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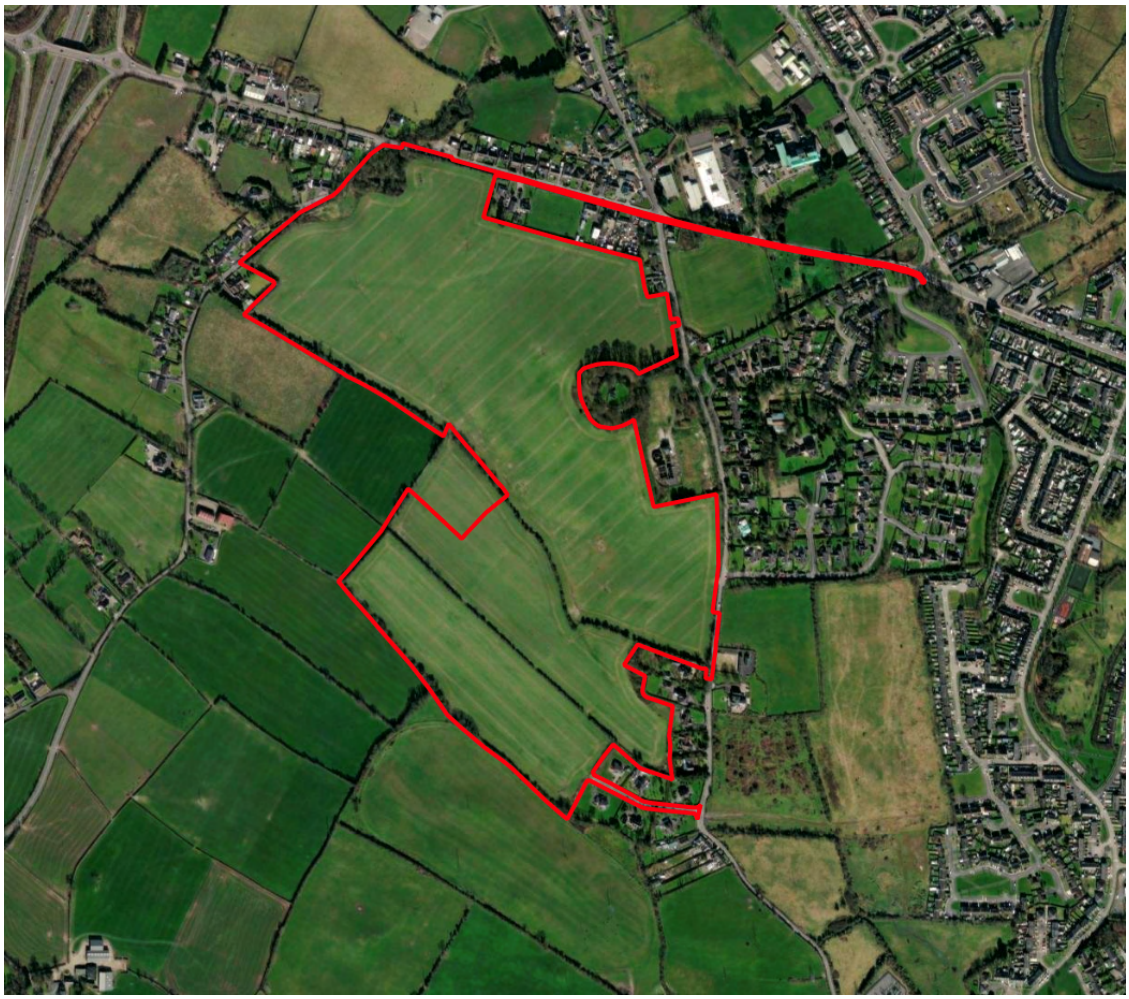
Appropriate Assessment Screening & Natura Impact Statement – Information for a Stage 1 (AA Screening) and Stage 2 (Natura Impact Statement) for a Proposed Residential Development at Mount Avenue, Dundalk, Co. Louth.



17th October 2025

Prepared by: Frank Spellman of Altemar Ltd.
On behalf of: Grandspect Ltd.

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Document Control Sheet			
Project	Appropriate Assessment Screening & Natura Impact Statement – Information for a Stage 1 (AA Screening) and Stage 2 (Natura Impact Statement) for a Proposed Residential Development at Mount Avenue, Dundalk, Co. Louth.		
Report	Natura Impact Statement		
Date	17th October 2025		
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Planning	Frank Spellman	Bryan Deegan	20th October 2025

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Introduction

The following Appropriate Assessment (AA) (Screening Stage) has been prepared by **Altemar Ltd.** at the request of Grandspect Ltd. for a proposed residential development at Mount Avenue, Dundalk, Co. Louth.

An Appropriate Assessment is an assessment of the potential effects of a proposed project or plan, on its own, or in combination with other plans or projects, on one or more Natura 2000 sites. Natura 2000 sites are those sites designated as Special Areas of Conservation (SAC) or Special Protection Areas (SPA).

The AA Screening stage examines the likely significant effects of a plan or project, either on its own, or in combination with other plans and projects, upon a Natura 2000 site and considers whether, on the basis of objective scientific evidence, it can be concluded that there are not likely to be significant effects on any European site, in view of best scientific knowledge and the conservation objectives of the relevant European sites.

The Natura Impact Statement examines whether the plan or project, either alone, or in combination with other plans and projects, in the view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European sites.

Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 31 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture). Bryan Deegan carried out all elements of this Appropriate Assessment Screening.

Background to the Appropriate Assessment

The Habitats Directive 92/43/EEC (together with the Birds Directive (2009/1477/EC)) forms the cornerstone of Europe's nature conservation policy. The Habitats Directive protects over 1000 animals and plant species and over 200 "habitat types" which are of European importance. In the Habitats Directive, Articles 3 to 9 provide the legislative means to protect habitats and species of European Community interest through the establishment and conservation of an EU-wide network of conservation sites (NATURA, 2000). These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive, Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the [NATURA 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the component 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."

As outlined in "Managing European sites, The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC" (European Commission, 21 November 2018) *"The purpose of the appropriate assessment is to assess the implications of the plan or project in respect of the site's conservation objectives, either individually or in combination with other plans or projects. The conclusions should enable the competent authorities to ascertain whether the plan or project will adversely affect the integrity of the site concerned. The focus of the appropriate assessment is therefore specifically on the species and/or the habitats for which the European site is designated."*

As outlined in the EC guidance document on Article 6(4) (January 2007)[1]:

"Appropriate assessments of the implications of the plan or project for the site concerned must precede its approval and take into account the cumulative effects which result from the combination of that plan or project with other plans or projects in view of the site's conservation objectives. This implies that all aspects of the plan or project which can, either individually or in combination with other plans or projects, affect those objectives must be identified in the light of the best scientific knowledge in the field.

Assessment procedures of plans or projects likely to affect European sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures and residual impacts. These determine what has to be compensated, both in quality and quantity. Regardless of whether the provisions of Article 6(3) are delivered following existing environmental impact assessment procedures or other specific methods, it must be ensured that:

- *Article 6(3) assessment results allow full traceability of the decisions eventually made, including the selection of alternatives and any imperative reasons of overriding public interest.*
- *The assessment should include all elements contributing to the site's integrity and to the overall coherence of the network as defined in the site's conservation objectives and Standard Data Form, and be based on best available scientific knowledge in the field. The information required should be updated and could include the following issues:*
    - *Structure and function, and the respective role of the site's ecological assets;*
    - *Area, representativity and conservation status of the priority and nonpriority habitats in the site;*
    - *Population size, degree of isolation, ecotype, genetic pool, age class structure, and conservation status of species under Annex II of the Habitats Directive or Annex I of the Birds Directive present in the site;*
    - *Role of the site within the biographical region and in the coherence of the European network; and,*
    - *Any other ecological assets and functions identified in the site.*
- *It should include a comprehensive identification of all the potential impacts of the plan or project likely to be significant on the site, taking into account cumulative impacts and other impacts likely to arise as a result of the combined action of the plan or project under assessment and other plans or projects.*
- *The assessment under Article 6(3) applies the best available techniques and methods, to estimate the extent of the effects of the plan or project on the biological integrity of the site(s) likely to be damaged.*
- *The assessment provides for the incorporation of the most effective mitigation measures into the plan or project concerned, in order to avoid, reduce or even cancel the negative impacts on the site.*
- *The characterisation of the biological integrity and the impact assessment should be based on the best possible indicators specific to the European assets which must also be useful to monitor the plan or project implementation."*

[1] European Commission. (2007).Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission;

Stage 1 Screening Assessment

Management of the Site

The plan or project is not directly connected with, or necessary to the management of European sites.

Description of the Proposed Project

Planning permission is being sought by Grandspect Ltd. The development description is as follows:

'*The proposed development comprises 1,058no. dwellings (765no. houses, 150no. duplex units, and 143no. apartments) including 2no. duplexes with an option to accommodate a childcare facility at ground floor level; a local centre comprising ground floor retail units, a medical unit, and mobility hub; provision of a c.194 place childcare facility; all in buildings ranging in height from 1 to 6 storeys. All associated and ancillary site development and infrastructural works, hard and soft landscaping and boundary treatment works, including public, communal and private open space; public lighting; surface car parking spaces; bicycle parking; ESB substations; bin stores; provision of a foul sewage pumping station; laying a foul rising main along Castletown Road from the proposed new access to the development eastward to the Castletown Road and Bellewsbridge Road Junction. The proposed development will be accessed from two new combined vehicular, cyclist and pedestrian junction at Castletown and at Mount Avenue. A separate pedestrian and cyclist access is also provided at Mount Avenue. A Heritage Park (c. 5.44Ha), a playing pitch (c. 1.2Ha) and a site reserved for a future educational/school facility (c. 1.35Ha) are also being provided.*

The proposed development is located at lands in the Townlands of Newtownbalregan, Castletown and Farrandreg, at Mount Avenue, Castletown, Dundalk, Co. Louth.'

The proposed site outline, location, layout and sections are demonstrated in Figures 1-6.

Drainage

Foul Water Drainage

An Engineering Assessment Report has been prepared by DBFL Consulting Engineers Limited for the proposed development. It outlines the following foul drainage strategy for the operational phase of the proposed development:

'4.1 Existing Foul Drainage

An existing 150mm Concrete combined Sewer extends along a section of the N53 to the North of the site, this line outfalls towards the Boyle O'Reilly Wastewater Pump Station (WWPS) east of the site where it ultimately discharges to the Dundalk Wastewater Treatment Plant.

Starting at the Newly formed roundabout on Mount Avenue Road South-East of the development, there is an 300 mm concrete foul sewer which drains towards the Boyle O'Reilly WWPS.'

