MWP

Screening for Appropriate Assessment

Tomsallagh 110kV Substation and Grid Connection, Co. Wexford

WXD Energy Limited

April 2024

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Summary of Findings

Screening for Appropriate Assessment

Project Title	Supporting Information for Screening for Appropriate Assessment (AA) for the Application for a 110 kilovolt (kV) air insulated switchgear (AIS) substation with overhead loop-in electrical connection, Tomsallagh, County Wexford
Project Proponent	WXD Energy Limited, a Special Purpose Vehicle Company (SPV) of Statkraft Ireland Ltd
Project Location	Townland of Tomsallagh, near Enniscorthy, County Wexford
Screening for Appropriate Assessment	The Screening for Appropriate Assessment report aims to provide the information required by the competent authority to determine whether the proposed development, either on its own or when combined with other plans or projects. This assessment is conducted with regard to Natura 2000 sites, taking into consideration the conservation objectives associated with these sites.
Conclusion	It has been objectively concluded in this AA Screening Report that the following Natura 2000 sites within the zone of influence of the proposed works will not be significantly impacted by the proposed project at Tomsallagh, County Wexford: • Slaney River Valley SAC (Site code: 000781) • Wexford Harbour and Slobs SPA (Site code: 004076)

1. Introduction

1.1 Purpose of the Assessment

WXD Energy Limited, a Special Purpose Vehicle Company (SPV) of Statkraft Ireland Ltd. (the Applicant) is proposing to apply to An Bord Pleanála for permission to construct a 110kV substation with overhead loop-in electrical connection ("proposed development") in the townland of Tomsallagh, Co. Wexford.

Malachy Walsh and Partners (MWP) Engineering and Environmental Consultants has been commissioned to prepare this AA Screening report to accompany the planning application. The purpose of the AA Screening Report is to provide a sufficient level of information to the competent authority in order to make a Stage 1 Appropriate Assessment Screening Decision in respect of the Proposed Development. This assessment is conducted with regard to Natura 2000 sites (European sites), taking into consideration the conservation objectives associated with these sites.

1.2 Project Overview

The proposed development site is situated within the townland of Tomsallagh to the northeast of Enniscorthy Town and to the south of Ferns Town, Co. Wexford. The site mainly consists of agricultural land bounded on all side by hedgerows. The proposed development comprises:

- A 110kV AIS loop-in substation with associated compound, including control and operational buildings, electrical plant, equipment, cabling, lighting, CCTV, lightening masts, drainage infrastructure, security palisade fencing, and all associated and ancillary works necessary to facilitate the development.
- Erection of 2 no. overhead line end masts (c. 20m high) and 2 no. lattice gantries (c. 16m high) and associated overhead cabling to enable a loop-in/loop-out grid connection to the existing Crane-Lodgewood 110 kV overhead line (OHL).
- New entrance and access road from the L-6065-1.

1.3 Legislative Context

The Habitats Directive (92/43/EEC) aims to preserve natural habitats of wild fauna and flora through the identification of Special Areas of Conservation (SACs), while the Birds Directive (79/409/EEC) focuses on safeguarding birds of special significance through Special Protection Areas (SPAs). Member states are responsible for designating both SPAs and SACs, collectively forming the Natura 2000 network, which protects sites across the European Community. In Ireland, the Habitats Directive has been incorporated into law through the European Communities (Birds and Natural Habitats) Regulations 2011.

Article 6(3) of the Habitats Directive necessitates an Appropriate Assessment of plans and projects affecting the Natura 2000 network. According to the European Communities (Birds and Natural Habitats) Regulations 2011, the Competent Authority must conduct a screening for AA before granting consent for a proposed development. This screening assesses, based on the best scientific knowledge and conservation objectives of the sites, whether the project, either individually or in conjunction with others, is likely to significantly impact a Natura 2000 site.

If, based on objective information, it cannot be ruled out that the proposed development will have a significant effect on a Natura 2000 site, AA becomes mandatory. In such cases, a NIS must be prepared. The information

provided in this screening report will be utilized by the Competent Authority, in this instance, Wexford County Council, to conduct their own screening for AA of the proposal.

1.4 Stages of Appropriate Assessment

The Appropriate Assessment process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required. All four stages are set out in Appendix 1. This report relates to Stage 1 - Screening.

Stage 1: Screening addresses:

• whether a plan or project is directly connected to or necessary for the management of the site, or

• whether a plan or project, alone or in combination with other plans and projects, is likely to have

significant effects on a Natura 2000 site in view of its conservation objectives.

If likely significant effects cannot be excluded beyond any reasonable doubt, the plan or project will have to undergo a full appropriate assessment under Article 6(3).

2. Appropriate Assessment Screening Methodology

2.1 Guidance

This screening for AA report has been prepared in accordance with the European Commission, Commission Notice - Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021/C 437/01) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2018).

2.2 Screening Steps

The screening analysis comprises four steps:

1. ascertaining whether the plan or project is directly connected with or necessary to the management of a Natura 2000 site;

2. identifying the relevant elements of the plan or project and their likely impacts;

3. identifying which (if any) Natura 2000 sites may be affected, considering the potential effects of the plan or project alone or in combination with other plans or projects;

4. assessing whether likely significant effects on the Natura 2000 site can be ruled out, in view of the site's conservation objectives.

2.3 Assessment Criteria

Establishing whether a plan or project is likely to affect a Natura 2000 site is based on an assessment of potential impacts using the following key indicators:

- reduction of habitat area, habitat degradation or fragmentation;
- disturbance to species, reduction in species populations and density;
- changes in ecological functions and/or features that are essential for the ecological requirements of habitats and species (e.g. water quality and quantity);
- interference with the key relationships that define the structure and function of the site.

The criteria for assessing significance, in view of the site-specific conservation objectives is as follows:

- degree of habitat loss (absolute, relative), changes in habitats structure;
- risk of species populations' displacement, level of disturbance, reduction of species home range, feeding area, refuge areas, alteration of favourable condition for breeding
- importance of the habitats and species affected, e.g. representativeness, local variety;
- importance of the site (e.g. limit of distribution area for certain habitats and species, stepping stone, important for ecological connectivity);
- disruption or alteration of ecological functions; and
- changes to key ecological features of the site (e.g. water quality).

2.4 Desktop Study

In order to complete the screening for AA report certain information on the existing environment is required. A desk study was carried out to collate available information on the proposed development site's natural environment. This comprised a review of the following publications, data and datasets:

- Ordnance Survey Ireland (OSI) Aerial photography and 1:50000 mapping
- NPWS on-line datasets and literature
- National Biodiversity Data Centre (NBDC) (on-line mapping)
- BirdWatch Ireland on-line resources
- Teagasc soil area maps (NBDC website)
- Geological Survey Ireland (GSI) area maps
- EPA water quality data and on-line mapping
- Southeastern River Basin District (SWRBD) datasets (Water Framework Directive)
- Review of requested records from NPWS Rare and Protected Species database
- Wexford County Development Plan 2022 - 2028[1]
- Other information sources and reports footnoted in the course of the report

[1] County Development Plan | (c) Wexford County Council (wexfordcoco.ie) Accessed: 23/01/2024.

2.4.1 Data Requests and Database Searches

The proposed development area lies within the OSI National Grid hectad T04. Concise and site-specific information on species records available in this hectad was retrieved from the NBDC online database and reviewed.

On the 24th of January 2024, a request was made to NPWS for Sensitive Data Access for hectad T04. Data for species records within the hectad was received from the NPWS on the 25th January 2024.

Information received via the NPWS and the NBDC in response to the data requests and database searches was used to help inform the baseline surveys and impact assessment in relation to the proposal.

