

Development for the further replacement of Fossil Fuel  
with Alternative Fuels and for use of Alternative Raw  
Materials  
Screening for Appropriate Assessment

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# 1 Introduction and background

Irish Cement Ltd (ICL) is seeking to seek a 10 year permission to expand the use of alternative fuels and to allow for the use of alternative raw materials at Platin Cement Works, Duleek, County Meath. It has been determined that the proposed development constitutes strategic infrastructure development and a planning application is being made directly to An Bord Pleanála under section 37E of the *Planning and Development Act, 2000* (as amended).

This Screening Statement for Appropriate Assessment is intended to provide information required in determining the potential impacts on European sites, (also known as Natura 2000 Sites, i.e. Special Areas of Conservation (SAC) and Special Protection Areas (SPA), designated for nature conservation) as a result of the proposed development.

Brady Shipman Martin was commissioned to undertake the study, which was carried out by Consultant Ecologist Matthew Hague CEnv MCIEEM.

The requirements for an Appropriate Assessment are set out under *Article 6 of the EU Habitats Directive (92/34/EEC)*, transposed into Irish law through the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI No. 477 of 2011, known as the *Habitats Regulations*) and the *Planning and Development Act, 2000* (as amended).

## 2 Methodology

### 2.1 Baseline data collection and field visits

A desk-based assessment was undertaken of the site at Platin and the wider area. This focused on habitats and species that are listed as Qualifying Interests (QI) (in the case of SACs) and Special Conservation Interests (SCI) (in the case of SPAs) in the designations for the European sites. A number of field visits have also been undertaken, most recently on 3<sup>rd</sup> April 2017.

This report takes the following guidance documents into account:

- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular NPWS 1/10 & PSSP 2/10;
- *Assessment of Plans and Projects Significantly Affecting European sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001);
- *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC*. Draft Guidance issued by the European Commission (April 2015).

Information was collated from the organisations and websites listed below:

- Data on European sites and rare and protected plant and animal species contained in the following databases:
  - The National Parks and Wildlife Service (NPWS) of the Department of Arts, Heritage and the Gaeltacht ([www.NPWS.ie](http://www.NPWS.ie));
  - The National Biodiversity Data Centre (NDBC) ([www.biodiversityireland.ie](http://www.biodiversityireland.ie));
  - BirdWatch Ireland ([www.birdwatchireland.ie](http://www.birdwatchireland.ie));
  - Bat Conservation Ireland ([www.batconservationireland.org](http://www.batconservationireland.org)).
- Information on land-use zoning from the online mapping of the Department of the Environment, Community and Local Government (<http://www.myplan.ie/en/index.html>);
- Recent and historical OSi mapping and aerial photography;
- Information on the Rivers Boyne and Nanny, and other local watercourses from [www.catchments.ie](http://www.catchments.ie);

- Information on water quality in the area ([www.epa.ie](http://www.epa.ie));
- Information on soils, geology and hydrogeology in the area ([www.gsi.ie](http://www.gsi.ie));
- Information on the status of EU protected habitats in Ireland (NPWS, 2013);
- National Biodiversity Plan 2011 – 2016 (Department of Arts, Heritage and the Gaeltacht, 2011);
- Draft 3<sup>rd</sup> National Biodiversity Action Plan 2017 – 2021 (Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, 2017);
- Meath County Development Plan 2013-2019;
- Louth Development Plan 2015-2021;
- Drogheda Borough Council Development Plan 2011 – 2017.

The report has regard to the following legislative instruments:

- Planning and Development, Act 2000, as amended;
- European Commission (EC) Habitats Directive 92/43/EEC;
- European Commission (EC) Birds Directive 2009/147/EC;
- European Communities (Birds and Natural Habitats) Regulations 2011 (SI no 477 of 2011).

Where relevant, information contained in the following documents has been reviewed:

- *Environmental Impact Assessment Report* prepared as part of the application for a 10 year permission for the further replacement of fossil fuels with alternative fuels and to allow for the introduction of alternative raw materials at the Cement Works Facility in Platin, County Meath (Arup, June 2017);

## 3 Screening for Appropriate Assessment

### 3.1 Background

The first part of the Appropriate Assessment process is known as Screening. Screening identifies the likely effects of the proposed development on European sites that could arise, either alone or in combination with other plans or projects, and considers whether these impacts are likely to have a significant effect on the European site in view of the site's conservation objectives.

Following Screening, if there is a possibility of there being a significant effect on the European site, this will generate the need for an appropriate assessment for the purposes of Article 6(3) of the Habitats Directive. This means that if the conclusions at the end of the screening exercise are that significant effects on any European sites, as a result of the proposed development, either alone or in combination with other plans and projects, are likely, uncertain or unknown, then an Appropriate Assessment, must be carried out. This is in accordance with established precedent and case law.

### 3.2 Potential Zone of Influence

In ecological and environmental impact assessment, for the risk of an impact to occur there must be a 'source', such as a construction site; a 'receptor', such as a designated site for nature conservation; and a pathway between the source and the receptor, such as a watercourse that links the construction site to the designated site. Although there may be a risk of an impact it may not necessarily occur, and if it does occur, it may not be significant.

Identification of a risk means that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receptor.

