers running track, the north bank was characterised by a narrow, highly modified riparian corridor associated with the Garda Boat Club and other recreational amenities. High levels of pedestrian and recreational activity, together with limited riparian cover and habitat connectivity, reduce its suitability for otter breeding and resting areas.

The southern bank of the River Liffey was subject to considerably higher levels of anthropogenic disturbance due to the presence of the River Liffey walkway, which experiences regular pedestrian and recreational use. The walkway runs immediately adjacent to the riparian corridor, resulting in only a narrow vegetated buffer between human activity and the riverbank. This close proximity to frequent disturbance reduces the suitability of the southern bank for breeding and resting otters, although it remains suitable for commuting and foraging.

3.2 Otter records

A low number of otter signs ($n=9$) were recorded within the survey area in June 2026. Signs were highly localised with most identified on the north bank of the Liffey (**Figure 3.1; Table 3.1**).

A total of four potential holts (legally protected resting areas) were identified in a scrubby woodland block west of Donore Harriers. Two of these (H2 & H3) showed no signs of recent otter activity (i.e. inactive) but there was evident mammal usage of holt H1 that was located behind a soil embankment and at holt H4 with evidence of recent excavation (**Figure 3.2; Plates 3.2 & 3.4**). An otter slide to the River Liffey was identified close to holt H1 (c. 15m away). All four potential holt locations were in close proximity and were located <150m from proposed works area at Donore Harriers running track.

A legally protected couch (resting area) was also identified during the survey. This was located under a fallen riverside tree on the north bank of the River Liffey adjacent to the Donore Harriers running track (**Plate 3.5**). An additional otter holt (H5) was recorded at the margin of the couch site, situated at the base of a mature tree within the riverbank (**Plate 3.6**). The holt and couch sites were located <10m from the existing running track. Two spraint sites (containing only old, degraded spraint) were recorded, both on the steeper south bank of the Liffey (**Figure 3.1**).

A photographic audit of the survey area, inclusive of the identified holt and couch areas, is presented in **Plates 3.1-3.9** below.

Table 3.1 Summary of the otter signs recorded in June 2026

Otter sign	Total no.
Holt (potential)	5
Spraint site	2
Slide	1
Couch	1
Total	9



Plate 3.1 Representative image of the River Liffey survey area, June 2026 (facing downstream)



Plate 3.2 Location of holt H1 in a large earthen embankment west of Donore Harriers running track, June 2026



Plate 3.3 The likely inactive holt H2 with no signs of recent otter activity, June 2026



Plate 3.4 Potential otter holt H4 with obvious recent excavation, June 2026



Plate 3.5 Regularly used couch site C1 located under a fallen tree on the north bank of the River Liffey adjacent to the Donore Harriers running track



Plate 3.6 Potential otter holt H5 adjacent to couch site C1 located under a fallen tree on the north bank of the River Liffey near Donore Harriers running track



Plate 3.7 Example of old otter spraint on a marginal boulder along the steep south bank of the River Liffey



Plate 3.8 The steep, heavily wooded and scrubbed south bank of the River Liffey was of poor suitability for otter marking or holting



Plate 3.9 High disturbance area of the River Liffey at the Garda Boat Club (poor marking suitability for otter)

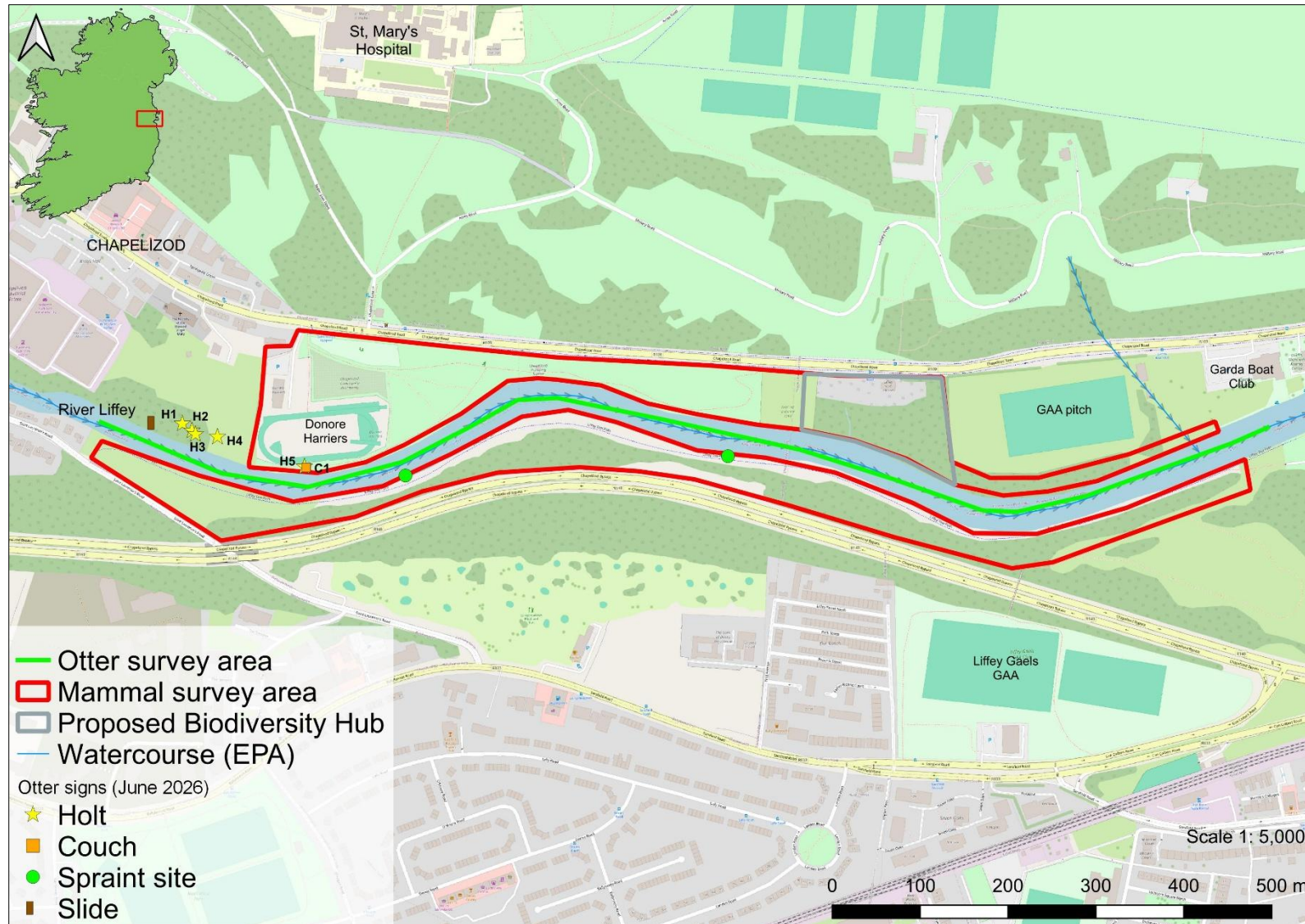


Figure 3.1 Otter signs recorded during the June 2026 survey showing an evident concentration of signs at the western extent of the survey area