2.5 Field Surveys

The desk top study was supplemented by multi-disciplinary ecological walkover survey of the study area on the 18th of January 2024 by MWP ecologists, aimed to establish the site's ecological features and resources, particularly any rare/protected species and habitats. The study area included all habitats and built areas within the site boundary, as well as the Tinacross Stream which drains the proposed development site and flows into the River Slaney. The topography of the site was observed and any overland connections between the proposed development and the Tinnacross Stream was recorded. The Tinacrross Stream was examined within the River Slaney Special Area of Conservation.

Summaries of the field survey methodologies employed are provided in the following sub-sections.

2.5.1 Habitats and Flora

The habitat surveys had regard to '*Best Practice Guidance for Habitat Survey and Mapping*' (Smith *et al.*, 2011) and '*A Guide to Habitats in Ireland*' (Fossitt, 2000). Habitats within the study area were categorised to Level 3 according to Fossitt (2000). It is noted that the baseline habitat and flora surveys were carried out outside the optimum flora survey period but this was not a constraint in terms of habitat classification.

2.5.2 Non-native/Invasive Species

The presence of Invasive Alien Plant species (IAPS) including species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011, as amended) was determined within the study area.

2.5.3 Otter

Walkover surveys for mammals including otter *Lutra lutra* were undertaken. Watercourses occurring within the proposed development site were evaluated in terms of their potential suitability for otter. Otter field signs such as tracks, prints, feeding signs, spraints, or the presence of couches or holts were searched for to indicate the presence/absence of otter. The otter survey had regard to methodology outlined in 'Monitoring the Otter *Lutra lutra*' (Chanin, 2003).

2.5.4 Aquatic Ecology

An assessment of the Tinnacross Stream was carried out based on width, depth and other physical characteristics. An opinion of lamprey habitats was documented with reference to 'Ecology of the River, Brook and Sea Lamprey'

by Maitland (2003). Habitat suitability for salmonids was assessed with reference to the 'Ecology of the Atlantic Salmon' (Hendry & Cragg-Hine, 2003).

2.6 Statement of Competency

The site survey was undertaken by Petr Dobes and Gerard Hayes (BSc). This report was prepared by Petr Dobes and reviewed by Gerard Hayes.

Petr, a graduate of Kerry College's Ecology program, has been a valuable member of MWP's Ecological team since May 2023. As a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM), he exhibits a deep commitment to environmental stewardship. Passionate about nature, Petr actively participates in Citizen Science projects, contributing to the monitoring of local wildlife and flora. He is a dedicated birdwatcher, conducting annual bird population surveys for both Birdwatch Ireland and the Irish Raptor Study Group.

Gerard is a Senior Aquatic Ecologist with over 15 years' experience in environmental consultancy. He is a member of the CIEEM (MCIEEM) and the Freshwater Biological Association (FBA). Gerard has a diverse ecological profile, with aquatic fauna, phase 1 habitat, mammal (including bats), bird, amphibian, macroinvertebrate, and tree survey experience. He has had numerous responsibilities including environmental report writing, ecological appraisals, waste assimilation capacity assessment, and ecological monitoring. His project involvement has been primarily in the areas of wind energy development, waste-water treatment plants, roads/bridges, water supply, flood defense and hydro schemes. He is co-author and/or carried out surveys for National Parks and Wildlife Service (NPWS) Irish Wildlife Manual Nos. 15, 24, 26, 37, 45. This included juvenile lamprey electrical fishing surveys in the Boyne, Corrib, Moy and Suir catchments, the latter which he led. He has collated field data and prepared river water quality assessment reports for the Environmental Protection Agency's (EPA) biological monitoring of rivers as part of Water Framework Directive (WFD) monitoring. He has been formally trained in WFD river monitoring (Environmental Protection Agency), Stage 1 and Stage 2 freshwater pearl mussel surveying (Dr. Evelyn Moorkens), aquatic macroinvertebrate identification (Freshwater Biological Association).

3. Description of the Project

It is proposed to develop a 110kV Substation Facility in the townland of Tomsallagh and an overhead connection to the National Grid by looping into the existing 110kV Lodgewood-Crane overhead powerlines above.

The proposed development will consist of the following elements:

- A 110kV Air Insulated Switchgear (AIS) loop-in substation with associated compound, including control and operational buildings, electrical plant, equipment, cabling, lighting, CCTV, lightening masts, drainage infrastructure, security palisade fencing, and all associated and ancillary works necessary to facilitate the development.
- Erection of 2 no. overhead line end masts (c. 20m high) and 2 no. lattice gantries (c. 16m high) and associated overhead cabling to enable a loop-in/loop-out grid connection to the existing Crane-Lodgewood 110 kV overhead line (OHL).
- New entrance and access road from the L-6065-1 public road.

3.1 Characteristics of the Project

The main characteristics of the development, including the civil works and activities associated with the construction phase, are set out in Table 1 below.

Table 1:Characteristics of the proposed development

Size, scale, area, land-take	The project is a small-scale industrial project comprising of a 110kV AIS substation with overhead loop-in electrical connection, new access road and all associated ancillary equipment comprising a development footprint of approximately 2.3 hectares located in Tomsallagh Solar Farm, Co. Wexford.
Details of physical changes that will take place during the various stages of implementing the proposal	Construction of the proposed development will require excavation and removal of topsoil and subsoils within the site across the extent of the development footprint. It is proposed that excavated material will be reused as much as possible within the site. Any topsoil or excavated subsoils not suitable for reuse within the proposed development will be brought to a suitable licensed waste facility. The removal of some mature trees and hedgerows will be required to facilitate the development. It is proposed to replant hedgerows on the berms that are to be constructed along the new access road.
Description of resource requirements for the construction/operation and decommissioning of the proposal (water resources, construction material, human presence etc)	The requirement for imported materials will mainly consist of higher-grade materials e.g. stone material for roads and foundations, and concrete for the construction of the hardstanding areas. Concrete and additional aggregate material required for construction will be sourced from authorised facilities. Potable water will be required for the construction employees (20 to 25 personnel). The average requirement is estimated at approximately 50 litres per person per day which equates to 1000 to 1250 litres per day during peak construction. It is proposed to import all water to the site during the construction phase. There will be a minimal water requirement during the operational phase. A rainwater harvesting system including filtration is proposed to provide the water required at the 110kV substation compound and the IPP welfare units. This system will allow for rainwater to be re-used in toilets/sinks. Potable water demand will be minimal and will be satisfied by an imported bottled water supply.
Description of timescale for the various activities that will take place as a result of implementation (including likely start and finish date)	The construction of the proposed substation is estimated over period of 14 to 18 months.
Description of wastes arising and other residues (including quantities) and their disposal	Excavated material will be reused onsite where possible to minimise waste generation. All waste (surplus soils, general waste, plastic, timber, etc.) arising during the construction phase will be managed and disposed of in accordance with the provisions of the Waste Management Act 1996 and associated amendments and regulations, and a Waste

	Management Plan (WMP) will be prepared by the appointed Contractor prior to the commencement of construction. All waste material will be disposed of at a fully licensed facility. It is not proposed to treat wastewater on site. Wastewater from the staff welfare facilities in the control buildings will be managed by means of a sealed storage tank. All wastewater will be removed from site by permitted waste collector to wastewater treatment plants. This is an accepted industry approach and has been adopted as a response to the specific site characteristics.
Identification of wastes arising and other residues (including quantities) that may be of particular concern in the context of the Natura 2000 network	At the substation compound, a site-specific drainage system has been designed to replicate predevelopment greenfield surface water runoff conditions at the proposed development lands. It is proposed that surface water runoff from the substation building roof, transformer plinths, and concrete roads within the electrical yard will be collected in a series of filter drains, roof guttering and downpipes and routed to an underground gravity drainage network. From here the surface water will outfall to an attenuation unit. Prior to draining into the onsite attenuation system, the collected stormwater flow from the substation compound will pass through an oil/petrol Interceptor. The attenuated surface water runoff is then proposed to overflow at a controlled rate equal to the greenfield runoff rate.
Description of any additional services required to implement the project or plan, their location and means of construction	During the construction phase, it will be necessary to provide temporary facilities for construction operatives. The temporary site compound will be located within the planning boundary. The temporary compound will have a hard-standing surface and will be used for construction phase car parking, a secure storage area for construction materials, waste materials and also contain temporary site accommodation units to provide welfare facilities for site personnel. Facilities will include offices, meeting rooms, a canteen and a drying room. A bunded containment area will be provided within the construction compounds for the storage of lubricants, oils and site generators etc. A self-contained port-a-loo with an integrated waste holding tank will be used on site for toilet facilities. This will be maintained by the Contractor on a regular basis and will be removed from the site on completion of the construction phase.

