



Appropriate Assessment Screening Report

for

**Proposed development of an Enterprise Campus on O'Brien
Rd, Carlow, Co. Carlow**

**Prepared in conformance with Article 6(3) of Council
Directive 92/43/EEC of 21 May 1992 on the conservation of
natural habitats and of wild fauna and flora, as amended**

by

**Dr Douglas McMillan
MIEMA, CEnv, MSB, MIBI, MAEE,
Grad IOSH, Fellow IITD
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1.0 Introduction

BioLogiQ Solutions was requested to carry out a screening for an appropriate assessment for the development of an Enterprise Park to be carried out for Carlow County Council on the O'Brien Road, Carlow, Co. Carlow. This was done using publicly available information from the NPWS, GSI, 'Catchments' and EPA Maps websites and a site visit on 20th April 2021.

2.0 The Appropriate Assessment Process

2.1 Requirements for an assessment under Article 6 of the Habitats Directive

Article 6(3) of Council Directive 2009/147/EC of 21st May, 1992 on the conservation of natural habitats and of wild fauna and flora, states:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.”

2.2 Appropriate Assessment guidance

This assessment is to ensure that the competent authorities agree to the development only after having ascertained that it will not adversely affect the integrity of the site concerned.

The project will involve the construction of an Enterprise Park to be carried out for Carlow County Council on the O'Brien Road, Carlow, Co. Carlow which has been screened to ascertain if it should be subject to an “appropriate assessment” as outlined in the Habitats Directive. To ensure that this was done in accordance with all legal requirements the following guidance documents were consulted:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities,¹
- Assessment of plans and projects significantly affecting Natura 2000 sites, methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC,²
- EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC,³
- Office of the Planning Regulator. Appropriate Assessment Screening for Development Management (PN01).⁴

In line with the suggested assessment methodology put forward by the Commission, a screening matrix was completed in section 6.0 below.

2.3 Stages in the process

A four stage process is required to complete a full Appropriate Assessment:²

1. **Screening:** identifies the likely impacts upon a Natura 2000 site of a plan, and considers whether these impacts are likely to be significant. It has four steps associated with it:
 - Step One: Management of the site
 - Step Two: Description of the project or plan
 - Step Three: Characteristics of the site
 - Step Four: Assessment of significance
2. **Appropriate Assessment:** consideration of the impact on the integrity of the Natura 2000 site with respect to the site's structure and function and its conservation objectives. This has four steps associated with it:



- Step One: Information required
 - Step Two: Impact Prediction
 - Step Three: Conservation Objectives
 - Step Four: Mitigation Measures
3. *Assessment of alternative solutions*: examines alternative ways of achieving the objectives of the plan that avoid adverse impacts on the integrity of the Natura 2000 site. This has two steps associated with it:
- Step One: Identifying alternative solutions
 - Step Two: Assessing alternative solutions
4. *The “IRPI” test (Imperative Reasons of Over-riding Public Interest)*: Stage 4 is the main derogation process of Article 6(4) which examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a Natura 2000 site to proceed in cases where it has been established that no less damaging alternative solution exists.

Stages 1 and 2 deal with the main assessment requirements specified in Article 6(3). The first stage involves gathering evidence and screening for likely impacts. This screening process determines whether a plan option is likely to have a significant effect on a European site and hence whether the subsequent steps of the AA are required. If no significant effects are identified, no further steps need to be taken in terms of AA. However, where such effects seem likely, ‘full’ AA of the plan (or specific elements of it) or project will be necessary. If insufficient information is available to make a clear judgment, the ‘precautionary principle’ – in line with the ‘spirit’ of the Habitats Directive - should be followed. This process will often establish mitigation measures or alternatives, which can offset all significant adverse effects and enable the plan or project to go forward. Where this is not the case, more stringent measures will need to be considered.

Stages 3 and 4 are only undertaken if it cannot be stated with certainty that the development will not have any significant effect on the Natura 2000 sites in question. This report describes the assessment and testing required for the Stage 1 Screening process to comply with Article 6(3) obligations and Planning Authorities guidance.



