

Dublin North Fringe 220kV Reinforcement

EirGrid

Site Selection

Review of Constraints

ECG/EG/NKP/02

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Executive Summary

Potential local issues relating to the site selection for the proposed EirGrid 220kV substation Project in the Dublin North Fringe Area have been considered, based on:

- Fingal Development Plan 2011 – 2017
- Fingal County Council, Realignment of the R107 Malahide Road and East West Distributor Road as far as M1 Environmental Report for Strategic Environmental Assessment (SEA) Volume 1, August 2008 (Atkins)
- Water Framework Directive
- EPA water quality mapping
- Eastern River Basin District Management Plan
- Site visit to the Study Area on 28/02/2011

The Study Area is located in the townlands of Clonshaugh, Burgage, Baskin, Balgriffin, Bohammer, Middletown, Belcamp, Springhill, Saint Doolaghs and Stockhole. The main roads within the Study Area are Baskin Lane to the North, Malahide Road in the east, N32 to the south and Clonshaugh road to the east. Further west is the M1 Motorway.

Particular attention is given to two potential locations of interest within the Study Area: the IDA lands in the townland of Clonshaugh adjacent to the N32 and the grounds of the Teagasc Research Institute in Kinsealy.

The principal land use in the Study Area is agriculture, both tillage and grazing.

Information on land use zoning was taken from the Fingal Development Plan 2011 – 2017. The 2011-2017 Development Plan was adopted by Fingal County Council on 23rd March 2011 and came into effect on 20th April 2011. Most of the Study Area is zoned as “Green Belt” with areas in the south of the project location designated as “High Technology”, “Open Space” and “Residential Area”. The IDA lands are zoned as “High Technology”. Objective GI 34 of the Development Plan is to protect areas of high landscape quality. The area along the Malahide Road and in the Northeast part of the Study Area has been designated as highly sensitive landscape from the nature development area aspect. This sensitive landscape is directly west and south of the Teagasc property.

The Study Area does not include any areas designated by the National Parks and Wildlife Service as Special Areas of Conservation, Special Protection Areas or Natural Heritage Areas. However, there are a number of designated areas within 5km of the Study Area:

The National Sites and Monument Record does not record the presence of any monuments within the IDA or Teagasc properties. However, the presence of numerous recorded sites in the wider Study Area indicates the potential for additional sites to be found.

The Study Area is constrained by the “Proposed Inner and Outer Safety Zones” at the eastern end of Dublin Airport Runway 10L/28R which limits the range of obstacles in the aircraft takeoff and landing zones. The safety zones extend well into the centre of the project Study Area. Neither the IDA nor the Teagasc lands are included in the public safety zones outlined in the Fingal Development Plan.

An illegal dump site covering an area of approximately 1.4 hectares containing hazardous waste is located on the northeast of the N32/Clonshaugh Road Junction on lands owned by the IDA.

The Environmental Report for the East West Distributor Road indicates that the existing road network in the Study Area is operating close to capacity with congestion experienced at peak times.

The Project Study Area lies within the catchments of the Mayne and Sluice Rivers, both of which flow eastwards into Baldoyle Bay. The EPA and Fingal Co Council monitor the water quality on the Mayne River and also in the past on the Cuckoo Stream, a tributary of the Mayne. The EPA has classified the status of these waters as “Poor”.

The development of the 220kV substation is unlikely to contribute significantly to the existing point and diffuse source pollution to the rivers in the area. However, care should be taken to ensure that no construction waste or solids runoff enters the existing water courses.

It is noted that the Cuckoo Stream flows through the IDA lands adjacent to the N32.

The Department of Environment, Heritage and Local Government has issued a guideline document to Planning Authorities in relation to Flood Risk Management. The Guidelines classify essential infrastructure such as electricity sub-stations as highly vulnerable development and stipulate that such developments be located in areas of low flood risk. Lands with less than 1 in 1,000 year (<0.1%) chance of flooding from rivers in any one year, designated as Zone C, are deemed suitable for such developments. Draft consultation mapping prepared for Fingal County Council in conjunction with the Office of Public Works (OPW) and Meath County Council highlights areas of potential flood risk in the Study Area. These maps indicate that the majority of the IDA lands are in Flood Zone C, which is appropriate for electricity sub-stations. The draft consultation maps indicate that the Teagasc site is also in Flood Risk Zone C.

The main constraints relate to the zoning objectives in the Fingal Development Plan and to the traffic constraints in the area. The least constrained area is that designated as HT High Technology adjacent to the N32.

Due to the presence of contaminated land, site investigation and further characterisation of the extent of contaminated land in this area is recommended to be undertaken and a risk assessment carried out. This would inform final site selection, cable routes and any mitigating measures required.

Screening for Appropriate Assessment under Article 6 of the Habitats Regulations may be required given the potential connectivity of the contaminated land area to the designated candidate Special Areas of Conservation (cSAC) and Special Protection Areas (SPA) via the hydrology of the area.

Careful construction site management would minimise the potential for impact on surface and groundwaters in the area.

A traffic and transport study and risk assessment would be required.

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ANNEX 1 Fingal Development Plan 2011-2017 Zoning Objectives

ANNEX 2 Dublin City Development Plan 2011 – 2017 Map B Use Zoning Objectives

Note

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1 Introduction

EirGrid requires a new 220kV electricity substation in the Dublin North Fringe Area. A suitable site is required within a Study Area which encompasses the townlands of Clonshaugh, Burgage, Baskin, Balgriffin, Bohammer, Middletown, Belcamp, Springhill, Saint Doolaghs and Stockhole. The main roads within the Study Area are Baskin Lane to the North, Malahide Road in the east, the N32 to the south and Clonshaugh road to the east. Further west is the M1 Motorway. The Study Area is located primarily within the Fingal County Council administrative area. A narrow strip of lands adjacent to the N32 is within the Dublin City Council administrative area.

ESBI has been commissioned by EirGrid to prepare a Site Selection Constraints report for the general area. This report provides an initial review of constraints associated with the Study Area.

Particular attention is given to two locations of interest within the Study Area:

- the IDA lands in the townland of Clonshaugh adjacent to the N32
- the grounds of the Teagasc Research Institute in Kinsealy.

2 Baseline Information

The Study Area is located principally within Fingal County Council in the south part of its administrative area (Figure 1). Development in the area is governed by the Fingal Development Plan 2011 – 2017. The 2011-2017 Development Plan was adopted by Fingal County Council on 23rd March 2011. The plan came into effect on 20th April 2011 and on adoption took precedence over Local Area Plans. The Fingal Development Plan sets out policies and objectives for the development of the County over the Plan period and it guides how and where development will take place in the county over the next 6 years.

The objectives of the 2011-2017 Plan, including land use zoning, are therefore relevant to the site selection process for the substation.