3.2 Identification of Other Projects or Plans or Activities

3.2.1 Plans

With regards to the potential for in-combination effects, the Wexford County Development Plan (2022-2028) was considered. This Plan was adopted on the 13th of June 2022 and came into effect on the 25th July 2022. One element of this plan, within Volume 1, Chapter 2 – Climate Action[2], is considered to have the potential to interact with the proposal in the context of potentially significant in-combination effects. This element in question is the development of low carbon technologies.

The objective of the Climate Action plan is to transition to a low carbon economy by 2050, 'which is focused on clean, low carbon technologies and promotes the development of sustainable renewable energy sources such as wind, tidal and solar energy as a means of reducing dependencies on fossil fuels, in particular, community owned and locally produced energy generation projects'.

The Wexford Biodiversity Action Plan (2013-2018)[3] was also considered regarding to the local ecology and action plans put in place to achieve the protection and enhancement of the Wexford's biodiversity.

3.2.2 Permitted and Proposed Developments in the Locality

A search of Wexford County Council's and An Bord Pleanála online planning enquiry system[4] for granted or on-going planning applications that have the potential for in-combinations effects with the proposed development on nearby Natura 2000 sites was undertaken. Table 2 below outlines the granted and/or on-going planning applications near the proposed development site.

[2]https://consult.wexfordcoco.ie/en/consultation/wexford-county-development-plan-2022-2028/chapter/chapter-2-climate-action
[3]https://www.wexfordcoco.ie/sites/default/files/content/Environment/BiodiversityComm/Co.%20Wexford%20Biodiversity%20Action%20Plan%202013-2018.pdf
[4] https://dms.wexfordcoco.ie/index.php

Table 2:List of granted and/or on-going planning applications near the proposed development site.

Application No.	Applicant	Proposed Development	Decision	Grant Date
20231025	Solas Eireann Development, Tincurry	Permission for the development of a solar panel PV array compromising photovoltaic panels on ground mounted panes within site area of 7.96 hectares , 4 NO. single storey MV substations, 1 no. single storey DSO substation, 1 no. single storey customer substation with 1 no. communications pole attached, 1 no single storey spares building, boundary security fencing, CCTV, associated, electrical cabling and ducting, alternation to existing entrance to include access gates, access track and all associated ancillary development and landscaping works.	Granted	16/12/2016
20160595	Power Capital Renewable Energy Ltd, Ballycarney	Construction of an up to 5MW Solar PV farm compromising approx. 20,000 no. photovoltaic panels on the ground mounted frames. Within a site area of 10.84 hectares and associated ancillary development including 4 no. transformer stations, 4 no. auxiliary transformer stations, 4 no inverters, 1 no. client side substation1 no. single storey storage building, 1 no. single storey communications building, 1 no. single storey DNO building, 3 no. CCTV security cameras mounted on 4 metre high poles, perimeter security fencing (2 metres high) and the formation of an access road to the site from adjoining road.	Granted	20/07/2016
20171127	Renewable Energy Ltd, Killabeg, Tinnacross	Permission for the development of a temporary (27 years) ground-mounted solar photovoltaic (PV) farm to generate renewable electricity on a 12.7HA site, compromising solar arrays, energy storage, associated electrical infrastructure, fencing, access improvements and ecologically beneficial landscape works.	Conditional	11/10/2017
20171680	Renewable Energy Systems Ltd, Killabeg, Tinnacross	Permission for the development JBM of a temporary (27 years) ground mounted solar panel photovoltaic (PV) farm to generate renewable electricity on a 10.4 ha site, comprising solar arrays, energy storage, associated electrical infrastructure, fencing, access improvements and ecologically beneficial landscape works.	Conditional	14/02/2018
20171275	JBM Solar Developments Ltd, Tomsallagh	Permission for development to consist of : a 10 year permission for the construction of solar PV energy development compromising installation of solar photovoltaic (PV) panels on ground mounted frames/support structures within existing field boundaries; underground cabling and ducting; 11 no. inverter/ transformer stations; 11 no. HV cabins; 2 no. electricity control buildings with associated hard standing area; 1 no. communications cabin; site perimeter stock- proof security fencing (C.36 HA); CCTV security cameras; upgrade of existing agricultural site entrance located to the north of the site for construction and operational access; site access tracks; landscaping and all associated site development works. A temporary construction compound will also be provided.	Conditional	10/10/2018

Application No.	Applicant	Proposed Development	Decision	Grant Date
20190440	Renewable Energy Systems (Res) Ltd, Killabeg, Tinnacross	Permission to amend the design of the approved development (planning ref 20171127) which comprises consent for the development of a temporary (25 years) ground mounted solar panel photovoltaic (PV) farm to generate renewable electricity on a 12.7ha site, comprising solar arrays, associated electrical infrastructure, fencing, access improvements and ecologically beneficial landscape works at Killabeg, Tinnacross, Wexford subject to 15 conditions. Permission is also sought to amend the lifespan of the consented development from 25 years to 35 years. Amendments proposed are: no changes to red line boundary and reduction in CCTV cameras from 16 to 11; solar panel height increase from 2.3m to 2.5m, angle span amended from 20-30 degrees to 10-40 degrees. Panel layout slightly reconfigured and increased; eastern perimeter fence removal to link with consented solar farm (ref:20171680). Fence change from mesh to deer (cond. 14); access track decrease of l,802.5m2; removal of the energy storage area and increase of the overall construction compound area from 2,934.56m2 to 3,033.06m2 change from four substations/energy storage containers and one grid connection substation to two solar farm substations, a larger grid connection substation and increased areas of hardstanding resulting in their land take increase of 62.06m2; overall decrease in ground disturbance at the construction stage by l,641.94m2; overall decrease in land take for the duration of the operational stage by 2,490.44m2.	Conditional	14/02/2020
20190441	Renewable Energy Systems (Res) Ltd, Killabeg, Tinnacross	Permission to amend the design of the approved development (planning ref: 20171680) which comprises consent for the development of a temporary (25 years) ground mounted solar panel photovoltaic (PV) farm to generate renewable electricity on a 10.4ha site, comprising solar arrays, associated electrical infrastructures, fencing, access improvements and ecologically beneficial landscape works at Killabeg, Tinnacross, co. Wexford subject to 15 conditions. Permission is also sought to amend the lifespan of the consented development from 25 years to 35 years. Amendments proposed are no changes to red line boundary and reduction in cctv cameras from 16 to 11; solar panel height increase from 2.3 to 2.5, angle span amended from 20-30 degrees to 10-40 degrees. Panel layout slightly reconfigured; western perimeter fence removal to link with consented solar farm (ref: 20171127). Fence change from mesh to deer fencing (cond.14); access track increase of 17.5m2; replace combined energy storage area and temporary compound area (5,500m2), with 3,075m2 energy storage area and 3,000 m2 temporary compound, removal of grid connection substation and 3 energy containers. Replace three solar farm substations with two slightly larger substations. Overall increase in ground disturbance at the construction stage of 766.5m2. Overall decrease in land take for the duration of the operational stage of 2,233.5m2.	Conditional	14/02/2020

