

Comhairle Contae Chill Mhantáin Uicklow County Council

Áras An Cl Cill Mhant Guthán / 1 Faics / Fax Rphost / E Suíomh / \

Forbairt Pleanála agus Comhshaol Planning Development and Environment

Neo Environmental Ltd 83-85 Bridge Street Ballymena Co. Antrim BT43 5EN

November 2023

RE: Declaration in accordance with Section 5 of the Planning & Development Ac 2000 (As Amended) – EX72/2023 Threecastles Solar Limited

I enclose herewith Declaration in accordance with Article 5 (2) (A) of the Planni Development Act 2000.

Where a Declaration is used under this Section any person issued with a Declar under subsection (2) (a) may, on payment to An Bord Pleanala of such fee as ma prescribed, refer a declaration for review by the Board within four weeks of the da the issuing of the declaration by the Local Authority.

Is mise, le meas.

ADMINISTRATIVE OFFICER

PLANNING DÉVELOPMENT & ENVIRONMENT.



Comhairle Contae Chill Mhantáin Ulicklow County Council

Forbairt Pleanála agus Comhshaol Planning Development and Environment

Áras An Chontae / County Buildings Cill Mhantáin / Wicklow Guthán / Tel: (0404) 20148 Faics / Fax: (0404) 69462 Rphost / Email: plandev@wicklowcoco Suíomh / Website: www.wicklow.ie

DECLARATION IN ACCORDANCE WITH ARTICLE 5 (2) (A) OF THE PLANNING & DEVELOPMENT ACT 2000 AS AMENDED

Applicant: Threecastle Solar Limited

Location: townlands of Threecastles, Crosscoolhabour, Santryhill, Blessingtin, Newpaddocks, Co. Wicklow

CHIEF EXECUTIVE ORDER NO. CE/PDE/1891/2023

A question has arisen as to whether "the construction of an underground medium voltage grid connection cable c. 3.62km from consented Threecastles Solar Farm (PRR 17/908 & 21/1237) to the Blessington 38kV substation" through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks, Co. Wicklow" is or is not exempted development.

Having regard to:

- The details submitted with this application on the 10th October 2023
- The Planning History of the site in particular: ABP Ref: 247714 (WCC PRR16/1060) and PRR17/908 (as amended by *PRR21/1237*) and EX70/19,
- Sections 2 and 3 of the Planning and Development Act 2000(as amended).
- Sections 4 (4), 172(1) and 177U(9) of the Planning and Development Act 2000(as amended).
- Article 3, 6 and 9 of the Planning and Development Regulations 2001 (as amended)
- Classes 26 and 27, Part 1 Schedule 2 of the Planning and Development Regulations 2001 (as amended)

Main Reasons with respect to Section 5 Declaration:

- a) The provision of a grid connection involves the carrying out of works and, therefore, constitutes development, under sections 2 and 3 of the Planning and Development Act, 2000, as amended,
- b) The underground electricity grid connection involves works carried out by an electricity undertaking, and, having regard to the nature of those works, would come within the scope of Class 26 of Part 1 of the Second Schedule to the Planning and Development Regulations, 2001, as amended, and would, therefore, constitute exempted development,
- c) None of the restrictions on exempted development provided for under section 4 (4) of the Planning and Development Act 2000, as amended, apply in this case, and
- d) None of the restrictions on exempted development provided for under Article 9 (1)(a) of the Planning and Development Regulations, 2001, as amended, apply in this case.



The Planning Authority considers that "the construction of an underground medium voltage grid connection cable c. 3.62km from consented Threecastles Solar Farm (PRR 17/908 & 21/1237) to the Blessington 38kV substation" through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks, Co. Wicklow is development and is exempted development.