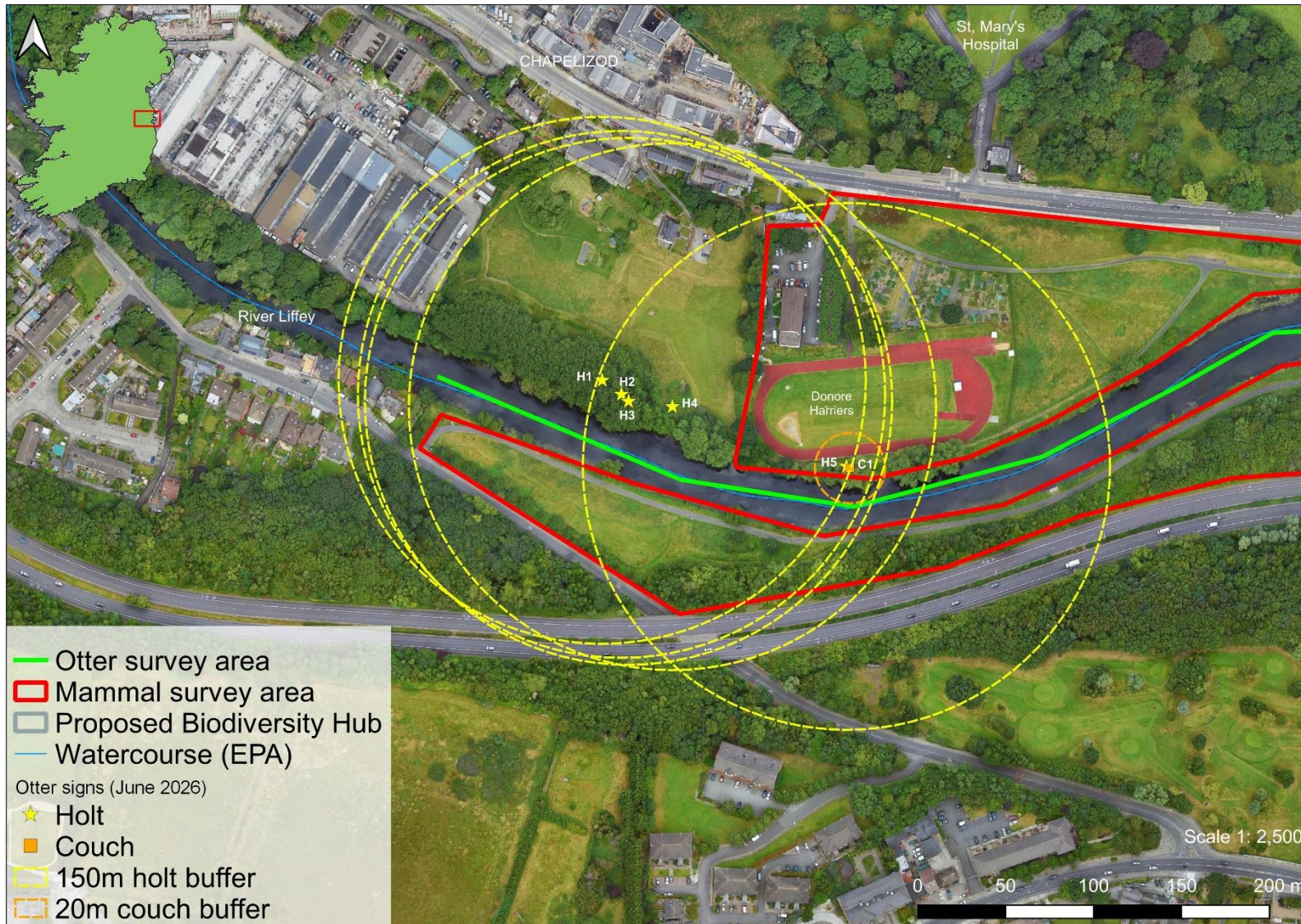


Figure 3.2 Otter sign distribution map showing 20m & 150m buffers for couch and holt sites, respectively

4. Discussion

The June 2026 survey recorded a total of $n=9$ otter signs, comprising five potential holts, one couch, one slide and two spraint sites. Most signs were concentrated on the northern bank of the River Liffey in the vicinity of Donore Harriers running track, reflecting the presence of more secluded riparian habitat with lower levels of anthropogenic disturbance. Although the overall number of signs was relatively low, this is considered to reflect both the highly modified nature of the river corridor and the generally high levels of human activity within the study area, rather than an absence of otter. Furthermore, the survey was undertaken during June, outside the principal pre-breeding marking period when otter scent-marking activity is typically at its highest (see Section 2.3).

The survey identified five potential holts (H1–H5) and one couch (C1), all of which are legally protected breeding or resting places under the Wildlife Acts 1976–2023 and the European Communities (Birds and Natural Habitats) Regulations 2011–2021. Holts H1-H4 were clustered within an area of dense scrub and mature woodland on private lands west of Donore Harriers running track, approximately 80m from the proposed works, while holt H5 was located adjacent to the couch site C1 at the base of a fallen tree within the riverbank approximately 10m from Donore Harriers running track (**Figures 3.1-3.2**).

Holt H1 exhibited evidence of recent mammal activity and was associated with a nearby otter slide leading directly to the River Liffey, indicating that it may be in active use. Holt H4 also showed signs of recent excavation and mammal activity and was similarly considered potentially active. In contrast, holts H2 and H3 showed no evidence of recent otter occupation and were considered inactive at the time of survey. Holt H5 was also considered potentially active given its location in proximity to the regularly used couch site C1. All five holts are suitable for occupation by otter and in accordance with the precautionary principle, should be regarded as protected breeding or resting areas.