Application No.	Applicant	Proposed Development	Decision	Grant Date
20200691	Renewable Energy Systems Limited, Killabeg, Tinnacross	Permission to amend the design of the approved development (Planning references 20171680 and 20190441) which comprises consent for the development of a temporary (25 years) ground mounted solar photo-voltaic (PV) farm to generate renewable electricity on a 10.4 hectare site. Comprising solar arrays, associated electrical infrastructure, fencing, access improvements and ecologically beneficial landscape works subject to the planning conditions. Amendments proposed are: Changes to the energy storage area comprising: decrease in size of the energy storage area by 246m2; addition of 1.5m gravel strip surrounding the outside of the energy storage area; alterations to the layout within the energy storage area; additional grid connection infrastructure and grid compliance equipment; increase in area (3.9m2 increase) and height (1.1m increase) of substation building; removal of welfare container; removal of 1 auxiliary transformer, reduction in height of fencing around the energy storage area from 3.0m to maximum of 2.6m; Increase in internal site track by 36m2; Addition of new temporary construction compound area (1584m2) to be removed after construction; No changes to red line boundary, perimeter fence, solar panel layout, perimeter CCTV points or any other parts of the development.	Conditional	21/08/2020
20201080	Renewable Energy Systems Limited, Killabeg, Tinnacross	Permission for the development of a temporary (27 years) ground mounted solar panel photovoltaic (PV) farm to generate renewable electricity on a 10.4 ha site, comprising solar arrays, energy storage, associated electrical infrastructure, fencing, access improvements and ecologically beneficial landscape works.	Conditional	03/02/2021
20211112	Renewable Energy Systems Limited, Killabeg, Tinnacross	Permission to amend the design of the approved development (Planning references 20171680, 20190441 and 20200691) which comprises consent for the development of a temporary (25 years) ground mounted solar photovoltaic (PV) farm to generate renewable electricity on a 10.4 hectare site, comprising solar arrays, associated electrical infrastructure, fencing, access improvements and ecologically beneficial landscape works. Amendments proposed are: Slight increase in swept area of access track south of site entrance and into energy storage area; Changes to the energy storage area comprising: removal of 2 battery enclosures and associated power conversion system and transformer; minor alterations to the equipment layout within the energy storage area; system transformers extended to allow for additional ancillary equipment; use of asphalt at the hardstanding area; minor alterations to the substation building including a reduction in roof height, a small communications antennae and works access lighting to front and rear; an additional pedestrian gate to the southwest; No changes to red line boundary, perimeter fence, solar panel layout, perimeter CCTV points or any other parts of the development.	Conditional	03/09/2021

3.2.3 EPA Licenced/Registered Facilities

There is no active IEL Licensed premise within subcatchment Slaney_SC_080. The Monagear and Environs Urban Wastewater Treatment (UWWT) Plant (Active License Number: A0267-01) is situated in Monagear, with a primary effluent emission point that empties into the Slaney_170. Under an operational scenario at Monagear WWTP the primary discharge (SW001) is identified as a "Very Low" category risk to the raw water quality at the downstream Irish Water Vinegar Hill WTP abstraction. Under failure scenario the primary discharge is identified as "Very Low" risk to the raw water quality at the downstream Irish Water abstraction point.

3.2.4 Existing Land-use and On-going Activities

Existing land-use within the proposed development site is agricultural. The project is located in the Tinnacross stream_020 river subbasin where Domestic Wastewater (Wastewater discharge) is identified as significant pressure and not agriculture as for much of the Slaney catchment[5]. Therefore, potential for significant cumulative impacts with existing Domestic Waste Water and Agriculture are considered in an assessment of the potential for in-combination effects.

4. Site Location and Context

The proposed development site is situated within the townland of Tomsallagh to the northeast of Enniscorthy Town and to the south of Ferns Town, Co. Wexford as shown in Figure 1.

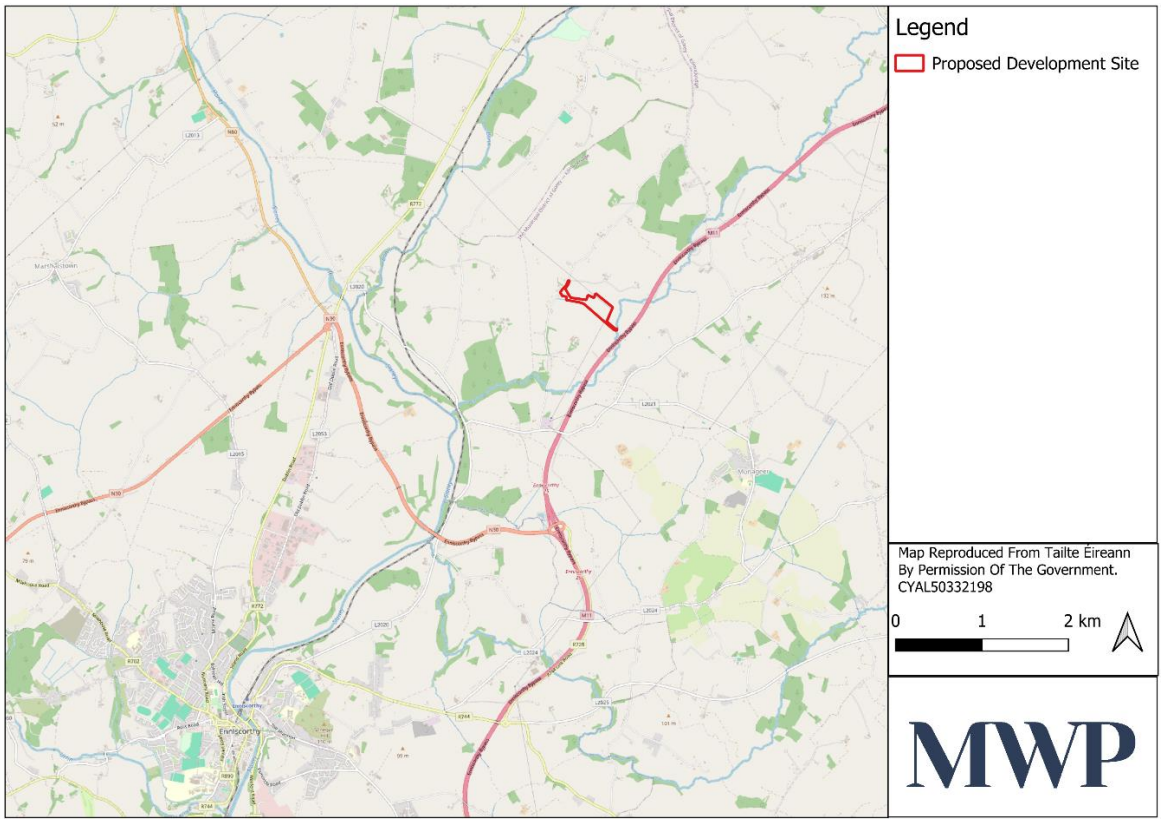

Figure 1. Location of proposed development site

[5] Subcatchment Assessment (catchments.ie)

The site mainly consists of agricultural land with hedgerows as shown in Figure 2. The terrain of the site remains generally level, with a subtle incline towards the northeast corner of the proposed area. Boundaries of the site are delineated by a combination of hedgerows, treelines, earth banks, and the local road named Crane. Access to the site is planned from the west via a new site entrance from the local road Crane (L-6065-1).

Figure 2. Aerial view of the proposed development site

4.1 General Site Description

The CORINE (2018) landcover data series (available on EPA's interactive map viewer) indicates that landcover at the proposed development site is classified as 'Agricultural areas' (Level 1 Code 2), 'Pastures' (Level 2 Code 23) and 'Pastures' (Level 3 Code 231) . The lands in vicinity of the site are classified as 'Agricultural Areas' either as 'Arable land' or 'Pastures', there is also 'Artificial surfaces' close by in form of residential houses and Dual Carriageway M11.