In accordance with the National Roads Authority *Guidelines for Assessment of Ecological Impacts of National Road Schemes* (NRA/TII, 2009 (Rev. 2)), the Zone of Influence of a project may be defined as the ecological areas and features (*i.e.* the ecological resources/receptors) likely to be affected by the biophysical changes caused by the

project, however remote from [the project]. From this it will be possible to establish a ‘zone of influence’ for the project that encompasses all of its potential impacts. There are no set recommended distances for projects to consider European sites as being relevant for assessment. Rather, NPWS (2010) recommends that *‘the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects’*. As a rule of thumb, it is often considered appropriate to include all European sites within 15km.

In some instances where there are hydrological connections a whole river catchment or a groundwater aquifer may need to be included. Similarly, where bird flight paths are involved the impact may be on an SPA more than 15 km away. Taking this into account, as a starting point a search was carried out for all European sites within 15km of the study area at Platin. This search was then extended to ensure that all European sites with any potential links to the proposed development were accounted for in the study.

### 3.3 Description of the proposed development

#### 3.3.1 Study area and surrounding environment

The study area comprises the site at Platin Cement Works as defined by the site boundary for the proposed development (see Figure 1), as well as an appropriate distance outside the site (the Zone of Influence as defined in Section 3.2).

Due to the heavily disturbed industrial nature of the local environment within the curtilage of the cement works at Platin, there are no areas of natural or semi-natural habitats present on the site. In effect, other than small pockets of ornamental shrubs and recolonising bare ground, the footprint of the site is predominantly occupied by buildings, hard-standing and by bare ground between areas of operational plant.

Site areas proposed for development are located within the general developed footprint of the cement works. Outside of the site, the boundary of the cement works and of the adjoining quarry have been landscaped to provide dense maturing tree belts of primarily native species such as alder, ash, birch, willow, whitebeam, scots pine and rowan trees.

No fauna occur regularly on the proposed development site, other than feral pigeons that use the buildings for shelter.

A number of European sites are located within 15km of the proposed development site at Platin. An additional European site is located just beyond the 15km boundary. These European sites are listed in Table 1 and are shown in Figure 2.

**Table 1 Relevant European sites**

European site	Site Code	Location (closest straight line distance from the development site at Platin)
<b>Special Areas of Conservation</b>		
River Boyne and River Blackwater	002299	3km to the north east
Boyne Coast and Estuary	001957	7km to the north west
Clogher Head	001459	15.2km to the north east. This site is outside the potential Zone of Influence of the proposed development by virtue of its location and qualifying interests. It is not necessary to consider the site further in this report.
<b>Special Protection Areas</b>		
Boyne Estuary	004080	5.5km to the west



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European site	Site Code	Location (closest straight line distance from the development site at Platin)
River Boyne and River Blackwater	004232	3km to the north east
River Nanny Shore and Estuary	004158	8km to the west