3.0 Description of Project

This is a proposed Enterprise Park with a 1637 m² footprint and associated site works on a site of 0.518 hectares (1.28 acres) on the O'Brien Road, Carlow, Co. Carlow (see Appendices 1 to 3). Water will be supplied from the town mains and sewage treated by Carlow Town sewerage system. It will be about 150 metres from a culverted section of the Burren River (Code: IE_SE_14B050500). Water supply, sewage treatment and stormwater runoff will be handled by the town's water supply and sewerage systems. Figure 1 below illustrates the raised eastern end of the site and Figure 2 the lower western portion.



Figure 1. View of raised eastern end of site.



Figure 2. View of lower western portion of site.



4.0 Identification of relevant Natura 2000 sites

4.1 Designated sites in the vicinity of the project

This is a proposed enterprise campus with a gross 1637 m² footprint of light industry and office buildings and associated parking facilities on a site of 0.518 hectares (1.28 acres) on the O'Brien Rd, Carlow, Co. Carlow (see Appendices 1 to 2). A culverted section of the Burren River (_060) flows about 150 metres east of the proposed development and the Slaney River SAC Site Code 000781 at a distance of 9.17 km at the closest point to the site.

However, it was considered that 'no pathway' exists by which the proposed development could impact upon the Slaney River SAC so it has been screened out for an Appropriate Assessment.

4.2 Characteristics of the River Barrow & River Nore SAC 002162

Site Name: River Barrow & River Nore SAC⁵

Site Code: 002162

Description: This site consists of the freshwater stretches of the Barrow/Nore River catchments as far upstream as the Slieve Bloom Mountains and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones. The upper reaches of the Barrow runs through limestone. The middle reaches and many of the eastern tributaries, sourced in the Blackstairs Mountains, run through Leinster Granite. The southern end, runs over intrusive rocks poor in silica.

Qualifying interests: The site is a candidate SAC selected for alluvial wet woodlands and petrifying springs, priority habitats on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for old oak woodlands, floating river vegetation, estuary, tidal mudflats, *Salicornia* mudflats, Atlantic salt meadows, Mediterranean salt meadows, dry heath and eutrophic tall herbs, all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive – Sea Lamprey (*Petromyzon marinus*), River Lamprey, (*Lampetra fluviatilis*), Brook Lamprey (*Lampetra planeri*), Freshwater Pearl Mussel (*Margaritifera margaritifera*), Nore Freshwater Pearl Mussel (*Margaritifera m. durrovensis*), Freshwater crayfish (*Austropotamobius pallipes*), Twaite Shad (*Alosa fallax fallax*), Atlantic Salmon (*Salmo salar*), Otter (*Lutra lutra*), Desmoulin's Whorl Snail (*Vertigo moulinsiana*) and the Killarney Fern (*Trichomanes speciosum*).

Notable features (near development): n/a

Conservation objectives: These are as follows:⁶

- To maintain or restore the favourable conservation status of the Annex I habitats and Annex II species of community interest listed above.
- To maintain the extent, species richness and biodiversity of the entire site.
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities.



Conservation objectives for qualifying interests:^{6,7}

In addition, lamprey species (*Lampetra planeri* and *L. fluviatilis*),⁷ Atlantic salmon (*Salmo salar*) and Otter (*Lutra lutra*) are assumed to be present in the b =nearest open section of the Burren River.