According to the GSI online map viewer, bedrock beneath the proposed development is 'Rhyolitic volcanics, grey and brown slates'.

Soils at the proposed development site are categorised predominantly as till derived from Palaeozoic shales with alluvial deposits mapped along the eastern site boundary associated with the Tinnacross Stream (EPA River Waterbody Code: IE_SE_12T010600). Teagasc Soils mapping notes the underlying soil as 'Surface water Gleys', 'Ground water Gleys', derived from mainly noncalcareous parent materials as categorized as 'Mineral poorly drained (mainly acidic).

The proposed development site is not located within a SAC or SPA collectively known as Natura 2000 sites.

4.2 Hydrology and Hydrogeology

The proposed development site is situated within the 'Slaney & Wexford Harbour' Water Framework Directive (WFD) catchment, the 'Slaney_SC_080' WFD sub-catchment and the 'Tinnacross stream_020' WFD river sub-basin. There are two watercourses near the proposed site, see Table 3 below:

Table 3: Watercourses in vicinity of proposed development site

River name	River code	Distance from Proposed Development Site	WDF Status
Tinnacross stream_020	IE_SE_12T010600	To the immediate east of the proposed development site	Moderate
Slaney_170	IE_SE_12S022300	Approx. 2.1km southwest of proposed site	Good

Tinnacross Stream drains to River Slaney which is part of Slaney River Valley SAC and Wexford Harbour and Slobs SPA. Further downstream, the River Slaney flows into Wexford Estuary, part of Wexford Harbour and Slobs SPA.

The proposed development is located in fields where natural surface water/overland flow is generally to the southeast and concentrated to the east at lowest elevations. Though there is a drainage ditch adjacent to the southern boundary of the field where the proposed substation is located, this drainage ditch is upgradient of the proposed development so is not considered a potential receptor. The presence of an earth bank, which effectively acts as a berm also precludes the possibility of runoff from the proposed development works entering this drainage ditch.

There is ca. 30cm corrugated plastic pipe discharging water to a drainage ditch to the northeast of the proposed substation compound, as indicated in the map below. Flow from this pipe was significant on the 18th January 2024, and was estimated at ca. 2 litres/sec at the time. The drainage ditch receiving the discharge starts at the location of the plastic pipe and flows into the Tinnacross Stream ca. 80m downstream. It is possible that the source of water in the pipe is from the field where the proposed substation is located, taking account of the topography and the lack of any visible surface water flows in the field.

Figure 3 Corrugated plastic pipe discharging water to drainage ditch (left) and drainage ditch at the Tinnacross stream confluence (right)

The EPA undertakes water quality surveys of the Tinnacross Stream at the Bridge - upstream of Salsborough Bridge (station RS12T010600), Salsborough Bridge (station RS12T010700) and the River Slaney – west of Salsborough Bridge (station RS12S022220) as per **Figure 4** below.

The latest river Q values were Q4-5 for the upstream and downstream stations on the Tinnacross Stream in 2001 and 2022 respectively, equivalent to high ecological status. The latest river Q value for Slaney River was Q4 representing good status.

The latest River Waterbody WFD Status (2016 - 2021) of Tinnacross Stream_020 is 'Moderate', noting that rating was applied prior to 2022 when most recently surveyed. This waterbody has been assigned a WFD River Waterbodies Risk (Cycle 3) status of 'At review' with significant pressure from domestic wastewater and waste water discharge.

The Slaney_170 River Waterbody Status (2016 – 2021) is 'Good'. This waterbody has been assigned a WFD River Waterbodies (Cycle 3) status of 'Not at risk'.

The Upper Slaney Estuary, transitional waterbody, IE_SE040_0300 has been assigned a WFD risk 'At risk' due to nutrient pollution, organic pollution and morphological impacts.

The proposed development site overlies the 'Enniscorthy' Ground Waterbody, IE_SE_G_061. This has an overall Ground Waterbody WFD latest status of 'Good' and WFD Risk is 'At risk. The National Groundwater Vulnerability Category of the site is assessed as 'Low' to 'Moderate' and is considered 'Low' for Subsoil permeability with Soil Drainage regarded as 'Wet'.

The proposed site overlies fissured bedrock which qualifies as Regionally Important Aquifer – Fissured Bedrock.

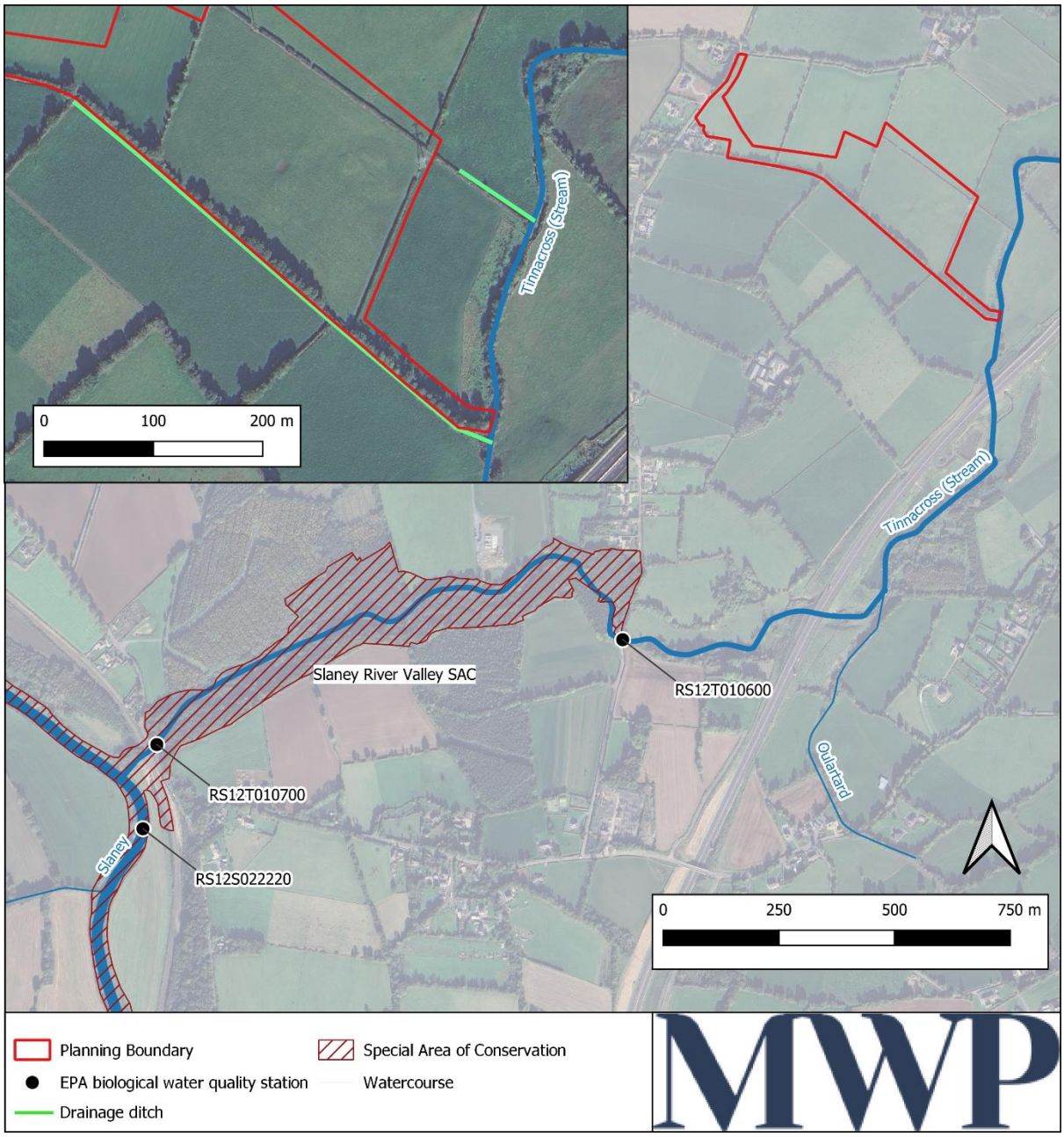

Figure 4.Watercourses and EPA monitoring stations within the vicinity of the proposed development site (Adapted from EPA map viewer)

4.3 Habitats and Flora

The dominant habitats within the proposed development site is agricultural grassland. Habitats include Improved Grassland (GA1), Treelines (WL2), Hedgerows (WL1), Buildings and Artificial Surfaces (BL3), Earth Banks (BL2), Stonework (BL1), Drainage ditches (FW4) and Lowland River (FW4). There is no overlap between the extent of works footprint and any Natura 2000 sites.