Figure 1. Site Location

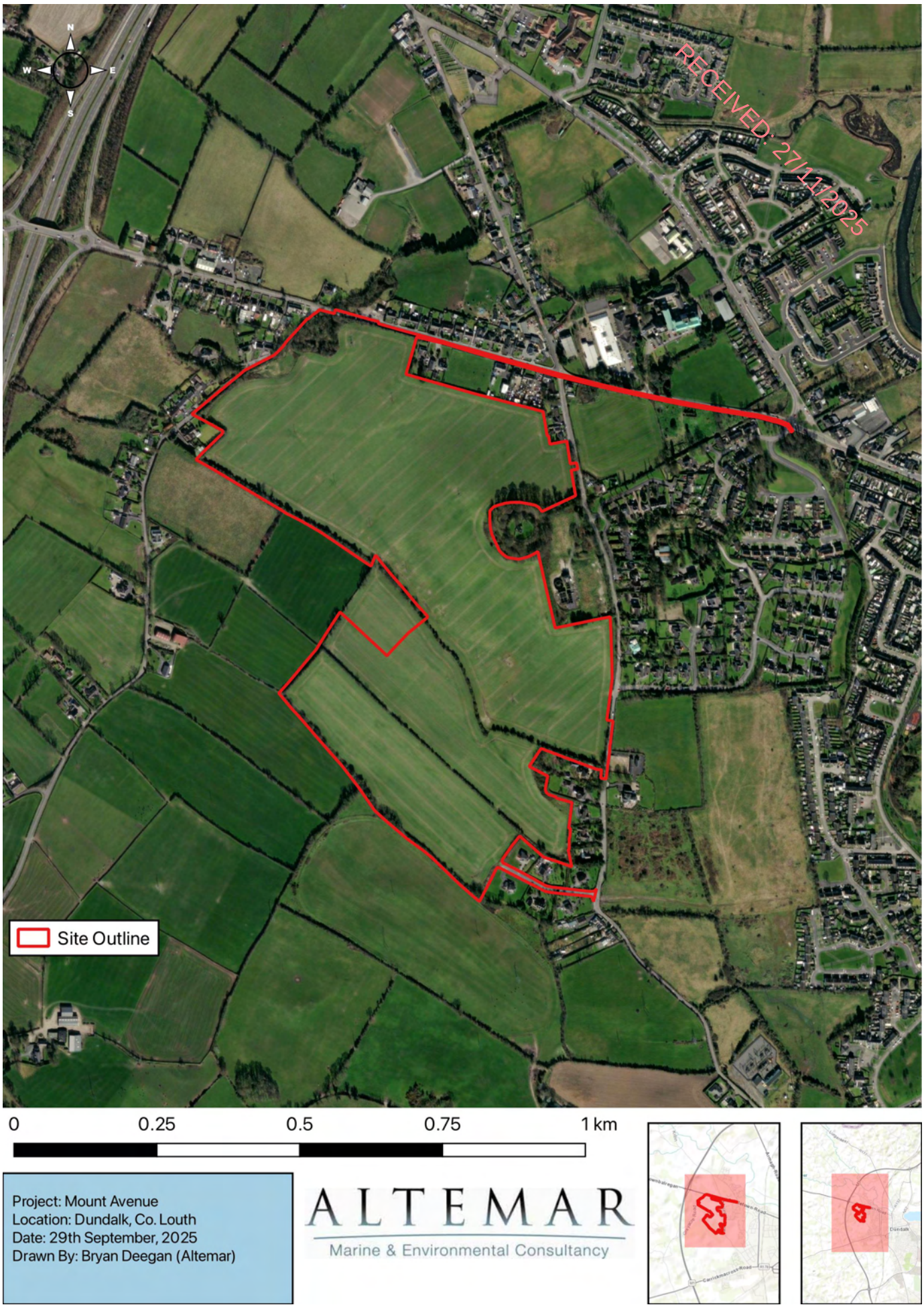


Figure 2. Site Outline

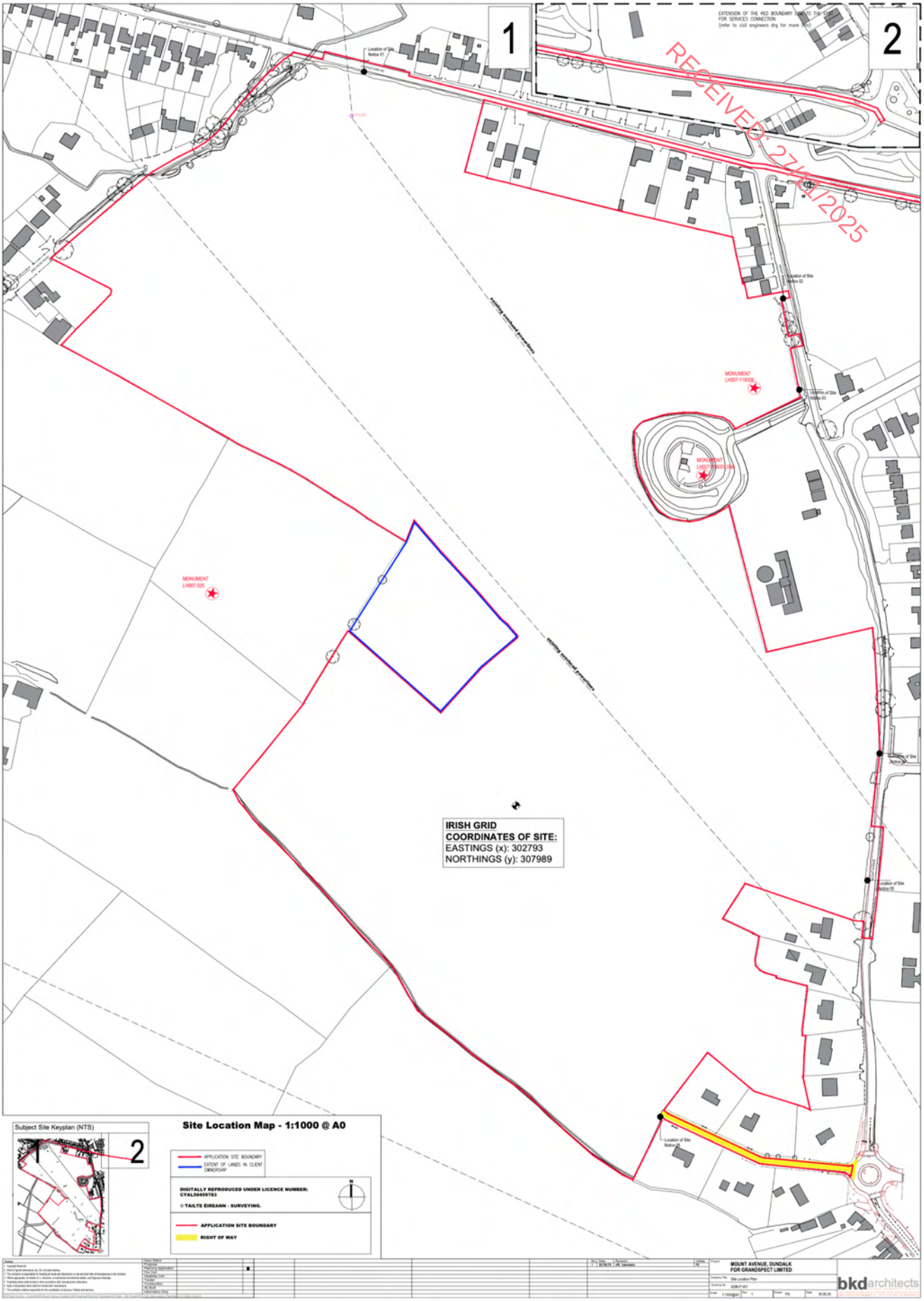


Figure 3. Proposed outline

Figure 4. Site Layout Plan

Figure 5. Site sections (1)

Figure 6. Site sections (2)

Figure 7. Landscape Masterplan

'4.3 Design Strategy

Due to the topography of the site and potential connection Points, the site has been split into two catchments Northern and Southern. Each catchment will have a distinct discharge point.

As the lands in the Northern catchment fall away from the proposed discharge point a gravity solution cannot be achieved. As such the foul network for the Northern catchment will comprise of a collection network made up of a series of 150mm and 225mm foul lines falling by gravity towards a foul pumping station (FPS) which will be located along the sites North-Western boundary. From there a rising main will convey the Foul sewage to a discharge manhole before then falling by gravity onto the Uisce Éireann Network at Castletown Cross Road.

The Southern catchment will have a more traditional gravity foul drainage network, comprises of a series of 150mm & 225mm diameter lines discharging by gravity towards the existing 300mm concrete foul Sewer located off the roundabout on Mount Avenue.'

'*Individual houses will connect to the 150/225mm diameter foul drains via individual 100mm diameter house connections, as per Irish Water Code of Practice for Wastewater Infrastructure. 100mm individual connections from duplexes will be provided with the 150mm diameter drainage being provided around extent of apartments*.'

The results of Uisce Éireann's Annual Environmental Report (2024) for Dundalk WwTP was reviewed independently by Altemar to assess available capacity. The report indicates that at Dundalk WwTP there is a population equivalent (PE) of 12,876 for organic capacity remaining at the plant. The plant's capacity is not anticipated to be exceeded within the next 3 years. The Treatment Capacity Report Summary table is included below:

2.1.4.2 Treatment Capacity Report Summary - Dundalk WWTP

Treatment capacity is an assessment of the hydraulic (flow) and organic (the amount of pollutants) load a treatment plant is designed to treat versus the current loading of that plant.

Dundalk WWTP	
Peak Hydraulic Capacity (m³/day) - As Constructed	56706
DWF to the Treatment Plant (m³/day)	18902
Current Hydraulic Loading - annual max (m³/day)	46782
Average Hydraulic loading to the Treatment Plant (m³/day)	23599
Organic Capacity (PE) - As Constructed	71000
Organic Capacity (PE) - Collected Load (peak week) Note1	58124
Organic Capacity (PE) - Remaining	12876
Will the capacity be exceeded in the next three years? (Yes/No)	No

Nominal design capacities can be based on conservative design principles. In some cases assessment of existing plants has shown organic capacities significantly higher than the nominal design capacity. Accordingly plants that appear to be overloaded when comparing a collected peak load with the nominal design capacity can be fully compliant due to the safety factors in the original design.

A Construction Environmental Management Plan (CEMP) has been prepared by DBFL Consulting Engineers for the proposed development. The plan states that during construction, '*foul drainage discharge from the construction compound will be tankered off site to a licensed facility until a connection to the public foul drainage network has been established.*'

Surface Water Drainage

The Engineering Assessment Report prepared by DBFL Consulting Engineers Limited for the proposed development outlines the following surface water drainage strategy for the operational phase of the proposed development:

'3.1 Existing Surface Water Drainage

While there is no existing drainage infrastructure within the proposed development lands, the natural topography of the Land (as described in section 1.3) in combination with the The Cunnicar stream on the North-Western boundary of the site and the Castletown Stream on the Southern boundary of the site (as described in section 1.2) form two naturally occurring surface water catchments. Both the Cunnicar and the Castletown streams ultimately discharge to the Castletown river.'

'There is also an existing 225mm surface water drainage along a portion of the N53 running parallel to the sites northern boundary, which extends for approximately 600m before discharging to the Castletown River.

3.2 Surface Water

General Description of Surface Water Design

'The existing streams and naturally formed catchments to the North-West (Northern catchment) and South (Southern catchment) (as described above in Section 3.1) will act a suitable point for the discharge of surface water from the proposed development.

So as not to disrupt the natural regime of the existing water course surface water from the development will be restricted by a vortex flow control device (Hydrobrake or equivalent), and associated underground geo-cellular attenuation systems. Surface water discharge will also pass via a Class 1 separator prior to discharge (sized in accordance with permitted discharge from the site). flow control will be set so as not to exceed the sites natural greenfield runoff rate.

The proposed surface water drainage network will collect surface water runoff from the development via a piped network, prior to discharging through the attenuation system, flow control device and separator arrangement as noted above.

Surface water runoff from the site's road network and roofs will be directed to the proposed pipe network via conventional road gullies, tree pits, and rain gardens while surface water runoff from driveways will be captured by permeable paving.

The Surface water drainage network and associated systems have been designed to accommodate Storms up to a 100-year return period with an additional 20% allowance for climate change.

Both the Northern and Southern Catchment have been further divided into sub catchments in order to manage surface water internally and distribute the attenuation across the development.'

'***3.3 Incorporated SuDS System and Associated Runoff Coefficients***

Based on the requirements of the GDSDS best practice and the SuDS Manual, CIRIA 753.the following SuDS features and runoff coefficients have been incorporated into the development.

1. *Impermeable Roads and footpaths Draining to swales, Tree pits and Bioretention / rain gardens – Runoff Coefficient 0.80*
   Typically, road surface discharges towards swales, tree pits and Bioretention / rain gardens (with high level overflow to the piped surface water network). Also takes account of run-off stored within the micro and macro texture of the surfacing (i.e. runoff not collected by piped network).
2. *Permeable paving for driveways and for on-street parking under the control of the management company of the apartment blocks – Runoff Coefficient 0.5*
   Reduction of velocity as the aggregate/filter material used in the SuDS feature (permeable paving) slows the run-off at source ultimately reduce the peak inflow for attenuation calculations.
3. *Conventional Roofs Draining Via SuDS (permeable paving) - Runoff Coefficient 0.5*
   Reduction of velocity as the aggregate/filter material used in the SuDS feature (permeable paving) slows the run-off at source ultimately reduce the peak inflow for attenuation calculations.
4. *Soft Landscaped / Grassed Areas - Runoff Coefficient 0.15*
   Grassed / Landscaped areas slow the run-off at source ultimately reduce the peak inflow.'

'3.6 Attenuation Calculation

As indicated in section 3.2.1 above, both the Northern and Southern catchments have been divided into sub-catchments, with individual attenuation and flow control features. All attenuation features have been sized to accommodate up to the 1 in 100-year event.

The Northern catchment, has been divided into 4 cascading sub-catchments, with catchment N1 cascading into catchment N2, catchment N3a cascading into catchment N3b, and N3b cascading into N2 which is discharging to the Cunnicar Stream at a Q-Bar of 27.0 L/Sec.

The Southern catchment, has been divided into 6 cascading sub-catchments, with catchment S1 cascading into catchment S5, S2 cascading into catchment S1, S3 cascading into S4, S4a cascading into S4, and S4 cascading into S5 which is discharging to the Stream Castletown at a Q-Bar of 29.0 L/Sec.

Run-off from the proposed development will be controlled / attenuated using vortex type flow control devices (Hydrobrake or equivalent).'

'*In total 6691m3 of storm-water storage is provided in the 10 geocellular systems, designed to accommodate rainfall levels up to the 1 in 30-year storm. Supplementing to this storage volume is a further 1670m3 of above ground storage designed to accommodate the 1 in 100-year storm.*'

The proposed surface and foul water layout is demonstrated within the site services layout in Figure 3.

Site-Specific Flood Risk Assessment

A site specific flood risk assessment report has been prepared by DBFL Consulting Engineers to accompany this planning application. The report concludes with the following in relation to flood risk for the proposed development:

'*We consider that the proposed development, can be delivered on the site in the context of flood risk to same and that the implementation of mitigation measures, as outlined in this report, can be accommodated by the site's detailed design and the surface water drainage design.*

The OPW document "The Planning System and Flood Risk Management Guidelines (November 2009)" requires that the proposed development be compatible with flood risk for the site. In accordance with these guidelines, the vast majority of the subject site is located within Flood Zone 'C'. Flood Zone "C" lands are suitable for all types of land use, including residential developments which are classified as "highly vulnerable" in the "Guidelines". A small portion of the lands are located in Flood Zone A/B however it is noted that these lands are all within open space areas which we note are compatible with these flood zones. All floor levels are to be set a minimum of 500mm above the existing flood level as outlined by the GDSDS. Therefore, the proposed development is suitable for the subject site and the Planning Guidelines Sequential Approach is passed.

The proposed development layout was assessed and it was concluded that it can be delivered on the site in the context of flood risk to same and that the implementation of the proposed mitigation measures, by the developments detailed design will address the remaining residual risks.

Taking into consideration the management of surface water runoff from extant neighbouring permissions their discharge rates are all limited to greenfield runoff and they would not increase flood risk elsewhere. The developments surface water runoff will be limited to Qbar (greenfield runoff rate). Therefore, the development complies with the requirements of the GDSDS and does not increase the risk of flooding elsewhere and does not result in displaced waters.

It is concluded that the development meets the requirements of The FRA Guidelines and that the proposed development is appropriate to this flood zoning and a justification test is not required.'

Landscape

A landscape strategy has been prepared by Gannon & Associates Landscape Architect to accompany this planning application. The proposed landscape masterplan is demonstrated in Figure 7.

Arboricultural Impact

An Arboricultural Assessment and Impact Report has been prepared by CMK Horticulture and Arboriculture Ltd. The overall arboricultural impact is outlined below:

'*The proposed development will require the removal of 10 trees and approximately 911m of hedgerow. No high quality (category A) trees will be impacted (table 3). In general the impact on the site's tree population is considered low with 9% of trees and 22% of hedgerows being removed. 7no. trees are recommended for removal for best arboricultural practice (category U trees). The removal of these trees are separate from the impact of the development. 84% of the site's trees will be retained.*'

The tree constraints and protection plans are demonstrated in figures 9 & 10.

Lighting

A public lighting report and drawings have been prepared by Fallon Design M&E Engineering to accompany this application. The proposed lighting strategy is demonstrated across figures 11-13.

Figure 8. Overall Site Services Layout

Figure 9. Tree survey and constraints plan

Figure 10. Arboricultural impact and tree protection plan.

Figure 11. Proposed lighting strategy (north).

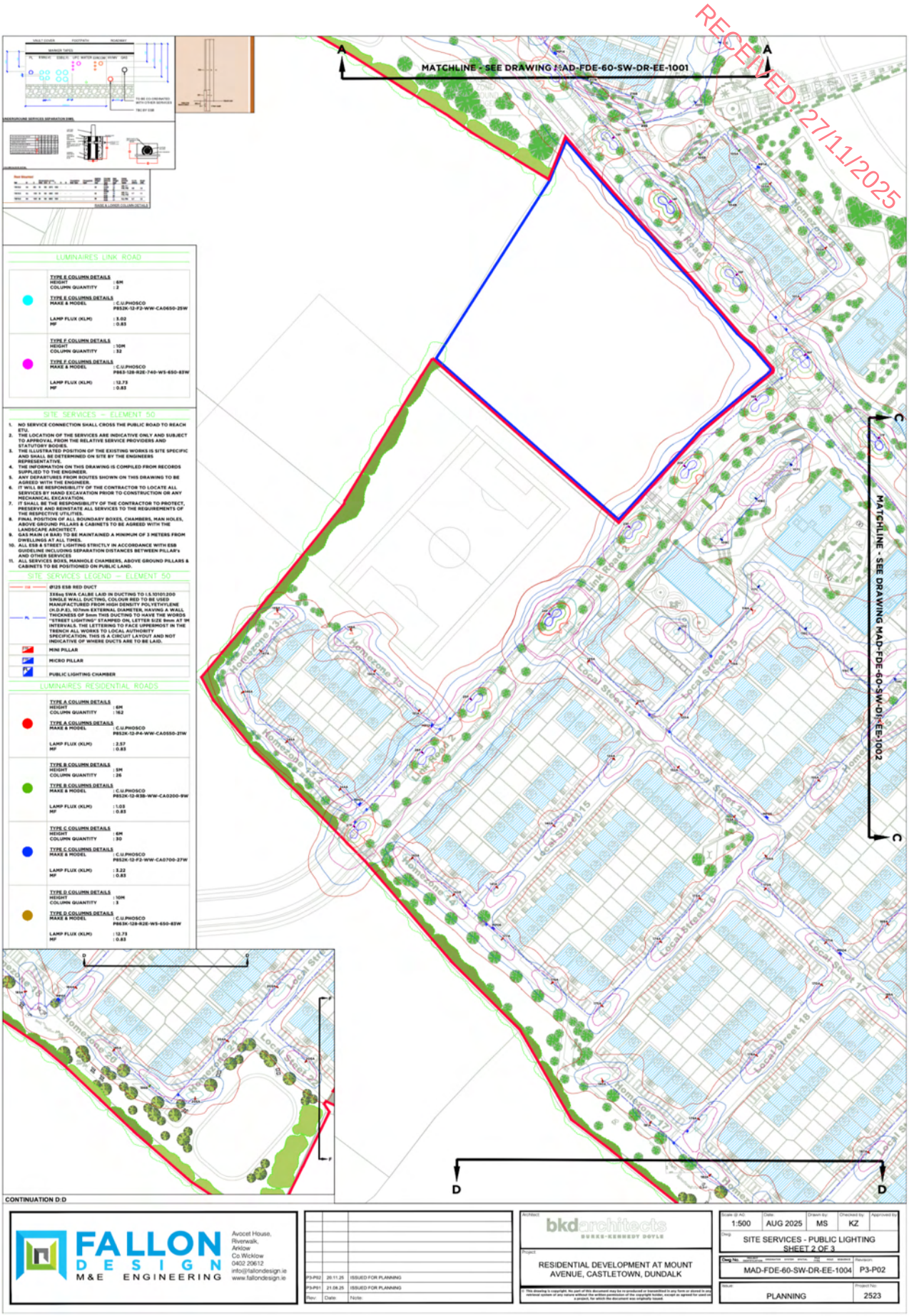


Figure 12. Proposed lighting strategy (south).