ADMINISTRATIVE OFFICER

PLANNING DEVELOPMENT & ENVIRONMENT O Dated

WICKLOW COUNTY COUNCIL

PLANNING & DEVELOPMENT ACTS 2000 (As Amended) SECTION 5

CHIEF EXECUTIVE ORDER NO. CE/PDE/1891/2023

Reference Number:

EX 72/2023

Name of Applicant:

Threecastles Solar Limited

Nature of Application:

Section 5 Referral as to whether "the construction of an underground medium voltage grid connection cable c3.62km from consented Threecastles Solar Farm (PRR 17/908 & 21/1237) to the Blessington 38kV substation" is

or is not exempted development

Location of Subject Site:

through the townlands of Threecastles, Crosscoolharbour,

Santryhill, Blessington, Newpaddocks, Co. Wicklow

Report from Chris Garde, EP and Fergal Keogh, SE

With respect to the query under Section 5 of the Planning & Development Act 2000 as to whether "the construction of an underground medium voltage grid connection cable c. 3.62km from consented Threecastles Solar Farm (PRR 17/908 & 21/1237) to the Blessington 38kV substation" through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks, Co. Wicklow is or is not exempted development within the meaning of the Planning & Development Act 2000 (as amended)

Having regard to:

- The details submitted with this application on the 10th October 2023
- The Planning History of the site in particular: ABP Ref: 247714 (WCC PRR16/1060) and PRR17/908 (as amended by *PRR21*/1237) and EX70/19,
- Sections 2 and 3 of the Planning and Development Act 2000(as amended).
- Sections 4 (4), 172(1) and 177U(9) of the Planning and Development Act 2000(as amended).
- Article 3, 6 and 9 of the Planning and Development Regulations 2001 (as amended)
- Classes 26 and 27, Part 1 Schedule 2 of the Planning and Development Regulations 2001 (as amended)

Main Reason with respect to Section 5 Declaration:

- a) The provision of a grid connection involves the carrying out of works and, therefore, constitutes development, under sections 2 and 3 of the Planning and Development Act, 2000, as amended,
- b) The underground electricity grid connection involves works carried out by an electricity undertaking, and, having regard to the nature of those works, would come within the scope of Class 26 of Part 1 of the Second Schedule to the Planning and Development Regulations, 2001, as amended, and would, therefore, constitute exempted development,

- c) None of the restrictions on exempted development provided for under section 4 (4) of the Planning and Development Act 2000, as amended, apply in this case, and
- d) None of the restrictions on exempted development provided for under Article 9 (1)(a) of the Planning and Development Regulations, 2001, as amended, apply in this case,

Recommendation

The Planning Authority considers that "the construction of an underground medium voltage grid connection cable c. 3.62km from consented Threecastles Solar Farm (PRR 17/908 & 21/1237) to the Blessington 38kV substation" through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks, Co. Wicklow is development and is exempted development as recommended in the report by the SE.

Signed

Dated day of November 2023

ORDER:

I HEREBY DECLARE:

That the construction of an underground medium voltage grid connection cable c. 3.62km from consented Threecastles Solar Farm (PRR 17/908 & 21/1237) to the Blessington 38kV substation" through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks, Co. Wicklow is development and is exempted development within the meaning of the Planning & Development Act 2000

Signed:

Dated 6 day of November 2023

Planning Development & Environment

WICKLOW COUNTY COUNCIL

Planning Department

Section 5 - Application for declaration of Exemption Certificate

TO:

Fergal Keogh SE, Edel Bermingham SEP, Suzanne White SEP.

FROM:

Chris Garde EP.

SUBJECT REF:

EX 72/2023 07/11/2023

DECISION DUE DATE:
APPLICANT:

07/11/2023

ADDDESS

Threecastles Solar Limited

ADDRESS:

Threecastles Solar Farm (PRR 17/908 & 21/1237) to the Blessington 38kV

Substation in Co. Wicklow through the townlands of Threecastles,

Crosscoolharbour, Santryhill, Blessington, Newpaddocks

EXEMPTION QUERY:

construction of an underground medium voltage grid connection cable c.3.62km

from consented Threecastles Solar Farm (PRR 17/908 & 21/1237) to the

Blessington 38kV Substation.

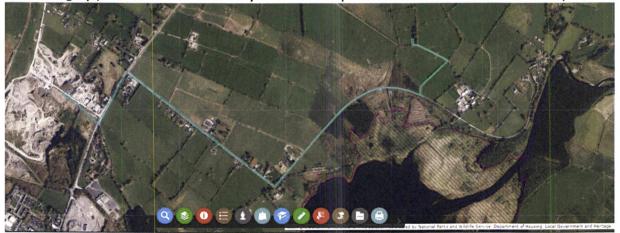
Site description:

The subject site/route consists primarily of local roads and a range of agricultural fields located between the Blessington 38kV Substation and N81 to the northwest, along Red Lane (L-8371-0) and L4371-0 to the south and then to the northwest through fields (that make up parts of the consented Threecastles Solar Farm (PRR 17/908 & 21/1237)).