4.4 Invasive Species

During MWP multi-disciplinary ecological field surveys of the site, no invasive plant species listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015) were recorded onsite.

4.5 Otter

There are 13 documented records held by the NBDC and four records held by the NPWS of otter within the hectad T04. None of these records are within the proposed development site. The closest of these otter records were 700 m southwest of the proposed site boundary[6].

Habitats for otter was identified during the ecological field surveys of the proposed development site in the form of the Tinnacross Stream_020 watercourse and Slaney_170 watercourse further downstream. The Tinnacross Stream, located to the immediate east of the site, is a 3rd order watercourse with capacity to support salmon and trout. It is likely that otter use the Tinnacross Stream for foraging. Similarly, River Slaney, located approx. 2km from the proposed development site, supports otter. There was no evidence of otters using the Tinnacross Stream adjacent to the proposed development site, but evidence of otter was recorded in River Slaney at the Tinnacross Stream confluence.

4.6 Aquatic Ecology

The Tinnacross Stream and the River Slaney are both suited to the early life stages of salmon, with optimal spawning gravels and nursery areas. The Tinnacross Stream is considered suboptimal with regard to holding adult salmon due to its size but the River Slaney is optimal in this respect. Freshwater pearl mussel occur in the River Slaney downstream of the Tinnacross Stream confluence (Gerard Hayes pers. ob. in 2016), There are 44 documented records held by the NPWS of freshwater pearl mussel within the River Slaney. The closest of these records is 6.6km downstream of the proposed development.

[6] https://maps.biodiversityireland.ie/Map (Accessed 30/11/2023)

5. Screening for Appropriate Assessment

5.1 Management of Natura 2000 Sites

The primary purpose of the proposed development is to facilated the connection of renewable energy development to the national grid. Therefore, the project is not considered by the Habitats Directive to be directly connected with or necessary to the conservation management of a Natura 2000 Site.

5.2 Identification of Likely Affected Natura 2000 Sites

5.2.1 Zone of Influence

In order to identify potentially affected Natura 2000 sites, and adopting the precautionary principle, all SPAs and SACs within a 15km distance radius of the Proposed Development were considered with regard to whether they were within the zone of influence (ZOI) of the Proposed Development. The ZOI is determined if a credible or tangible source-pathway-receptor link exists between the proposed development and a protected species or habitat type.

Once the Natura 2000 sites within the likely ZOI have been identified, an assessment is made in relation to these sites of the likely significance of the potential effects associated with the proposal in the context of the rationale for designation and the qualifying features of interest.

5.2.2 Natura 2000 sites outside the likely Zone of Influence

With regards to the proposal, it is considered that certain Natura 2000 sites are located outside the likely ZOI of the proposal due to the absence of plausible impact pathways and/or the attenuating effect of the distance intervening, and as such the works do not include any element that has the potential to significantly affect the conservation objectives for which these sites are designated.

The Blackstairs Mountains SAC is an upland site designated for heath habitats. These habitats are all located upslope of the proposed development and the drainage from this SAC is to the Slaney River. The Blackstairs Mountains SAC is hydrologically disconnected from the proposed development site with regard to maintenance of the hydrological regime required to maintain the function of the heath habitats for which the SAC has been designated. Therefore, it is objectively concluded there would be no impacts from Proposed Development Site on conservation objectives of Blackstairs Mountains SAC.

5.2.3 Natura 2000 sites within the likely Zone of Influence

Designated SACs and SPAs within the potential ZOI of the proposal, including their proximity and rationale for inclusion for further consideration and evaluation for these sites is outlined in **Table 4** below. The locations of these designated sites in relation to the proposed development site are shown on a map in **Figure 5** below.

Table 4: Natura 2000 sites included for further evaluation.

Designated Site	Site Code	Proximity of Designated Site to Nearest Point of Proposed development site	Rationale for Inclusion
Slaney River Valley SAC	000781	The SAC is located approx. 1.3km downstream	The proposed development site is connected directly to the SAC via a hydrological pathway (Tinnacross stream) that discharges into the SAC approx. 1.3 km downstream from the site.
Wexford Harbour and Slobs SPA	004076	The SAC is located approx. 8.8km downstream	The proposed development site will be connected directly to the SPA via a hydrological connection that discharges into the SAC approx. 8.8km downstream from the site.

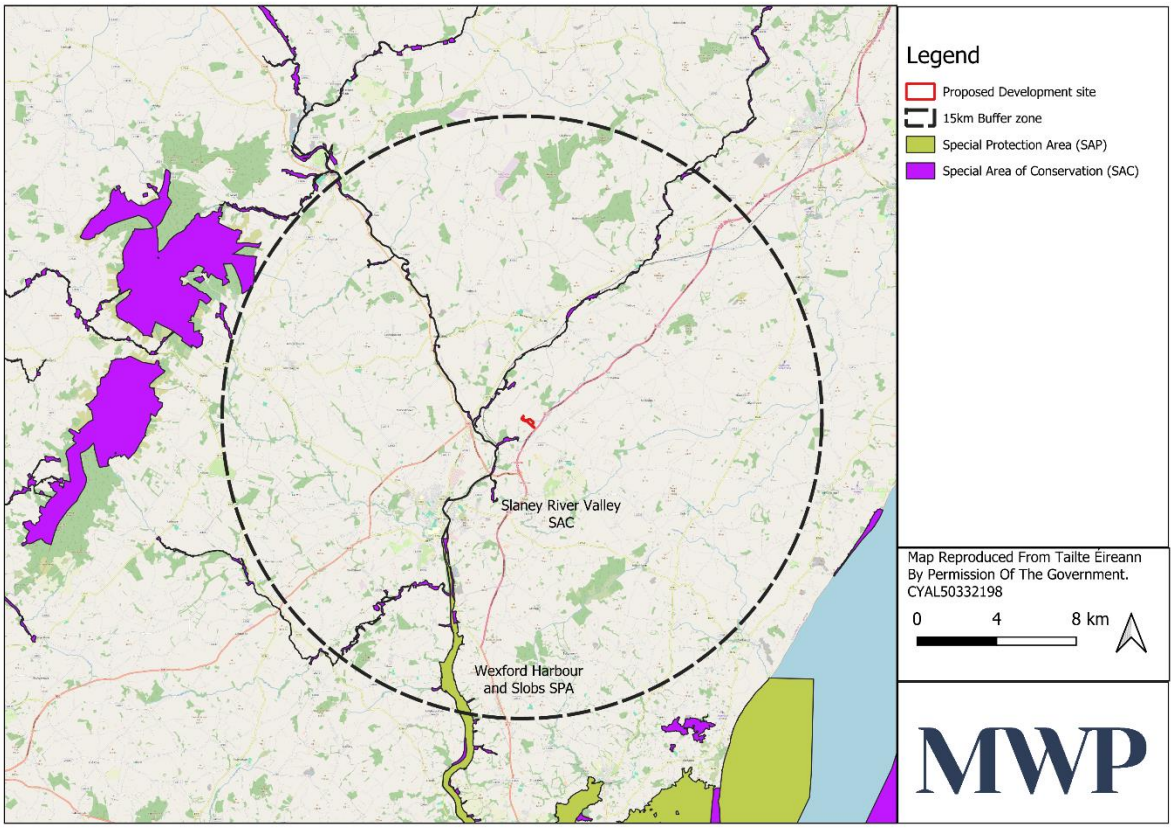

Figure 5. SACs and SPAs within 15 km radius of the proposed development site

5.2.4 Characteristics of Natura 2000 Sites

The following table lists the qualifying features of conservation interest for the Natura 2000 sites identified within the ZOI. Information pertaining to the Natura 2000 sites is from site synopses, conservation objectives and other information available on www.npws.ie.