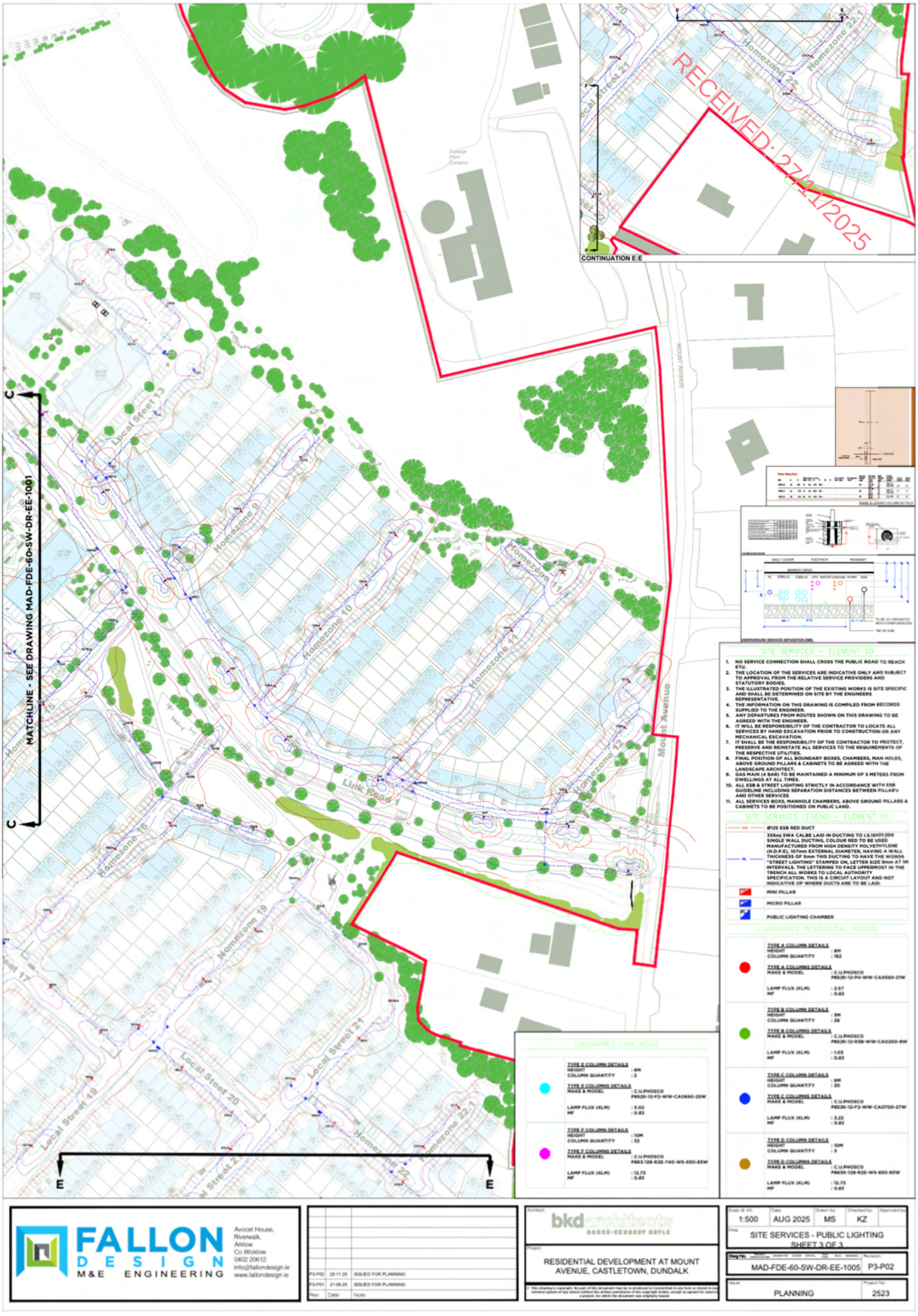


Figure 13. Proposed lighting strategy (east).

Identification of Relevant European Sites

As outlined in Office of the Planning Regulator (2021) "*The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km).*"

A key factor in the consideration as to whether or not a particular European site is likely to be affected by the proposed development is its distance from the development location. It is generally, but not necessarily, the case that the greater the distance from the plan or project the smaller the likelihood of impacts. In this case, the nearest Natura 2000 to the site is Dundalk Bay SPA, located 737m to the east (Figure 15). The proposed development site is primarily a greenfield site and consists of mainly of agricultural fields. The nearest watercourses are the Cunnicar Stream (Castletown_030) bounding and briefly crossing through the northwest of the proposed development site, and the Castletown Stream (Castletown_030) running along the southern boundary of the proposed site (Figure 16). Surface water drainage from the development is proposed to discharge to the Cunnicar and the Castletown streams at the northwest and southeast of the site following attenuation. These streams ultimately outfall to the Castletown Estuary. Surface water ultimately enters the Dundalk Bay SPA and SAC within the estuarine environment as a result of dispersion and tidal patterns (as seen in Figures 17 & 18). Given the nearest outfall of the two recipient waterbodies for surface water into the Castletown Estuary is located approximately 270m from Dundalk Bay SPA and 1.6km from Dundalk Bay SAC, it is considered that there is a short indirect hydrological connection to these Natura 2000 sites via surface water drainage from the proposed development.

Foul wastewater from the northern catchment is proposed to discharge via a proposed foul pumping station to an existing combined-sewer along the N53 to the north of the site. Foul wastewater from the northern catchment will discharge to an existing foul sewer located to the southeast of the proposed development on Mount Avenue. Both networks outfall for treatment at Dundalk WwTP via the Boyle O'Reilly Wastewater Pump Station, from where foul wastewater ultimately discharges to inner Dundalk Bay. Therefore, it is considered that there is an indirect hydrological pathway to Dundalk Bay SAC and SPA via foul wastewater from the proposed development.

Given the scale of the proposed development and the fact that surface water will discharge to the Cunnicar and Castletown streams, which ultimately outfall to the Castletown Estuary, within which Dundalk Bay SAC and SPA are located, it is considered that the ZOI of the proposed project includes the site outline, Castletown Estuary, and Dundalk Bay located downstream of the proposed development. In the absence of mitigation, there is the potential for dust, pollution and surface water runoff to enter the Cunnicar and Castletown Streams with the potential for significant effects on Dundalk Bay SAC and SPA.

In the interest of carrying out a thorough assessment in line with both the Habitats Directive, and the precautionary principle, the area of assessment was expanded to include designated sites within 15km of the proposed development site, and sites beyond 15km with the potential for a hydrological connection. This was done in the interest of ensuring that any pathways, however indirect or remote, were considered. All Natura 2000 sites within 15km, and beyond 15km with the potential for a hydrological pathway are listed in Table 1. The qualifying interests, and the potential impact of the development on each European site and qualifying interest, are screened in/out in Table 2. SPA's and SAC's within 15km are seen in Figures 14 & 15. Waterbodies, SACs, and SPAs proximate to the subject site are demonstrated in Figures 16-18.

Table 1. Natura 2000 sites within 15km of, and with a hydrological connection, to the subject site

Natura 2000 Site Code	Natura 2000 Site	Distance
IE000455	Dundalk Bay SAC	2.1 km
IE000453	Carlingford Mountain SAC	7.2 km
UK0030277	Slieve Gullion SAC	10 km
IE002306	Carlingford Shore SAC	15.6 km
IE004026	Dundalk Bay SPA	737 m
IE004091	Stabannan-Braganstown SPA	13 km
IE004078	Carlingford Lough SPA	16 km

Table 2. Initial screening of NATURA 2000 sites within 15km and NATURA 2000 sites beyond 15km with potential of hydrological connection to the proposed development

Natura 2000 Site Code	Name	Screened IN/OUT	Details/Reason
Special Areas of Conservation			
IE000455	Dundalk Bay SAC	**IN**	**Conservation Objectives** 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. **Qualifying Interests** Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410] **Potential Impact** The proposed site is a minimum of 2.1 km from this SAC (Figure 7). There is no direct hydrological pathway from the proposed development to this SAC. There is an indirect hydrological pathway from the proposed development site to this SAC via the proposed surface water strategy, which following attenuation is proposed to discharge to the Cunnicar and Castletown streams. These watercourses ultimately outfall to the Castletown Estuary, where through estuarine hydrological patterns, will enter the Dundalk Bay SAC which is located 1.6km east from the outflow of the Castletown Stream. There is an indirect pathway from the proposed development to Dundalk Bay SAC via the proposed foul wastewater strategy. Foul wastewater will be directed to Dundalk WwTP via Boyle O'Reilly Wastewater Pump Station, where it will be treated under licence and existing compliance requirements. Treated wastewater is ultimately discharged from Dundalk WwTP to Dundalk Bay SAC. Following treatment under license, no significant impact to this SAC via foul wastewater is foreseen. In a strict application of the precautionary principle, it has been concluded that significant effects on the Dundalk Bay SAC are likely, in the absence of mitigation measures, from the proposed works. This is primarily as a result of the short indirect hydrological connection of Dundalk Bay SAC to the proposed project which involves a short indirect surface water connection via waterbodies that outfall to this SAC. For this reason, it is necessary to proceed to NIS on the potential effects of the project on the SAC in view of its conservation objectives. **Significant effects are likely in the absence of mitigation measures. NIS is Required.**
IE000453	Carlingford Mountain SAC	**OUT**	**Conservation Objectives**

Natura 2000 Site Code	Name	Screened IN/OUT	Details/Reason
			The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. **Qualifying Interests** Northern Atlantic wet heaths with *Erica tetralix* [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Alkaline fens [7230] Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] **Potential Impact** The proposed development site is located approximately 7.2 km from this SAC. There is no direct or indirect hydrologcial pathway between the proposed development site and this SAC. Given the minimum distance from the development site to this SAC (7.2km), accross a substatial terrestrial envrionment, no risk of impact via silt or pollutants from the proposed site on this SAC is foreseen. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely.**
UK0030277	Slieve Gullion SAC	**OUT**	**Conservation Objectives** To maintain (or restore where appropriate) the European Dry Heaths to favourable condition. **Qualifying Interests** European dry heaths Northern Atlantic wet heaths with *Erica tetralix* Active blanket bogs Transition mires and quaking bogs **Potential Impact** The proposed development site is located approximately 10 km from this SAC. There is no direct or indirect hydrologcial pathway between the proposed development site and this SAC. Given the minimum distance from the development site to this SAC (10km), accross a substatial terrestrial envrionment, no risk of any silt or pollutants from the proposed site impacting on this SAC is foreseen. The construction and operation of the proposed development will not impact on the conservation interests of the site.

Natura 2000 Site Code	Name	Screened IN/OUT	Details/Reason
			No significant effects are likely.
IE002306	Carlingford Shore SAC	**OUT**	**Conservation Objectives** The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. **Qualifying Interests** Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] **Potential Impact** The proposed development site is located 15.6 km from this SAC There is no direct hydrological pathway between the proposed development and this SAC. There is an indirect hydrological pathway from the proposed development site to this SAC via the proposed surface water strategy, which following attenuation is proposed to discharge to the Cunnicar and Castletown streams. These watercourses ultimately outfall to the Castletown Estuary, from where surface water enters the marine environment of Dundalk Bay and the Irish Sea. There is potential for silt, hazardous materials and/or pollutants to enter the marine environment via this hydrological pathway. However, given the distance to this SAC (min. 15.6 km) located on the far east and northeast of the Cooley Peninsula, in the absence of mitigation measures, any silt or pollutants will settle, be dispersed, or diluted within the estuarine and marine environments. No significant impacts on the qualifying interests of this SAC are foreseen. There is an indirect pathway from the proposed development to Carlingford Shore SAC via the proposed foul wastewater strategy. Foul wastewater will be directed to Dundalk WwTP via Boyle O'Reilly Wastewater Pump Station, where it will be treated under licence and existing compliance requirements. Treated wastewater is ultimately discharged from Dundalk WwTP to Dundalk Bay. Following treatment and given the distance between the proposed licensed treatment facility and this SAC over a substantial marine environment, no significant impact to this SAC via foul wastewater is foreseen. No potential impact is foreseen. There is no direct pathway from this site to the SAC. In the absence of mitigation measures, no impact via indirect hydrological pathways is foreseen. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely.**
Special Protection Areas			
IE004026	Dundalk Bay SPA	**IN**	**Conservation Objectives**

Natura 2000 Site Code	Name	Screened IN/OUT	Details/Reason
			To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SPA has been selected. **Qualifying Interests** Great Crested Grebe (*Podiceps cristatus*) [A005] Greylag Goose (*Anser anser*) [A043] Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Teal (*Anas crecca*) [A052] Mallard (*Anas platyrhynchos*) [A053] Pintail (*Anas acuta*) [A054] Common Scoter (*Melanitta nigra*) [A065] Red-breasted Merganser (*Mergus serrator*) [A069] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141] Lapwing (*Vanellus vanellus*) [A142] Knot (*Calidris canutus*) [A143] Dunlin (*Calidris alpina*) [A149] Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157] Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Common Gull (*Larus canus*) [A182] Herring Gull (*Larus argentatus*) [A184] Wetland and Waterbirds [A999] **Potential Impact** The proposed site is a minimum of 737 m from this SPA. There is no direct hydrological pathway from the proposed development to this SPA. There is an indirect hydrological pathway from the proposed development site to this SPA via the proposed surface water strategy, which following attenuation is proposed to discharge to the Cunnicar and Castletown streams. These watercourses ultimately outfall to the Castletown Estuary, where through estuarine hydrological patterns, will enter the Dundalk Bay SPA which is located 272m east from the outflow of the Castletown Stream. In the absence of mitigation measures, there is potential for silt, hazardous materials and/or pollutants to enter the estuarine environment and SPA. There is an indirect pathway from the proposed development to Dundalk Bay SPA via the proposed foul wastewater strategy. Foul wastewater will be directed to Dundalk WwTP via Boyle O'Reilly Wastewater Pump Station, where it will be treated under licence and existing compliance requirements. Treated wastewater is ultimately discharged from Dundalk WwTP to Dundalk Bay SPA. Following treatment under license, no significant impact to this SPA via foul wastewater is foreseen.