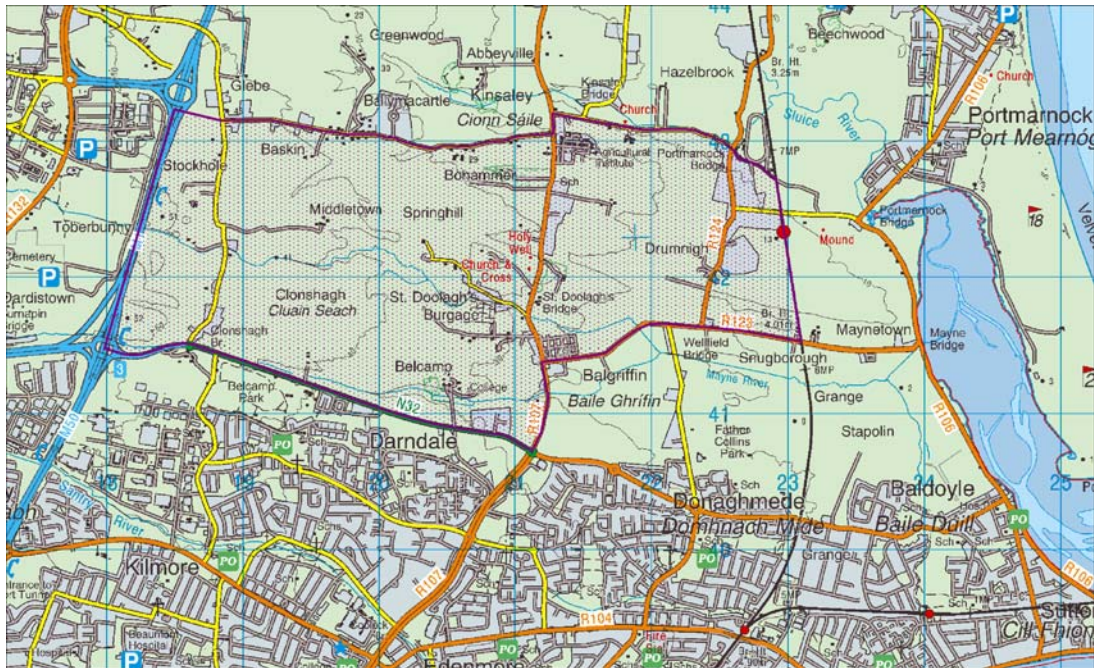


Figure 1: Project Study Area (shaded in purple)

A small section of the study area., in the south-western corner comes within the administrative area of Dublin City Council and is subject to the objectives and land use zoning of the Dublin City Development Plan 2011 – 2017.

The Dublin City Development Plan was adopted by Dublin City Council at a Special adjourned Meeting on 24th November 2010. The plan came into effect on 22nd December 2010. It also sets out policies and objectives to create a sustainable and vibrant city at the heart of the Greater Dublin Region. This plan guides how and where development will take place in the city over the next 6 years.

2.1 Land Use

The principal land use in the Study Area is agriculture, both tillage and grazing (see Figure 2). The landscape in the Study Area is characterised as low lying agricultural land in the Fingal Development Plan. There are also areas of residential and mixed commercial development, principally adjacent to the Malahide Road. Recreational areas include open space and playing pitches. Examples include the Athletic Union League Sports Grounds adjacent to the M1, Craobh Chiarain Sports Grounds adjacent to the N32, Belcamp College Sports Grounds adjacent to the Malahide road and a pitch and putt course. Balgriffin Cemetery is located just off the Malahide Road and is accessed via Carr's Lane.

The current land use of the IDA lands is agricultural.

The Teagasc Agricultural research centre is located in Kinsealy in the north east part of the Study Area, (Figure 2).

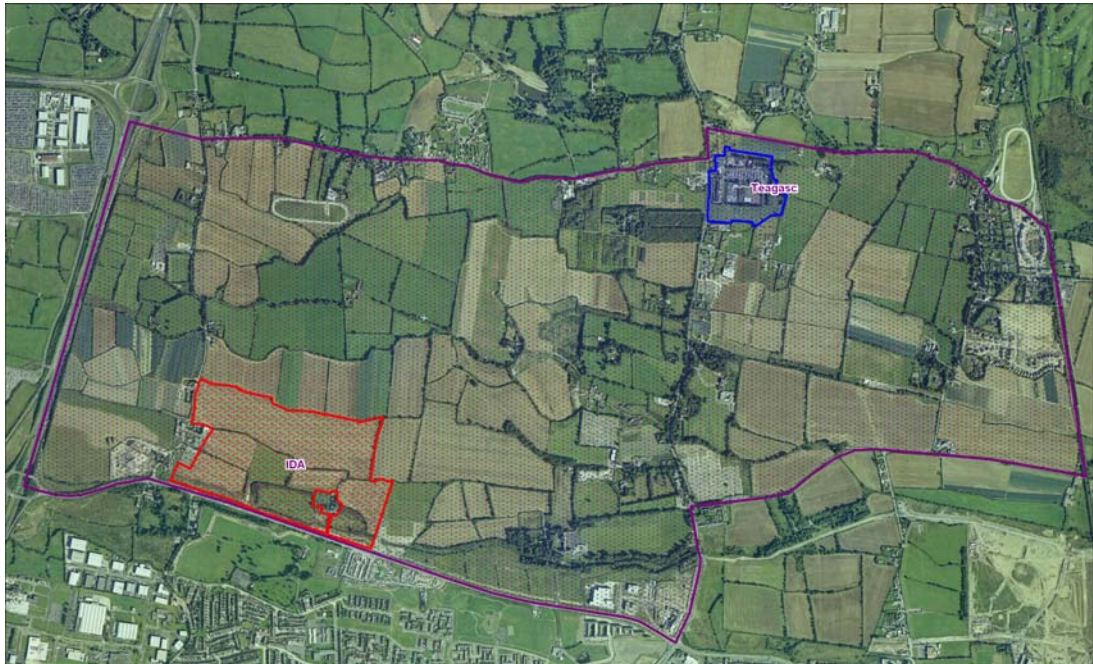


Figure 2: Land use in the Study Area



Figure 3: Road infrastructure

2.2 Zoning Objectives in the Study Area

Land use zoning has been derived from the Fingal Development Plan 2011 – 2017. (see Figure 4)

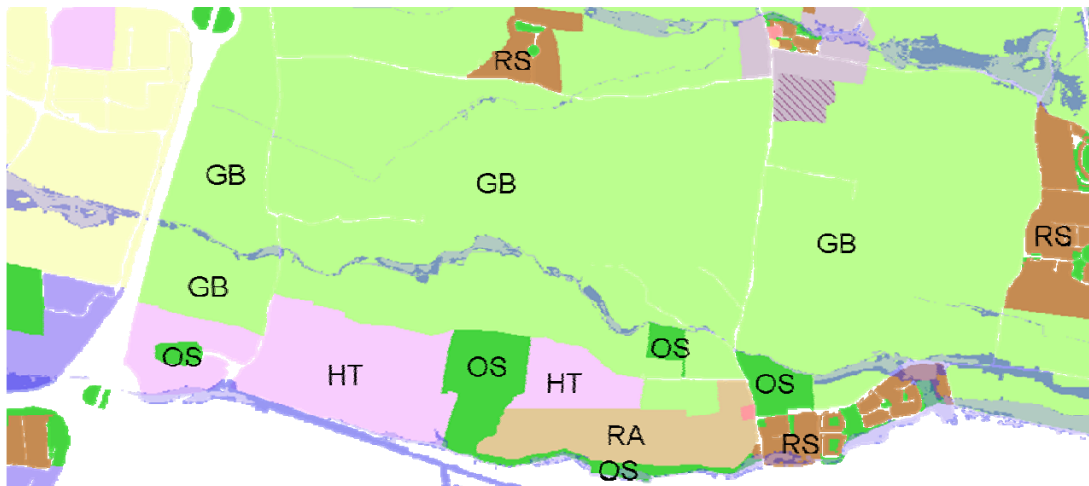


Figure 4: Land Use Zoning

GB – Green Belt, HT – High technology, OS – Open space, RS – Residential Development, RA - Residential Area

Source: Fingal Development Plan 2011-2017

Most of the Study Area is zoned as “Green Belt” with areas in the south of the project location designated as “High Technology”, “Open Space” and “Residential Area”.