The identified couch (C1) was located beneath a fallen crack willow within the riparian woodland immediately adjacent to the Donore Harriers running track (**Figures 3.1-3.2**). The couch functioned as a regularly used resting area and was associated with nearby otter activity. As with the holt sites, couch sites are typically located in areas providing high levels of shelter and seclusion, with dense riparian vegetation and minimal human disturbance (Tolrà et al., 2024; Weinberger et al., 2019).

In accordance with Transport Infrastructure Ireland (TII) buffer thresholds for otter, 20m and 150m buffers around couch and holt areas respectively are shown relative to the development boundary (TII, 2008; **Figure 3.2**). Otter breeding areas (holts) are especially sensitive to direct human disturbance (Mason & Macdonald, 2009), with otter reproductive success known to be higher in less disturbed habitat, hence their preferential fidelity for low disturbance areas of habitat (Brazier & Macklin, 2020; Macklin et al., 2019; Scorpio et al., 2016; Ruiz-Olmo et al., 2011; Loy et al., 2009; Kruuk, 2006).

Provided that the mitigation measures outlined in this report are fully implemented, inclusive of the relevant actions detailed in the Construction and Environmental Management Plan (CEMP) and subject to the granting of a derogation licence for indirect disturbance to otter, it is anticipated that no significant adverse effects on otters will result from the proposed development.

5. Derogation licence application

As outlined above, the June 2026 otter survey undertaken by Triturus Environmental Ltd. identified five potential otter holts (H1–H5) (potential breeding areas) and one couch site (C1) (resting area) within the study area adjacent to the Donore Harriers running track (**Figure 3.2**). Holts H1–H4 were located within an area of mature scrub and woodland on the north bank of the River Liffey, approximately 80m from the proposed works. The couch site (C1) and holt H5 were located beneath a fallen crack willow tree within the riparian corridor, approximately 10m from the Donore Harriers running track. Holts H1 and H4 were considered potentially active based on evidence of recent mammal activity, while holts H2 and H3 exhibited no evidence of recent occupation but remain structurally suitable for future use by otter. Holt H5 was also considered potentially active given its proximity to the regularly used couch site (C1). Consequently, this derogation licence application relates to the potential indirect disturbance of holts H1–H5 (potential breeding areas) and couch site C1 (resting area).

Otters, along with their breeding and resting places, are protected under provisions of the Irish Wildlife Acts 1976–2021 and also pursuant to the requirements of Articles 12, 13 and 16 of the Habitats Directive (92/43/EEC) as an Annex IV species. Indirect disturbance is therefore possible.

Potential impacts are limited to temporary and indirect disturbance of the identified holt and couch sites, should they be active at the time of construction works, due to their proximity to the proposed development. As such, a derogation licence will be required in advance of any works in these areas as per Article 16 of the Habitats Directive and Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations, 2011–2021.

A mitigation-by-design approach has been integrated into the development's plan to minimise the footprint to limit incursion on the natural riparian corridor of the River Liffey. In addition to a pre-construction survey (as outlined above) and construction best practice (e.g. water quality protection), numerous mitigation measures will be applied to reduce disturbance and impacts to otter. These are outlined in **section 5.1** below.

Given likely unavoidable disturbance to the breeding and or resting places of otter in areas adjoining the proposed development, a derogation licence is requested for the proposed works, with the following details:

Applicant: Dublin City Council Parks Biodiversity and Landscape Services

Supervised by: Ross Macklin of Triturus Environmental Ltd, Unit 5 Anchor Business Park, Little Island, Co. Cork, T45 XN59.

Species: European otter (*Lutra lutra*)

Activity: Donore Harriers running track maintenance and flood lighting installation

Timeline: 1st July 2026 – 31st December 2026 (covering the annual period of a permitted derogation consent)

5.1 Test 1 - Justification for Derogation

5.1.1 *Explanation as to why the derogation licence sought is the only available option for works and no suitable alternative exists as per Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations.*

The derogation is sought under **Article 16(1)(c)** of Regulation 54(2) given that the proposed works are;

- ***(c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.***

The derogation is required given the proximity of the identified otter breeding and resting places (i.e. five holts, H1-H5 & one couch, C1) to the proposed refurbishment works at Donore Harriers running track. There is no alternative option but to proceed with the development in the vicinity of the identified potential breeding and resting areas. Although holt closures have been avoided through the design process, indirect disturbance during the works will be unavoidable. As outlined in section 5.2 below, no suitable alternative designs or locations for the development exist.

Avoidance and mitigation measures are summarised below in section 5.3. The disturbance impacts of the works on the identified otter breeding areas cannot be fully avoided or mitigated, considering the proximity to and nature of the proposed works. Justification for the project in the interests of public health, public safety, including social, economic and beneficial consequences of primary importance for the environment, is summarised below.

Social & Economic Public Interest

Dublin City Council's overarching policy focuses on inclusive, community-driven physical activity, ecological preservation, and equitable access to green infrastructure. These works have been approved through the Dublin City Council planning Part 8 process and forms part of an essential element in the provision of space in sport and leisure for the community

The purpose of the proposed flood lighting is to upgrade the existing sports facilities to ensure the availability of, and equal access to sporting facilities for local populations. This proposal also represents a significant investment by Sports Capital Grants and Dublin City Council. Parks, Biodiversity and Landscape Services propose to remove existing floodlight provision, install 5 number new floodlight columns with 3 luminaires on 2 columns and 2 luminaires on 3 columns at the existing running track at Donore Harriers Athletic Club, Liffey Valley Park, Chapelizod.

The works undertaken will significantly improve the safety and usability of the athletics track. The project proposal was developed in collaboration with all stakeholders as part of an open participative design process. The provision of high quality, smart and energy efficient public lighting enhances peoples' experience of the City and their sense of place, safety and security. Artificial light provides valuable benefits to society, including through extending opportunities for sport and recreation. The Council has ensured that public lighting is appropriately and sensitively designed in order to balance the requirement for adequate lighting with safety, amenity and ecological considerations.

In summary the main construction works shall comprise of:

Track works

- The whole of the track shall be resurfaced with new polymeric materials including jump events and field event areas plus the small sprint straight.

Floodlighting works

- New floodlighting (columns and lamps) shall be installed to illuminate the track taking account of the sensitive nature of the location being located on a riverbank.

5.2 Test 2 - Assessment of Alternatives

The European Commission guidance requires demonstration that no satisfactory alternatives exist that meet the project's objectives with less impact on the species concerned.