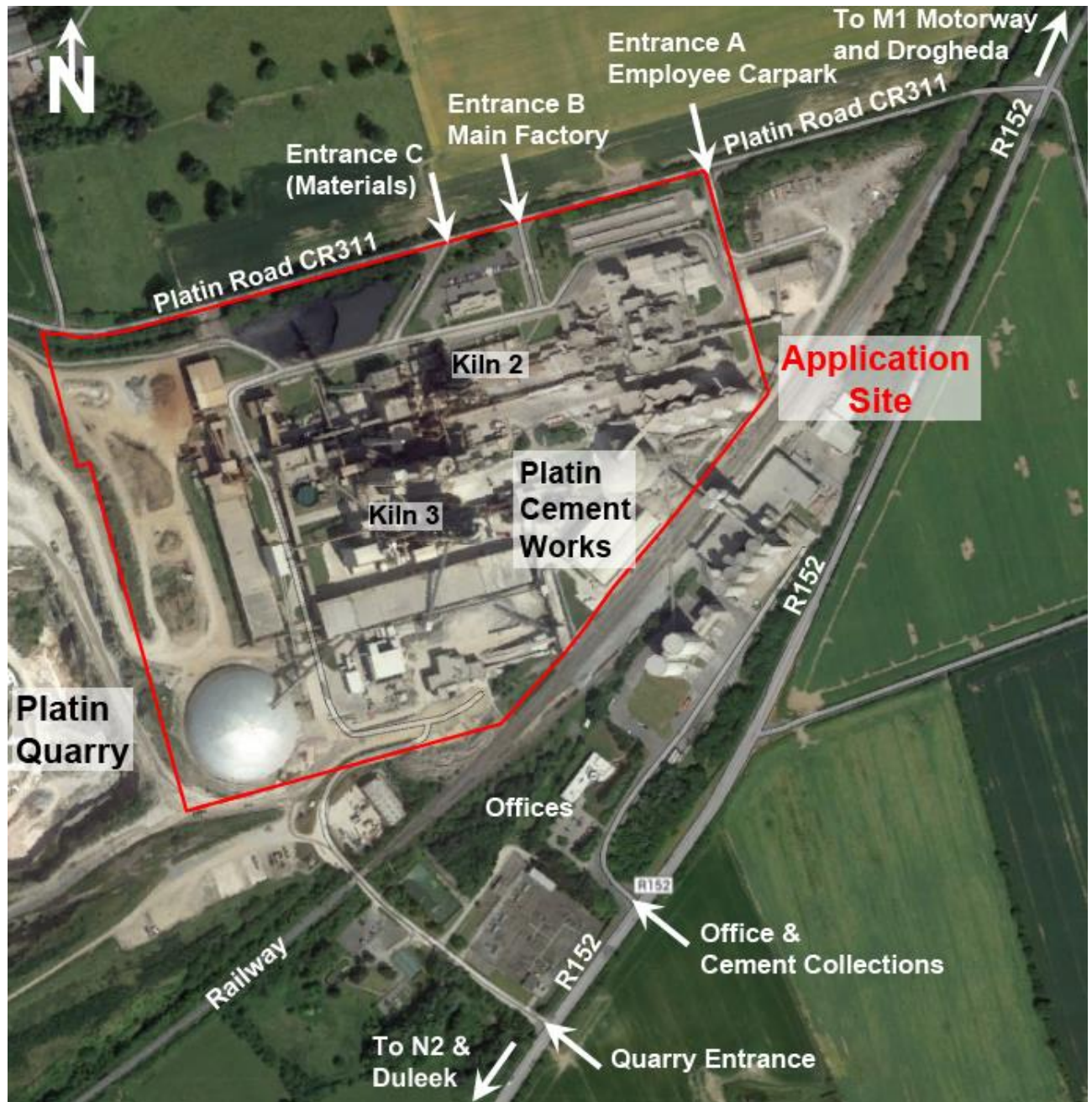


Figure 1 Platin Cement Works and Application Site



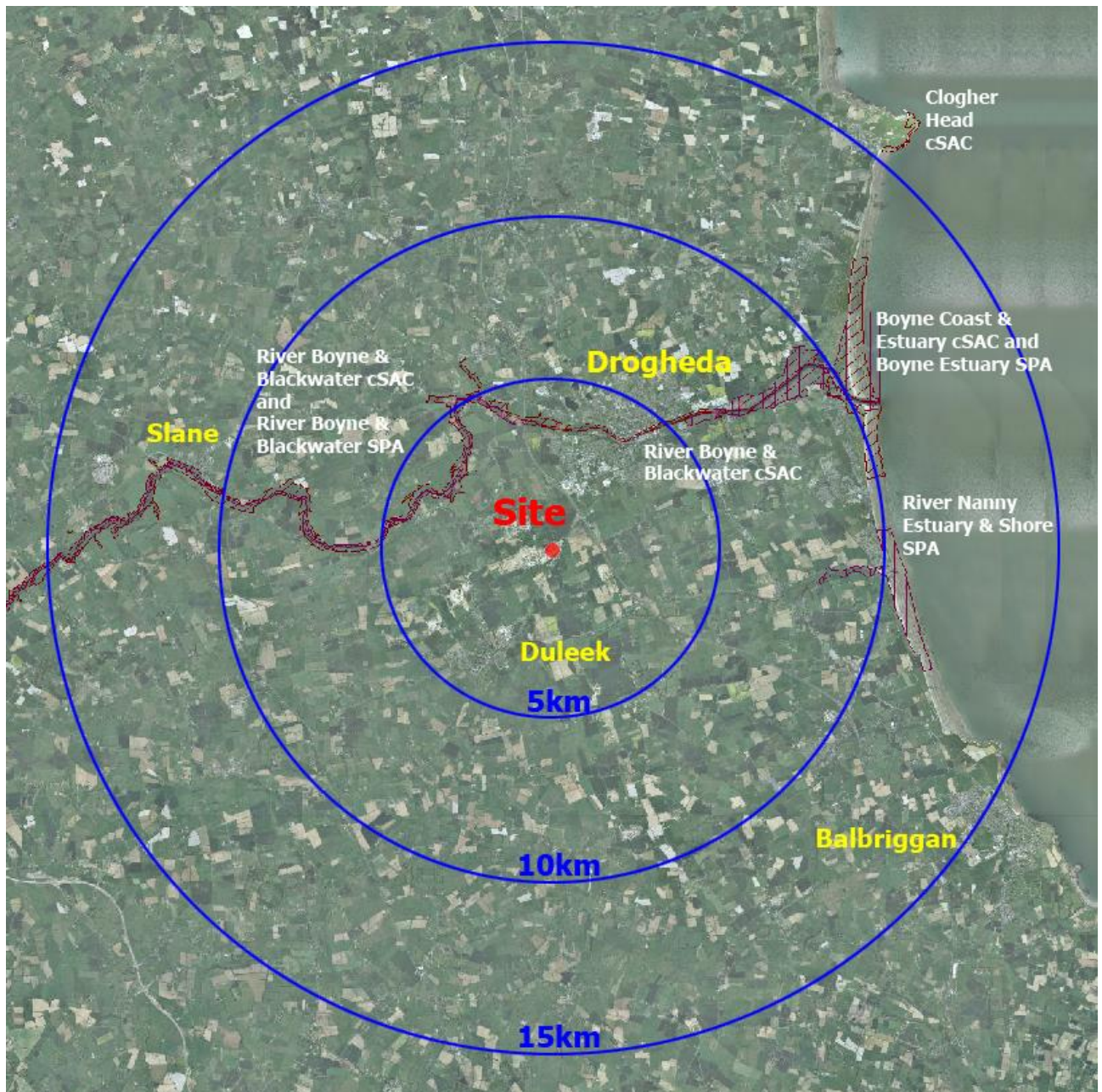


Figure 2 European Sites in relation to the Study Area/Application Site

### 3.3.2 Description of the proposed development

Irish Cement Limited is applying to An Bord Pleanála for a ten year planning permission for a strategic infrastructure development consisting of the further replacement of fossil fuels with lower carbon alternative fuels and for the use of alternative raw materials at Platin Cement Works, County Meath. Extant permissions already allow for the use of up to 120,000 tonnes per annum of a limited range of alternative fuels in Kiln 3. However, the proposed development seeks the flexibility to replace virtually all existing use of imported fossil fuels (*i.e.* up to 85% replacement) and for the use of alternative fuels in replacing a portion of traditional raw materials used in the manufacture of cement. In total this requires an additional 480,000 tonnes per annum of alternative fuels and alternative raw materials for use in both Kiln 2 and Kiln 3.

Following research on guidance by the Environmental Authorities in Switzerland and Germany, a range of potential materials have been selected as being suitable for use as alternative fuels or as alternative raw materials by cement plants. These materials include both non-hazardous and hazardous waste materials. The cement industry has been



using these materials throughout Europe for more than 35 years and many of these materials are already licensed for use by the Environmental Protection Agency (EPA) for cement production in other cement plants in Ireland.

The proposed development consists of the provision of a range of buildings, structures, conveyors, plant and equipment for the further replacement of fossil fuels with alternative fuels and for the use of alternative raw materials in Platin Cement Works.

The application site, which extends to 22.5 hectares, is centrally located within Platin Cement Works. The Cement Works, which extends to circa 40 hectares, is located off the R152 Drogheda - Kilmoon Cross Regional Road, approximately 750m southwest of Junction 8 (Drogheda South) on the M1 Dublin Belfast Motorway. Platin limestone quarry is located directly west of the Cement Works and provides the primary raw material used in the manufacture of cement.

Platin Cement Works is regulated under the Industrial Emissions (IE) Directive and operates in accordance with IE Licence No. P0030-04, which is issued and monitored by the Environmental Protection Agency (EPA).