Qualifying interests	Conservation objectives
River lamprey (<i>Lampetra planeri</i>)	<ul style="list-style-type: none"> • maintaining greater than 75% of main stem lengths of rivers accessible (i.e. free of artificial barriers); • ensuring at least three age/size groups are present; • ensuring juvenile density of at least 2/m²; • preventing any decline in the extent and distribution of spawning beds; • maintaining the availability of juvenile habitat at more than 50% sampling sites as a minimum.
Brook lamprey (<i>Lampetra fluviatilis</i>)	<ul style="list-style-type: none"> • maintaining greater than 75% of main stem lengths of rivers accessible (i.e. free of artificial barriers); • ensuring at least three age/size groups are present; • ensuring juvenile density of at least 2/m²; • preventing any decline in the extent and distribution of spawning beds; • maintaining the availability of juvenile habitat at more than 50% sampling sites as a minimum.
Atlantic salmon (<i>Salmo salar</i>)	<ul style="list-style-type: none"> • maintain access to 100% of river channels down to second-order accessible from the estuary (i.e. free of artificial barriers); • exceeding the Conservation Limit for each system; • maintaining salmon fry abundance catchment-wide (set at 17 fry/5 min sampling by electrofishing); • preventing any significant decline in out migrating smolt abundance; • preventing any decline in number and distribution of spawning redds; • ensuring a minimum EPA Q value of Q₄ at all EPA-sampled sites.
Otter (<i>lutra lutra</i>)	<ul style="list-style-type: none"> • maintain populations across its current range • no decrease in couching sites and holts • no decrease in available fish biomass in kilograms • no iincrease in barriers to connectivity



5.0 Assessment of Likely Effects

5.1 Desktop survey

The ‘Catchments’ website which supports the River Basin Management Plan documentation in relation to Ireland’s River Basin Districts was consulted to establish the water quality for the Barrow River (WaterBody Code: IE_SE_14_196_4). A section of the Burren River (Code IE_SE_14B050500) flows about 150 metres east of the proposed development.

The data page⁸ details that at the time of surveying the Burren had ‘Moderate’ water quality (out of five status classes: High, Good, Moderate, Poor, Bad) based on its ecological status. These classes correspond to the Q-rating system which would give it a Q₃ rating. It is also highlighted as being ‘At Risk’. The overall objective is to ‘Restore’ its water quality to ‘Good’ (Q₄) status by 2021.