The site is located within close proximity (c.150m) to the Poulaphuca Reservoir SPA and there are a number of streams in the area that connect the site to the Reservoir. In addition there are a number of Monuments Points, which are also c. c.150m from the L-4371-0.

The roads and lands are, for the most part, relatively flat and low-lying and are located within a valley between the N81 and the townlands of Golden Hill and Threecastles. The section west of the N81 passes through a former quarry lands within the townland of Newpaddocks.

Aerial imagery (site outline indicated in cyan. SPA: Poulaphouca Reservoir SPA noted to south):



Relevant Planning History:

23/690:

Extension of appropriate period of PRR: 17/908 (amended under PRR: 21/1237).

Refused for the following reason:

"1. The application is not in compliance with the requirements of Section 42 (1) (a) (i) because the Planning Authority is not satisfied that substantial works were carried out pursuant to the permission during the appropriate period. The application is not in compliance with Section 42 (8) because Appropriate Assessment would be required in

relation to the proposed extension."

21/1237:

Applicant:

SOLAS EIREANN DEVELOPMENT LTD

Development: Amend the design of the approved development (Planning Reference 17/908) which comprises consent for a Solar PV Energy Development. Project lifetime proposed to be extended from 30 years to 35 years.

Decision:

Grant

EX70/19:

Applicant:

SOLAS EIREANN DEVELOPMENT LTD

Development:

Underground cabling and overhead line

Decision:

Section 5 (is development but is exempted development).

17/908:

Applicant:

SOLAS EIREANN DEVELOPMENT LTD

Development: Solar Panel Array

Decision:

Grant

16/1060:

Applicant:

Solas Eireann Development Ltd

Development:

A solar PV panel array with a capacity of 19MWp comprising on a site of

30.06ha

Decision:

Refused-An Bord Pleanala:

Having regard to the nature and scale of the development proposed, the proximity of the proposed development to the Poulaphuca Reservoir SPA, and the main conservation objective for this site which seeks 'to maintain the special conservation interests for this SPA at favourable conservation status of species including the Greylag Goose", the fact that the lands that make up the appeal site are an important core feeding ground for Greylag Geese, which are confirmed to be in decline regarding numbers, there is potential for significant effects on the conservation status of Greylag Goose and the applicant has failed to provide adequate information to demonstrate that this would not be the case. In this regard the Board cannot be satisfied that the proposed development individually, or in combination with other plans or projects would not be likely to have a significant effect on the Poulaphuca Reservoir Special Area of Conservation (Site Code 004063). In such circumstances the **Board** precluded from granting

approval/permission.

Question:

Whether the provision of c.3620m of 20kV underground cable forming the grid connection between the consented Threecastles Solar Farm (Refs: 17/908 & 21/1237) to the existing Blessington 38kV substation Co. Wicklow is development and if it is development, if it is exempt development?

Relevant legislation:

Planning and Development Act 2000 (as amended)

Section 2:

"In this Act, except where the context otherwise requires -

'statutory undertaker' means a person, for the time being, authorised by or under any enactment or instrument under an enactment to – (b) provide or carry out works for the provisions of, gas, electricity or telecommunications services, or (c) provide services connected with, or carry out works for the purposes of the carrying on of the activities of, any public undertaking.

'structure' means any building, structure, excavation or other thing constructed or made on, in or under any land, or any part of a structure so defined and—

- (a) where the context so admits, includes the land on, in or under which the structure is situate, and
- (b) in relation to a protected structure or proposed protected structure, includes—
- (i) the interior of the structure,
- (ii) the land lying within the curtilage of the structure,
- (iii) any other structures lying within that curtilage and their interiors, and
- (iv) all fixtures and features which form part of the interior or exterior of any structure or structures referred to in *subparagraph* (i) or (iii);

'works' includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal...."

Section 3:

- 3.—(1) In this Act, except where the context otherwise requires, "development" means—.
- (a) the carrying out of any works in, on, over or under land, or the making of any material change in the use of any land or structures situated on land, or
- (b) development within the meaning of Part XXI (inserted by section 171 of the Maritime Area Planning Act 2021).

