

Ecological Impact Assessment

For

**Site clearance works for the proposed Development
of an Existing Industrial Site as a Fire Service Training
Centre at Kilmallock Business Park, Kilmallock, Co.
Limerick.**

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1.Introduction

1.1 Purpose of the Ecological Impact Assessment

This Ecological Impact Assessment has been prepared with regard to the proposed site clearance works at Kilmallock Business Park, Kilmallock, Co. Limerick as part of the development of the existing industrial site as a Fire Service Training Centre.

An Appropriate Assessment screening was carried out for the proposed development and its conclusions were that the project screened out and that Stage 2 (Natura Impact Statement) of Appropriate Assessment was not required.

The site is not within a designated site and the nearest designated site is Ballyhoura Mountain SAC which is 10km away. The River Loobagh is not part of any designated site and there is no hydrological connection to any designated site via the River Loobagh. There will be no negative impact on any Natura 2000 site as a result of the proposed project, however, in order to protect the ecology of the local area, some general measures are outlined

2. Site Description

The site is part of the existing industrial site at Kilmallock Business Park, Kilmallock, Co. Limerick. There are areas of open grassland within the site which support a variety of common wildflower species such as Birds-foot Trefoil, White Clover, Red Clover, Buttercup, Knapweed, Meadowsweet. There is a small patch of Willow (*Salix sp.*) at the South-western corner of the site which is a consequence of lack of grazing/mowing.

The River Loobagh is within 50m to the South of the site, flowing from West to East. The immediate surrounding landscape is primarily improved agricultural grassland. The site is not located within any Designated site and is 10km from the nearest designated site: Ballyhoura Mountain SAC. The River Loobagh is not part of any SAC or SPA designated site.



Fig. 1 Grassland area within site.

2.1 River Loobagh

The River Loobagh is located to the south of the site and is within 30-50m of the site boundary. It flows from East to West along the southern boundary of the site.



Fig. 2 River Loobagh with Kilmallock town in background.

The River Loobagh is not part of any designated site. The water quality of the River Loobagh has been classified as Good (EPA- River waterbody WFD Status 2013-2018). The river provides an important wildlife corridor through the surrounding countryside and supports a variety of typical plant species found along rivers. Otter have been seen in the River further upstream.

3. Site works

There are 2 areas within the site complex that will require excavations and groundworks.

1. The area of the site where the Compartment Fire Behaviour Training(CFBT) will be located.
2. The Training Yard area with two drill towers.

3.1 CFBT Area

The CFBT area is located at the South-western area of the site. This area of the site slopes from North to South towards the River Loobagh which is within 30m of the site boundary. Fill will be required to raise the level of the site, the fill will come from the Local Authority Depot , 955 m³ of fill will be required to raise the level of the site. The finished ground level of the CFBT Site will be 4.5m above the river. The fill material will come from a local authority depot and it will contain the following;

- 200201 Biodegradable Waste, 200202 Soil and Stones,
- 200203 Other non-biodegradable wastes,
- 170107 Mixture of concrete bricks, tiles and ceramics other than those mentioned in 170106, 170504 Soil and Stones other than those mentioned in 170503,
- 170904 Mixed construction and demolition wastes other than those mentioned in 170901 170902 170903.

ACO drains connected to existing network will capture any surface water run-off post construction.

There is a small area of Willow (*Salix spp.*) scrub on this area of the site which will need to be removed during site works.

3.2 Training Yard with Drill Towers.

The area proposed for the training yard with drill towers is currently open grassland. The area of the drill yard will be 5,300 sq.m (1.3 acres). The two drill towers will be constructed of steel and will be 3 storeys high and 12.9 metres in height. Foundations will be required. The yard will be surfaced with tarmac/bitumen macadam. A 2.4m high fence will be erected around site perimeter. ACO drains connected to existing network will capture any surface water run-off post construction.

4. Potential Impacts

The CFBT area of the site is the main area which could have potential impacts on the ecological value of nearby habitats, particularly the water quality of the River Loobagh. Site works on the Training Yard with the 2 drill towers also has potential to negatively impact on the ecological value of nearby habitats. These potential impacts are not Natura 2000 issues but are of local ecological importance.

4.1 CFBT Area

The CFBT area slopes towards the River Loobagh, fill will be required to be brought on site in order to raise the level of the ground. There is also a small patch of Willow scrub that will need to be removed during site clearance works. There is a danger that runoff during site clearance works and from transporting fill on site could enter the River Loobagh potentially compromising the water quality. Also, there is the possibility of invasive species being introduced on site when fill is being brought in. Invasives such as Japanese Knotweed would have a negative impact on the biodiversity value of nearby habitats.

The area of Willow scrub could also be nesting habitat for a number of bird species and cannot be removed during the breeding season as per Restrictions on cutting hedgerows as set out in Section 40 of the Wildlife Act 1976 as amended by the Wildlife (Amendment) Act 2000 and the Heritage Act 2018. These Acts stipulate that it is an offence to destroy vegetation on uncultivated land between the 1st of March and the 31st of August each year.

4.2 Training Yard with Drill Towers.

There is a small patch of Japanese Knotweed in the grassland area where the Training Yard with drill towers will be located. Site works in this area could spread Japanese Knotweed within site and also off site. Japanese Knotweed can regrow from small fragments and could be transported within site and off site. Small fragments in mud could attach to wheels of machinery or people boots and be spread further within site as well as off site.

5.0 Recommendations

The following general measures are recommended to avoid any negative impacts on the water quality of the River Loobagh and the biodiversity value of surrounding habitats. These

5.1 Site clearance works on CFBT area

The River Loobagh is not a designated site and there is no hydrological connection from the proposed development via the River Loobagh to any nearby designated site (Ballyhoura Mountains SAC). There is only a minimal risk of site works negatively impacting on the water quality of the River Loobagh.

However, following the precautionary principle and using CIRIA Good Practice Guidelines including “Control of water pollution from construction sites” (CIRIA, 2001) and Environmental good practice on site (CIRIA, 2010). The following recommendations are made:

The risk of any sediments or hydrocarbons entering a watercourse is minimal, however the following controls should be implemented:

- Sediment control measures will be put in place prior to any excavation or site clearance works commencing.
- A silt fence will be placed immediately downhill along the length of any section of the CFBT area where site works will take place. The silt fence will be made of filter fabric and will be entrenched in the ground and supported by wooden posts at 1.5m intervals. The height of the silt fence will not exceed 36 inches. Both ends of the fence will be turned uphill.
- Subsoil from site clearance will be heaped away from drainage channels to avoid any sediment falling into these channels.

- Fill material will be sourced from Local Authority depot where it has been screened for invasive species. This will prevent introduction of invasive species onsite.
- No removal of Willow scrub should take place until 01st September when the breeding season is complete.

5.1.1 Japanese Knotweed removal

The small patch of Japanese Knotweed in the area where the training yard and drill tower are proposed should be treated appropriately to ensure it is eradicated from site. No site works should take place in this area until the patch of Japanese Knotweed has been eradicated. The following link gives information on Japanese Knotweed and how to control it.

<https://www.property-care.org/wp-content/uploads/2015/04/Knotweed-Leaflet-A5-Folded-to-A3-Draft-6-FINAL-WEB.pdf>



Fig.3 Location of Japanese Knotweed ● on proposed area of Training yard with drill towers.

6. Conclusion.

The proposed development has no potential impact on any nearby designated site and is not part of a designated site.

The recommendations in this report are precautionary and are aimed at protecting the River Loobagh and the ecological value of the local area.

References

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