### 3.3.3 Links to European sites, including cumulative effects

Platin Cement Works is not under any wildlife or conservation designation. Furthermore, no rare, threatened or legally protected plant species, as listed in the *Irish Red Data Book*, the *Flora Protection Order, 2015* or the *EU Habitats Directive*, are known to occur within the site. Neither the site nor its immediate surroundings contain any habitats of ecological value. No Key Ecological Receptors (defined in accordance with the ecological resource valuations presented in the *National Roads Authority Guidelines for Assessment of Ecological Impacts of National Road Schemes* (NRA/TII, 2009 (Rev. 2))) have been recorded. No evidence of any species or habitats with links to European sites has been recorded at the site or at Platin Cement Works and no ‘reservoir’ type habitats are present. As a consequence of any development there will therefore be no loss of any habitat or species listed as a qualifying feature of any designated site

Table 2 lists the relevant European sites and outlines their reasons for designation.

**Table 2 Relevant European sites including reasons for designation**

European Site	Reasons for designation (information correct as of July 2017) (*denotes a priority habitat)
<b>Special Areas of Conservation</b>	
River Boyne and River Blackwater SAC (002299)	<ul style="list-style-type: none"> <li>•Alkaline fens [7230]</li> <li>•*Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</li> <li>•Atlantic Salmon <i>Salmo salar</i> (only in fresh water) [1106]</li> <li>•River Lamprey <i>Lampetra fluviatilis</i> [1099]</li> <li>•Otter <i>Lutra lutra</i> [1355]</li> </ul> <p>Generic Conservation Objectives: 15/08/16</p> <p>According to this SAC’s Natura 2000 information form, this site comprises most of the freshwater element of the River Boyne from upriver of the Boyne Aqueduct at Drogheda, the Blackwater River as far as Lough Ramor and the principal Boyne tributaries, notably the Deel, Stoneyford and Tremblestown Rivers. This system drains a considerable area of Counties Meath and Westmeath and smaller areas of Cavan and Louth. The underlying geology is Carboniferous Limestone for the most part with areas of Upper, Lower and Middle well represented. In the vicinity of Kells Silurian Quartzite is present while close to Trim are Carboniferous Shales and Sandstones. The rivers flow through a landscape dominated by intensive agriculture, mostly of improved grassland but also cereals. Much of the river channels were subject to arterial drainage schemes in the past. Natural flood-plains now exist along only limited stretches of river, though often there is a fringe of reed swamp, freshwater marsh, wet grassland or deciduous wet woodland. Along some parts, notably</p>