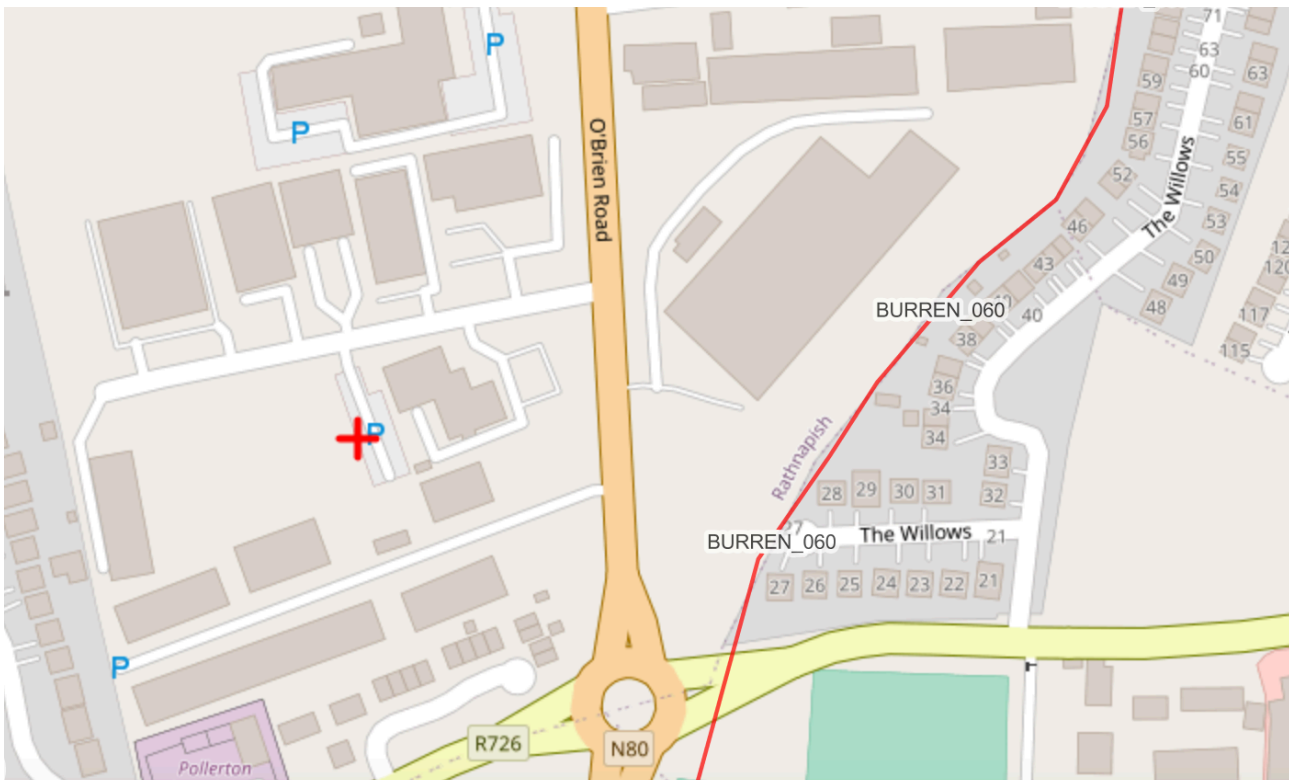


Figure 3. Site at closest point (indicated by red ‘+’ to culverted section of Burren_060 (indicated in red).

5.2 Field survey and findings

GSI online mapping indicates the soil is ‘Mineral alluvium’ over ‘Visean limestone & calcareous shale’ bedrock. The site is classed as being a Regionally Important Gravel Aquifer and as having a High (H) groundwater vulnerability.

A site walk-over was carried out on 20th April 2020 to identify species found onsite and survey⁹ and classify the habitats as per Fossitt.¹⁰ The site is cleared ground with rubble and spoil and includes higher ground at



the eastern end of the site with the remaining part of the site at a lower level. It is a mosaic of habitats which as per Fossitt range from bare ground to some regenerated areas of meadow (GS) and scrub woodland (WL) mixed with species of recolonising disturbed ground (ED) and a mix of native and exotic tree and shrub species.

Exotic and naturalised species present across the site include the tree species cypress (*Chamaecyparis* sp.), shrub species, buddleia (*Buddleia davidii*), firethorn (*Pyracantha* sp.), cotoneasters (*Cotoneaster horizontalis* & *C. cornubia*), the climber wild clematis (*Clematis vitalba*) and the herbaceous species, red valerian (*Centranthus ruber*), Canadian fleabane (*Erigeron canadensis*) and fennel (*Foeniculum vulgare*).

Tree and shrub species on the ‘high’ ground include birch (*Betula* sp.), rowan (*Sorbus aucuparia*), willow (*Salix* spp.), field rose (*Rosa arvensis*), gorse (*Ulex europaeus*) and bramble (*Rubus fruticosus* agg.).

Species of disturbed ground include cleavers (*Galium aparine*), common field speedwell (*Veronica persica*), field pansy (*Viola arvensis*), groundsel (*Senecio vulgaris*), herb Robert (*Geranium robertianum*), marsh hawksbeard (*Crepis paludosa*), red dead-nettle (*Lamium purpureum*), smooth sow-thistle (*Sonchus arvensis*), red valerian (*Centranthus ruber*) and rosebay willow-herb (*Epilobium angustifolium*).

‘Meadow’ areas include bent grasses (*Agrostis* spp.), mat-grass (*Nardus stricta*), false oat-grass (*Arrhenatherium elatius*), sweet vernal-grass (*Anthoxanthum odoratum*) and Yorkshire fog (*Holcus lanatus*).