The detailed explanation of these zoning objectives set out in the Development Plan 2011 – 2017 is provided in Annex 1 to this Report. A summary of the zoning objectives is as follows:

Zoning Objective Green Belt (GB):

Objective: *Protect and provide for a Green Belt.*

Vision: *This zoning objective seeks to create a rural/urban Green Belt zone that permanently demarcates the boundary i. between the rural and urban areas, or ii. between urban and urban areas. The role of the Green Belt is to check unrestricted sprawl of urban areas, to prevent coalescence of settlements, to prevent countryside encroachment, and to protect the setting of towns and/or villages. The Green Belt is attractive and multifunctional, serves the needs of both the urban and rural communities, and strengthens the links between urban and rural areas in a sustainable manner. The Green Belt will provide opportunities for countryside access and for recreation, retain attractive landscapes, improve derelict land within and around towns, secure lands with a nature conservation interest, and retain land in agricultural use. The zoning objective will have the consequence of achieving the regeneration of undeveloped town areas by ensuring that urban development is directed towards these areas.*

Zoning Objective High Technology (HT):

Objective: *Provide for office based, research and development and high technology type employment in a high quality built and landscaped environment.*

Vision: *The purpose of this zoning is to facilitate opportunities for science and technology, major office and research and development based employment within high quality, highly accessible, campus style settings. The HT zoning is aimed at providing a location for high end, environmentally sound, value added businesses and corporate headquarters. An emphasis on exemplar sustainable design and aesthetic quality will be promoted to enhance corporate image and identity.*

The Zoning Objective for the IDA lands at Clonshaugh is High Technology (HT). It is noted that for HT areas in the use classes related to the zoning objectives, utility installations are permitted in principle.

Zoning Objective Open Space (OS):

Objective: *Preserve and provide for open space and recreational amenities.*

Vision: *The zoning objective seeks to provide recreational and amenity resources for urban and rural populations subject to strict development controls. Only community facilities and other recreational uses will be considered and encouraged by the Planning Authority.*

Zoning Objective Residential Area (RA)

Objective: *Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure.*

Vision: *Ensure the provision of high quality new residential environments with good layout and design, with adequate public transport and cycle links and within walking distance of community facilities; provide an appropriate mix of house sizes, types and tenures in order to meet household needs; and to promote balanced communities.*

Zoning Objective Residential (RS)

Objective: *Provide for residential development and to protect and improve residential amenity.*

Vision: *Ensure that any new development in existing areas would have a minimal impact on and enhance existing residential amenity.*

The zoning objective of the small section of the study area with the administrative area of Dublin City Council is Zone Z7. Its zoning objective is to provide for the protection and creation of industrial uses and facilitate opportunities for employment creation (Annex 2).

2.3 Highly Sensitive Landscape

Objective GI 34 of the Development Plan is to protect areas of high landscape quality including Special Amenity Areas, High Amenity zoned lands, and Highly Sensitive Landscapes. The area along the Malahide Road and in the Northeast part of the Study Area has been designated as highly sensitive landscape from the nature development area aspect (Figure 5). This sensitive landscape is directly west and south of the Teagasc property.

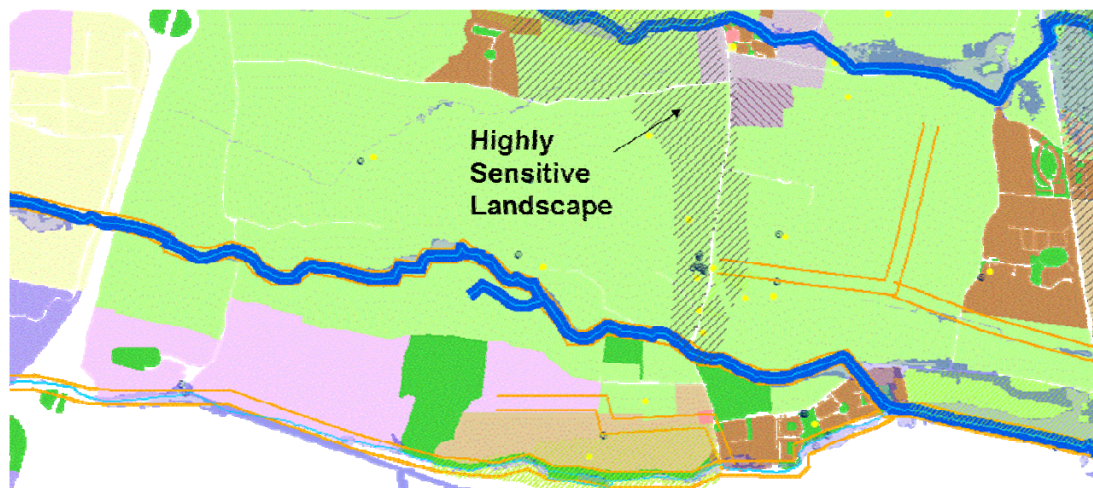


Figure 5: Highly Sensitive Landscape
Source: Fingal Development Plan 2011-2017

2.4 Natural Heritage, Biodiversity and Ecology

There are no statutory designated nature reserves within the Study Area. This means that the area does not include a Special Areas of Conservation (cSAC), Special Protection Area (SPA), Natural Heritage Area (NHA) or proposed Natural Heritage Area (pNHA). In addition, no refuge for fauna areas have been identified. However, there are a number of designated areas within 5km of the Study Area:

- Baldoyle Bay cSAC (Site Code 4016),
- Malahide Estuary cSAC (Site code 205)
- North Dublin Bay cSAC (Site Code 206)
- Baldoyle Bay SPA (Site Code 199)

- North Bull Island SPA (Site Code 4006)
- Broadmeadow/Swords Estuary SPA (Site Code 4025)
- Sandymount Strand/Tolka Estuary SPA (Site Code 4024)
- North Dublin Bay pNHA (Site Code 206)
- Malahide Estuary pNHA (Site code 205)
- Sluice River Marsh pNHA (Site code 1763)
- Feltrim Hill pNHA (Site code 1208)
- Santry Demesne pNHA (Site code 178)
- Baldoyle Bay pNHA (Site Code 199)

No rare flora, Flora Protection Order (1999) Site or Annex I Habitat is identified within the Study Area.

Existing habitats within the area comprise semi natural habitats comprising hedgerows with mature trees. An area of limestone outcropping occurs at Limekiln lane.

An Ecological Corridor is identified along the length of the Mayne River and the Woodland at Belcamp College has been identified as a nature development area (Figure 6).

Mammals observed in the area include bats such as Common Pipistrelle (*Pipistrellus ipestrellus*), Soprano Pipistrelle (*P. pygmaeus*), Brown long-eared bat (*Plecotus auritus*) (known to roost at St. Doolagh's Church) and Leisler's Bat (*Nyctalus leisleri*) (Balgriffin House offices). Other mammals include foxes, hares and rabbits and the habitat in the area may also be suitable for badgers.

Farmland, hedgerow and woodland edge bird species are likely to dominate in the general area.

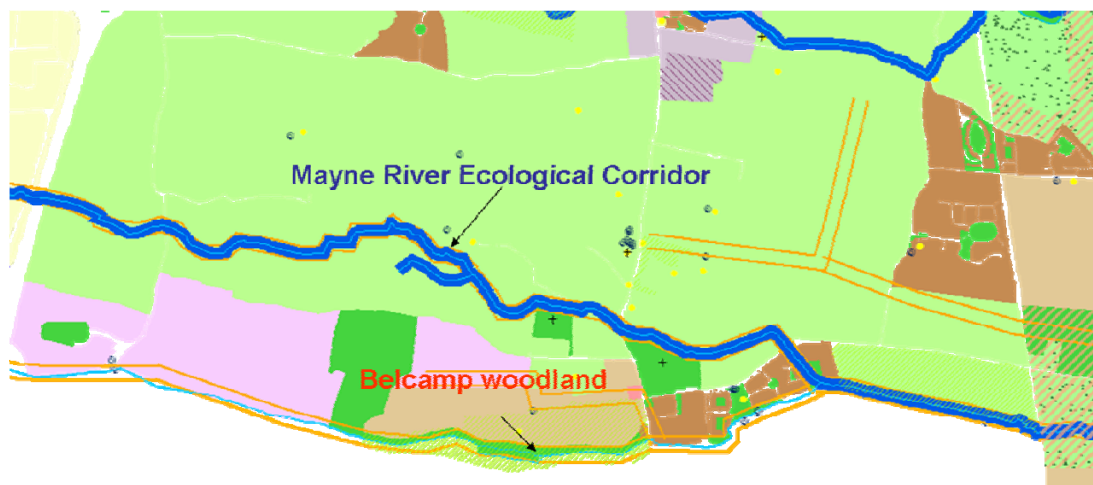


Figure 6: Ecological zonings

Source: Fingal Development Plan 2011-2017

2.5 Architectural and Archaeological Heritage

Architectural and archaeological heritage has been identified from the records of Monuments and Places (RMP) and the records of Protected Structures. These are shown in Figure 7. Historic Graveyards and existing graveyards are also shown.