There are no alternative sites and there are no alternatives to floodlights available to the client, which would provide appropriate lighting for health and safety concerns. Alternative sites in the Liffey Valley Area, which are in the ownership of the client, are either not zoned accordingly for the development of open space or recreational zoned areas or cannot facilitate the development of same as they have been already built on. It is noted that alternative sites for this type of development do not exist as many of these sites are already developed and therefore do not have the necessary capacity to facilitate the development of an open space recreational facility such as a running track.

The proposal as outlined in the Part 8 planning approved ref 3723/24 provides an environmentally sensitive solution to the provision of floodlighting on this site. The scheme controls obtrusive light spill and glare emanating from the floodlights on the track and surrounds in accordance with the relevant applicable ecological guidance. The facility is a fantastic asset for the Donore Harriers Club but also potentially for the wider community and in that regard the Donore Harriers wish to develop the site and expand their user profile.

As the Donore Harriers Track is existing, there are no design alternatives. Therefore, the only option is to restore the running track in accordance with maintenance for health and safety reasons in addition to the accommodation of appropriate lighting to minimise impacts on the ecology of the area (similar lux values to existing lighting with improved energy rating, cowed lighting away from the river interface etc.).

Health and Safety & Ecological Aspects of Floodlighting

- The provision of new floodlighting on this site is compatible with the Dublin City Council Development Plan 2022-2028. The site is zoned Z9 with the objective: To preserve, provide and improve recreational amenity and open space and green networks.
- The development proposes to upgrade the existing sports facilities to ensure the availability of and equal access to sporting facilities for local populations. The lighting has been designed in accordance with the development plan, Section 9.5.9, with the provision of energy

efficient lighting that provides an adequate amount of light while balancing safety, amenity and environmental considerations.

- The proposal is to install 5 No. new floodlight columns with 2/3 No. LED fittings on each column is dependent on the location of the column (**Figures 5.1-5.6**). This will enhance the level of lighting on the track and will make it **safe** for training in winter evenings and provide the correct level of illumination for athletics training to be conducted. The operating hours for the floodlights will be dusk until **10:00pm**.
- Obtrusive light spill has been assessed, and reference has been made to the ILE Guidance note 01/21 - The Reduction of Obtrusive Light of the Institute of Lighting Engineers in relation to light spill.
- An additional reference has been made to the Guidance Note 08/18 Bats and artificial lighting in the UK, published by Bat Conservation Trust and Institution of Lighting Professionals, 2018. Reference should be made to the Musco Iso lux plots drawing No.211820F dated 06-July-22 in **attachment I** of this report.
- To put into perspective Dublin City Council already set out restrictive standards with the Lights an average of 79 lux on the main running lanes but on the surrounding area **within 30m of the track the lux levels are a maximum of 2 lux. On the river the maximum lux level is 1 lux or 0.**
 - Compare this typically floodlighting at venues of this nature provide for a design of **500 lux** levels and for televised events it is **1000 lux** and higher.
- **How these lights address any issues** With regard to compliance with the Guidance Note 08/18 - Bats and artificial lighting in the UK, published by Bat Conservation Trust and Institution of Lighting Professionals, 2018):
 - luminaires with an upward light ratio of 0% and with good optical control are used.
 - Luminaires are mounted on the horizontal, i.e. no upward tilt.
 - Luminaires are fitted with internal louvers to reduce light spill and direct light only to where it is needed.
 - Colour temperature of 3000k has been selected for this project following a detailed assessment of the fittings available. This is the best available on the market currently.
 - A candela assessment has been provided and demonstrates that the values to be achieved are below those recommended in ILE Guidance note 01/21 for environmental zone 2.
- The site falls within what the ILE refer to as environmental zone 2, i.e. 'relatively dark urban locations'. The maximum obtrusive light spill values recommended in the ILE design guidance is 5 lux on windows of any residential property pre-curfew and 1 lux post curfew. These values are considered normal for sports floodlighting installations. The ILE do not consider biodiversity in their guidance document therefore reference has been made to the recommendations contained in Ecological Evaluation Report, Appendix II and Guidance Note 08/18 Bats and artificial lighting in the UK, published by Bat Conservation Trust and Institution of Lighting Professionals, 2018 in consideration of biodiversity on this site.
- The floodlight foundations refer to **Figure 5.7** are of precast concrete bases. The floodlight foundations are root mounted, installed via a ground auger and fitted with concrete rings surrounded by mass concrete. This minimises the amount of ground works required and reduces potential impact on receiving environment.

- Consultation has taken place with Dublin City Council Parks regarding the trees in the area where the floodlights will be installed. It has been determined that there is sufficient room on the outside of the track to accommodate the floodlight foundations and columns without damaging any trees, so this is the policy that is being adopted on-site. There may be some strategic pruning required but this will be undertaken under supervision of Dublin City Council Parks. It is not possible to maintain a 10m distance to trees from a floodlighting column in this location. This is mainly due to the presence of self-seeded trees growing on banks of the river, these do however act as a screen to the floodlights themselves. With careful location, root mounted foundations for the floodlight columns and modern fittings it is not anticipate any issues with the installation of floodlights on the Southern edge of the track.
- Mitigation It is proposed that additional planting is undertaken along the western hedge (e.g., privet (*Ligustrum Vulgare*), Blackthorn and Hawthorn) to screen lighting as well as the establishment of a climbing plants such as Honeysuckle and Ivy along the southern fence to reduce light pollution. The establishment of this will take a little time but will have a very positive impact on the scheme. Dublin City Council Parks have commenced planting of native trees along the access path and will continue to do so in subsequent planting seasons, see photograph below.
- It is proposed that the construction works will be monitored by a qualified person to ensure that all the recommendations regarding works near water, hedgerows and mature trees are implemented. This will be specified during the tender process.