European Site	Reasons for designation (information correct as of July 2017) (*denotes a priority habitat)
	<p>between Drogheda and Slane, are stands of tall, mature mixed woodland. Substantial areas of improved grassland and arable land are included in site for water quality reasons. There are many medium to large sized towns adjacent to but not within this SAC.</p> <p>The main channel of the Boyne contains a good example of alluvial woodland type which has developed on three alluvium islands. Alkaline fen vegetation is well represented at Lough Shesk, where there is a very fine example of habitat succession from open water to raised bog. The Boyne and its tributaries is one of Ireland's premier game fisheries and offers a wide range of angling, from fishing for spring salmon and grilse to sea trout fishing and extensive brown trout fishing. The site is one of the most important in eastern Ireland for salmon (<i>Salmo salar</i>) and has very extensive spawning grounds. The site also has an important population of river lamprey (<i>Lampetra fluviatilis</i>), though the distribution or abundance of this species is not well known. Otter (<i>Lutra lutra</i>) is widespread throughout the site. Some of the grassland areas along the Boyne and Blackwater are used by a nationally important winter flock of whooper swan (<i>Cygnus Cygnus</i>). Several Red Data Book plants occur within the site, with round-leaved wintergreen (<i>Pyrola rotundifolia</i>), a bluegrass (<i>Poa palustris</i>) and compressed rush (<i>Juncus compressus</i>). Also occurring are a number of Red Data Book animals, notably badger (<i>Meles meles</i>), pine marten (<i>Martes martes</i>) and common frog (<i>Rana temporaria</i>). The River Boyne is a designated Salmonid Water under the EU Freshwater Fish Directive.</p>
Boyne Coast and Estuary SAC (001957)	<ul style="list-style-type: none"> <li>•Estuaries [1130]</li> <li>•Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>•Salicornia and other annuals colonizing mud and sand [1310]</li> <li>•Spartina swards (<i>Spartinion maritimae</i>) [1320]</li> <li>•Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>•Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>•Embryonic shifting dunes [2110]</li> <li>•Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</li> <li>•*Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> </ul> <p>Site Specific Conservation Objectives: 31/10/12</p> <p>According to the site's Natura 2000 information form, this moderately sized coastal site, which is situated below the town of Drogheda, comprises most of the estuary of the Boyne River, a substantial river which drains a large catchment. On the seaward side this SAC extends north and south for several kilometres to include the remaining intact areas of dune systems at Baltray and Mornington, as well as the adjacent beaches and intertidal sand flats. The main channel of the Boyne is contained by training walls for navigable purposes. As well as intertidal sand and mud flats, the inner part of the site has salt marshes and <i>Spartina</i> swards.</p> <p>While the site has a good diversity of coastal habitats, including fixed dunes, most have been modified in some way. The containment of the main tidal channel has altered the tidal pattern which affects the functioning of the various estuarine habitats. Both dune systems were formerly far more extensive but much of the stable areas have now been converted to golf courses. This SAC is important for wintering waterfowl, supporting nine species in nationally important numbers, including golden plover (<i>Pluvialis apricaria</i>), an Annex I EU Birds Directive species. Little tern (<i>Sterna albifrons</i>) breeds or attempts to breed in most years.</p>

European Site	Reasons for designation (information correct as of July 2017) (*denotes a priority habitat)
<b>Special Protection Areas</b>	
Boyne Estuary SPA (004080)	<ul style="list-style-type: none"> <li>•[wintering] Shelduck <i>Tadorna tadorna</i></li> <li>•[wintering] Oystercatcher <i>Haematopus ostralegus</i></li> <li>•[wintering] Grey Plover <i>Pluvialis squatarola</i></li> <li>•[wintering] Golden Plover <i>Pluvialis apricaria</i></li> <li>•[wintering] Lapwing <i>Vanellus vanellus</i></li> <li>•[wintering] Knot <i>Calidris canutus</i></li> <li>•[wintering] Sanderling <i>Calidris alba</i></li> <li>•[wintering] Black-tailed Godwit <i>Limosa limosa</i></li> <li>•[wintering] Redshank <i>Tringa totanus</i></li> <li>•[wintering] Turnstone <i>Arenaria interpres</i></li> <li>•[breeding] Little Tern <i>Sterna albifrons</i></li> <li>•Wetlands &amp; Waterbirds</li> </ul> <p>Site Specific Conservation Objectives: 26/02/13</p> <p>According to the site’s Natura 2000 form, this moderately-sized coastal site, which is situated below the town of Drogheda, comprises most of the estuary of the Boyne River, a substantial river which drains a large catchment. Apart from one section which is over 1 km wide, the width is mostly less than 500 m. The main river channel, which is navigable and dredged, is defined by training walls, the latter being breached in places. Intertidal flats occur on the sides of the channelled river. The sediments vary from fine muds in the innermost areas to sandy muds or sands towards the mouth. The linear stretches of intertidal flats to the north and south of the river mouth are mainly sands. Intertidal areas are fringed by salt marshes in the inner sheltered areas. <i>Spartina</i> is frequent on the flats and salt marshes.</p> <p>The Boyne Estuary is one of the most important sites for wintering waterfowl on the east coast. It has a total of 10 species with populations of national importance – of particular note is that it supports 7.0% of the national total of knot (<i>Calidris canutus</i>) and 4.0% of the total for golden plover (<i>Pluvialis apricaria</i>). Other species which have populations of national importance include shelduck (<i>Tadorna tadorna</i>), oystercatcher (<i>Haematopus ostralegus</i>), lapwing (<i>Vanellus vanellus</i>), black-tailed godwit (<i>Limosa limosa</i>), redshank (<i>Tringa totanus</i>) and turnstone (<i>Arenaria interpres</i>). The site provides both feeding and roosting areas for the birds. Little tern (<i>Sterna albifrons</i>) bred in the past but successful breeding has not occurred since 1996.</p>
River Boyne and River Blackwater SPA (004232)	<ul style="list-style-type: none"> <li>•Kingfisher <i>Alcedo atthis</i></li> </ul> <p>Generic Conservation Objectives: 15/08/16</p> <p>According to the site’s Natura 2000 form, the River Boyne and River Blackwater SPA is a long linear site that comprises stretches of the River Boyne and several of its tributaries: most of the site is in Co Meath but it extends also into Counties Cavan, Louth and Westmeath. It includes the following river sections: The River Boyne from the M1 motorway bridge, west of Drogheda, to the junction with the Royal Canal, west of Longwood, Co Meath; the River Blackwater from its junction with the River Boyne in Navan to the junction with Lough Ramor in Co Cavan; the Tremblestown River (and Athboy River) from the junction with the River Boyne at Kilnagross Bridge to the bridge in Athboy, Co Meath; the Stoneyford River from its junction with the River Boyne to Stonestone</p>