The area is rich in heritage as evidenced by the extent of recorded sites including areas such as Belcamp House (now in ruins), Belcamp College, Middleton House, St Doolagh's Church (see Figure 8) and Springhill.

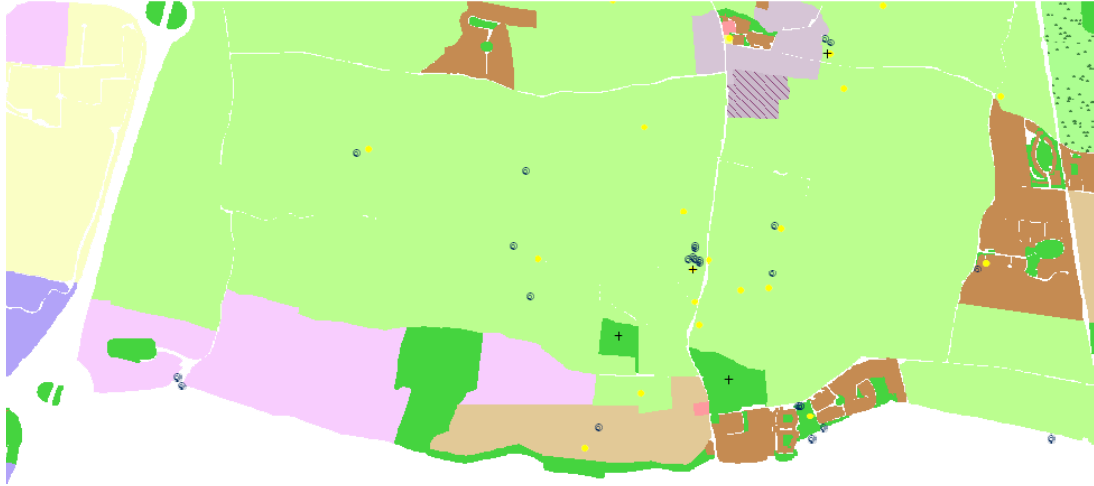


Figure 7: Architectural and Archaeological Heritage

**Records of Monuments and Places (grey dots), Recorded Protected Structures (yellow dots)
Historic Graveyards (cross symbol)**

Source: Fingal Development Plan 2011-2017

The National Sites and Monument Record does not record the presence of any monuments within the IDA or Teagasc properties. However, the presence of several recorded sites in the Study Area indicates the potential for additional sites to be found.



Figure 8: St Doolagh's Church (within Study Area)

2.6 Specific Development Plan Objectives

The Fingal Development Plan 2011 – 2017 sets out specific objectives pertaining to the Study Area, (Figure 9). These include a proposed new east west relief road linking the Malahide road to the west with link roads to the N32 and northwards. Other special objective areas are designated inner and outer public safety zones as the area is used a flight path to the east west runway at Dublin Airport and the associated inner and outer airport noise zones. Fingal County Council has incorporated proposed Public Safety Zones (PSZ) into the Fingal Development Plan 2011 – 2017. These zones were taken from a report, published by consultant ERM in 2005, commissioned by the Departments of Transport and Environment, Heritage and Local Government investigating Public Safety Zones at Cork, Dublin and Shannon airports. Development in the vicinity of Dublin Airport is constrained by the “Inner and Outer Public Safety Zones” at each end of all the runways.

The Study Area is constrained by the “Proposed Inner and Outer Safety Zones” at the eastern end of Runway 10L/28R which limits the range of obstacles in the aircraft takeoff and landing zones. The safety zones extend well into the centre of the Project Study Area.

Within the Public Safety Zones, the following land-use policy restricts the scale of development which can take place: -

- Prevent further development within inner PSZ's but allow existing developments to remain; and
- Allow existing developments to remain within PSZ's, but prevent high-density housing development and the building of schools, hospitals and facilities attracting large numbers of people.

Permitted developments include:

- Developments where persons are not expected to be present;
- Long stay car parks (i.e. greater than 24 hours), provided that persons are normally expected to park their car and then immediately leave the carpark development.
- Roads and railways where vehicles and passenger trains/trams are not expected to be stationary. For example, road vehicles can be expected to be stationary at major road intersections, junctions and traffic lights. Therefore, major road intersections, junctions, traffic lights and similar should not be permitted in the inner PSZ.

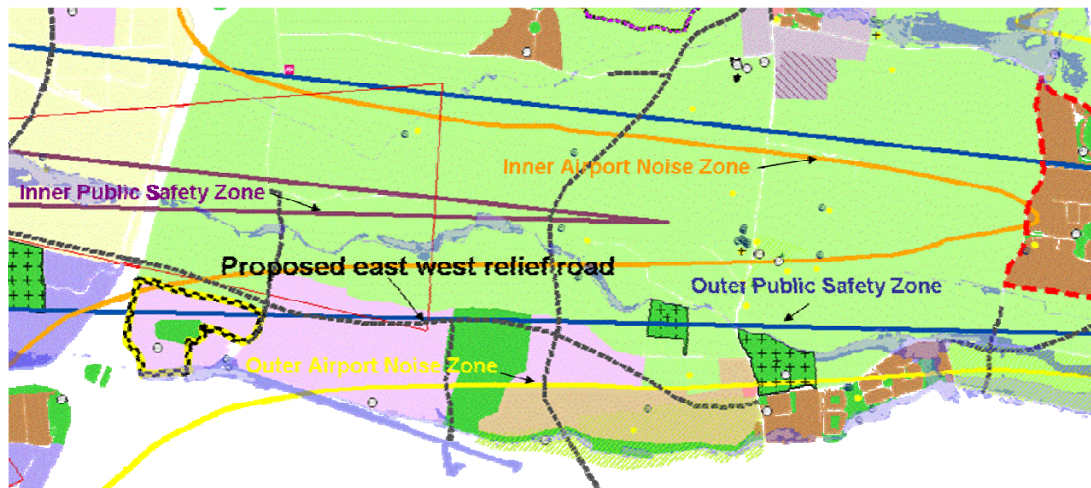


Figure 9: Proposed Specific Objectives

Source: Fingal Development Plan 2011-2017

The Teagasc Research Centre is outside all Safety Zones. The IDA site is outside the Inner Public Safety Zone. A small part of the northern section of the site may be in the Outer Public Safety Zone. The Irish Aviation Authority (who regulate safety standards within the Irish civil aviation industry) has stated that it would not have an objection to the construction of a substation within a Public Safety Zone east of the M1 motorway provided that the highest part of any structure is below 80 m AMSL (above mean sea level). All proposed sites are east of the M1 and the substation elevation will be well below 80 m AMSL.

2.7 Contaminated Lands

An illegal dumping ground was discovered within the Study Area on the IDA lands in 1998. The illegal dump site covers an area of approximately 1.4 hectares and is located on the northeast of the N32/Clonshaugh Road Junction as shown on Figure 10. Site investigations of the waste, undertaken on behalf of the IDA, identified the following types of waste:

- Commercial waste from factories;
- Food waste from airline in-flight meals;
- Construction and demolition waste; and
- Waste from engine oil and glass vessels with blood.

The contaminated land is believed to comprise an area of approximately 2-5 metres in width and 250 m in length and between 2-5 metres below existing ground level, but the true extent is unknown. The area has been fenced off and a number of groundwater monitoring boreholes were observed. (Figure 10)

Fingal County Council granted planning permission to the IDA on 8th May 2009 to environmentally remediate an area of 1.5 hectares on part of its land at Clonshaugh. The remediation methodology proposed is to remove the hazardous waste together with the surrounding impacted material for export off site, and replace with imported clean clay fill.