Meadow forbs include broad-leaved dock (*Rumex obtusifolius*), creeping thistle (*Cirsium arvense*), black medick (*Medicago lupulina*), bird’s-foot trefoil (*Lotus corniculatus*), common vetch (*Vicia sativa*), cat’s-ear (*Hypochaeris radicata*), creeping buttercup (*Ranunculus repens*), daisy (*Bellis perennis*), cut-leaved and dove’s-foot cranesbills (*Geranium dissectum* & *G. molle*), broad-leaved and ribwort plantain (*Plantago major* & *P. lanceolata*), dandelion (*Taraxacum officinale* agg.), nettle (*Urtica dioica*), perforate St. John’s wort (*Hypericum perforatum* agg.), red clover (*Trifolium arvense*), white clover (*Trifolium repens*), wild carrot (*Daucus carota*) and yarrow (*Achillea millefolium*)

For the ‘low’ ground, tree, shrub and climber species present include birch, buddleia, cypress, cotoneaster, firethorn, rowan, willow, Scots pine (*Pinus sylvestris*), field rose, gorse, bramble and wild clematis.

Grasses here include bent grasses, false oat-grass, mat-grass and sweet vernal-grass and meadow forbs include black medick, bird’s-foot trefoil, common vetch, common mouse-ear, creeping buttercup, creeping thistle, cut-leaved cranesbill, daisy, dandelion, perforate St. John’s wort and ribwort plantain. A typical species of woodland present is tutsan (*Hypericum androsaemum*).

Species of disturbed ground include butterbur (*Petasites hybridus*), Canadian fleabane, colt’s-foot (*Tussilago farfara*), cut-leaved cranesbill, fennel, groundsel, ragwort (*Senecio jacobea*), red valerian and rosebay willow-herb.

There are also two species of fern growing on the piles of spoil, namely, hart’s-tongue fern (*Asplenium scolopendrium*) and maidenhair spleenwort (*Asplenium trichomanes*). This is an ecologically diverse site but does not contain any species of conservation interest.

The completed EC screening matrix is as follows:

Brief description of the project or plan: See section 3.0 above

Brief description of the Natura 2000 site: See section 4.0 above



<p><i>Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site.</i></p>	<p>The project involves the construction of an enterprise campus on a site of approximately 1.28 acres which if inadequately carried out could result in groundwater pollution</p>
<p><i>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:</i></p>	
<p>Size and scale</p>	<p>1637 m² footprint (situated on approx. 0518 hectare site)</p>
<p>Land-take</p>	<p>There is no land-take from any protected area</p>
<p>Distance from the Natura 2000 site or key features of the site</p>	<p>150 metres west of a tributary stream of the Burren River</p>
<p>Resource requirements (water abstraction etc.)</p>	<p>No resources are required from the SAC. The sites will be serviced from the town water supply</p>
<p>Emissions (disposal to land, water or air)</p>	<p>Fuels or oils used during construction could leach to groundwater which is of high vulnerability. Any fuel or oil-containing equipment (generators etc.) should be bunded and a spill response plan in place. Dust and air emissions from site clearing activities and vehicle exhaust emissions. Water supply, sewage treatment and stormwater runoff will be handled by the town's water supply and sewerage systems</p>
<p>Excavation requirements</p>	<p>The whole 1.26 acre site will be cleared and levelled</p>
<p>Transportation requirements</p>	<p>The building materials required for the development will be transported along existing road networks</p>
<p>Duration of construction, operation, decommissioning, etc.</p>	<p>Construction work is expected to last about 12 months</p>
<p>Other</p>	<p>n/a</p>
<p><i>Describe any likely changes to the site arising as a result of:</i></p>	
<p>Reduction of habitat area</p>	<p>There will be no reduction in habitat area</p>
<p>Disturbance to key species</p>	<p>There will be no disturbance to key species</p>
<p>Habitat or species fragmentation</p>	<p>There will be no habitat or species fragmentation</p>
<p>Reduction in species density</p>	<p>There will be no reduction in species density</p>
<p>Changes in key indicators of conservation value (water quality etc.)</p>	<p>There will be no change in key conservation indicators</p>