European Site	Reasons for designation (information correct as of July 2017) (*denotes a priority habitat)
	<p>Bridge in Co. Westmeath; the River Deel from its junction with the River Boyne to Cumber Bridge, Co. Westmeath. The site includes the river channel and marginal vegetation</p> <p>The River Boyne and River Blackwater SPA supports nationally important numbers of kingfisher (<i>Alcedo atthis</i>). Other species which occur within the site include mute swan (<i>Cygnus olor</i>), teal (<i>Anas crecca</i>), mallard (<i>Anas platyrhynchos</i>), cormorant (<i>Phalacrocorax carbo</i>), grey heron (<i>Ardea cinerea</i>), moorhen (<i>Gallinula chloropus</i>), snipe (<i>Gallinago gallinago</i>) and sand martin (<i>Riparia riparia</i>).</p>
<p>River Nanny Estuary and Shore SPA (004158)</p>	<ul style="list-style-type: none"> <li>•[wintering] Oystercatcher <i>Haematopus ostralegus</i></li> <li>•[wintering] Ringed plover <i>Charadrius hiaticula</i></li> <li>•[wintering] Golden plover <i>Pluvialis apricaria</i></li> <li>•[wintering] Knot <i>Calidris canutus</i></li> <li>•[wintering] Sanderling <i>Calidris alba</i></li> <li>•[wintering] Herring gull <i>Larus argentatus</i></li> <li>•Wetlands &amp; Waterbirds</li> </ul> <p>Site Specific Conservation Objectives: 21/09/12</p> <p>According to the site’s Natura 2000 form, the site comprises the estuary of the River Nanny and sections of the shoreline to the north and south of the estuary (c.3 km in length). The estuarine channel, which extends inland for almost 2 km, is narrow and well sheltered. Sediments are muddy in character and edged by saltmarsh and freshwater marsh/wet grassland. The shoreline, which is approximately 500 m in width to the low tide mark, comprises beach and intertidal habitats. It is a well-exposed shore, with coarse sand sediments. The well-developed beaches, which are backed in places by clay cliffs, provide high tide roosts for the birds. The village of Laytown occurs in the northern side of the River Nanny estuary.</p> <p>This is an important east coast site, with nationally important populations of golden plover (<i>Pluvialis apricaria</i>), oystercatcher (<i>Haematopus ostralegus</i>), ringed plover (<i>Charadrius hiaticula</i>), knot (<i>Calidris canutus</i>), sanderling (<i>Calidris alba</i>) and herring gull (<i>Larus argentatus</i>). The population of knot (<i>Calidris canutus</i>) and sanderling (<i>Calidris alba</i>) are of particular note as they represent 4% and 3.8% of the respective all-Ireland totals. A range of other waterfowl species also occur, including light-bellied brent goose (<i>Branta bernicla hrota</i>), as well as <i>Larus</i> (gulls.). The site is of most importance as a roost area for the birds but also provides feeding habitat.</p>

Table 3 contains a screening matrix of the potential impact types and the potential for a significant effect on each European site.



Table 3 Significance of Impact Matrix for European Sites potentially affected by the proposed development at Platin Cement Works

European Site	Conservation Objective	Impact Type	Potential Cause	Potential for a Significant Effect
River Boyne and River Blackwater SAC (002299)	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	Habitat Loss and/or fragmentation	Construction effects	No potential significant effect
		Impacts to habitat structure	Construction effects	No potential significant effect
		Disturbance to species of conservation concern	Construction effects	No potential significant effect
		Mortality to species (such as roadkill)	Construction effects	No potential significant effect
		Noise pollution	Emissions during construction and operation	No potential significant effect
		Emissions to water	Emissions during construction and operation	No potential significant effect
		Emissions to air	Emissions during Construction and operation	<b>Possible significant effect</b>
Boyne Coast and Estuary SAC (001957)	To maintain the favourable conservation condition of Estuaries, Mudflats and sandflats not covered by seawater at low tide and Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritima</i> ) in the Boyne Coast and Estuary SAC;  To restore the favourable conservation condition of <i>Salicornia</i> and other annuals colonising mud and sand, Embryonic shifting dunes,	Habitat Loss and/or fragmentation	Construction effects	No potential significant effect
		Impacts to habitat structure	Construction effects	No potential significant effect
		Disturbance to species of conservation concern	Construction effects	No potential significant effect
		Mortality to species (such as roadkill)	Construction effects	No potential significant effect
		Noise pollution	Emissions during construction and operation	No potential significant effect

