**Considerate Constructors Best Practice Hub Innovation**

**Biosecurity protocol for Centre Parcs, Longford Forest**

Invasive, non-native species pose a growing threat to Ireland’s unique biodiversity and a significant threat to economic interests such as agriculture, forestry, fisheries and tourism. Once introduced and established within a habitat invasives can cause the complete eradication of native flora and fauna leading to a long term environmental impact that once started cannot easily be stopped or reversed.

Prior to construction commencing at Center Parcs site in June 2017, the Roadbridge Environmental team became aware from reviewing project reports that the site was free from aggressive aquatic and terrestrial invasive species. From early project meetings with officers from Environmental Statutory bodies such as Inland Fisheries Ireland and the National Parks and Wildlife Service a decision was reached by Roadbridge to produce a Biosecurity Plan for the site to implement site controls to prevent the unintentional introduction of aggressive invasives to the site during the construction phase. Unintentional introduction can be by invasive plant fragments, seeds or spores encrusted in dry mud/clays adhering to plant machinery tracks and wheels being brought to the site from other sites. Another major pathway for aquatic invasives introduction to site would be by entry of site personnel and plant machinery into waterways without adequate cleaning and disinfection.

Before producing a Biosecurity Plan Roadbridge sought advice and recommendations from INVAS Biosecurity Ireland, a specialist consultancy with an expertise in the control and eradication of non-native terrestrial and aquatic invasives. INVAS Biosecurity walked the entire site with the Roadbridge Environmental team to identify simple yet effective measures that would help impose biosecurity across the site. A strict protocol of checking, cleaning and drying all plant equipment, hand tools, footwear and clothing after being in aquatic areas was advised by Invas Biosecurity. A disinfectant solution (1% solution of Virkon Aquatic) recommended by Inland Fisheries Ireland was purchased by Roadbridge.

To launch the Biosecurity plan Dr Joe Caffrey of Invas Biosecurity was invited to site by Roadbridge to deliver a full days training to all site personnel. All personnel were reminded to thoroughly check, clean, disinfect and dry hand tools, boots, waders and other waterproof clothing before and after instream works. Throughout the summer of 2017 the Roadbridge project ecologist ensured that biosecurity featured in all weekly toolbox talks to further instil the concept of ***check - clean—dry*** before entering and leaving watercourses on site. Posters displayed on the site compound and canteen noticeboards help to maintain awareness of non-native invasive plants and weeds and the importance of keep the site clear of them.

As part of the Biosecurity measures imposed on site the Roadbridge Environmental Manager devised a Biosecurity Declaration Form that is distributed via email to all other Roadbridge sites in Ireland and the UK that are to send plant machinery to the Center Parcs site. This form must be completed and signed by the responsible foreman or plant manager before the item of plant can be dispatched to the Center Parcs site. The form outlines the biosecurity measures in place and instructs that all items of plant need to be thoroughly hot power washed (above 60 degree Celsius) to remove all mud debris etc. The completed form which includes for photos of the washing operation must be sent back to the Roadbridge Environmental Manager prior to the plant being delivered to site. This declaration form as well as a copy of the Biosecurity plan is also sent to all subcontractors that need to bring plant machinery to site. When this item of plant machinery is delivered to site it is inspected by the environmental team at a designated quarantine area near the point of entry to the site. This inspection will ensure that the plant is thoroughly clean and it will then be sprayed with the disinfectant solution. Should the item of plant be different to the item listed on the declaration form and/or deemed to be inadequately cleaned it will be sent off site immediately.

Roadbridge feel that these robust biosecurity measures are helping to avoid leaving both a degraded environment and an immense financial bill for impact and control of introduced invasives to the site. The biosecurity measures in place have proved effective to date and other contractors on site have also embraced this approach and have now adopted the same protocol.