Natura 2000 Site Code	Name	Screened IN/OUT	Details/Reason
			In a strict application of the precautionary principle, it has been concluded that significant effects on the Dundalk Bay SAC are likely, in the absence of mitigation measures, from the proposed works. This is primarily as a result of the short indirect hydrological connection of Dundalk Bay SPA to the proposed project which involves a short surface water connection via waterbodies that outfall to this SPA. For this reason, it is necessary to proceed to NIS on the potential effects of the project on the SPA in view of its conservation objectives. **Significant effects are likely in the absence of mitigation measures. NIS is Required.**
IE004091	Stabannan-Braganstown SPA	**OUT**	**Conservation Objectives** The maintenance of habitats and species within European sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. **Qualifying Interests** Greylag Goose (*Anser anser*) [A043] **Potential Impact** The proposed development site is located approximately 13.0 km from this SPA. There is no direct or indirect hydrologcial pathway between the proposed development site and this SPA. Given the minimum distance from the development site to this SPA (13.0 km), across a substatial terrestrial envrionment, there is no risk of dust, silt or pollutants entering or impacting this SPA. No potential impact is foreseen via surface or foul water drainage. No significant effects from noise and vibration during construction would be exprected as the proposed development site is a significant distance from this SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely.**
IE004078	Carlingford Lough SPA	**OUT**	**Conservation Objectives** The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. **Qualifying Interests** Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Wetland and Waterbirds [A999] **Potential Impact** The proposed development site is located 16 km from this SPA. There is no direct hydrological pathway between the proposed development and this SPA.

Natura 2000 Site Code	Name	Screened IN/OUT	Details/Reason
			There is an indirect hydrological pathway from the proposed development site to this SPA via the proposed surface water strategy, which following attenuation is proposed to discharge to the Cunnicar and Castletown streams. These watercourses ultimately outfall to the Castletown Estuary, from where surface water enters the marine environment of Dundalk Bay and the Irish Sea. There is potential for silt, hazardous materials and/or pollutants to enter the marine environment via this hydrological pathway. However, given the distance to this SPA (min. 16 km) located on the northeast of the Cooley Peninsula within Carlingford Lough, in the absence of mitigation measures, any silt or pollutants will settle, be dispersed, or diluted within the estuarine and marine environments. No significant impacts on the qualifying interests of this SPA are foreseen. There is an indirect pathway from the proposed development to Carlingford Lough SPA via the proposed foul wastewater strategy. Foul wastewater will be directed to Dundalk WwTP via Boyle O'Reilly Wastewater Pump Station, where it will be treated under licence and existing compliance requirements. Treated wastewater is ultimately discharged from Dundalk WwTP to Dundalk Bay. Following treatment and given the distance between the proposed licensed treatment facility and this SPA over a substantial marine environment, no significant impact to this SPA via foul wastewater is foreseen. No potential impact is foreseen. There is no direct pathway from this site to the SPA. In the absence of mitigation measures, no impact via indirect hydrological pathways is foreseen. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely.**