Figure 10: Area of Suspected Contamination and Monitoring Borehole

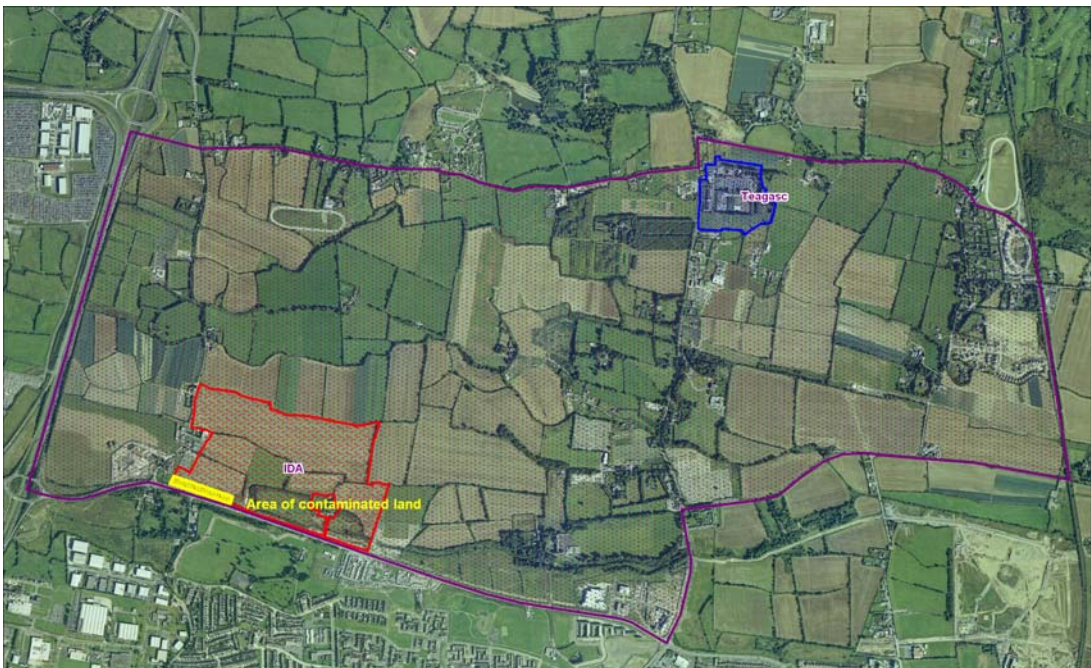


Figure 11: Site of illegal waste disposal area

A risk assessment should be carried out on what affect the contaminated land may have on the proposed development including potential liability issues when considering any location in the vicinity of historic landfill area/potential contaminated sites/illegal dumps as a possible location for a substation site.

An old quarry in Limehill has also been used as a dump site. Waste includes biodegradable waste such as branches, but there are also cars, white goods and domestic waste. The extent of this dump site is also unknown.

2.8 Traffic and Transport

As noted above in Section 2.6 of this report, the Fingal Development Plan 2011–2017 refers to a proposed new east west relief road linking the Malahide road to the west. The Environmental Report for this East West Distributor Road prepared by Atkins for Fingal County Council (2008) indicates that the existing road network in the area is operating close to capacity with congestion experienced at peak times, particularly on the N32, on its approach to the M50 and at the Malahide Road/N32 Junction. Figure 9 in Section 2.6 above shows the indicative route of this proposed road.

The major traffic routes serving the Study Area are the R132 / M1 route to the west of the area, the N32 to the south and the Malahide Road to the east. The only other traffic routes within the Study Area are Stockhole Lane, Clonshaugh Road and Baskin Lane. All of these are minor county roads with carriageway widths of only 6 to 7 meters. The exception is the northern section of Stockhole Lane at Cloghran which was recently realigned as part of the M1 Motorway extension project.

Baskin Lane provides an east-west link between the Malahide Road and the M1 for local residents. Clonshaugh Road provides a north south link between the N32 and the N1, Baskin Lane and the Malahide Road. It is used by traffic attempting to avoid the congested M1/M50 interchange and the even more congested Malahide Road / Grange Road junction at Clare Hall.

2.9 Submissions to the Draft Fingal Development Plan

A number of submissions are recorded by Fingal County Council as having been made on the Draft 2011-2017 Fingal Development Plan. A report on these submissions has been prepared by Fingal County Council and these are currently under consideration and will be discussed by members of the Council. Figure 12 indicates the locations within the project Study Area where submissions have been made. Details of the submissions were not available at the time of report preparation but the map serves to indicate where interests have been raised with respect to the development plan.

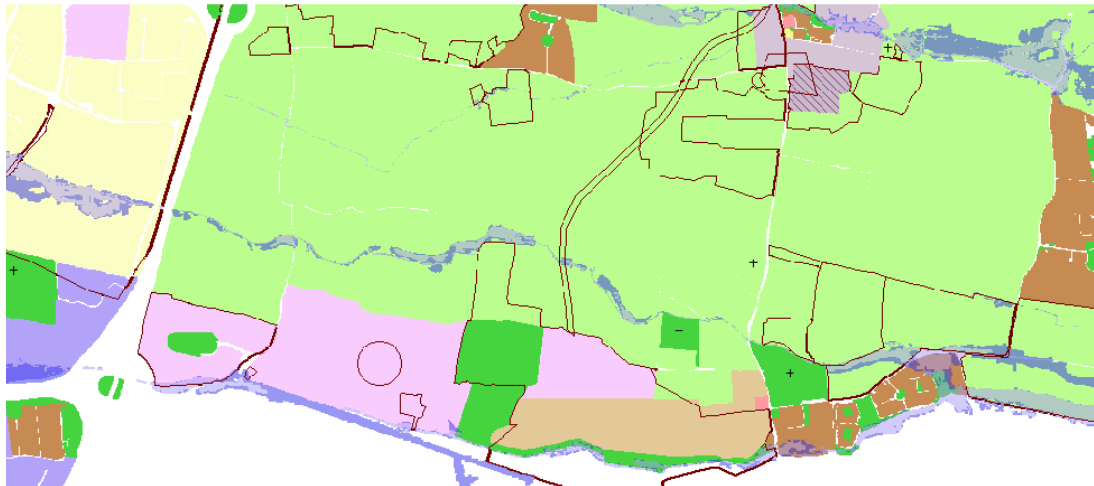


Figure 12: Areas related to submissions to the Fingal Draft Development Plan

Source Fingal Development Plan 2011 - 2017

2.10 Water courses

The Study Area lies within two river catchments. The southern part lies within the catchment of the River Mayne. A smaller area in the north of the district is within the catchment of the River Sluice.

The principal watercourses in the area are:

- The Mayne river which flows eastward through the centre of the Study Area to Baldoyle Bay. In its upper reach near Dublin Airport, the river is also known as the Cuckoo Stream
- A tributary of the Mayne which flows eastwards adjacent to the N32 road joining the Mayne river in Balgriffin Park.
- The Sluice River which flows eastwards to the north of the Study Area emptying into the sea at Portmarnock into Baldoyle Bay.

The watercourses in the area form part of the Santry-Mayne Sluice water Management Unit under the Eastern River Basin District (ERBD). A full description of the river basins and its characteristics as well as the WFD objectives can be found on www.wfdireland.ie and on www.erbd.ie.

The River Basin Management Plan 2009 - 2015 for the Eastern River Basin has been adopted by the Fingal County Council. Its objectives are to

- prevent deterioration;
- restore good status;
- reduce chemical pollution;
- achieve water-related protected areas objectives.

These include the objective to maintain water status for High and Good status waters and to restore to at least Good status all waters by 2015. In addition, the Surface Waters Environmental Objectives Regulations (SI 272 of 2009) and the

Groundwater Environmental Objectives Regulations (SI 9 of 2010) were made to give effect to the measures needed to achieve surface water and groundwater environmental objectives established in river basin management plans. The Regulations place a legal obligation on public authorities to aim to achieve those objectives in the context of their statutory functions.