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	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes') and *Fixed coastal dunes with herbaceous vegetation ('grey dunes') in the Boyne Coast and Estuary SAC.	Emissions to water	Emissions during construction and operation	No potential significant effect
		Emissions to air	Emissions during construction and operation	<b>Possible significant effect</b>
Boyne Estuary SPA (004080)	To maintain the favourable conservation condition of each of the bird species and the wetland habitat in Boyne Estuary SPA listed as Special Conservation Interests for this SPA.	Habitat Loss and/or fragmentation	Construction effects	No potential significant effect
		Impacts to habitat structure	Construction effects	No potential significant effect
		Disturbance to species of conservation concern	Construction effects	No potential significant effect
		Mortality to species (such as roadkill)	Construction effects	No potential significant effect
		Noise pollution	Emissions during construction and operation	No potential significant effect
		Emissions to water	Emissions during Construction and operation	No potential significant effect
		Emissions to air	Emissions during construction and operation	<b>Possible significant effect</b>
River Boyne and River Blackwater SPA (004232)	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.	Habitat Loss and/or fragmentation	Construction effects	No potential significant effect
		Impacts to habitat structure	Construction effects	No potential significant effect
		Disturbance to species of conservation concern	Construction effects	No potential significant effect
		Mortality to species (such as roadkill)	Construction effects	No potential significant effect

Development for the further replacement of Fossil Fuel with Alternative Fuels and for use of Alternative Raw Materials

Screening for Appropriate Assessment

European Site	Conservation Objective	Impact Type	Potential Cause	Potential for a Significant Effect
		Noise pollution	Emissions during construction and operation	No potential significant effect
		Emissions to water	Emissions during Construction and operation	No potential significant effect
		Emissions to air	Emissions during Construction and operation	<b>Possible significant effect</b>
River Nanny Estuary and Shore SPA (004158)	To maintain the favourable conservation condition of each of the bird species and the wetland habitat in River Nanny Estuary and Shore SPA listed as Special Conservation Interests for this SPA.	Habitat Loss and/or fragmentation	Construction effects	No potential significant effect
		Impacts to habitat structure	Construction effects	No potential significant effect
		Disturbance to species of conservation concern	Construction effects	No potential significant effect
		Mortality to species (such as roadkill)	Construction effects	No potential significant effect
		Noise pollution	Emissions during construction and operation	No potential significant effect
		Emissions to water	Emissions during construction	<b>Possible significant effect</b>
			Emissions during operation	<b>Possible significant effect</b>
		Emissions to air	Emissions during Construction and operation	<b>Possible significant effect</b>

**Explanation of terms used in Significance of Impact Matrix:**

**Likely Significant Effect:** Where a plan or project is likely to undermine any of the site’s conservation objectives;

**Possible Significant Effect:** Where a plan or project has an indicated potential to undermine any of the site’s conservation objectives, but where doubt exists about the risk of a significant effect in the current context. Nevertheless where doubt exists about the risk of a significant effect, use of the precautionary principle requires this effect to be considered appropriately within the screening process.

**No Potential Significant Effect:** Where there is considered to be no likelihood of any potential for a plan or project to undermine any of the site’s conservation objectives.



### 3.3.4 Other European sites

No other European sites are considered to be relevant to this assessment of the proposed development at Platin. It is not necessary to consider any sites further in this report.

### 3.3.5 Other designated conservation sites (other than European sites)

Eleven proposed Natural Heritage Areas (pNHAs) occur within 10km of Platin Cement Works. The majority are concurrent with the European site designations along the Boyne and the Boyne and Nanny Estuaries. Three proposed Natural Heritage Areas, not designated at European sites, are located southwest of Platin Cement Works. These are Duleek Commons (001578), Thomastown Bog (001593) and Balrath Woodlands (001579). One further pNHA site, Cromwell's Bush Fen (001576) is located some 7km south of the site.

No impacts are expected to arise at any non-European designated site, such as the pNHAs within 5km of the Platin Facility. This is due to the distance between the sites and Platin, and the reasons for which the sites are designated. For example, no changes to groundwater levels at Duleek Commons pNHA are considered remotely likely as a result of the proposed development.

### 3.3.6 Other issues

While no invasive plant species (*i.e.* those species listed on Schedule 3 of *the Birds and Habitats Regulations, 2011*) were identified on site, there is a risk that during construction such species could be introduced to the site. Avoidance of such risk will be managed during the construction period and no such species will be planted or deliberately imported to the site.

## 4 Screening conclusion

An appraisal has been undertaken of the proposed development at Platin and its relationship with European Sites. Under the precautionary principle, and as shown in Table 3 it is concluded that it is not possible to rule out significant adverse effects on five European sites following Screening.

The Screening exercise undertaken therefore determined that a Natura Impact Statement is required, for the following reasons:

- **Potential construction effects on European sites:**
  - Potential release of contaminated surface water may pose a temporary risk to watercourses, resulting in potential effects on the Special Conservation Interests of the River Nanny Estuary and Shore SPA, located approximately 8km downstream of the River Nanny outfall (emission point SW-4);
  - Potential effects resulting from emissions to air may pose a temporary risk to the Qualifying Interests and Special Conservation Interests of the following European sites:
    - River Boyne and River Blackwater SAC;
    - Boyne Coast and Estuary SAC;
    - Boyne Estuary SPA;
    - River Boyne and River Blackwater SPA;
    - River Nanny Estuary and Shore SPA.
- **Potential operational effects on European sites:**
  - Potential release of contaminated surface water may pose a risk to watercourses, specifically resulting in potential effects on the Special Conservation Interests of the River Nanny Estuary and Shore SPA, located approximately 8km downstream of the River Nanny outfall (emission point SW-4);
  - Potential effects resulting from emissions to air may pose a risk to the Qualifying Interests and Special Conservation Interests of the following European sites:



- River Boyne and River Blackwater SAC;
- Boyne Coast and Estuary SAC;
- Boyne Estuary SPA;
- River Boyne and River Blackwater SPA;
- River Nanny Estuary and Shore SPA.