Table 5:Qualifying features of conservation interest of Natura 2000 sites within the potential ZOI

Designated Site	Site Code	Qualifying features of conservation interest
Slaney River Valley SAC	000781	**Habitats** • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] • Mediterranean salt meadows (*Juncetalia maritimi)* [1410] • Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] • Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0] • Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0] **Species** • *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029] • *Petromyzon marinus* (Sea Lamprey) [1095] • *Lampetra planeri* (Brook Lamprey) [1096] • *Lampetra fluviatilis* (River Lamprey) [1099] • *Alosa fallax* (Twaite Shad) [1103] • *Salmo salar* (Salmon) [1106] • *Lutra lutra* (Otter) [1355] • *Phoca vitulina* (Harbour Seal) [1365]
Wexford Harbour and Slobs SPA	004076	**Habitats** • Wetland [A999] **Species** • Little Grebe (*Tachybaptus ruficollis*) [A004] • Great Crested Grebe (*Podiceps cristatus*) [A005] • Cormorant (*Phalacrocorax carbo*) [A017] • Grey Heron (*Ardea cinerea*) [A028] • Bewick's Swan (*Cygnus columbianus bewickii*) [A037] • Whooper Swan (*Cygnus cygnus*) [A038] • Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] • Shelduck (*Tadorna tadorna*) [A048] • Wigeon (*Anas penelope*) [A050] • Teal (*Anas crecca*) [A052] • Mallard (*Anas platyrhynchos*) [A053] • Pintail (*Anas acuta*) [A054] • Scaup (*Aythya marila*) [A062] • Goldeneye (*Bucephala clangula*) [A067] • Red-breasted Merganser (*Mergus serrator*) [A069] • Hen Harrier (*Circus cyaneus*) [A082] • Coot (*Fulica atra*) [A125] • Oystercatcher (*Haematopus ostralegus*) [A130] • Golden Plover (*Pluvialis apricaria*) [A140]

Designated Site	Site Code	Qualifying features of conservation interest
		• Grey Plover (*Pluvialis squatarola*) [A141] • Lapwing (*Vanellus vanellus*) [A142] • Knot (*Calidris canutus*) [A143] • Sanderling (*Calidris alba*) [A144] • 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] • Lesser Black-backed Gull (*Larus fuscus*) [A183] • Little Tern (*Sterna albifrons*) [A195] • Greenland White-fronted Goose (*Anser albifrons flavirostris*) [A395] • Wetland and Waterbirds [A999]

5.2.5 Conservation Objectives

According to the Habitats Directive, the *conservation status of a natural habitat* will be taken as 'favourable' within its biogeographic range when:

- its natural range and areas it covers within that range are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable as defined below.

According to the Habitats Directive, the conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' within its biogeographical range when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Individual conservation objectives for each site are available on www.npws.ie. These have been accessed for the sites listed in the tables above on the 25th January 2024.

Site-specific conservation objectives were available for the following sites:

- NPWS (2011) Conservation Objectives: Slaney River Valley SAC 000781. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2012) Conservation Objectives: Wexford Harbour and Slobs SPA 004076. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Management plans were not available for any of the sites. All conservation objectives together with other designated site information are available on www.npws.ie/protectedsites.

5.3 Identification of Potential Impacts

Potential likely direct, indirect or secondary ecological impacts arising from the proposed development (either alone or in combination with other plans or projects) are identified in this section.

Table 6: Description of elements of the project likely to give rise to potential ecological impacts.

Construction Phase
• Human presence: Sustained increase in human activity (Increased human activity, noise, lighting, dust) during daylight hours for the duration of the works • Increased noise and air emissions associated with construction activity • Site set-up, mobilisation, ground clearance • Excavation works • Construction activity • Temporary surface water flow management systems for specific engineering elements as required at various locations • Importation/Stockpiling of material • Generation of waste/spoil/construction run-off • Use of plant, machinery, tools etc • Use of fuels/oils/lubricants/chemicals/concrete/cementitious material • Temporary storage of excavated spoil • Temporary site compound
Operational Phase
• Operational and maintenance works
Decommissioning Phase
• Increased human activity, increased noise and air emissions. • Permanent disassembly and removal of substation and substation components. • Permanent disposal and storage of excavated materials. • Temporary site compound.

Table 7:Direct, indirect or secondary ecological impacts of the construction and operational phases (either alone or in combination with other plans or projects) which have the potential for having significant effects

Describe any likely direct, indirect or secondary ecological impacts of the project (either alone or in combination with other plans or projects) by virtue of: • *Size and scale;* • *Land-take;* • *Distance from Natura 2000 Site or key features of the Site;* • *Resource requirements;* • *Emissions;* • *Excavation requirements;* • *Transportation requirements;* • *Duration of construction, operation etc.; and* • *Other.*	There is no overlap with any Natura 2000 site but there is direct hydrological connection between the proposed development site and Natura 2000 site. **Construction Phase** Habitat loss/alteration/fragmentation • There will be some direct habitat loss/alteration within the construction works footprint, but no overlap with Natura 2000 sites (no loss of Annex I qualifying habitat) Water quality Impacts may potentially occur through: • Erosion and run-off of sediment and silt from excavation areas, disturbed ground, plant and machinery etc. • Ingress of fuels/oils, cementitious material, or other such substances to groundwater via leaching • Use of on-site temporary toilets and washing facilities Species disturbance/displacement Impacts to habitats and species not related to any Natura 2000 sites may potentially occur through: • construction noise/vibration/lighting • increased human presence • impacts on prey availability • loss of and alteration of breeding/resting/foraging/commuting or other required habitat **Operational Phase** Water quality • Increase in stormwater runoff Species disturbance/displacement Impacts may potentially occur through: • increased human presence/noise • increased light levels • impacts on prey availability • indirect alteration of foraging/commuting habitat

5.4 Assessment of Significance of Potential Impacts

This section considers the sites identified within the ZOI together with whether the project is likely to have significant effects on the qualifying interests for which it was designated. The evaluation takes cognisance of the scope, scale, nature and size of the project, its location relative to the Natura 2000 sites listed, and the degree of connectedness that exists between the project and each Natura 2000 site's potential ecological receptors.

The likelihood of significant effects from the project to the Natura 2000 sites is determined based on several indicators including:

- Water quality
- Habitat loss/alteration
- Disturbance and/or displacement of species
- Habitat or species fragmentation

5.4.1 Water Quality

Regarding the proposed development, there is a potential for impacts on the water quality of Natura 2000 sites.

The Tinnacross stream, which is situated to the immediate east of the development site, is hydrologically connected to two Natura 2000 sites: the Slaney River Valley SAC and the Wexford Harbour and Slobs SPA. However, any potential silt and surface runoff from the proposed development site would initially infiltrate into grassland before reaching the Tinnacross stream. Therefore, the likelihood of the discharge of silt or pollution into the Tinnacross stream, would be minimal. Consequently, the likelihood of discharges of contaminated water into these two Natura 2000 sites is also minimal.