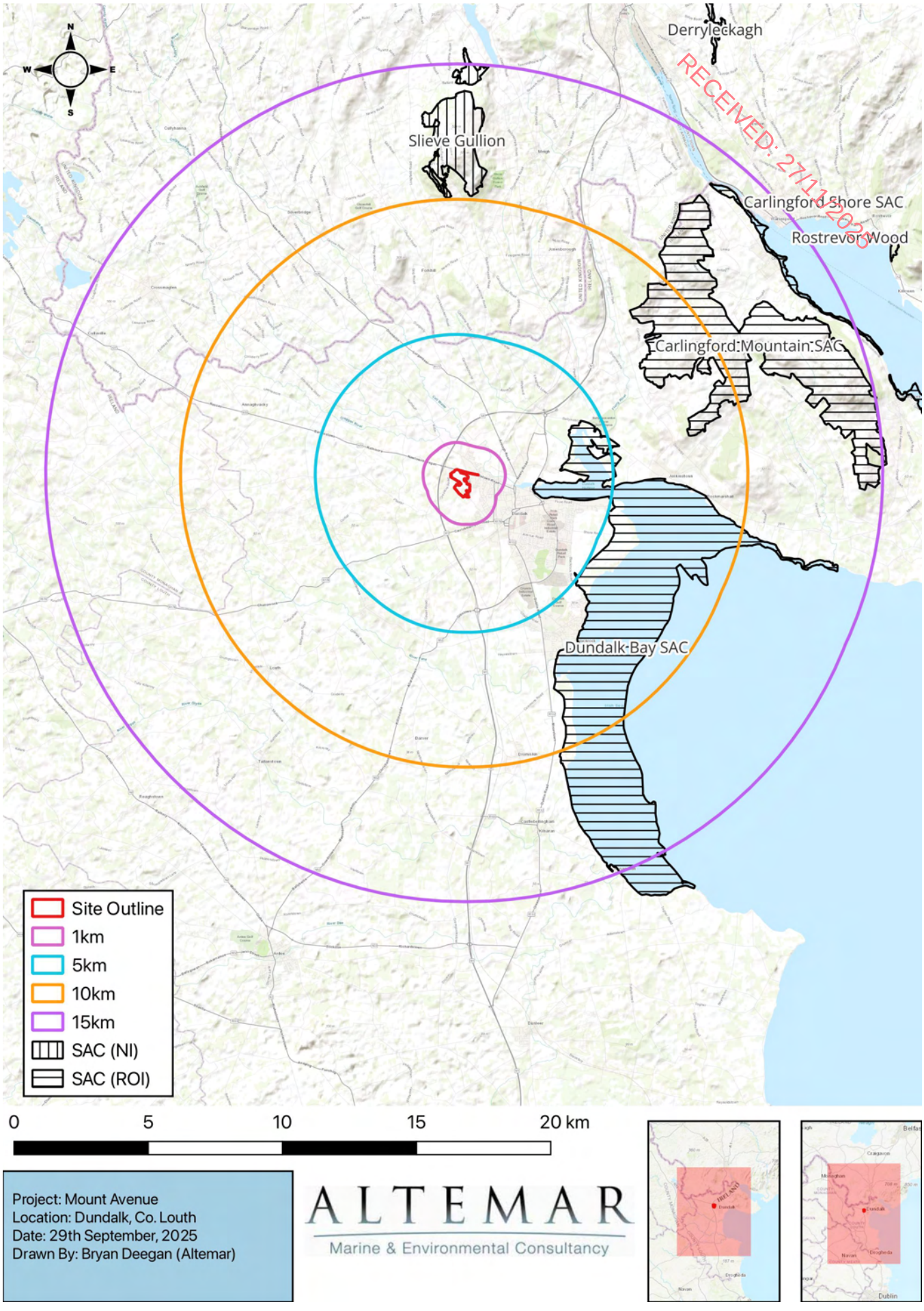


Figure 14. SACs within 15km of the subject

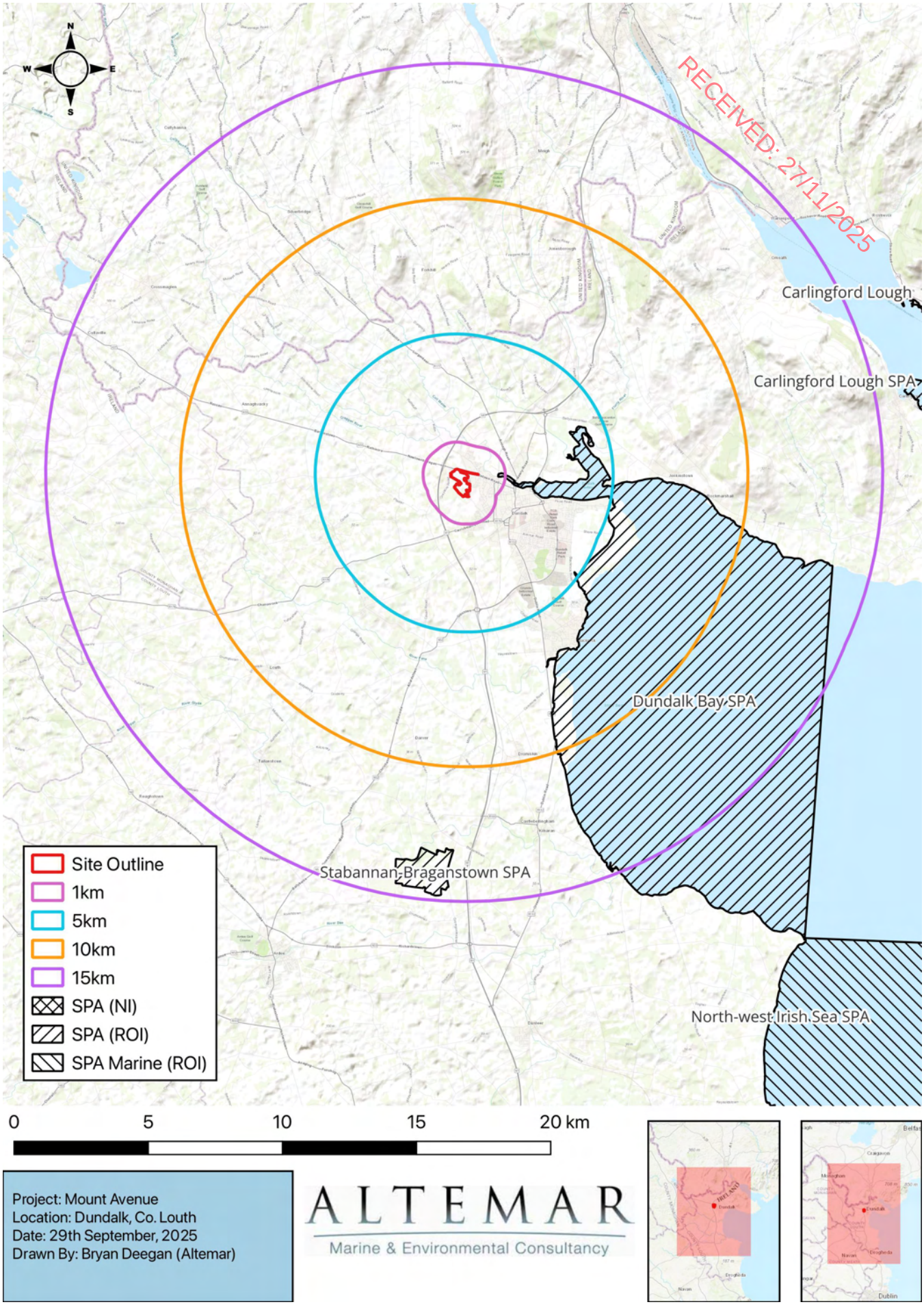


Figure 15. SPAs within 15km of the subject

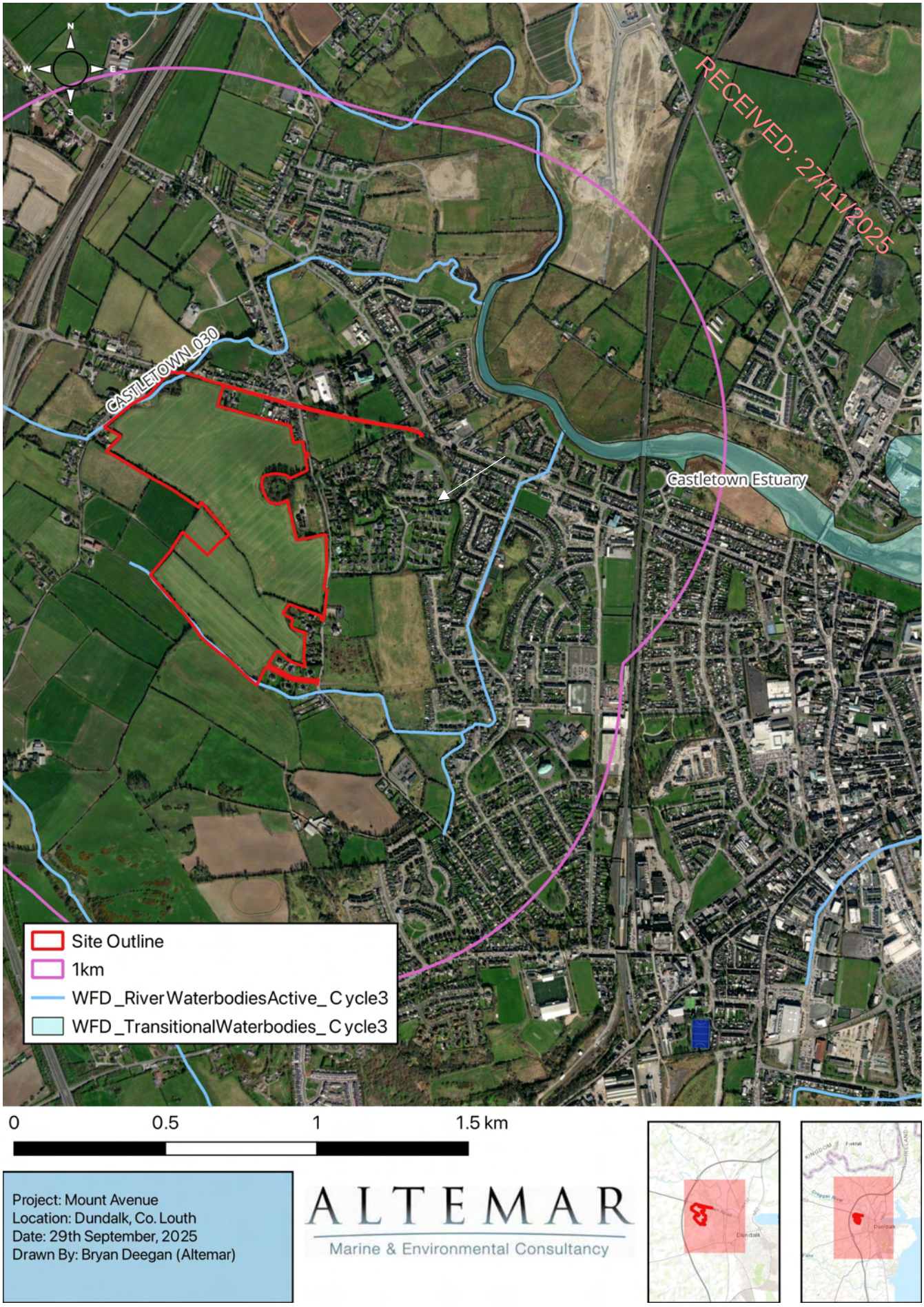


Figure 16. Waterbodies within 1km of the subject site

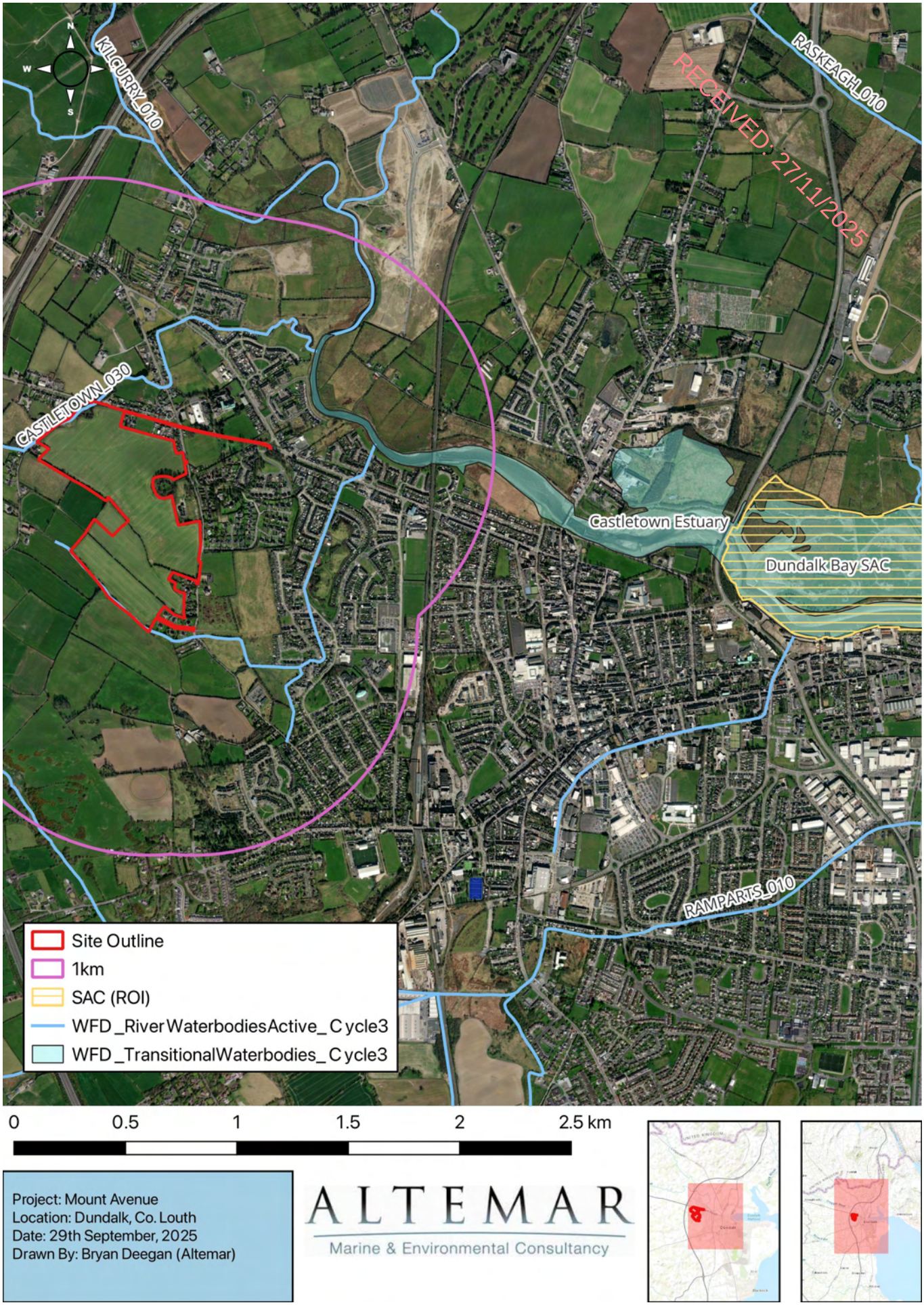


Figure 17. SACs with potential hydrological pathways from the subject site

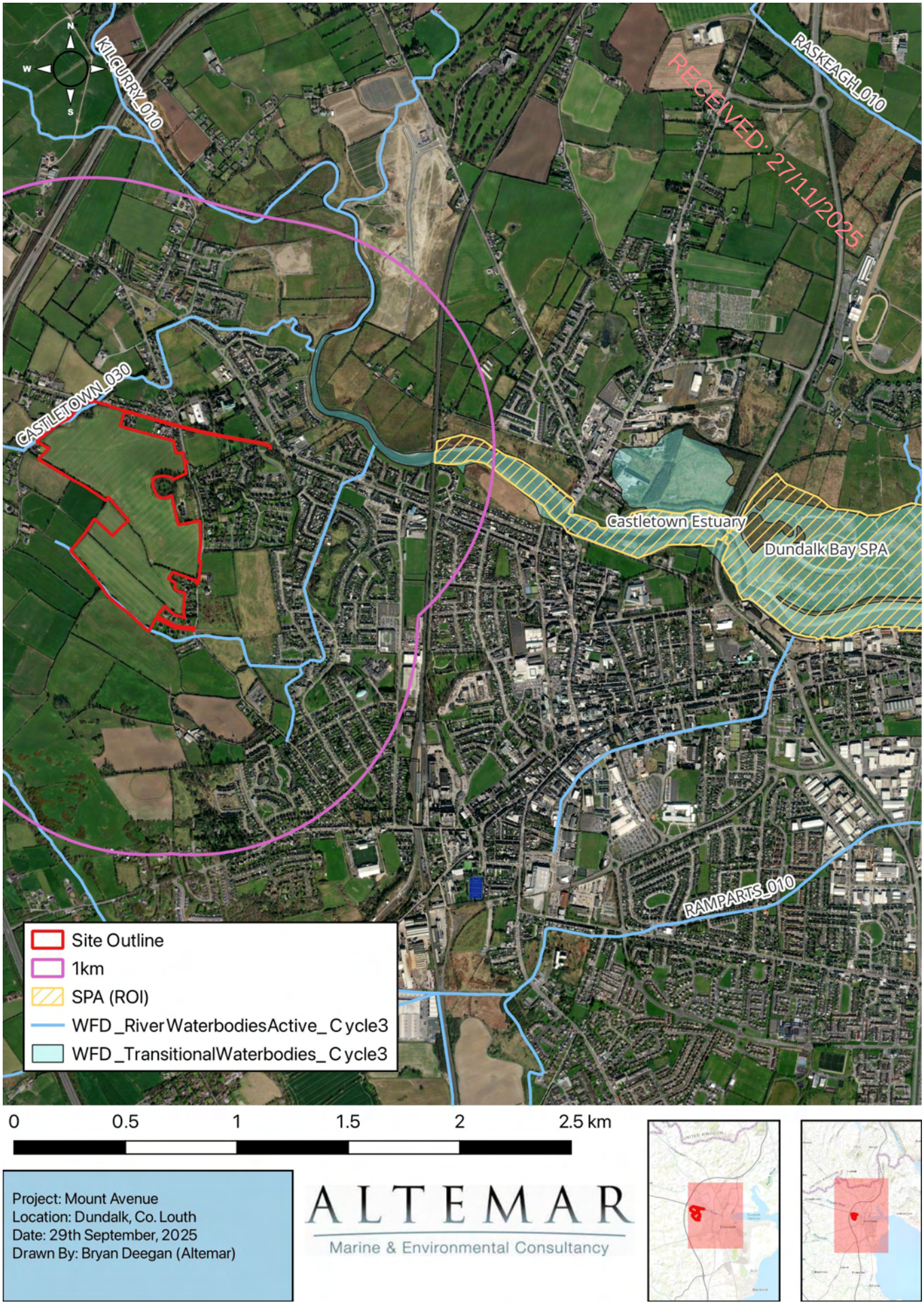


Figure 18. SPAs with potential hydrological pathways from the subject site

In-Combination Effects

The following is a list of planning applications in close proximity to the subject site as identified on the Department of Housing, Local Government and Heritage's 'National Planning Application Database' portal[2],:

Table 3. In-combination effects considered

Ref. No.	Address	Proposal
211173	Mount Avenue, Dundalk, Co. Louth	Part 8 - Notice is hereby given that Louth County Council proposes to carry out the development of 93 no. residential units and all associated/ancillary works on lands at Mount Avenue, Dundalk - total area of site 2.83 hectares. The development comprises the following: 3 no. 3 bed single storey dwellings (bungalows); 2 no. 2 bed single storey dwellings (bungalows); 21 no. 2 bed two storey dwellings; 26 no. 3 bed two storey dwellings; 9 no. 4 bed two storey dwellings; Duplexes: 4 no. 2 bed ground floor apartments with 4 no. 3 bed two storey Maisonette units over; Duplexes: 12 no. 3 bed two storey Maisonette units with 12no. 1 bed apartments over; All associated road works, boundaries, utilities & services, landscaping and ancillary site development works.
2360190	Hearthfield , Farndreg Mount Avenue Headford , Dundalk Co. Louth	Planning permission for revisions to 25 no. dwellings that form part of the permitted residential development to be known as "Hearthfield" granted under P.A. Ref. No. 18/943 (An Bord Pleanala Ref. No. 303628-19) at Farndreg, Mount Avenue, Headford, Dundalk, Co. Louth. The development will consist of raising the finished floor levels of the 25 no. dwellings (No.'s 1-11; 36 -45 and 47-50 of the permitted development). The proposed development also provides for amendments to elevations and roof profile of a two-storey terraced block along the western site boundary encompassing House No.'s 47-50. The development also provides for all associated site development works including landscaping and boundary treatments.
23103	Clan Na Gael GFC Sports Ground , Ard Easmuinn Road , Dundalk Co Louth	Permission for the demolition of an existing single storey gym and a storage type building, the construction of a new single storey building with 4 number changing rooms, ancillary toilet and shower facilities, gymnasium, coffee dock, photovoltaic panels to the southern and western roof facades inclusive of all associated site development works
22458	Castletown Road , Dundalk , Co Louth	Permission for the construction of a 3 storey apartment block consisting of 4 no. 2 bedroom ground floor apartments and 4 no. 3 bedroom duplex apartments; a separate 2 storey apartment block consisting of 2 no. 2 bedroom ground floor apartments with 2 no. 2 bedroom first floor apartments above and a final 3 storey apartment block consisting of 2 no. 2 bedroom ground floor apartments and 2 no. 3 bedroom duplex apartments all with associated site development works to include for 21 no. car parking spaces, bin storage, public and communal open space which are to service the proposed developments with private amenity space to service individual apartments. *Significant Further Information received on 03/05/2023 with revised development description as follows; development will consist of the construction of a 3 storey apartment block consisting of 4no. 2-bedroom ground floor apartments and 4 no. 3-bedroom duplex apartments and a separate 2 storey apartment block consisting of 2 no. 2-bedroom ground floor apartments with 2 no. 2-bedroom first floor

[2] https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de

		apartment above all with associated site development works to include for 12 no. car parking spaces, Bin Storage, public and communal open space which are to service the proposed developments with private amenity spaces to service individual apartments.
21783	Lands at Lisdoo Townland, Dundalk, Co Louth	Permission for development that will consist of the completion of 34 units comprising 22 no. 3 bedroom terrace, 4 no. 2 bedroom terrace, 4 no. 1 bedroom apartments and 4 no. 3 bedroom duplex's and all associates site development and drainage works
23103	Dundalk North Business Park , Armagh Road , Dundalk	Permission is sought by Urban Green Private Ltd. acting for TrippierLtd to vary Condition 3 of the permission granted on 19/12/22 (Reg. Ref 22/524) for a warehouse development of 37,289 sq.m at Dundalk North BusinessPark, Armagh Road, Dundalk, County Louth. Condition 3 limited the hours of operation to 0800 hr - 1800hrs Monday - Saturday. This application seekds to vary this condition such that hours of operation of the facility shoud be unrestricted.

No projects in the vicinity of the proposed development would be seen to have a significant in combination effect on Natura 2000 sites.

Conclusions

An initial screening of the proposed works, using the precautionary principle (without the use of any standard construction phase controls or mitigation measures) and the Source/Pathway/Receptor links between the proposed works and Natura 2000 sites with the potential to result in significant effects on the conservation objectives and features of interest of the Natura 2000 sites was carried out in Table 2. Based on best scientific knowledge and objective information and assessment, the possibility of significant effects caused by the proposed project was excluded for the following Natura 2000 sites:

Special Areas of Conservation

- Carlingford Mountain SAC
- Slieve Gullion SAC
- Carlingford Shore SAC

Special Protection Areas

- Stabannan-Braganstown SPA
- Carlingford Lough SPA

Given the nature and scale of the proposed works, the proposed surface water strategy, and the proximity of the proposed development to two watercourses, it is considered that the ZOI of the proposed works extends beyond the site to include the Cunnicar and Castletown Streams, Castletown Estuary, and Natura 2000 sites located within the Castletown Estuary and Dundalk Bay. In the absence of mitigation measures, there is the potential for petrochemicals, contamination, or silt laden material to enter the estuarine and marine environments at Dundalk Bay SAC and Dundalk Bay SPA.

Acting on a strictly precautionary basis, an NIS is required in respect of the effects of the project on Dundalk Bay SAC and Dundalk Bay SPA because it cannot be excluded on the basis of best objective scientific information following screening, in the absence of control or mitigation measures that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the named European Site/s.

An NIS or Stage 2 Appropriate Assessment is not required for the effects of the project on all other listed Natura sites and those beyond 15km because it can be excluded on the basis of the best objective scientific information following screening that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the European Site/s.

A Natura Impact Statement is required for the proposed development.

Stage 2: Natura Impact Statement

A Natura Impact Statement (NIS) is Stage 2 of the Appropriate Assessment process. In the case of the proposed development at Mount Avenue, Dundalk, Co. Louth, acting on a strictly precautionary basis, an NIS is required in respect of the effects of the project on Dundalk Bay SAC and Dundalk Bay SPA due to the potential for silt and contaminated surface water runoff to enter the Cunnicar and Castletown streams, which ultimately outfall to Castletown Estuary, and Dundalk Bay SAC and SPA because it cannot be excluded on the basis of best objective scientific information, in the absence of control or mitigation measures, following screening that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the named European Site/s.

A Stage 2 Appropriate Assessment or NIS is not required for the effects of the project on all other listed Natura sites within, and sites beyond, 15km because, it can be excluded, on the basis of the best objective scientific information following screening, that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the European Site/s.

The NIS evaluates the potential for direct, indirect effects, alone or in combination with other plans and projects having taken into account the use of mitigation measures. The NIS is informed by the proposed mitigation measures outlined in the accompanying Construction Environmental Management Plan to reduce the potential effects of the proposed project on species/habitats of conservation importance and the surrounding environment.

A further review of the Conservation Objectives and qualifying interests is necessary to determine if significant effects are likely to impact the identified Natura 2000 sites.

Dundalk Bay SAC (Site Code: 000455)

As outlined in the Dundalk Bay SAC Site Synopsis (NPWS, Version date 31.01.2014):

'*Dundalk Bay, Co. Louth, is a very large open, shallow sea bay with extensive saltmarshes and intertidal sand/mudflats, extending some 16 km from Castletown River on the Cooley Peninsula in the north, to Annagassan/Salterstown in the south. The bay encompasses the mouths and estuaries of the Rivers Dee, Glyde, Fane, Castletown and Flurry.*

Saltmarsh vegetation occurs in four main areas: at Lurgangreen, Marsh South, Dundalk Harbour and Bellurgan. Two types are represented – Atlantic and Mediterranean salt meadows. The Atlantic salt meadows are commonest and are characterised by Sea-purslane (Halimione portulacoides) (often as a dominant band), along with Common Saltmarsh-grass (Puccinellia maritima), Thrift (Armeria maritima), Red Fescue (Festuca rubra), Common Scurvygrass (Cochlearia officinalis), Sea Plantain (Plantago maritima) and Sea Rush (Juncus gerardi). Common Cord-grass (Spartina anglica) is frequent and often dominant over substantial areas. Glassworts (Salicornia spp.) occur on the lower zones of the saltmarshes, and in places extend out onto the sandflats. Mediterranean salt meadows are mostly confined to the upper levels of the saltmarshes or along stream sides where they merge with grassland habitats (though the transitional zone is now absent in many places). The habitat contains Sea Rush (Juncus maritimus), Sea Arrowgrass (Triglochin maritima) and Sea Aster (Aster tripolium). The saltmarshes at Lurgangreen and Marsh South are partially fenced and grazed by sheep.