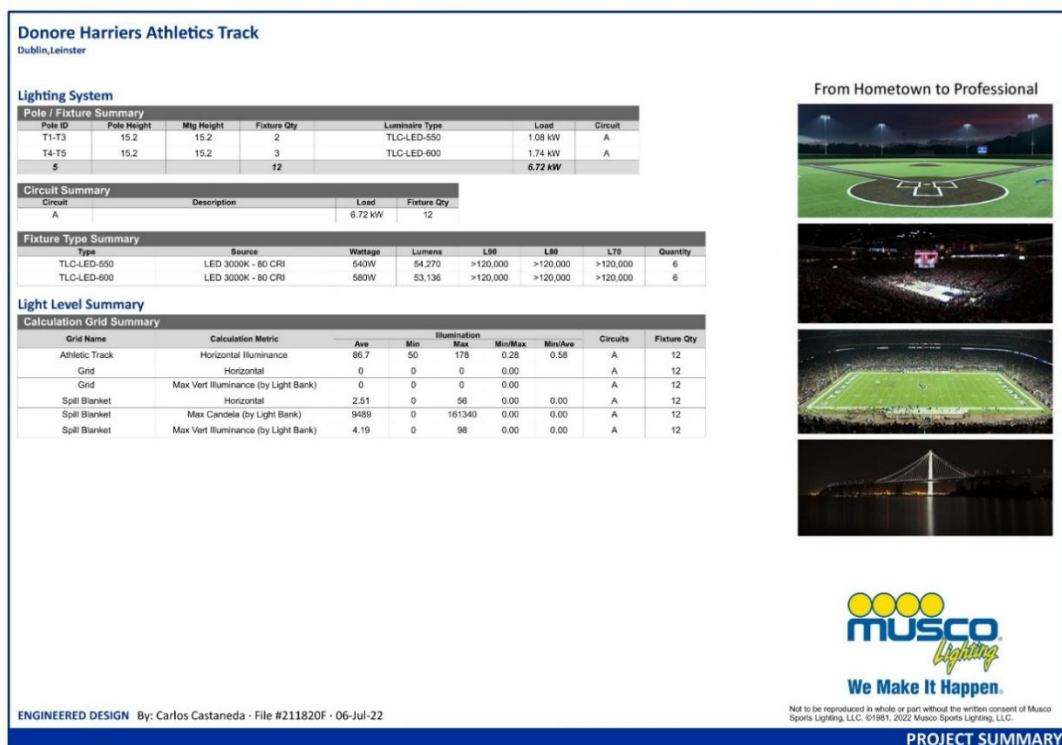


Figure 5.1 Lighting design at Donore Harriers running track

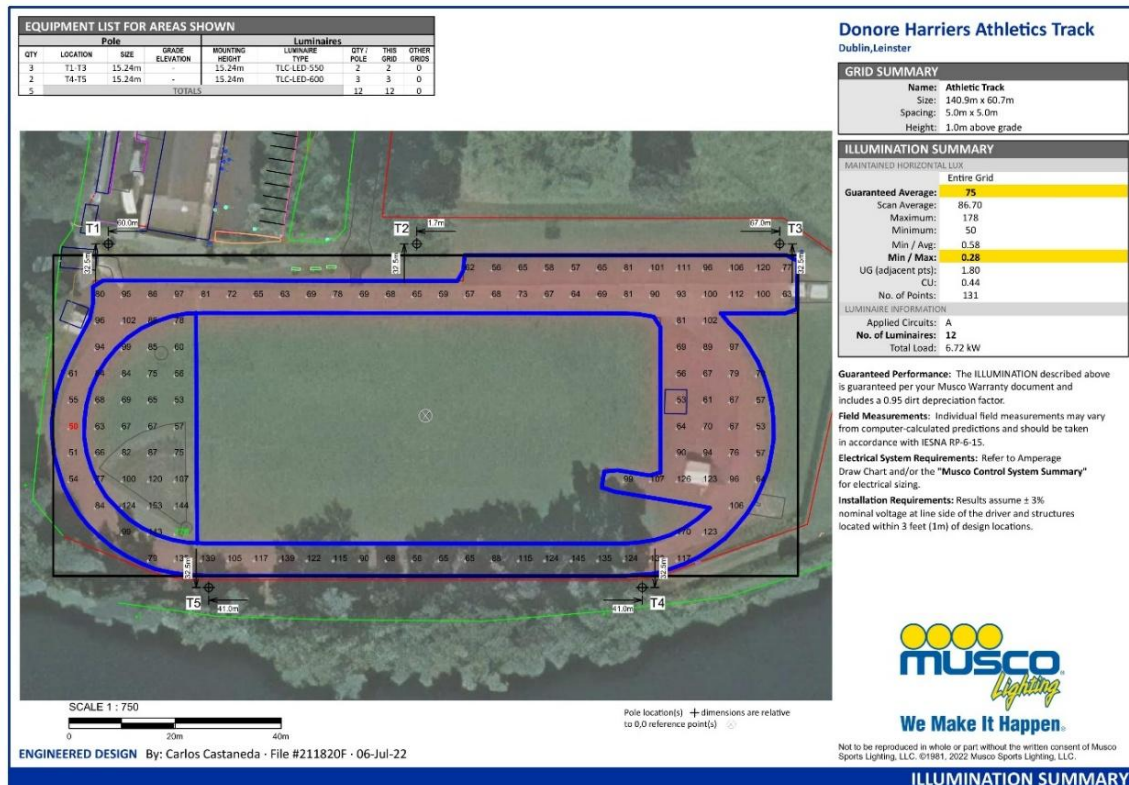


Figure 5.2 Lighting design and locations at Donore Harriers running track

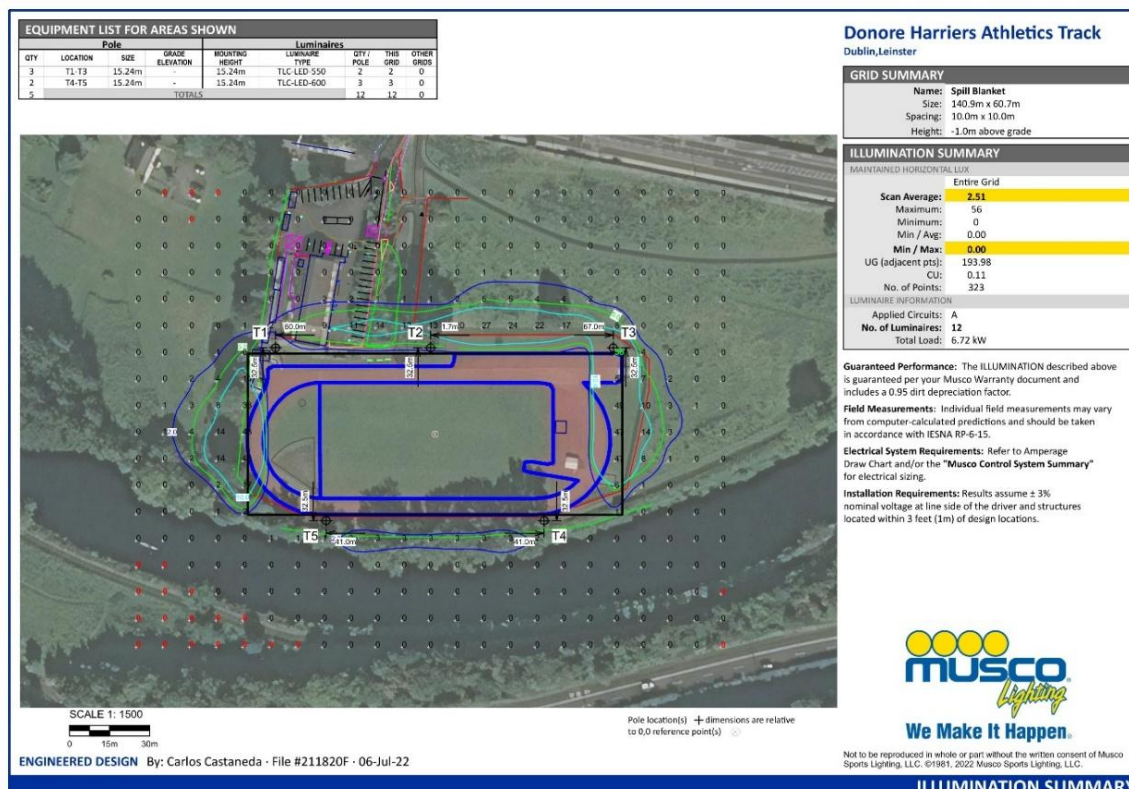


Figure 5.3 Lighting design and locations at Donore Harriers running track