Water discharged from the proposed development during construction will be to the field to the south. This field is currently used for agriculture, namely pasture. The discharge from the proposed development will take place after a period of settlement within the proposed development site. The discharge will be to the field at a location in excess of 150m from the Tinnacross Stream. The water discharged from the site can be expected to percolate to ground and/or will be attenuated by grass to such a degree that sediment will not reach the Tinnacross Stream. Based on topography and field slope, overland flow of water will be to the east and means water discharged from the site would have to travel overland in excess of 200m and pass through a 30m strip of unmanaged grassland prior to entering the Tinnacross Stream. The risk of polluted water from the proposed development site entering the Tinnacross Stream is considered negligible to none as water will be attenuated by grass and absorbed by the soil before it ever reaches the Tinnacross Stream. Any groundwater reaching the Tinnacross Stream from the proposed development site will be clean as it would be filtered, similar to the water observed coming from the land drain (corrugated pipe) to the east of the proposed development.

With regard to potential direct water quality impacts associated with the generation of sewage/wastewater from the use of temporary welfare facilities during the construction phase, it is noted that these facilities will be maintained accordingly by an approved and permitted contractor who will remove effluent to a licenced facility for disposal. Therefore, this aspect of the proposal is not considered to have any potential for significant effects to Natura 2000 sites.

Similarly during the operational phase the likelihood of the polluted discharges from the proposed development into the Tinnacross stream, would be minimal. Surface water runoff from the substation building roof,

transformer plinths, and concrete roads within the electrical yard will be collected in a series of filter drains, roof guttering and downpipes and routed to an underground gravity drainage network. From here the surface water will outfall to an attenuation unit. Prior to draining into the onsite attenuation system, the collected stormwater flow from the substation compound will pass through an oil/petrol Interceptor. The attenuated surface water runoff is then proposed to overflow at a controlled rate equal to the greenfield runoff rate.

Figure 6 Unmanaged grassland between the proposed development and the Tinnacross Stream .

5.4.2 Habitat Loss and Alteration

5.4.2.1 Slaney River Valley SAC

There is no spatial overlap with the proposed development site and the Slaney River Valley SAC. Therefore, there will be no direct habitat loss of any of the qualifying habitats of conservation interest for which this site is designated. However, there is a direct hydrological connection between the proposed development site and the Slaney River Valley SAC which could potentially alter aquatic habitats via water quality impacts.

There is no likelihood of potential direct or indirect loss or alteration of any of the designated terrestrial habitats within SAC as a result of the proposed development.

5.4.2.2 Wexford Harbour and Slobs SPA

There is no spatial overlap with the proposed development site and the Wexford Harbour and Slobs SPA. Therefore, there will be no direct habitat loss of any of the qualifying habitats of conservation interest for which this site is designated. Although, there is a direct hydrological connection between the proposed development site and the SPA it is unlikely any of designated habitats will be affected by proposed development.

5.4.3 Disturbance and/or Displacement of Species

5.4.3.1 Slaney River Valley SAC

While there is no spatial overlap between the proposed development site and the Slaney River Valley SAC, there exists a direct hydrological connection between them. However, this point of hydrological connectivity is approximately 1.6km away from the proposed development site. Given this considerable distance, it is unlikely

that any disturbance or displacement of species of conservation interest within the Slaney River Valley SAC will occur as a result of the proposed development.

5.4.3.2 Wexford Harbour and Slobs SPA

There is no likelihood for disturbance, displacement of species of qualifying interest or habitat alternation via water quality between Proposed Development Site and Wexford Harbour and Slobs SPA. During the field visit on 18th January there were no bird species of conservation interest recorded using the agricultural fields as feeding ground therefore it is considered unlikely that grassland within site boundary provides value to wintering fowl.

5.4.4 In-combination Effects

As well as singular effects, the potential for in-combination effects also need to be considered. A cumulative impact arises from incremental changes caused by other past, present or reasonably foreseeable future actions together with the proposed development. The proposal was considered in combination with other relevant plans, projects and activities in the area.

No significant cumulative impacts are predicted with the Wexford CDP, as each plan has a range of environmental and natural heritage policy safeguards in place. These safeguards that protect the natural environment and Natura 2000 Sites will also apply to the proposal described in this report.

No significant in-combination effects are considered likely as a result of interaction between the proposed development and any plans or other projects. All aforementioned permitted developments were subject to AA screening assessments that included cumulative and in-combination effects with other relevant developments. For each development there were no significant in-combination or cumulative effects identified.

The likelihood of significant combined effects is anticipated due to the interaction between the planned development and the current land-use. The designated land-use in the proposed development area is agricultural, notwithstanding the fact that domestic wastewater is recognized as a significant pressure in the Tinnacross stream_020 subbasin, as opposed to agriculture. Although agriculture is not identified as the primary pressure, it is imperative to evaluate the potential for noteworthy cumulative impacts arising from the interplay between the proposed development and existing agricultural pressures, in conjunction with domestic wastewater. These impacts could potentially affect the Slaney River Valley SAC and Wexford Harbour and Slobs SPA.

5.5 Conclusion of Screening Stage

This report for screening for AA was compiled to assist the competent authority in carrying out the screening for AA.

It has been objectively concluded during this screening process that the proposed construction, operation and eventual decommissioning of the proposed development at Tomsallagh in County Wexford, either individually or in combination with other plans or projects, is not likely to have significant effects on the following Natura 2000 site located within 15km of the proposed development in view of those sites' Conservation Objectives and further assessment is deemed unnecessary:

- Slaney River Valley SAC (000781)
- Wexford Harbour and Slobs SPA (004076)

6. References

Alves, J.A., Sutherland, W.J. and Gill, J.A., 2012. Will improving wastewater treatment impact shorebirds? Effects of sewage discharges on estuarine invertebrates and birds. Animal Conservation, 15(1), pp.44-52.

Chanin P (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough.

Department of the Environment, Heritage and Local Government (DoEHLG) (2010). *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.* Department of Environment, Heritage and Local Government.

European Commission (EC) (2018). Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Luxembourg: Office for Official Publications of the European Communities.

European Commission (EC) (2001). Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Luxembourg: Office for Official Publications of the European Communities.

Fossitt, J. A. (2000). A Guide to Habitats in Ireland. Kilkenny, The Heritage Council.

Franklin, Alan B., Noon, Barry R. & Luke George T., (2002). What is Habitat Fragmentation?, Studies in Avian Biology No. 25: 20-29.

Malachy Walsh and Partners (MWP) (2023). *Carney RS Civil Utilities Planning Report: Final Report*. Document Number: 23824-6009-A. Report prepared for Tulfarris CG Ltd. Malachy Walsh and Partners, Engineering and Environmental Consultants, Reen Point, Blennerville, Co. Kerry.

Murray, C.G. and Hamilton, A.J., 2010. Perspectives on wastewater treatment wetlands and waterbird conservation. Journal of applied ecology, 47(5), pp.976-985.

NPWS, 2019. The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neill. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Smith, G., O'Donoghue, P., O'Hora, K. & Delaney, E., 2011. Best Practice Guidance for Habitat Survey and Mapping, Kilkenny, Ireland: The Heritage Council.

Appendix 1

Stages of Appropriate Assessment

Stage 1 - Screening

This is the first stage of the Appropriate Assessment process and that undertaken to determine the likelihood of significant impacts as a result of a proposed project or plan. It determines need for a full Appropriate Assessment.

If it can be concluded that no significant impacts to Natura 2000 Sites are likely then the assessment can stop here. If not, it must proceed to Stage 2 for furthermore detailed assessment.

Stage 2 - Natura Impact Statement (NIS)

The second stage of the Appropriate Assessment process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 Site with respect to the conservation objectives of the site and its ecological structure and function. This is a much more detailed assessment than Stage 1. A Natura Impact Statement containing a professional scientific examination of the proposal is required and includes any mitigation measure to avoid, reduce or offset negative impacts.

If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned.

Stage 3 - Assessment of alternative solutions

A detailed assessment must be undertaken to determine whether alternative ways of achieving the objective of the project/plan exists.

Where no alternatives exist the project/plan must proceed to Stage 4.

Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain

The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 Site where no less damaging solution exists.