Climate change	The site is 150 metres distant from a culverted section of the Burren which is also separated by intervening buildings and road and so is highly unlikely to be significantly affected by future increased flooding risk
<i>Describe any likely impacts on the Natura 2000 site as a whole in terms of:</i>	
Interference with the key relationships that define the structure of the site	None
Interference with the key relationships that define the function of the site	None
<i>Provide indicators of significance as a result of the identification of effects set out above in terms of:</i>	
Loss (of habitat)	No loss of SAC habitat will occur
Fragmentation (of habitats or species)	No fragmentation will occur
Disruption	There should be no disruption to habitat
Disturbance	There should be no disturbance to aquatic species
Changes to key elements of the site (e.g. water quality etc.)	No change to key elements of the site is predicted
No effects have been identified so no indicators are required.	
<i>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.</i>	
There are no likely significant impacts. There is no uncertainty attached to any impact magnitude	



6.0 Screening statement

6.1 Finding of No Significant Effects report matrix

<i>Name of project or plan</i>		Enterprise campus on O'Brien Rd, Carlow, Co. Carlow	
<i>Name and location of Natura 2000 site</i>		River Barrow SAC	
<i>Description of the project or plan</i>		Proposed 1637 m ² of light industry and office buildings and associated parking spaces on a site of approx. 0.518 hectares	
<i>Is the project or plan directly connected with or necessary to the management of the site (provide details)?</i>		No	
<i>Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)?</i>		No	
The assessment of significance of effects			
<i>Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site</i>		There are no likely significant impacts subject to implementation of the controls outlined above and summarised below	
<i>Explain why these effects are not considered significant</i>		Bundling of any fuel-/oil-containing equipment and of fuels, oils, greases, hydraulic fluids to 110% largest container/25% of total volume stored (or use of electrical equipment); refuelling of machinery in bunded areas; provision of spill kits, spill response plans and trained personnel; good practice for preparation and storage of construction materials and proper management of construction waste (including hazardous waste); bunding of any fuel or oil tanks used for heating systems; water supply, sewage treatment and stormwater runoff will be handled by the town's water supply and sewerage systems; closest section of Burren 150 metres distant is culverted	
<i>List of agencies consulted: provide contact name and telephone or e-mail address</i>		Manager, Development Application Unit, Department of Agriculture, Heritage & the Gaeltacht manager.Dau@ahg.gov.ie Pat Connolly, Carlow County Council pconnolly@carlowcoco.ie	
Data collected to carry out the assessment			
<i>Who carried out the assessment?</i>	<i>Sources of data</i>	<i>Level of assessment completed</i>	<i>Where can the full results of the assessment be accessed and reviewed?</i>



<p>Dr Douglas McMillan, BioLogiQ Solutions</p>	<p>Publicly available information provided by the NPWS, GSI, 'Water Matters ' and EPA Maps on their websites</p>	<p>Stage 1 screening which involved a desktop study using existing information from the relevant state authorities and a site visit carried out on 20thApril 2020</p>	<p>This can be viewed at Carlow County Council's Planning Department, Dublin Rd, Carlow</p>
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7.0 Conclusions and recommendations

The AA screening process has determined that the project, alone or in combination with other proposed or actual developments or activities, will not produce a significant impact on the water quality of the Burren River, part of the River Barrow SAC, its conservation objectives for qualifying interests, subject to the following controls and site details:

- Use of good construction practice to be carried out to include:
 - storage of any fuels, oils, greases and hydraulic fluids in bunded areas to 110% volume of largest container/25% of total volume stored (whichever is greater),
 - bunding of any fuel/oil-containing equipment (or use of electrically-powered equipment) to 110% volume of largest container/25% of total volume stored (whichever is greater),
 - refuelling of any machinery in bunded areas,
 - provision of spill kits, spill response plans and trained personnel,
 - proper waste management and disposal of construction waste including hazardous materials (i.e. waste oils, empty oil containers etc.) as per WMA 1996.
- Water supply, sewage treatment and stormwater runoff will be handled by the town's water supply and sewerage systems,
- Section of the Burren River 150 metres distant on far side of O'Brien Road is culverted.

By adhering to the above controls the proposed enterprise campus does not require an appropriate assessment as the construction is unlikely to have a significant effect on the closest Natura 2000 site.