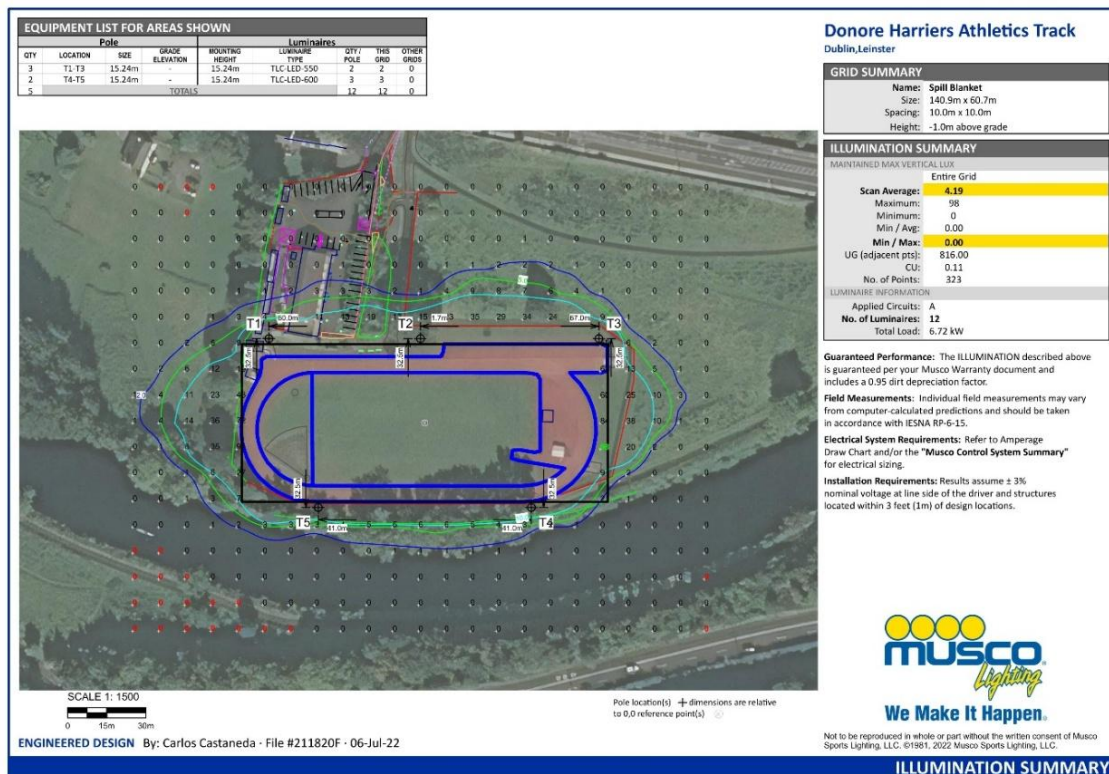


Figure 5.4 Lighting design and locations at Donore Harriers running track

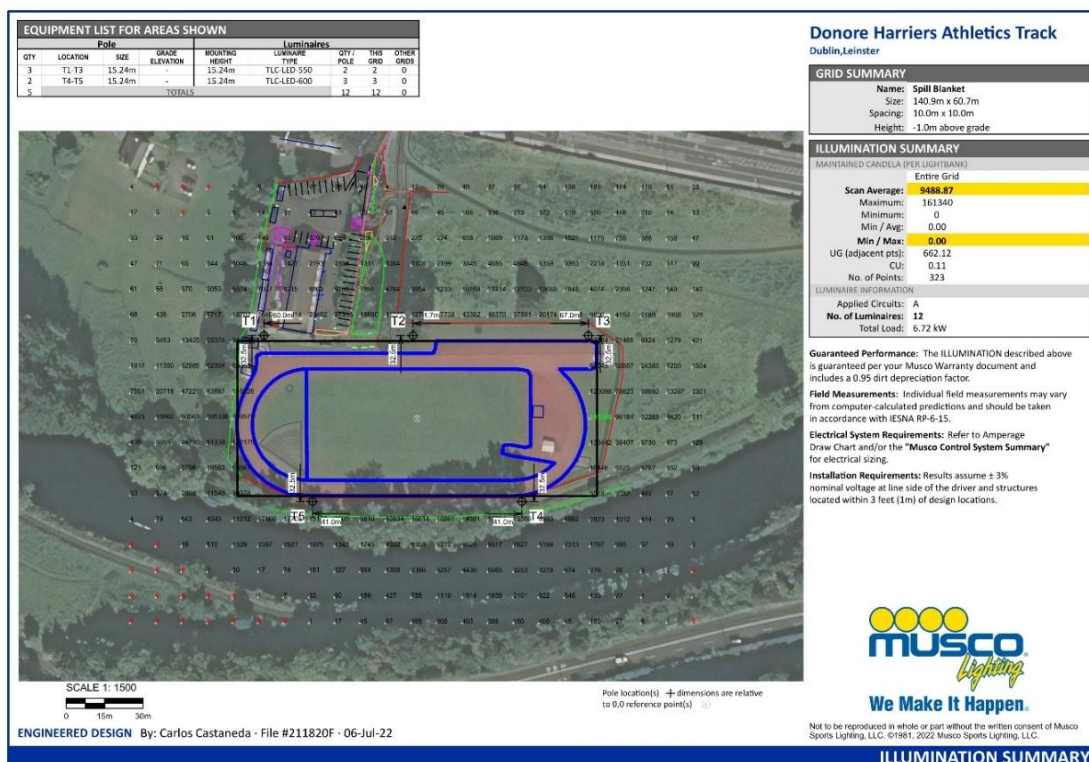


Figure 5.5 Lighting design and locations at Donore Harriers running track

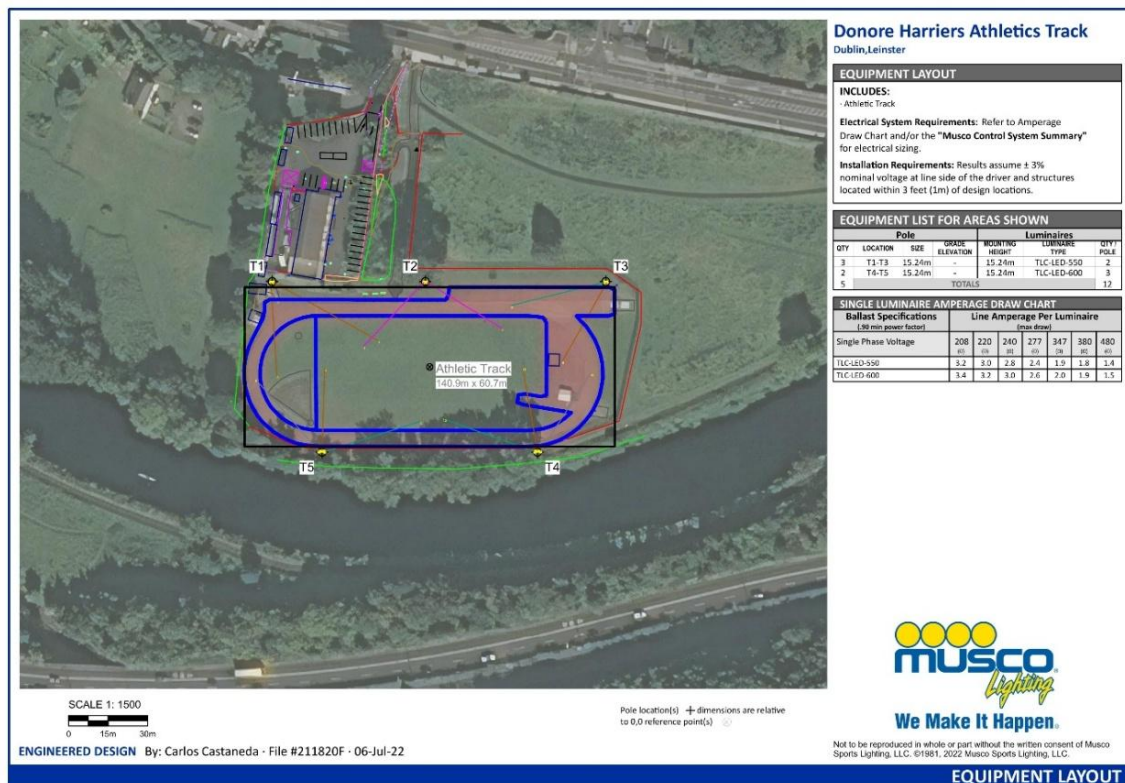


Figure 5.6 Lighting design and locations at Donore Harriers running track