Shingle beaches are particularly well represented in Dundalk Bay, occurring more or less continuously from Salterstown to Lurgan White House in the south bay, and from Jenkinstown to east of Giles Quay in the north bay. The shingle is mostly stable, occurring on post-glacial raised beaches. The shingle often occurs in association with intertidal shingle, saltmarsh and or shingle-based grassland. The shingle supports species such as Spear-leaved Orache (Atriplex prostrata), Sea Mayweed (Matricaria maritima), Sea Beet (Beta vulgaris subsp. maritima), Sea Rocket (Cakile maritima), Wild Carrot (Daucus carota), Sea-holly (Eryngium maritimum), Sea Sandwort (Honkenya peploides) and Sea Radish (Raphanus raphanistrum subsp. maritimus). Yellow Hornedpoppy (Glaucium flavum) and Lyme-grass (Leymus arenarius) occur here at their most northern locality on the east coast, while the Red Data Book species Sea-kale (Crambe maritima) has recently been recorded.

The extensive sandflats and mudflats (over 4,000 ha) occur and are comprised of ecological communities such as muddy fine sand communities and fine sand community complexes. In the centre of Dundalk Bay there is a gravel community dominated by polychaetes. These habitats host a rich fauna of bivalves molluscs, marine worms and

crustaceans and are the main food resource of the tens of thousands of waterfowl (including waders and gulls) which feed in the intertidal area of Dundalk Bay. The saltmarshes are used as high-tide roosts by all of these species, while the grazing birds (notably Brent Goose and Wigeon) feed on the saltmarsh grasses, areas of Zostera and other grassland vegetation. Brent Goose also feed on the mats of green algae on the mudflats. At night the wintering Greylag and Greenland White-fronted Goose, and Whooper Swans, from Stabannan/Braganstown (inland from Castlebellingham) roost in Dundalk Bay.

The site is internationally important for waterfowl (numbers in brackets refers to the average maximum over the period 1994/95 to 1997/98) because it regularly holds over 20,000 birds (up to 57,000 have been recorded) and supports over 1% of the North-West European/East Atlantic Flyway populations of Brent Goose (366), Bartailed Godwit (2,312) and Knot (11,948). Additionally, it is nationally important for Golden Plover (4,266), Great Crested Grebe (193), Greylag Goose (312), Shelduck (463), Mallard (657), Pintail (100), Red-breasted Merganser (148), Oystercatcher (6,940), Grey Plover (218), Ringed Plover (133), Wigeon (565), Dunlin (9,112), Blacktailed Godwit (754), Curlew (1,593), Lapwing (4,822), Greenshank (20) and Redshank (1,455). Both Golden Plover and Bar-tailed Godwit are Annex I species. The site has been designated a Special Protection Area (SPA) under the E.U. Birds Directive and it is also a designated Ramsar site.

This is a site of significant conservation value because it supports good examples of a range of coastal habitats listed on Annex I of the E.U. Habitats Directive, as well as large numbers of bird species, some of which are listed in the Birds Directive.'

As outlined in the Conservation objectives supporting document:

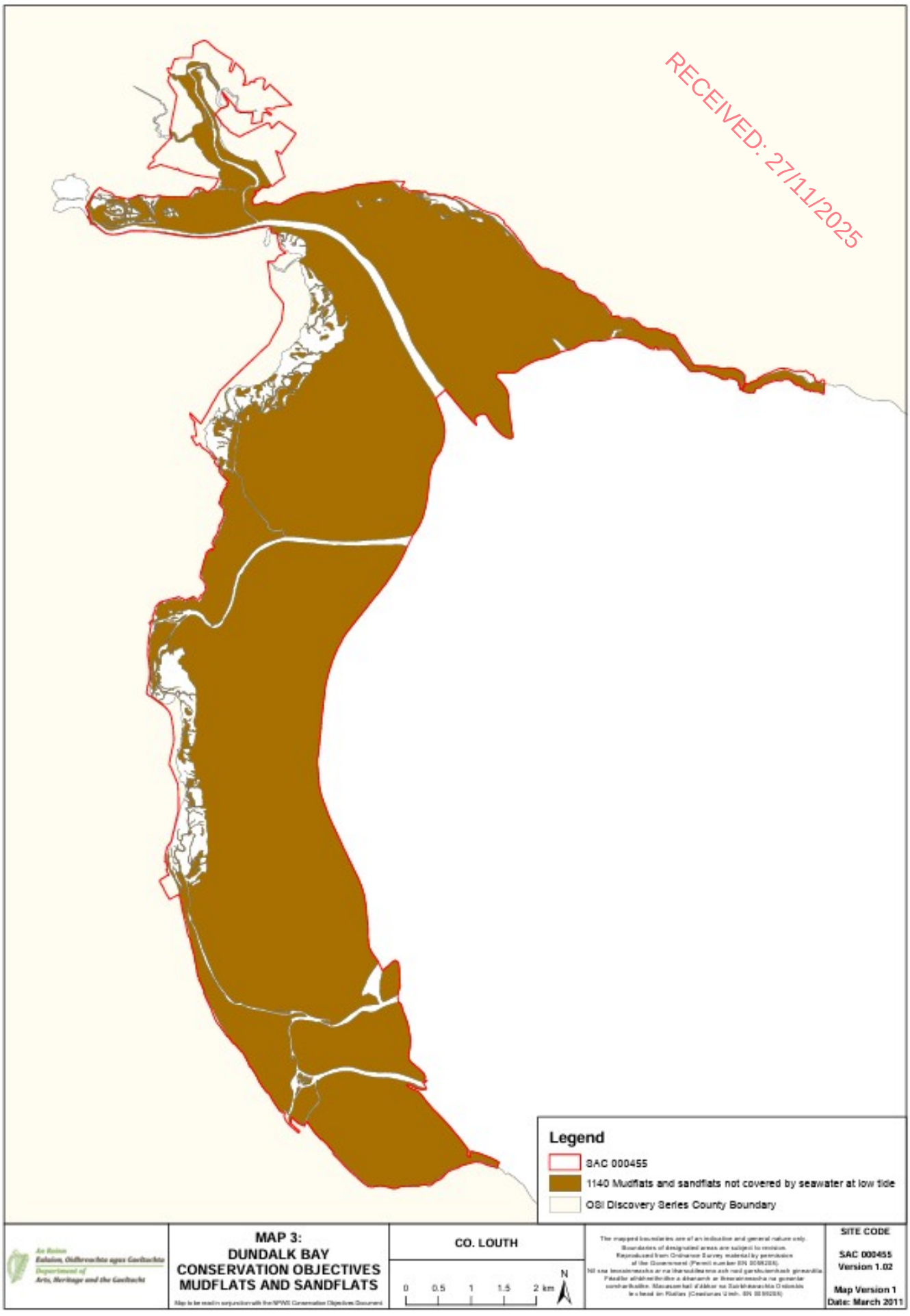
'Dundalk Bay SAC is designated for a range of marine and coastal habitats including vegetated shingle and saltmarsh. The following four coastal habitats are included in the qualifying interests for the site:

- *Perennial vegetation of stony banks (1220)*
- *Salicornia and other annuals colonising mud and sand (1310)*
- *Atlantic salt meadows (Glauco-Puccinellietalia maritimae) (1330)*
- *Mediterranean salt meadows (Juncetaliea maritimi) (1410)*

The first habitat is associated with shingle, while the other three are found in saltmarshes, where they occur in complex mosaics.

This backing document sets out the conservation objectives for the four coastal habitats listed above in Dundalk Bay SAC, which is defined by a list of parameters, attributes and targets. The main parameters are (a) Range (b) Area and (c) Structure and Functions, the latter of which is broken down into a number of attributes, including physical structure, vegetation structure and vegetation composition.

The targets set for the shingle is based in part on the findings of the National Shingle Beach Survey (NSBS), which was carried out in 1999 on behalf of the National Parks and Wildlife Service (NPWS) (Moore & Wilson, 1999). The targets set for the saltmarsh habitats are based primarily on the results of the Saltmarsh Monitoring Project (SMP) (McCorry, 2007; McCorry & Ryle, 2009) and this document should be read in conjunction with those reports.'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Legend
SAC 000455
1140 Mudflats and sandflats not covered by seawater at low tide
OSI Discovery Series County Boundary
MAP 3:
DUNDALK BAY
CONSERVATION OBJECTIVES
MUDFLATS AND SANDFLATS
CO. LOUTH
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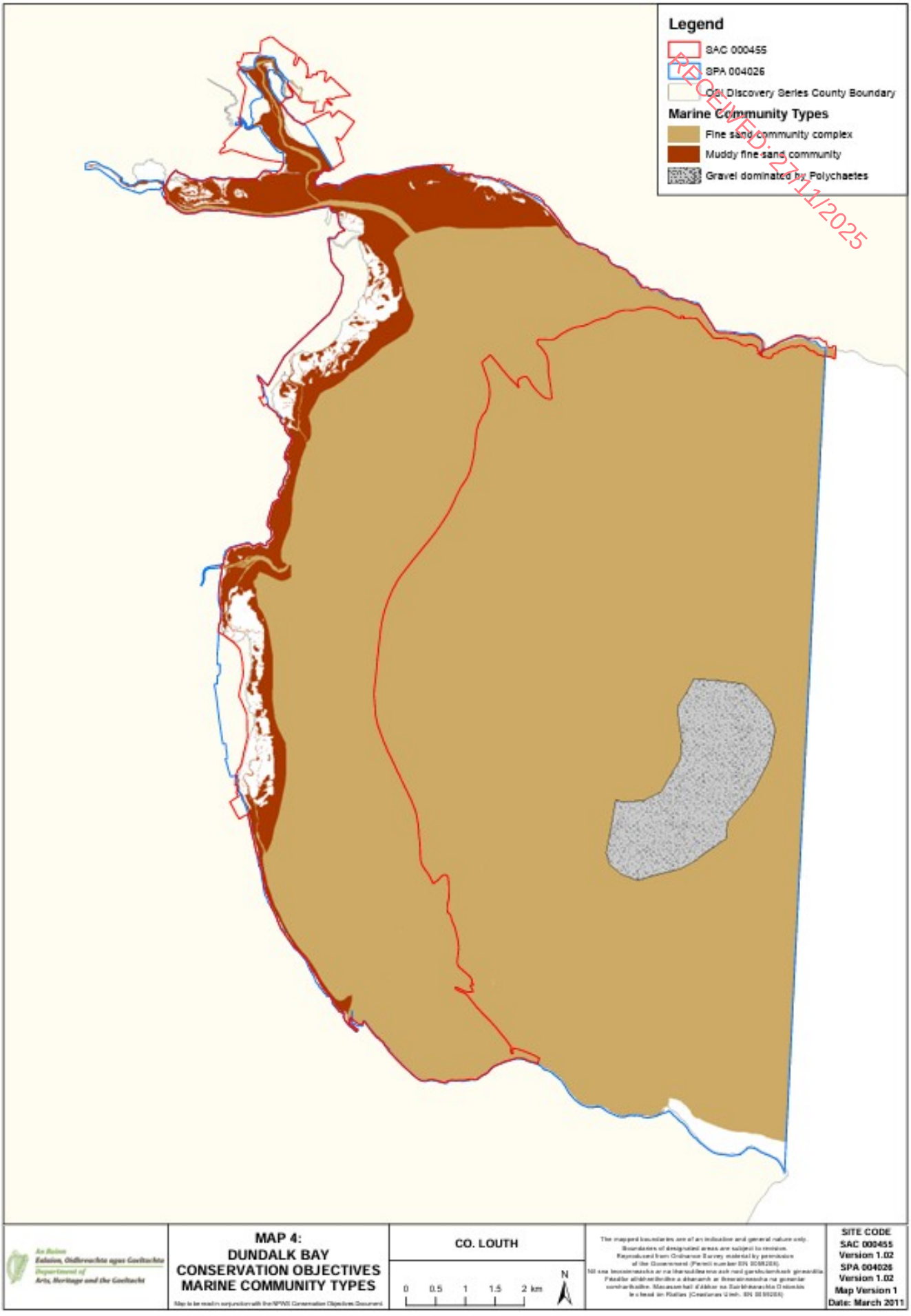
N
SITE CODE
SAC 000455
Version 1.02
Map Version 1
Date: March 2011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SAC 000455
SPA 004026
OSI Discovery Series County Boundary
Marine Community Types
Fine sand community complex
Muddy fine sand community
Gravel dominated by Polychaetes
RECEIVED: 27/11/2025
MAP 4:
DUNDALK BAY
CONSERVATION OBJECTIVES
MARINE COMMUNITY TYPES
CO. LOUTH
0 0.5 1 1.5 2 km
N
SITE CODE
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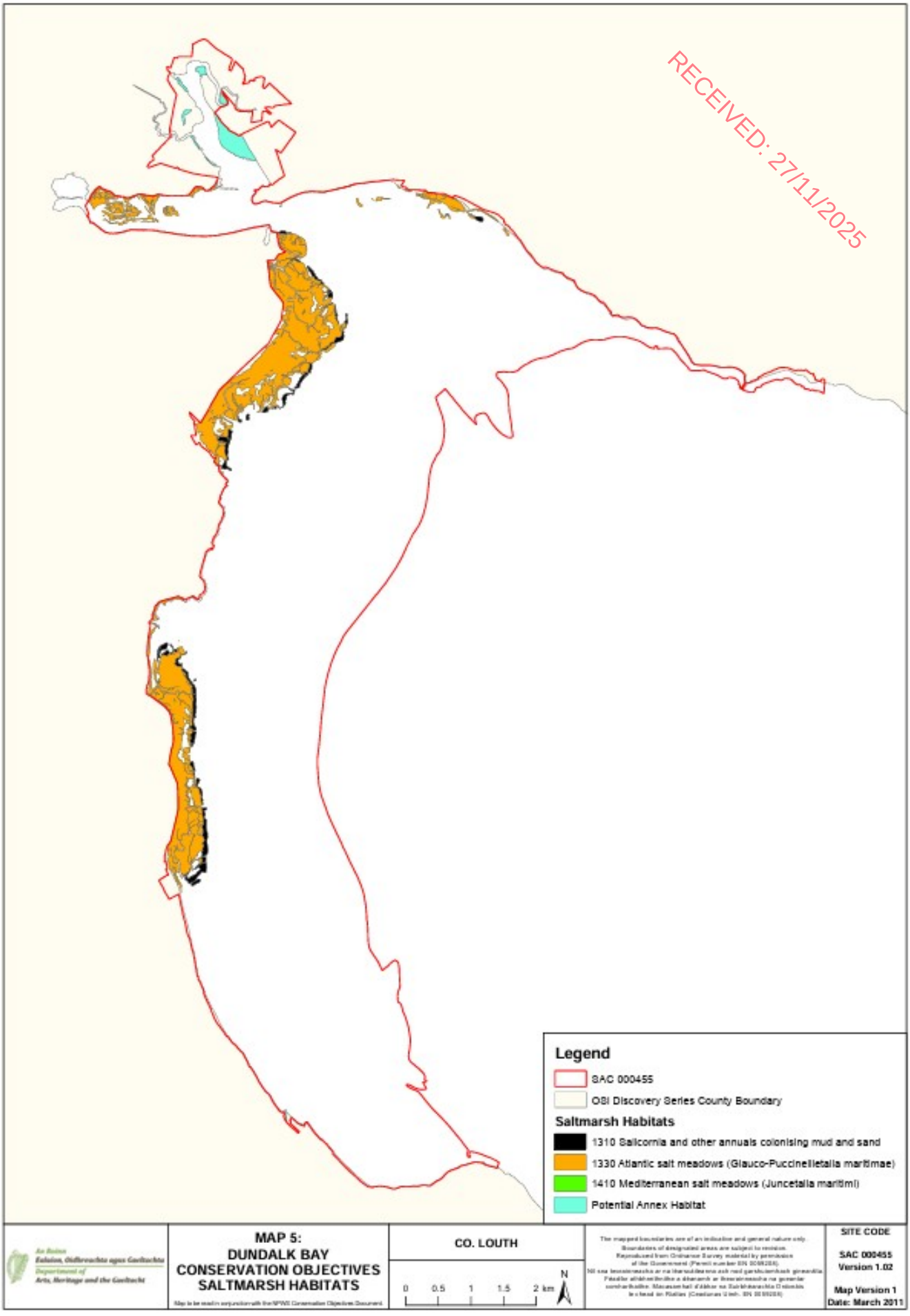
Version 1.02
SPA 004026
Version 1.02
Map Version 1
Date: March 2011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Legend
SAC 000455
OSI Discovery Series County Boundary
Saltmarsh Habitats
1310 Salicornia and other annuals colonising mud and sand
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
1410 Mediterranean salt meadows (Juncetalia maritimi)
Potential Annex Habitat
MAP 5:
DUNDALK BAY
CONSERVATION OBJECTIVES
SALTMARSH HABITATS
CO. LOUTH
0 0.5 1 1.5 2 km
N
SITE CODE
SAC 000455
Version 1.02
Map Version 1
Date: March 2011