Section 4:

- (1) The following shall be exempted developments for the purposes of this Act—
- (g) development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires or other apparatus, including the excavation of any street or other land for that purpose.
- (h) development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures.

Section 4(2) provides that:

The Minister may by regulations provide any class of development to be exempted development. The Regulations which are applicable in this case are the Planning and Development Regulations 2001 (as amended).

Section 4(4) Notwithstanding..... any regulations under subsection (2), development shall not be exempted development if an environmental impact assessment or an appropriate assessment of the development is required"

Section 172(1) "An environmental impact assessment shall be carried out by a planning authority or the Board, as the case may be in respect of an application for consent for —

- (a) Proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which exceeds a quantity area, or other limit specified in that Schedule, and
- (b) Proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which does not exceed a quantity, area or other limit specified in that Schedule but which the planning authority or the Board determines would be likely to have significant effects on the environment."

Section 177U(9) "In deciding upon a declaration or a referral under section 5 of this Act a Planning Authority or the Board, as the case may be shall where appropriate, conduct a screening for appropriate assessment in accordance with the provisions of this section"

Planning and Development Regulations 2001(as amended)

Article 3(3) "electricity undertaking" means an undertaker authorised to provide an electricity service".

Article 6 (1) "Subject to Article 9, development of a class specified in column 1 part 1 of schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in column 2 of the said part 1 opposite the mention of that class in the said column 1.

The relevant conditions and limitations are set out in the schedule below:

Schedule 2, Part 1 Development by Statutory Undertakers

Class 26 "the carrying out by any undertaker authorised to provide an electricity service of development consisting of the laying underground of mains, pipes, cables or other apparatus for the purposes of the undertaking."

Class 27 "the carrying out by any undertaker authorised to provide an electricity service of development consisting of the construction of over-head transmission or distribution lines for conducting electricity at a voltage not exceeding a minimal value of 20kV."

Article 9(1) Restrictions on Exemption Development to which Article 6 relates shall not be exempted development for the purposes of the Act –

(a) If the carrying out of such development would

- (i) contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act,
- (ii) consist of or comprise the formation, laying out or material widening of a means of access to a public road the surfaced carriageway of which exceeds 4 metres in width.
- (iii) endanger public safety by reason of traffic hazard or obstruction of road users,
- (iiia) endanger public safety by reason of hazardous glint and/or glare for the operation of airports, aerodromes or aircraft,
- (v) consist of or comprise the carrying out under a public road of works other than a connection to a wired broadcast relay service, sewer, water main, gas main or electricity supply line or cable, or any works to which class 25, 26 or 31 (a) specified in column 1 of Part 1 of Schedule 2 applies,
- (vi) interfere with the character of a landscape, or a view or prospect of special amenity value or special interest, the preservation of which is an objective of a development plan for the area in which the development is proposed or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,
- (vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan,
- (viiA) consist of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places, pursuant to section 12 (1) of the National Monuments (Amendment) Act 1994, save that this provision shall not apply to any excavation or any works, pursuant to and in accordance with a consent granted under section 14 or a licence granted under section 26 of the National Monuments Act 1930 (No. 2 of 1930) as amended,
- (viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,
- (viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.
- (viii) consist of or comprise the extension, alteration, repair or renewal of an unauthorised structure or a structure the use of which is an unauthorised use, (c) if it is development to which Part 10 applies, unless the development is required by or under any statutory provision (other than the Act or these regulations) ton comply with the procedures for the purposes of giving effect to the Council Directive.

Relevant An Bord Pleanala Referrals:

Ref:

RL 3606

Question:

whether the laying of underground MV cables to link a substation in the permitted Drumroe solar farm development (Waterford City and County Council Permission Ref. 16/126 – ABP Ref. PL93.246902) to the existing ESBN Kilcloher substation, at Kilclogher and Drumroe, Cappoquin, Co Waterford, is or is not development and is or is not exempted development;

Conclusion:

An Bord Pleanála concluded that:

- (a) the laying of the underground cables comes within the scope of sections 2(1) and 3(1) of the Planning and Development Act, 2000, Act (as amended), and therefore constitutes development;
- (b) the referrer in this case, Highfield Solar Ltd., is a statutory undertaker and an electricity undertaking, within the meaning of Article 3 (3) of the Planning and Development Regulations 2001, as amended;
- (c) the carrying out by the referrer of the development in question comes within the scope of Class 26 of Part 1 of Schedule 2 to these Regulations and is therefore exempted development;
- (d) None of the restrictions on exemption set out in Section 4 (4) of the Planning and Development Act 2000, as amended, or set out in Article 9 of the Planning and Development Regulations, 2001, as amended, apply in this instance.