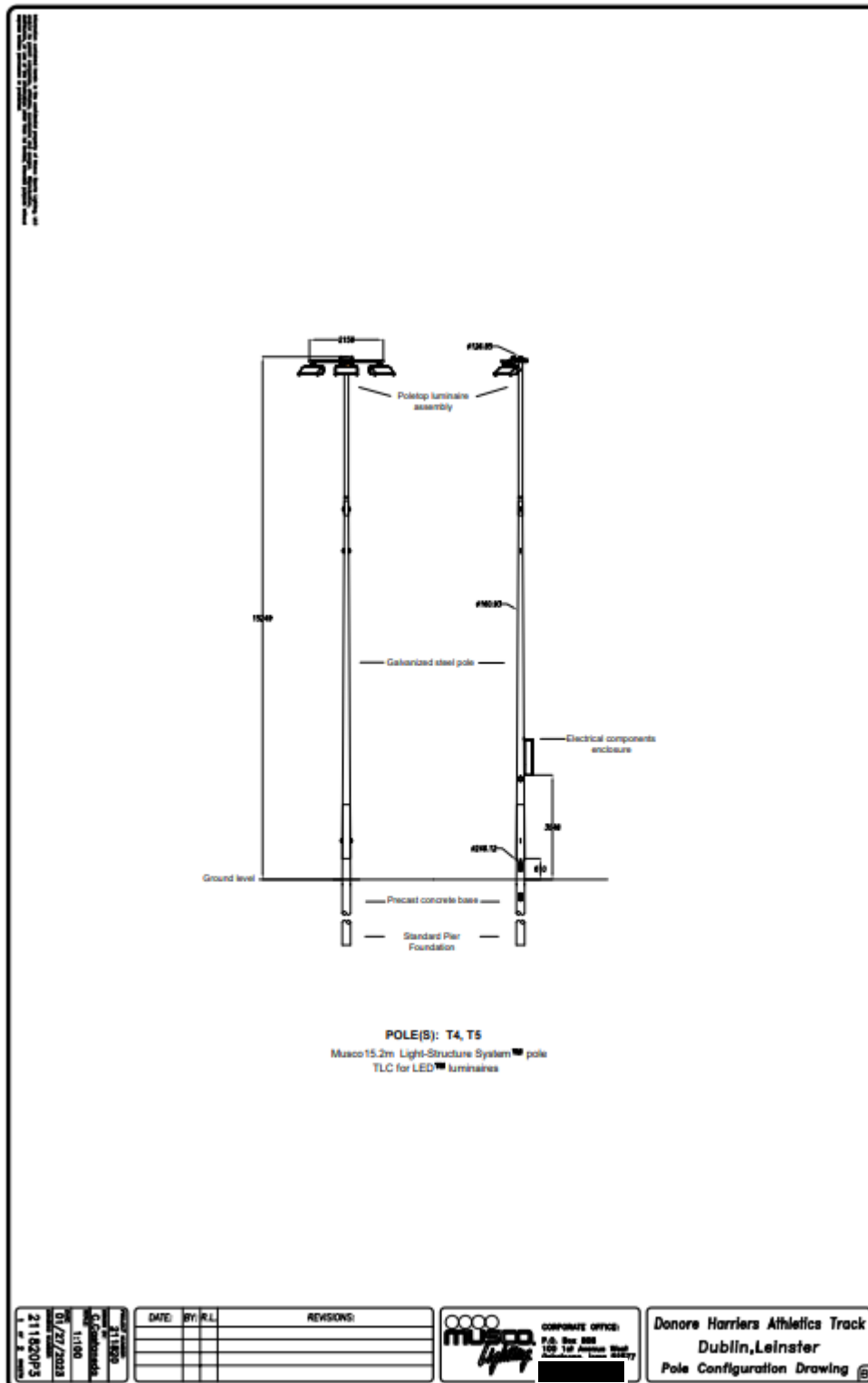


Figure 5.7: Example of lighting design for Donore Harriers running track

5.3 Test 3 – Impact of a Derogation on Conservation Status

The following summary information provides responses to four key issues which will be considered during the derogation licence decision making process;