Dundalk Bay SPA (Site code: 004026)

As outlined in the Dundalk Bay SPA Site Synopsis (NPWS, Version date 07.07.2014):

'*Dundalk Bay is a large open shallow sea bay with extensive saltmarshes and intertidal sand/mudflats, extending some 16 km from Castletown River on the Cooley Peninsula, in the north, to Annagassan/Salterstown in the south.*

The extensive sand flats and mud flats have a rich fauna of bivalves, molluscs, marine worms and crustaceans which provides the food resource for most of the wintering waterfowl. The outer part of the bay provides excellent shallow-water habitat for divers, grebes and sea duck. In summer, it is thought to be a major feeding area for ducks from the Dublin breeding colonies. The bay is used at night for roosting by wintering flocks of Greylag Goose, Greenland White-fronted Goose and Whooper Swan from Stabannan/Braganstown (inland of Castlebelligham) and other inland sites.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Crested Grebe, Greylag Goose, Light-bellied Brent Goose, Shelduck, Teal, Mallard, Pintail, Common Scoter, Redbreasted Merganser, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Lapwing, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Black-headed Gull, Common Gull and Herring Gull. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The site is of international importance because it regularly supports an assemblage of over 20,000 wintering waterbirds. It also qualifies as a site of international importance for supporting populations of Light-bellied Brent Goose (370), Knot (9,710), Black-tailed Godwit (1,100) and Bar-tailed Godwit (1,950) - all figures, unless stated otherwise, are five year mean peaks for the period 1995/96 to 1999/2000. A variety of other species occur in numbers of national importance, i.e. Great Crested Grebe (303), Greylag Goose (435), Shelduck (522), Teal (538), Mallard (765), Pintail (117), Common Scoter (581 - five year mean peak for the period 2000/01 to 2004/05), Red-breasted Merganser (121), Oystercatcher (8,746), Ringed Plover (151), Golden Plover (5,967), Grey Plover (204), Lapwing (4,892), Dunlin (11,518), Curlew (1,264) and Redshank (1,659). Other wintering species which occur include Red-throated Diver, Great Northern Diver, Cormorant, Grey Heron, Little Egret, Mute Swan, Wigeon, Goldeneye, Greenshank and Turnstone.

The site also supports nationally important populations of three wintering gull species - Black-headed Gull (6,643), Common Gull (551) and Herring Gull (754). In spring and autumn the site attracts a range of passage migrants, including Little Stint, Curlew Sandpiper and Ruff.'

The Qualifying Interests (QI) (Features of Interest), Special Conservation Interests (SCIs) for the SPA and SAC sites and the National conservation status of the QI of two European sites subject to the NIS are seen in Table 4. The site specific conservation Objectives for European sites are seen in Table 5.

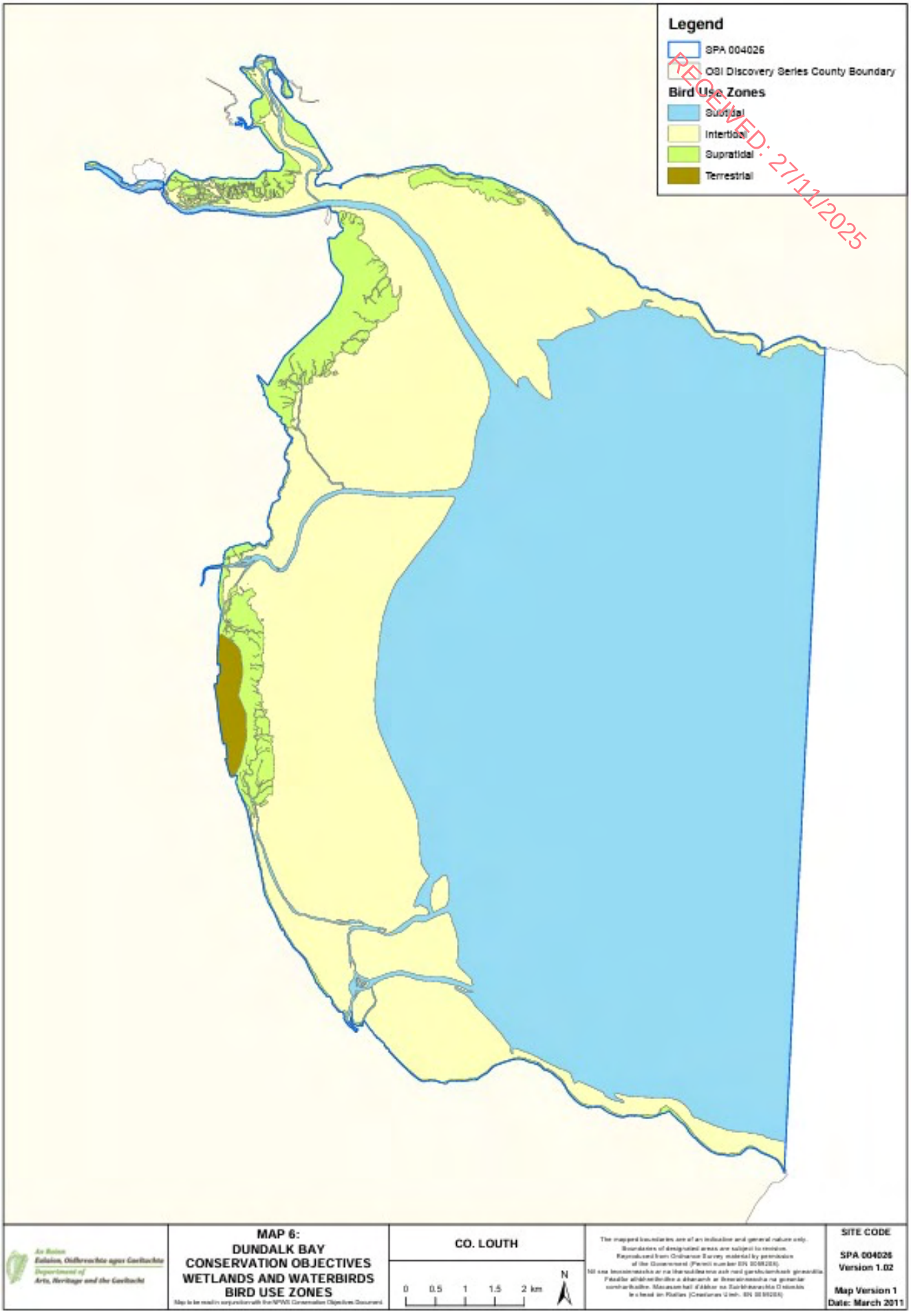
Legend
SPA 004026
OSI Discovery Series County Boundary
Bird Use Zones
Subtidal
Intertidal
Supratidal
Terrestrial
RECEIVED: 27/11/2025
MAP 6:
DUNDALK BAY
CONSERVATION OBJECTIVES
WETLANDS AND WATERBIRDS
BIRD USE ZONES
CO. LOUTH
0 0.5 1 1.5 2 km
N
SITE CODE
SPA 004026
Version 1.02
Map Version 1
Date: March 2011

Table 4. Qualifying Interests, Conservation Status, Management Objectives, Conditions underpinning site integrity for relevant European sites		
European Site Name & Code	Qualifying Interests	Current Conservation Status & Trend
Special Areas of Conservation (SAC)		
Dundalk Bay SAC (000455)	Estuaries [1130]	Favourable & Stable
	Mudflats and sandflats not covered by seawater at low tide [1140]	Favourable & Stable
	Perennial vegetation of stony banks [1220]	Favourable & Stable
	Salicornia and other annuals colonising mud and sand [1310]	Unfavourable-Inadequate & Stable
	Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]	Favourable & Increasing
	Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	Favourable & Stable
Special Protection Areas (SPA)		
Dundalk Bay SPA (004026)	Great Crested Grebe (*Podiceps cristatus*) [A005]	Amber
	Greylag Goose (*Anser anser)* [A043]	Amber
	Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]	Amber
	Shelduck (*Tadorna tadorna*) [A048]	Amber
	Teal (*Anas crecca*) [A052]	Amber
	Mallard (*Anas platyrhynchos*) [A053]	Amber
	Pintail (*Anas acuta*) [A054]	Amber
	Common Scoter (*Melanitta nigra*) [A065]	**Red**
	Red-breasted Merganser (*Mergus serrator*) [A069]	Amber
	Oystercatcher (*Haematopus ostralegus*) [A130]	**Red**
	Ringed Plover (*Charadrius hiaticula*) [A137]	Amber
	Golden Plover (*Pluvialis apricaria*) [A140]	**Red**
	Grey Plover (*Pluvialis squatarola*) [A141]	**Red**
	Lapwing (*Vanellus vanellus*) [A142]	**Red**
	Knot (*Calidris canutus*) [A143]	**Red**
	Dunlin (*Calidris alpina*) [A149]	**Red**
	Black-tailed Godwit (*Limosa limosa*) [A156]	**Red**
	Bar-tailed Godwit (*Limosa lapponica*) [A157]	**Red**
	Curlew (*Numenius arquata*) [A160]	**Red**
	Redshank (*Tringa totanus*) [A162]	**Red**
	Black-headed Gull (*Chroicocephalus ridibundus*) [A179]	Amber
	Common Gull (*Larus canus*) [A182]	Amber
	Herring Gull (*Larus argentatus*) [A184]	Amber
	Wetland and Waterbirds [A999]	N/A

Table 5. The site specific conservation Objectives for European sites		
Dundalk Bay SAC (000455)		
Attribute	Measure	Target
1130 Estuaries - To maintain the favourable conservation condition of Estuaries in Dundalk Bay SAC		
Habitat Area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes
Community Distribution	Hectares	The Subtidal fine sand community complex should be conserved in a natural condition
1140 Mudflats and sandflats not covered by seawater at low tide - To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Dundalk Bay SAC		
Habitat Area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes
Community Distribution	Hectares	The Muddy fine sand community and Intertidal fine sand community complex should be conserved in a natural condition
1220 Perennial vegetation of stony banks - To maintain the favourable conservation condition of Perennial vegetation of stony banks in Dundalk Bay SAC		
Habitat Area	Hectares	Area stable, subject to natural processes, including erosion and succession
Habitat Distribution	Occurrence	No decline, subject to natural processes
Physical Structure: Functionality and sediment supply	Presence/absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation Structure: Zonation	Occurrence	Maintain range of habitat zonations including transitional zones, subject to natural processes including erosion and succession
Vegetation Composition: Typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain the presence of species-poor communities with characteristic species: *Honckenya peploides, Beta vulgaris ssp. maritima, Crithmum maritimum, Tripleurospermum maritimum, Glaucium flavum and Silene uniflora*
Vegetation Composition: Negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cove
1310 Salicornia and other annuals colonizing mud and sand - To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in Dundalk Bay SAC		
Habitat Area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site surveyed: 35.00ha
Habitat Distribution	Occurrence	No decline, subject to natural processes
Physical Structure: Sediment supply	Presence/absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions
Physical Structure: Creeks and pans	Occurrence	Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession
Physical Structure: Flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation Structure: Zonation	Occurrence	Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession
Vegetation Structure: Vegetation height	Centimetres	Maintain structural variation within sward

Vegetation Structure: Vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation Structure: Typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub- communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)
Vegetation Structure: Negative indicator species – *Spartina anglica*	Hectares	No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur.
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) - To maintain the favourable conservation condition of Atlantic salt meadows in Dundalk Bay SAC		
Habitat Area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For the sub-site (357.57ha) and potential areas (22.42ha) mapped: 379.98ha.
Habitat Distribution	Occurrence	No decline, subject to natural processes.
Physical Structure: Sediment supply	Presence/absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions
Physical Structure: Creeks and pans	Occurrence	Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession
Physical Structure: Flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation Structure: Zonation	Occurrence	Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession.
Vegetation Structure: Vegetation height	Centimetres	Maintain structural variation within sward
Vegetation Structure: Vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: Typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub- communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)
Vegetation Structure: Negative indicator species – *Spartina anglica*	Hectares	No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur
1410 Mediterranean salt meadows (*Juncetalia maritimi*) - To maintain the favourable conservation condition of Mediterranean salt meadows in Dundalk Bay SAC		
Habitat Area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: 0.045ha.
Habitat Distribution	Occurrence	No decline, subject to natural processes.
Physical Structure: Sediment supply	Presence/absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions
Physical Structure: Creeks and pans	Occurrence	Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession

Physical Structure: Flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation Structure: Zonation	Occurrence	Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession.
Vegetation Structure: Vegetation height	Centimetres	Maintain structural variation within sward
Vegetation Structure: Vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: Typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub- communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)
Vegetation Structure: Negative indicator species – *Spartina anglica*	Hectares	No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur

Dundalk Bay SPA (004026)		
Attribute	Measure	Target
Great Crested Grebe (*Podiceps cristatus*) [A005]; Greylag Goose (*Anser anser)* [A043]; Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048]; Teal (*Anas crecca*) [A052]; Mallard (*Anas platyrhynchos*) [A053]; Pintail (*Anas acuta*) [A054] Common Scoter (*Melanitta nigra*) [A065]; Red-breasted Merganser (*Mergus serrator*) [A069]; Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137]; Golden Plover (*Pluvialis apricaria*) [A140]; Grey Plover (*Pluvialis squatarola*) [A141] Lapwing (*Vanellus vanellus*) [A142]; Knot (*Calidris canutus*) [A143]; Dunlin (*Calidris alpina*) [A149]; Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157]; Curlew (*Numenius arquata*) [A160]; Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus*) [A179]; Common Gull (*Larus canus*) [A182]; Herring Gull (*Larus argentatus*) [A184]		
Population Trend	Percentage Change	Long term population trend stable or increasing
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation
A999 Wetlands & Waterbirds - To maintain the favourable conservation condition of the wetland habitat in Dundalk Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it		
Habitat Area	Hectares	The permanent area occupied by the wetland habitat is stable and not significantly less than the areas of 8136, 4374 and 649 hectares respectively for subtidal, intertidal, and supratidal habitats, other than that occurring from natural patterns of variation.