In the Project Study Area the EPA and Fingal Co Council monitor the water quality on the Mayne River and also in the past on the Cuckoo Stream. The EPA has classified the status of these waters as “Poor”. The poor water quality status relate to wastewater discharges from industrial and municipal plants giving rise to

- High Nutrients (Phosphorus)
- High Oxygen Demand
- Low Ecological Rating
- Inferior Habitat.

The main pressure preventing achievement of Good Status is urban point and diffuse pollution. Full implementation of the programme of measures set out in the plan is expected to correct this, however recovery time will mean that the larger rivers will not achieve Good Status before 2015 and an extended deadline to 2027 is set out in the plan.

The development of the 220kV substation is unlikely to contribute significantly to the existing point and diffuse source pollution to the rivers in the area. However, care should be taken to ensure that no construction waste or solids runoff enters the existing water courses. It is also important to ensure that any development that could occur near contaminated lands undergoes a thorough site risk assessment to avoid contamination of ground and surface waters.

It is noted that the Cuckoo Stream, a tributary of the Mayne flows through the IDA lands adjacent to the N32.

2.11 Flood Risk Areas

In November 2009 the Dept of Environment, Heritage and Local Government issued a guideline document to Planning Authorities in relation to Flood Risk Management. The Guidelines classify developments into three vulnerability classes based on the effects of flooding (i) Highly vulnerable development, (ii) Less vulnerable development and (iii) Water Compatible development. Essential infrastructure such as electricity sub-stations are classed as highly vulnerable development.

The Guidelines classify Land areas within three flood zones based on the probability of flooding. Zone A is at highest risk and has a 1 in 100 year (1%) chance of flooding from rivers in any one year. Zone B is at moderate risk and has up to 1 in 1,000 year (>0.1%) chance of flooding from rivers in any one year. Zone C is low risk and has less than 1 in 1,000 year (<0.1%) chance of flooding from rivers in any one year. In the identification of flood zones, no account should be taken of any flood relief walls or embankments.

Fingal County Council in conjunction with the Office of Public Works and Meath County Council have commissioned consultants to prepare a catchment based flood risk assessment of the Fingal - East Meath area known as the Fingal East Meath Flood Risk Assessment and Management Study (FEM – FRAMS). Draft flood risk maps have been issued for consultation for the rivers in the area including the Study Area. These maps indicate that small parts of the IDA lands adjacent to the Cuckoo Stream beside the N32 are on Flood Zones A and B. The majority of the site is however in Flood Zone C, which is appropriate for electricity sub-stations. The Teagasc site is in the catchment of the Sluice River. The draft consultation flood risk maps for the Sluice River indicate that the Teagasc site is in Flood Risk Zone C.

The Development Plan 2011 – 2017 identifies some flood risk areas along the Mayne River, the Cuckoo Stream and the Sluice River (Figure 13). This map is generally compatible with the draft consultation FEM – FRAMS mapping.

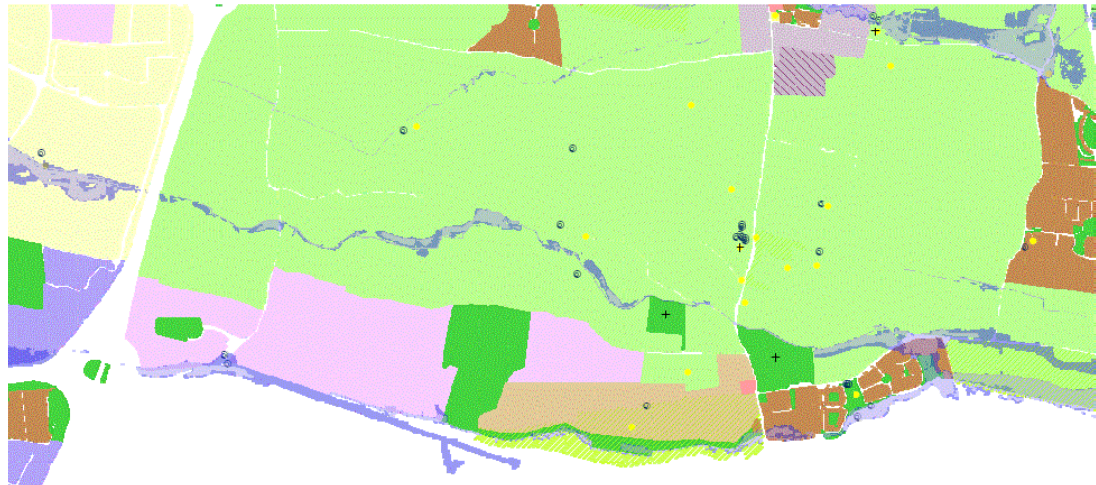


Figure 13: Flood risk Areas (shaded in blue)

Source: Fingal Development Plan 2011 - 2017

Objective SW02 of the Plan stipulates that no new development should be allowed in floodplains other than development in well established towns which satisfies the justification test outlined in the guideline document to Planning Authorities in relation to Flood Risk Management

3 Constraints

The principal constraint stems from the zoning designations set out in the Fingal Development Plan 2011 – 2017. Much of the lands within the Study Area comprise Green Belt, Open Space or residential areas and this could preclude any substation development within these areas.

Development in the central Study Area is also curtailed by the inner and outer public safety zones.

Development in the north eastern part (near the Teagasc Agricultural College) is constrained by the zoning designation as highly sensitive landscape.

In the south-eastern area around Belcamp woodland the zoning designation as a nature development area would also preclude development in this area.

The lands zoned as High Technology adjacent to the N32 offers the least constraint to development in the area. However, one section of this land has been used as an illegal landfill site and contains contaminating materials. The extent of this contamination is unknown and the site could extend to a greater area. Any development would need to assess the risk of disturbing contaminated material and the potential to contaminate groundwater and or surface water. As the hydrology of the area is connected to the Baldoyle Bay area there is some potential for any such contamination to reach the designated Special Area of Conservation and this may trigger the need for Screening for Appropriate Assessment under Article 6 of the Habitats Directive and possibly an Appropriate Assessment itself.

There are also significant traffic constraints in the Study Area.

4 Conclusion

The main constraint relates to the zoning objectives in the 2011-2017 Fingal County Development Plan and to the traffic constraints in the area. The least constrained area is that designated as HT (High Technology) adjacent to the N32.

Due to the presence of contaminated land, site investigation and further characterisation of the extent of contaminated land in this area is likely to be required and a risk assessment carried out. This would inform final site selection, cable routes and any mitigating measures required.

Screening for Appropriate Assessment under Article 6 of the Habitats Regulations may be required given the potential connectivity of the contaminated land area to the designated cSAC and SPA areas via the hydrology of the area.

Careful construction site management would minimise the potential for impact on surface and groundwaters in the area.

A traffic and transport study and risk assessment is likely to be required.

ANNEX 1

Fingal Development Plan 2011-2017 Zoning Objectives

ZONING OBJECTIVE “GB” GREENBELT

Objective: *Protect and provide for a Green Belt.*

Vision: *This zoning objective seeks to create a rural/urban Green Belt zone that permanently demarcate the boundary i. between the rural and urban areas, or ii. between urban and urban areas. The role of the Green Belt is to check unrestricted sprawl of urban areas, to prevent coalescence of settlements, to prevent countryside encroachment, and to protect the setting of towns and/or villages. The Green Belt is attractive and multifunctional, serves the needs of both the urban and rural communities, and strengthens the links between urban and rural areas in a sustainable manner. The Green Belt will provide opportunities for countryside access and for recreation, retain attractive landscapes, improve derelict land within and around towns, secure lands with a nature conservation interest, and retain land in agricultural use. The zoning objective will have the consequence of achieving the regeneration of undeveloped town areas by ensuring that urban development is directed towards these areas.*

USE CLASSES RELATED TO ZONING OBJECTIVE

Permitted in Principle

Agricultural Buildings, Agri-Tourism, Bed and Breakfast*, Boarding Kennels, Burial Grounds, Childcare Facilities*, Community Facility, Golf Course, Guest House*, Health Practitioner*, Home-Based Economic Activity, Offices Ancillary to Permitted Use, Open Space, Place of Worship, Recreational Facility/Sports Club, Residential¹, Restaurant/café, Veterinary Clinic*, Woodland Forestry.