5.3.1 *Evidence that actions permitted by a derogation will not be detrimental to the maintenance of the populations of the species to which the Habitats Directive relates at a favourable conservation status in their natural range as is required under Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations.*

No otter breeding (holt) or resting (couch) places will be directly impacted by the proposed works at Donore Harriers running track. The four holts (H1–H4), located within mature scrub and woodland on the north bank of the River Liffey, are situated approximately 80m from the proposed works and lie outside the direct construction footprint. Similarly, holt H5 and couch site C1, although located closer to the proposed works (approximately 10m from the existing running track), will not be directly disturbed or damaged as part of the development. However, short-term, indirect disturbance to otter breeding and resting areas during the construction phase cannot likely be avoided. Mitigation measures, including mitigation by design, focusing on the minimisation of disturbance to otter (see below), will be implemented.

These measures are designed to ensure that the permitted actions will not be detrimental to the maintenance of otter populations, thereby supporting the species' favourable conservation status within their natural range in compliance with Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations.

5.3.2 *Details of any mitigation measures planned for the species affected by the derogation at the location, along with evidence that such mitigation has been successful elsewhere.*

No otter breeding (holt) or resting (couch) places will be directly disturbed as a result of the proposed works at Donore Harriers. The four identified potential holts (H1–H4) are located within mature scrub and woodland on the north bank of the River Liffey, approximately 80m from the proposed works and outside the direct construction footprint. Holts H1 and H4 exhibited evidence of recent mammal activity during the June 2026 survey and are therefore considered potentially active, whereas holts H2 and H3 showed no evidence of recent occupation but remain structurally suitable for future use by otter.

The identified holt H5 and the couch site (C1) are located beneath a fallen crack willow within the riparian corridor adjacent to the Donore Harriers running track, approximately 10m from the proposed works. Although located in close proximity to the construction area, the holt and couch lie outside the direct footprint of the development and will be retained.

While direct impacts are not anticipated, short-term indirect disturbance to otter breeding and resting areas during the construction phase cannot be entirely ruled out. Measures will be implemented to minimise disturbance to otter, their habitat and prey resources during both the construction and operation phases of the development. Measures align with best practice guidance for otter (e.g. NPWS, 2021; TII, 2009) with evidence of successful implementation in previous infrastructure projects across Ireland and elsewhere as summarised below.

The main viable mitigation measures are as follows to protect otter from indirect disturbance related impacts:

- Ecological Clerk of Works (ECoW) supervision during the construction phase to ensure buffers are maintained minimising any encroachment by plant.
- Ecologically sensitive areas associated with otter activity will be clearly demarcated on the north bank of the River Liffey using ecological sensitivity signage prior to the commencement of works.
- A trail camera monitoring program² will continue to be implemented by the Project Ecologist/ECoW to observe otter activity and detect any disturbance-related impacts. Monitoring will continue throughout the construction period to ensure mitigation measures are effective and to allow for real-time adjustments as needed.
- All construction personnel will receive a site-specific briefing from the Project Ecologist/ECoW prior to works commencing. This briefing will identify the locations of nearby otter breeding and resting places and outline all required mitigation measures.
- Temporary timber hoarding or acoustic barriers should be used to screen noise disturbance from site access/egress and construction activities required near holt sites H1-H5 as well as couch C1.
- Monitoring results and ecological updates will be provided regularly to the client and construction team by the ECoW throughout the construction period, ensuring that mitigation measures remain effective and responsive to site conditions.

5.3.3 As much information as possible to allow a decision to be made on this application.

Robust information pertaining to otters, inclusive of detailed mitigation proposals, has been provided in the current report to best inform the decision process.

² Please note that pre-construction trail camera monitoring of the holt sites will be completed under a Section 9 & 23 licence, once received from the NPWS.

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7. Appendix A – otter signs database

Table 7.1 Summary of the otter signs recorded in the survey area during June 2026 (results presented west to east). Legally protected areas in **bold**

Sign ID	Holt/ couch ID	Location	Sign type	Spraint no.	Sign age	Bank	ITM x	ITM y	Notes
LV_otter_01	n/a	Woodland west of Donore Harriers	Slide	n/a	n/a	North	710489	734132	Slide from woodland to river north bank
LV_otter_02	H1	Woodland west of Donore Harriers	Holt	n/a	n/a	North	710521	734131	Holt behind soil embankment (possible originally a badger sett). 30x25cm. No spraint but recent animal activity on soil embankment
LV_otter_03	H2	Woodland west of Donore Harriers	Holt	n/a	n/a	North	710532	734123	Holt between tree roots. No sign of activity
LV_otter_04	H3	Woodland west of Donore Harriers	Holt	n/a	n/a	North	710536	734119	Holt in woodland scrub, c.30x25cm. Overgrown with ivy. Not active
LV_otter_05	H4	Woodland west of Donore Harriers	Holt	n/a	n/a	North	710561	734116	Holt in vegetated embankment with well-worn path up to entrance. Fresh mammal droppings below entrance (not otter)
LV_otter_06	H5	Adjacent to Donore Harriers running track	Holt	n/a	n/a	North	710660	734082	Holt adjacent to regularly used couch area
LV_otter_07	C1	Adjacent to Donore Harriers running track	Couch	6(30)	Mixed age	North	710662	734081	Regularly used resting area with numerous mixed aged spraints under fallen crack willow
LV_otter_08	n/a		Spraint site	1(1)	Old	South	710775	734072	Single old spraint on large boulder next to pier
LV_otter_09	n/a		Spraint site	1(1)	Old	South	711142	734094	Single very old spraint on large boulder, south bank



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