Analysis of the Potential Impacts

The proposed development will involve the removal of the existing terrestrial habitats on site, excavations, landscaping and the construction of roads, dwellings and associated services. It is proposed to utilise the existing foul drainage network including upgrades along the N53 and Mount Avenue located along the northern and southeastern boundaries of the site respectively, and to direct surface water following attenuation to the Curnicar and Castletown Streams located along the northwestern and southern boundaries of the site respectively.

Construction Impacts

The construction of the proposed development would potentially impact on the existing ecology of the site and the surrounding area. These potential construction impacts would include impacts that may arise during the site clearance, re-profiling of the site, and the building phases of the proposed development. The proposed development of the new onsite buildings and infrastructure will entail the loss of certain habitats on site. Construction phase mitigation measures are required on site, particularly as surface water from the proposed development will discharge to the watercourse along the northwest and south of the site. There is potential for silt, petrochemicals and/or other pollutants to enter these watercourses with potential for downstream impacts. Mitigation Measures to prevent impacts on European sites are outlined in Table 7.

Designated European Sites

The proposed development is not within a designated conservation site. A potential pathway exists via surface water to the nearby European sites (Dundalk Bay SAC and Dundalk Bay SPA). The construction of the proposed development would potentially impact on the existing ecology of the site and the surrounding area. These potential construction impacts on European sites are seen in Table 6 and would include impacts that may arise during the site clearance, re-profiling of the site and the building of the proposed development. Runoff during excavation, re-profiling, the construction and operation of project elements could enter the surface water network which leads to the European sites. Compliance with the Water Pollution Acts and Inland Fisheries Ireland guidance would be seen as the primary method of ensuring no significant impact on designated conservation sites. Mitigation measures are required to ensure compliance with the Water Pollution Acts.

Ecology

The impact of the development during construction phase will be a loss of existing habitats and species. Terrestrial non-avian mammal (2025), wintering bird (2024/25), breeding bird (2025) and bat (2024) assessments were carried out by Altemar at the subject site.

Badger (*Meles meles*) is present and foraging within the site and an active outlier sett is present within hedgerow habitat along the western site boundary. Badgers and their resting places are protected in Ireland and impacts on badgers and the badger sett are likely in the absence of mitigation measures.

Six wintering bird species listed as Qualifying Interests of the nearby Dundalk Bay SPA were recorded within, over and/or adjacent to the subject site (black-headed gull, common gull, herring gull, lapwing, oystercatcher and mallard) in numbers not considered to be significant. The proposed development will result in a loss of foraging habitat for some of these species. There will be a low-moderate collision risk during the construction phase. In the absence of mitigation measures, no significant impacts on wintering bird are likely. However, out of an abundance of caution, mitigation measures will be in place to reduce collision risk during construction.

13 bird species were recorded breeding within the proposed site, including four amber-listed Birds of Conservation Concern in Ireland (BoCCI)(linnet, spotted flycatcher, starling and willow warbler) and one red-listed BoCCI (yellowhammer). Areas being utilised by both amber and red-listed BoCCI, as well as the majority of breeding hotspots within the site, are to be retained and/or supplemented/improved with native planting as part of the landscape strategy. Following standard vegetation clearance protocols in relation to nesting birds, no significant negative impact are foreseen.

A bat assessment was carried out in September 2024. Three species (common pipistrelle, soprano pipistrelle and Leisler's bat) were recorded foraging within the site. Main foraging corridors identified were the perimeter hedgerows

and treelines of the site. The site is of little value for roosting. The adjacent Cú Chulainn's Castle and surrounding woodland, located outside the proposed development boundary to the northeast, present the most suitable roosting potential within and adjacent to the site. However, no bats were recorded entering the proposed site from this area during an emergent survey. Based on the proposed works and plans, the main potential impact to foraging and roosting bats during construction would be light spill and works outside of the proposed construction zones impacting trees proposed to be retained.

No other flora, bird or terrestrial mammal species of conservation importance were recorded on site or in NPWS or NBDC records.

Small mammals such as long-tailed field mouse, house mouse, and brown rat are likely to be present. Frogs and reptiles were not observed on site; however, given the presence of the Cunnicar and Castletown Streams, frogs and newts may be present. The common lizard may occur on site but was not observed. Some mortality may occur of species that are not of conservation significance during construction.

Wintering bird, non-avian terrestrial mammal, breeding bird and bat assessment reports and survey results are included in appendix I-IV of this report.

Operational Impacts

Once constructed all onsite foul drainage will be connected to separate foul and surface water systems. Surface water runoff will comply with SUDS and discharge to the Cunnicar and Castletown streams following attenuation. Foul drainage will discharge to the existing public combined sewer network along the N53 to the north and to the existing foul network on Mount Avenue to the southeast, both of which ultimately lead to Dundalk WwTP.

The biodiversity value of the site would be expected to improve as the landscaping matures. Badgers and the existing badger sett within the site will persist due to accommodations within the landscape plan. The value of the site for breeding birds is predicted to improve due increased diversity in habitats throughout the site and retention of the majority of important breeding habitats. There will be a non-significant loss of foraging habitat for wintering birds (including Qualifying Interests of nearby SPAs) and flights of all bird species over and adjacent to the site will persist. The retention of main foraging corridors for bats and lack of suitable roosting habitats within the proposed development area will result in limited negative impacts on bats during operation compared to current levels. However, development and lighting within the proposed development will result in a reduction of open foraging areas.

Mitigation measures alongside standard operational controls will be incorporated into the proposed development project to minimise the potential negative impacts within the Zone of Influence (ZoI) including the Cunnicar and Castletown streams, Castletown Estuary, Dundalk Bay and European sites with hydrological pathways (Table 7).

Designated Conservation Sites within 15km

As the main potential vector for impacts to European sites would be seen to be via the existing watercourses bounding the northwest and south of the proposed site, no additional controls are required besides those outlined below (Table 7), during the construction and operational phases of the development, to mitigate against potential negative impacts on designated conservation sites. The mitigation measures designed and outlined in Table 7 represent best practice to ensure that the project will comply with the Water Pollution Acts and standard IFI Conditions in relation to construction and drainage.

Table 6. Potential impacts on European sites.		
Potential for adverse effects on the qualifying interests and conservation objectives of European sites		
European Site & Site Code	Qualifying Interests	Potential for Adverse Effects
Dundalk Bay SAC [000455]	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	Given the nature of the works, all of these effects would be expected to be localised in nature restricted to the immediate vicinity of the site. However, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into the Cunnicar Stream or Castletown Stream with potential for downstream impacts on Dundalk Bay SAC. The habitats of conservation interest of this SAC are not on site. However, the range of the habitats that are of conservational interest are present hydrologically downstream of the proposed works. Site clearance, groundworks and construction works have the potential for downstream impacts on aquatic biodiversity through the introduction of silt, petrochemicals and pollutants. Surface water runoff or works in the vicinity of the hydrological networks on onsite could lead to dust, hazardous material, soil or silt laden runoff entering adjacent streams. Surface water runoff on site during construction may lead to silt or contaminated materials from the site entering the Cunnicar and Castletown Streams and Castletown Estuary, with downstream impacts on the SAC. If on-site concrete production is required or cement works are carried out in the vicinity of watercourses there is potential for contamination of watercourses. The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or in adjacent watercourses. Impacts on the SAC from upstream sources have the potential to directly impact on the qualifying interests of the SAC in the absence of mitigation measures. In the absence of mitigation measures there is the potential to impact on the distribution number, range and/or characteristics of the following qualifying interests: • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Perennial vegetation of stony banks [1220] • Salicornia and other annuals colonising mud and sand [1310] • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] • Mediterranean salt meadows (Juncetalia maritimi) [1410]

		Mitigation measures are required to remove the potential of impacts on the SAC from pathways via the Cunnicar and Castletown Streams.
Dundalk Bay SPA [004026]	Great Crested Grebe (*Podiceps cristatus*) [A005] Greylag Goose (*Anser anser)* [A043] Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Teal (*Anas crecca*) [A052] Mallard (*Anas platyrhynchos*) [A053] Pintail (*Anas acuta*) [A054] Common Scoter (*Melanitta nigra*) [A065] Red-breasted Merganser (*Mergus serrator*) [A069] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141] Lapwing (*Vanellus vanellus*) [A142] Knot (*Calidris canutus*) [A143] Dunlin (*Calidris alpina*) [A149] Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157] Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Common Gull (*Larus canus*) [A182] Herring Gull (*Larus argentatus*) [A184] Wetland and Waterbirds [A999]	Given the nature of the works, all these effects would be expected to be localised in nature restricted to the immediate vicinity of the site. However, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into the Cunnicar Stream or Castletown Stream with potential for downstream impacts on Dundalk Bay SPA. A number of species listed as conservation interests of this SPA are either occasionally or regularly occurring on, over or immediately adjacent to the proposed site. However, the species listed as Qualifying Interests of the SPA which do occur on site do not occur in significant numbers. Site clearance, groundworks and construction works have the potential for downstream impacts on biodiversity through the introduction of silt, petrochemicals and pollutants. Surface water runoff or works in the vicinity of the hydrological networks on onsite could lead to dust, hazardous material, soil or silt laden runoff entering adjacent streams. Surface water runoff on site during construction may lead to silt or contaminated materials from the site entering the Cunnicar and Castletown Streams which outfall to Castletown Estuary, with downstream impacts on the SPA, it's Qualifying Interests and the habitat which sustains them. If on-site concrete production is required or cement works are carried out in the vicinity of watercourses there is potential for contamination of watercourses. The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or in adjacent watercourses. Impacts on the SPA from upstream sources have the potential to directly impact on the qualifying interests of the SPA in the absence of mitigation measures. In the absence of mitigation measures there is the potential to impact on the distribution number and range of the following qualifying interests: • Great Crested Grebe (*Podiceps cristatus*) [A005] • Greylag Goose (*Anser anser)* [A043] • Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] • Shelduck (*Tadorna tadorna*) [A048] • Teal (*Anas crecca*) [A052] • Mallard (*Anas platyrhynchos*) [A053]

		• Pintail (*Anas acuta*) [A054] • Common Scoter (*Melanitta nigra*) [A065] • Red-breasted Merganser (*Mergus serrator*) [A069] • Oystercatcher (*Haematopus ostralegus*) [A130] • Ringed Plover (*Charadrius hiaticula*) [A137] • Golden Plover (*Pluvialis apricaria*) [A140] • Grey Plover (*Pluvialis squatarola*) [A141] • Lapwing (*Vanellus vanellus*) [A142] • Knot (*Calidris canutus*) [A143] • Dunlin (*Calidris alpina*) [A149] • Black-tailed Godwit (*Limosa limosa*) [A156] • Bar-tailed Godwit (*Limosa lapponica*) [A157] • Curlew (*Numenius arquata*) [A160] • Redshank (*Tringa totanus*) [A162] • Black-headed Gull (*Chroicocephalus ridibundus*) [A179] • Common Gull (*Larus canus*) [A182] • Herring Gull (*Larus argentatus*) [A184] • Wetland and Waterbirds [A999] Mitigation measures are required to remove the potential of impacts on the SPA from pathways via the Cunnicar and Castletown Streams.

Table 7. Mitigation Measures.

Sensitive Receptors	Potential Impacts	Designed-in Mitigation
Dundalk Bay SAC Dundalk Bay SPA Surface Water Network and Streams Castletown Estuary Dundalk Bay	• Habitat degradation • Dust deposition • Pollution • Silt ingress from site runoff • Downstream impacts • Negative impacts on habitats	As outlined in the CEMP by DBFL Consulting Engineers, the following mitigation measures will in place. Additional mitigation measures in addition to those within the CEMP are also outlined. The outlined mitigation measures, with continual ecological supervision and monitoring of these measures, will prevent impacts on the Cunnicar and Castletown Streams and, subsequently, Dundalk Bay SAC and Dundalk Bay SPA: **Mitigation Measures** • ‘***Stripping of Topsoil*** ○ *Stripping of topsoil shall be carried out in a controlled and carefully managed way and coordinated with the proposed staging for the development.*

	• Negative impacts on aquatic and bird fauna • Negative impacts of terrestrial fauna • Negative impacts on bats.	○ *At any given time, the extent of topsoil strip (and consequent exposure of subsoil) shall be limited to the immediate vicinity of active work areas.* ○ *Topsoil stockpiles shall be protected for the duration of the works and not located in areas where sediment laden runoff may enter existing surface water drains.* ○ *Topsoil stockpiles shall also be located so as not to necessitate double handling.'* • ***Stripping of topsoil*** ○ *Stripping of topsoil shall be carried out in a controlled and carefully managed way and coordinated with the proposed staging for the development.* ○ *At any given time, the extent of topsoil strip (and consequent exposure of subsoil) shall be limited to the immediate vicinity of active work areas.* ○ *Topsoil stockpiles shall be protected for the duration of the works and not located in areas where sediment laden runoff may enter existing surface water drains.* ○ *Topsoil stockpiles shall also be located so as not to necessitate double handling.* • ***Excavation of Subsoil Layers*** ○ *The design of road levels and finished floor levels has been carried out in such a way as to minimize cut/fill type earthworks operations.* ○ *The duration that subsoil layers are exposed to the effects of weather shall be minimised.* ○ *Disturbed subsoil layers will be stabilised as soon as practicable (e.g. backfill of service trenches, construction of road capping layers, construction of building foundations and completion of landscaping).* ○ *Similar to comments regarding stripped topsoil, stockpiles of excavated subsoil material shall be protected for the duration of the works. Stockpiles of subsoil material shall be located separately from topsoil stockpiles. These stockpiles will be monitored throughout the construction phase. Monitoring ground conditions and stability of excavations will be an on-going basis.* ○ *Measures will be implemented to capture and treat sediment laden surface water runoff (e.g. sediment retention ponds, surface water inlet protection and earth bunding adjacent to open drainage ditches).* • ***Weather Conditions*** ○ *Typical seasonal weather variations will also be taken account of when planning stripping of topsoil and excavations with an objective of minimising soil erosion and silt generation. The approach of extreme weather events will be monitored to inform near-term operational activities.* • ***Surface Water Runoff*** ○ *Surface water runoff from areas stripped of topsoil and surface water collected in excavations will be directed to on-site settlement ponds where measures will be implemented to capture and treat sediment laden runoff prior to discharge of surface water at a controlled rate. Monitoring of these*