Not permitted

Abattoir, Advertising Structures, Aerodrome/Airfield, Agri-Business, Agricultural Farm Supplies, Agricultural Machinery Sales and/or Maintenance, Airport Related Uses, Amusement Arcade, Betting Office, Caravan Park – Residential, Cargo Yards, Carpark Commercial, Cash and Carry/Wholesale Outlet, Concrete/Asphalt etc., Conference Centre, Dancehall/Nightclub, Distribution – Non Local Food Based, Enterprise Centre, Fast Food Outlet/Take-Away, Food Industry Park, Fuel Depot – Commercial, Fuel Depot – Household, Fuel Storage Facilities, Funeral Home, Heavy Vehicle Park, Holiday Home/Apartments, Hospital, Industry – General, Industry – Light, Industry – Special, Logistics, Office ≤ 100sq.m., Office > 100sq.m. and < 1,000sq.m., Offices ≥ 1,000sq.m., Park and Ride Facilities, Plant Storage, Public House, Residential Care Home/ Retirement Home, Residential Institutions, Retail Warehouse, Retirement Village, High Technology Based Enterprise, Service Garage, Service Trades and Construction Uses, Sheltered Housing, Shop – Local < 150 sq.m. gfa, Shop – Convenience < 500 sq.m. gfa, Shop – Supermarket < 2500 sq.m nfa, Shop – Superstore > 2500 sq.m. nfa, Shop – Hypermarket > 5000 sq.m. nfa, Shop – Comparison Sales Outlets, Shop – Factory Outlet Centre, Shop – Warehouse Club, Taxi Office, Teleservices, Traveller Community Accommodation, Vehicle Sales Outlet – Small Vehicles, Vehicle Sales Outlet – Large Vehicles, Warehousing, Waste Disposal and Recovery Facility (Low Impact), Waste Disposal and Recovery Facility (High Impact).

* Where the use is ancillary to the use of the dwelling as a main residence.

¹ Subject to conformance with the rural settlement strategy.

ZONING OBJECTIVE “HA” HIGH AMENITY

Objective: *Protect and enhance high amenity areas.*

Vision: *The zoning objective seeks to protect these highly sensitive and scenic locations from inappropriate development and reinforce their character, distinctiveness and sense of place. In recognition of the amenity potential of these areas, opportunities to increase public access will be explored.*

USE CLASSES RELATED TO ZONING OBJECTIVE

Permitted in Principle

Agricultural Buildings, Agri-Tourism, Bed and Breakfast*, Burial Grounds, Carpark¹, Childcare Facilities*, Guest House*, Health Practitioner*, Holiday Home/Apartments², Home-Based Economic Activity*, Offices Ancillary to Permitted Use, Open Space, Residential³, Restaurant/Café⁴.

Not permitted

Abattoir, Advertising Structures, Aerodrome/Airfield, Agri-Business, Agricultural Farm Supplies, Agricultural Machinery Sales and/or Maintenance, Airport-Related Uses, Amusement Arcade, Betting Office, Boarding Kennels, Caravan Park – Holiday, Caravan Park – Residential, Cargo Yards, Carpark Commercial, Cash and Carry/Wholesale Outlet, Casual Trading, Concrete/Asphalt etc., Conference Centre, Dancehall/Nightclub, Distribution – Non Local Food Based, Education, Enterprise/Training Centre, Fast Food Outlet/Take-Away, Food Industry Park Uses, Fuel Depot – Commercial, Fuel Depot – Household, Fuel Storage Facilities, Funeral Home, Health Centre, Heavy Vehicle Park, Industry – General, Industry – Light, Industry – Special, Logistics, Office ≤ 100sq.m., Office > 100sq.m. and < 1,000sq.m., Offices ≥ 1,000sq.m., Park and Ride Facilities, Petrol Station, Place of Worship, Plant Storage, Public House, Public Transportation Station, Recycling Facility, Residential Care Home/Retirement Home, Residential Institution, Retail Warehouse, Retirement Village, Rural Research and Advisory Services (Non-Production), High Technology-Based Enterprise, Service Garage, Service Trades and Construction Uses, Sheltered Housing, Shop – Local < 150 sq.m. gfa, Shop – Convenience < 500 sq.m. gfa, Shop – Supermarket < 2500 sq.m nfa, Shop – Superstore > 2500 sq.m. nfa, Shop – Hypermarket > 5000 sq.m. nfa, Shop – Comparison Sales Outlets, Shop – Factory Outlet Centre, Shop – Warehouse Club, Taxi Office, Teleservices, Road Transport Depot, Traveller Community Accommodation, Vehicle Sales Outlet – Small Vehicles, Vehicle Sales Outlet – Large Vehicles, Veterinary Clinic, Warehousing, Waste Disposal and Recovery Facility (Low Impact), Waste Disposal and Recovery Facility (High Impact).

* Where the use is ancillary to the use of the dwelling as a main residence.

¹ Ancillary to permitted or existing use only.

² Only allowed in situations where the development involves conversion of a protected structure.

³ Subject to conformance with the rural settlement strategy.

⁴ Ancillary to tourist facility and development involves conversion of a protected structure.

ZONING OBJECTIVE “HT” HIGH TECHNOLOGY

Objective: *Provide for office based, research and development and high technology type employment in a high quality built and landscaped environment.*

Vision: *The purpose of this zoning is to facilitate opportunities for science and technology, major office and research and development based employment within high quality, highly accessible, campus style settings. The HT zoning is aimed at providing a location for high end, environmentally sound, value added businesses and corporate headquarters. An emphasis on exemplar sustainable design and aesthetic quality will be promoted to enhance corporate image and identity.*

USE CLASSES RELATED TO ZONING OBJECTIVE

Permitted In Principle

Alternative Energy Installation, A.T.M., Enterprise Centre, Industry – Light, Offices Ancillary to Permitted Use, Office ≤ 100sq.m., Office > 100sq.m. and < 1,000sq.m., Offices ≥ 1,000sq.m., Open Space, High Technology Based Enterprise, Shop – Local < 150 sq.m. gfa*, Telecommunications Structures, Utility Installations.

Not Permitted

Abattoir, Aerodrome/Airfield, Agricultural Buildings, Agri-Business, Agricultural Farm Supplies, Agricultural Machinery Sales and/or Maintenance, Agri-Tourism, Airport Related Uses, Amusement Arcade, Betting Office, Boarding Kennels, Burial Grounds, Caravan Park – Holiday, Caravan Park – Residential, Cargo Yards, Carpark Commercial, Cash and Carry/Wholesale Outlet, Casual Trading, Concrete/Asphalt etc, Cottage Industry, Dancehall/Nightclub, Distribution – Non Local Food Based, Extractive Industry/Extractive Quarrying, Fast Food Outlet/Take-Away, Food Industry Park Uses, Fuel Depot – Commercial, Fuel Depot – Household, Fuel Storage Facilities, Funeral Home, Garden Centre, Golf Course, Guest House, Heavy Vehicle Park, Holiday Home/Apartments, Industry – Special, Logistics, Place of Worship, Public House, Residential, Residential Care Home/ Retirement Home, Residential Institution, Retail Warehouse, Retirement Village, Road Transport Depot, Service Garage, Sheltered Housing, Shop – Convenience < 500 sq.m. gfa, Shop – Supermarket < 2500 sq.m nfa, Shop – Superstore > 2500 sq.m. nfa, Shop – Hypermarket > 5000 sq.m. nfa, Shop – Comparison Sales Outlets, Shop – Factory Outlet Centre, Shop – Warehouse Club, Vehicle Sales Outlet – Small Vehicles, Vehicle Sales Outlet – Large Vehicles, Veterinary Clinic, Warehousing, Waste Disposal and Recovery Facility (Low Impact), Waste Disposal and Recovery Facility (High Impact), Woodland Forestry.