Note: Inspectors Report is available on line at:

(https://www.pleanala.ie/anbordpleanala/media/abp/cases/reports/302/r302895.pdf?r=142899)

Ref:

ABP-302895-18

Question:

Whether the provision of a medium voltage (20kV) underground grid connection between a permitted solar farm at Dysart, Johnstownbridge, County Kildare and the Dunfirth ESB substation at Dunfirth, Johnstownbridge, County Kildare is or is not development or is or is not exempted development.

Conclusion:

An Bord Pleanála concluded that:

- (a) the provision of the underground electricity connection and associated works involves the carrying out of works and, therefore, constitutes development, under sections 2 and 3 of the Planning and Development Act, 2000, as amended,
- (b) the underground electricity grid connection involves works carried out by an electricity undertaking, and, having regard to the nature of those works, would come within the scope of Class 26 of Part 1 of the Second Schedule to the Planning and Development Regulations, 2001, as amended, and would, therefore, constitute exempted development,
- (c) none of the restrictions on exempted development provided for under section 4 (4) of the Planning and Development Act 2000, as amended, apply in this case, and

(d) none of the restrictions on exempted development provided for under Article 9 (1)(a) of the Planning and Development Regulations, 2001, as amended, apply in this case, and in particular, having regard to the scope of the works as set out in the Outline Construction Methodology Report submitted by the referrer, the development in question would not endanger public safety by reason of traffic hazard

It is also noted that an earlier Section 5 application (EX70/19) submitted by SOLAS EIREANN DEVELOPMENT LTD also for an Underground cabling and overhead line development was deemed to be development but exempted development.

Information / documentation submitted in support of this application:

- The project involves the installation of an underground cable to facilitate the grid connection of Threecastles Solar Park (granted under PRR17/908 & PRR21/1237) to the Irish Distribution system. Details of the proposed works are set out in the Outline Construction Environmental Management Plan prepared by NEO Environmental Ltd.
- The proposed grid connection will consist of approximately 3.6km of underground cable.

PRR17/908 and Grid connection:

The following is an extract from the planning report under the previous application PRR17/908 (as amended by *PRR21/1237*).

Grid Connection

In accordance with the information submitted, it is proposed to connect this facility to the existing ESB substation in Blessington which is located c.3.62km from the site by road. The applicant has already received a formal grid connection offer from ESB Networks confirming the applicant's ability to the national grid. The means and route of connection from the proposed site to the ESB substation is to be decided in consultation with the ESB. The site location maps accompanying the application outlines the proposed grid connection route (which is indicative only) with two potential options, one using overhead lines and the other using underground gabling alongside or under the existing road network.

It is noted from the previous Section 5 history (EX70/19) considered, in the interest of visual amenity, that the option for underground cabling was favoured in preference to over ground cabling, and that any over ground cabling should be subject to a separate planning application to allow for full and detailed assessment of the potential impact.

It appears that this revised Section 5 only proposes underground cabling option which wold negate the need for an additional planning application.

Assessment

The first assessment must be whether or not the proposal outlined above constitutes development within the remit of Section 3 of the Planning and Development Act 2001. In this regard, Section 3 of the Planning and Development Act provides that:

"development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.

It should be noted that Section 2 of the Act defines works as:

"works" includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.

With regard to the above, it is considered that the construction of a 20kV underground cable which forms the grid connection (3.62km total length approx.) from the proposed Threecastles Solar Park substation at Threecastles in Blessington, Co. Wicklow to the ESB Blessington 38kV substation at Edmondstown in Blessington would fall within the definition of works and as such would constitute 'development' under the meaning of the Act.