## 5 References

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NPWS (2013b). The Status of EU Protected Habitats and Species in Ireland. Species Assessments Volume 3, Version 1.0. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland

Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) ([www.npws.ie/protectedsites](http://www.npws.ie/protectedsites))

Planning and Development, Act 2000, as amended.



## Appendix 1 – Background to Appropriate Assessment

The European<sup>1</sup> network is a Europe-wide network of ecologically important sites (SPAs and cSACs – also known as ‘European Sites’ or ‘Natura 2000 sites’) that have been designated for protection under either the EU Birds Directive (Council Directive 79/409/EEC on the Conservation of Wild Birds) or the EU Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna).

The main aim of the Habitats Directive is “to contribute towards ensuring biodiversity through the conservation of natural habitats of wild fauna and flora in the European territory of the Member States to which the treaty applies”. Any actions taken must be designed to “maintain or restore, at a favourable conservation status, natural habitats and species of wild fauna and flora of Community interest”. Under Article 6 of the Habitats Directive, an assessment is required where a plan or project may give rise to significant effects upon a European site.

In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in this process;

Article 6 (paragraphs (3) and (4)) of the Habitats Directive states that:

- (3) Any plan or project not directly connected with or necessary to the management of the site but likely to have 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. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.
- (4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of European is protected. It shall inform the Commission of the compensatory measures adopted.”

The requirements of the Habitats Directive are transposed into Irish law by means of the *European Communities (Birds and Natural Habitats) Regulations 2011* (hereafter referred to as the *Birds and Habitats Regulations*)<sup>2</sup> and by the *Planning and Development Act 2000*, as amended.

In Ireland, the statutory agency responsible for the designated areas is NPWS.

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<sup>1</sup> The EU Habitats Directive, Article 3.1, states “A Coherent European ecological network of Special Areas of Conservation and Special Protection Areas pursuant to Directive 79/409/EEC shall be set up under the title European”

<sup>2</sup> SI No. 477 of 2011

### Stages in the assessment

European Commission guidance (2001)<sup>3</sup> sets out the principles on how to undertake decision making in applying the Habitats Directive. The requirements of the Habitats Directive comprise four distinct stages:

**Stage 1: Screening** is the process which initially identifies the likely significant effects upon a European site of a project or plan, either alone or in combination with other projects or plans. It is important to note that the burden of evidence is to show, on the basis of objective information, that there will be no significant effect; if the effect may be significant, or is not known, that would trigger the need for an Appropriate Assessment. There is European Court of Justice case law to the effect that unless the likelihood of a significant effect can be ruled out on the basis of objective information, then an Appropriate Assessment must be made.

**Stage 2: Appropriate Assessment** is the detailed consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine with scientific certainty whether or not there will be adverse effects on the integrity of the site in light of its conservation objectives. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.

**Stage 3: Assessment of alternative solutions** is the process which examines alternative ways of achieving the objectives of the project or plan that would avoid impacts on the integrity of the European site, should avoidance or mitigation measures be unable to cancel out adverse effects.

**Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.** At Stage 4 an assessment is made with regard to whether or not the development is necessary for imperative reasons of overriding public interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the European network.

### Conservation objectives of European sites

The conservation objectives for a European Site are intended to represent the aims of the Habitats and Birds Directives in relation to that site. To this end, habitats and species of European Community importance should be maintained or restored to 'favourable conservation status' (FCS), as defined in Article 1 of the Habitats Directive below:

The conservation status of a natural habitat will be taken as 'favourable' when:

- Its natural range and the area it covers within that range are stable or increasing;
- The specific structure and functions which are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future;
- Conservation status of typical species is favourable as defined in Article 1(i).

The conservation status of a species will be taken as favourable when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;

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<sup>3</sup> European Commission (2001) *Assessment of Plans and Projects Significantly Affecting European Sites: Methodological Guidance on the Provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC*



- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Guidance from the European Commission<sup>4</sup> indicates that the Habitats Directive intends FCS to be applied at the level of an individual site, as well as to habitats and species across their European range. Therefore, in order to properly express the aims of the Habitats Directive for an individual site, the conservation objectives for a site are essentially to maintain (or restore) the habitats and species of the site at (or to) FCS.

The European Commission guidance recommends that screening should fulfil the following steps:

- 1** Determine whether the plan (or policy) is directly connected with or necessary for the management of European sites;
- 2** Describe the plan and describe and characterise any other plans or projects which, in combination, have the potential for having significant effects on European sites;
- 3** Identify the potential effects on European sites;
- 4** Assess the likely significance of any effects on European sites.

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<sup>4</sup> Managing European sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC. (European Commission 2000)

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