* To serve the local working population only.

ZONING OBJECTIVE “RA” RESIDENTIAL AREA

Objective: *Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure.*

Vision: *Ensure the provision of high quality new residential environments with good layout and design, with adequate public transport and cycle links and within walking distance of community facilities; provide an appropriate mix of house sizes, types and tenures in order to meet household needs; and to promote balanced communities.*

USE CLASSES RELATED TO ZONING OBJECTIVE

Permitted in Principle

Alternative Energy Installation, A.T.M., Bed and Breakfast, Betting Office*, Childcare Facilities, Community Facility, Education, Funeral Home*, Health Centre, Health Practitioner, Home-Based Economic Activity, Offices Ancillary to Permitted Use, Office ≤100sq.m. *, Open Space, Place of Worship, Public House*, Public Transportation Station, Recycling Facility, Residential, Residential Care Home/Retirement Home, Retirement Village, Restaurant/Café*, Sheltered Housing, Shop – Local < 150 sq.m. gfa*, Shop – Convenience < 500 sq.m. gfa*, Shop – Supermarket < 2500 sq.m. gfa*, Taxi Office, Traveller Community Accommodation, Utility Installations, Veterinary Clinic.

Not Permitted

Abattoir, Aerodrome/Airfield, Agri-Business, Agricultural Buildings, Agricultural Farm Supplies, Agricultural Machinery Sales and/or Maintenance, Agri-Tourism, Airport Related Uses, Amusement Arcade, Boarding Kennels, Burial Grounds, Caravan Park – Holiday, Caravan Park – Residential, Cargo Yards, Carpark Commercial, Cash and Carry/Wholesale Outlet, Casual Trading, Concrete/Asphalt etc., Conference Centre, Cottage Industry, Dancehall/Nightclub, Distribution- Non Local Food Based, Enterprise Centre, Extractive Industry – Extraction Quarrying, Food Industry Park, Fuel Depot – Commercial, Fuel Depot – Household, Fuel Storage Facilities, Garden Centre, Golf Course, Industry – General, Industry – Special, Logistics, Office > 100sq.m. and < 1,000sq.m., Offices ≥ 1,000sq.m., Plant Storage, Heavy Vehicle Park, Retail Warehouse, Road Transport Depot, Rural Research and Advisory Services (Non-Production), High Technology Based Enterprise, Service Garage, Service Trades and Construction Uses, Shop – Superstore > 2500 sq.m. nfa, Shop – Hypermarket > 5000 sq.m. n.f.a., Shop – Comparison Sales Outlets, Shop – Factory Outlet Centre, Shop – Warehouse Club, Teleservices, Vehicle Sales Outlet – Small Vehicles, Vehicle Sales Outlet – Large Vehicles, Warehousing, Waste Disposal and Recovery Facility (Low Impact), Waste Disposal and Recovery Facility (High Impact), Woodland Forestry.

* In a Local Centre only.

ZONING OBJECTIVE “RS” RESIDENTIAL

Objective: *Provide for residential development and to protect and improve residential amenity.*

Vision: *Ensure that any new development in existing areas would have a minimal impact on and enhance existing residential amenity.*

USE CLASSES RELATED TO ZONING OBJECTIVE

Permitted in Principle

Alternative Energy Installation, Bed and Breakfast, Childcare Facilities, Community Facility, Education, Guest House, Home-Based Economic Activity, Offices Ancillary to Permitted Use, Open Space, Recycling Facility, Residential, Residential Care Home/ Retirement Home, Sheltered Housing, Transport Facilities, Traveller Community Accommodation, Utility Installations.

Not Permitted

Abattoir, Advertisements/Advertising Structures, Aerodrome/Airfield, Agri-Business, Agricultural Buildings, Agricultural Farm Supplies, Agricultural Machinery Sales and/or Maintenance, Agri-Tourism, Airport Related Uses, Amusement Arcade, Betting Office, Boarding Kennels, Burial Grounds, Caravan Park – Holiday, Caravan Park – Residential, Cargo Yards, Carpark Commercial, Cash and Carry/Wholesale Outlet, Casual Trading, Concrete/Asphalt etc., Conference Centre, Cottage Industry, Dancehall/Nightclub, Distribution – Non Local Food Based, Enterprise Centre, Extractive Industry -Extraction Quarrying, Fast Food Outlet/Take-Away, Fuel Depot – Commercial, Fuel Depot – Household, Fuel Storage Facilities, Funeral Home, Garden Centre, Golf Course, Hospital, Industry – General, Industry – Special, Logistics, Office ≤ 100sq.m., Office > 100sq.m. and < 1,000sq.m., Offices ≥ 1,000sq.m., Park and Ride Facilities, Plant Storage, Public House, Retail Warehouse, Road Transport Depot, Rural Research and Advisory Services (Non-Production), High Technology Based Enterprise, Service Garage, Service Trades and Construction Uses, Shop – Supermarket < 2500 sq.m nfa, Shop – Superstore > 2500 sq.m. nfa, Shop – Hypermarket > 5000 sq.m. nfa, Shop – Comparison Sales Outlets, Shop – Factory Outlet Centre, Shop – Warehouse Club, Taxi Office, Teleservices, Vehicle Sales Outlet – Small Vehicles, Vehicle Sales Outlet – Large Vehicles, Warehousing, Waste Disposal and Recovery Facility (Low Impact), Waste Disposal and Recovery Facility (High Impact), Woodland Forestry.

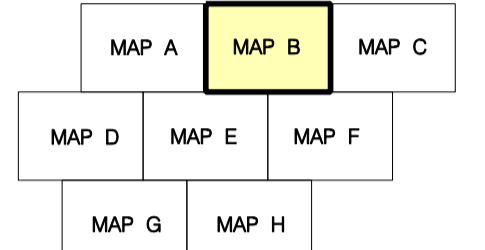
ANNEX 2

Dublin City Development Plan 2011 – 2017

Map B Use Zoning Objectives

Dublin City Development Plan 2011-2017

Map B



USE ZONING OBJECTIVES

- Zone Z1 To protect, provide and improve residential amenities
- Zone Z2 To protect and/or improve the amenities of residential conservation areas
- Zone Z3 To provide for and improve neighbourhood facilities
- Zone Z4 To provide for and improve mixed services facilities
- Zone Z5 To consolidate and facilitate the development of the central area and to identify, restore and strengthen and protect its civic design character and dignity
- Zone Z6 To provide for the creation and protection of enterprises and facilitate opportunities for employment creation
- Zone Z7 To provide for the protection and creation of industrial uses and facilitate opportunities for employment creation
- Zone Z8 To protect the existing architectural and civic design character to allow only for limited expansion consistent with the conservation objective
- Zone Z9 To preserve, provide and improve recreational amenity and open space & green networks
- Zone Z10 To consolidate and facilitate the development of inner city and inner suburban sites for mixed use development of which office, retail and residential would be the predominant uses
- Zone Z11 To protect and improve canal, coastal and river amenities
- Zone Z12 To ensure that existing environmental amenities are protected in any future use of these lands
- Zone Z14 To seek the social, economic and physical development and/or rejuvenation of an area with mixed use of which residential and "2B" would be the predominant uses
- Zone Z15 To provide for institutional, educational, recreational, community, green infrastructure & health uses

SPECIFIC OBJECTIVES

- Conservation Areas
- Architectural Conservation Areas
- Specific Site Objective (see Written Statement - Chapter 15)
- Protected Structures (FPS takes precedence)
- Sites of Archaeological Interest
- Zones of Archaeological Interest
- Key District Centres
- SEVESCO II establishments
- Strategic Development & Regeneration Areas
- LAP (Local Area Plan)
- Dublin Airport Safety Zone

- ROADS**
- Road Schemes and Bridges
 - Eastern By-Pass (indicative only)

1. Map to be read in conjunction with the written statement
2. Roads objectives are shown diagrammatically

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City Boundary
Scale: 0 100 200 300 400 500 metres

Dick Gleeson
Dublin City Planner