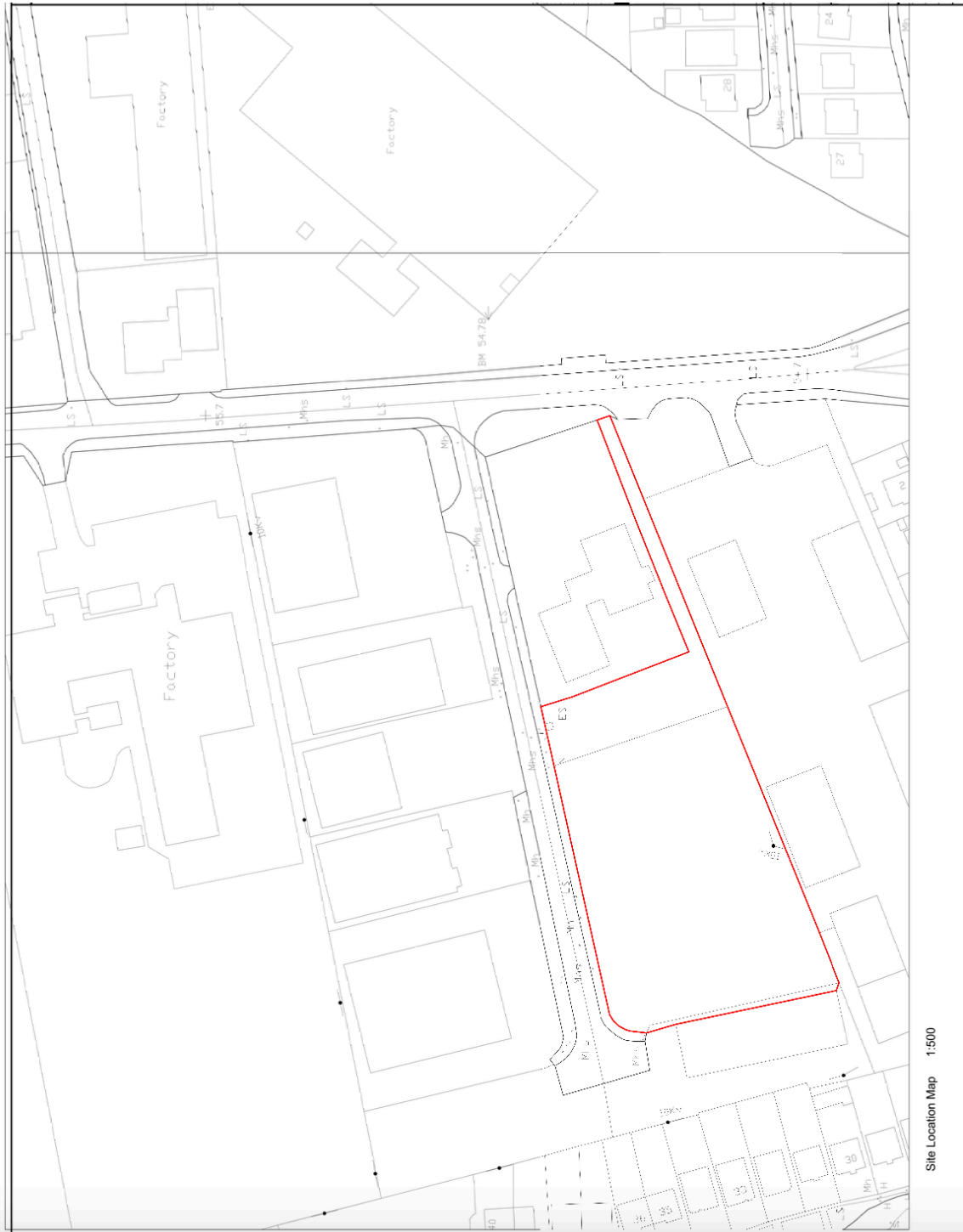


8.0 References

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APPENDIX 1. Record Place Map.





APPENDIX 2. Site Layout.



Scheme