The second stage of the assessment is to determine whether or not the proposed development would be exempted development under the Planning and Development Act 2000 (as amended) or it's associated Regulations.

As regards Section 4(2)(a)(i) of the Act, and the Regulations made there under, the relevant classes of development are Class 26 and 27, Part 1 Schedule 2 of the Planning and Development Regulations, as amended (see above). I am satisfied that the proposed development would fall within the scope of classes 26 and 27.

On the requirement for the development to be carried out by an "undertaker authorised to provide an electricity service" I refer to Article 3(3) of the regulations which states that an electricity undertaking means an undertaker authorised to provide an electricity service. The Electricity Regulation Act 1999 provides a definition as follows:

"electricity undertaking" means any person engaged in generation, transmission, distribution or supply of electricity, including any holder of a licence or authorisation under this Act, or any person who has been granted a permit under Section 37 of the Principal Act."

I note the broad definition of "statutory undertaker" provided within the Planning and development Act 2000 as follows

"statutory undertaker" means a person, from the time being, authorised by or under any enactment or instrument under an enactment to- (b) Provide, or carry out works for the provision of, gas, electricity or telecommunications services,".

In light of these definitions, I am satisfied that Solas Eireann falls within the category of statutory undertaker on foot of its authorisation under the Planning Act to construct a solar farm that is a project for the provision of electricity. On this basis I am satisfied that the proposed development falls within the scope of Classes 26 and 27.

Restrictions on exempted development

Section 4(4) of the Act essentially de-exempts any development which attracts a requirement for Environmental Impact Assessment (EIA) or Appropriate Assessment (AA).

In relation to EIA, the development of a medium voltage (20kV) grid connection between the solar park permitted under PRR17/908 (as amended by *PRR21/1237*) at Threecastles in Blessington, Co. Wicklow and the ESB Blessington 38kV substation is not a prescribed class of development for the purposes of

EIA. In addition, it is noted that the original solar park application was not subject to EIA and is not a prescribed class of development for the purposes of EIA.

In relation to the need for Appropriate Assessment the following is noted:

- The cover letter from NEO Environmental Ltd submitted in support of this Section 5 application includes the following note on appropriate assessment screening:

An Appropriate Assessment Screening has been carried out by the applicant (Prepared by Neo Environmental Ltd) in this case for the proposed grid connection. It is attached with this application and concludes:

With the inclusion of best practice measures (aligning with those outlined in the original planning application) the Appropriate Assessment concludes that no likely significant effect is foreseen upon any Natura 2000 site as a result of the proposals, either alone or in combination with any other development.

Accordingly, there is sufficient information to allow the Competent Authority to conclude that the project individually or in combination will not be likely to have any significant effects on any European sites. A Stage 2 Natura Impact Assessment should not therefore be required in this case. Taking all the above in to account the development does not fall under Section 4(4) of the Planning and Development Act 2000-2018

- Notwithstanding the above, it is considered that there is sufficient information available to the Planning Authority to screen this development for appropriate assessment.
- The development applied for under PRR17/908 (as amended by PRR21/1237), did not include the grid connection however details of an indicative grid connection did accompany the application and were considered in the Natura Impact Assessment (NIA). The NIA focused on the potential impact of the proposed development on the Poulaphouca Reservoir SPA which is designated for the greylag goose and lesser black-backed gull, with the conservation objective of maintaining or restoring the favorable conservation conditions of these species.

The NIA found that the proposed development is likely to have a minor impact on the wintering population of greylag geese through the loss of 12.6ha of grazing land however this constituted only 5% of the suitable grazing land within the immediate vicinity and 1% of the total suitable grazing land within the catchment.

The NIA also considered a number of potential impacts on the conservation objectives of the Natura site that may arise from the gird connection:

- Negative effects on water quality due to siltation or chemical (fuels or concrete) pollution which may damage freshwater or wetland habitats and result in population reductions of sensitive freshwater or riparian plant and animal species
- o disturbance to the wintering greylag geese and whooper swan during construction
- It is noted that the grid connection now proposed follows a different route to the indicative route outlined in the previous application, PRR17/908(as amended by PRR21/1237) and subsequently arranged under EX70/19. The current proposal initially runs south across the solar farm lands

onto the L-4371-0, connecting in a northwest direction to Red Lane(L-8371-0), then onto the N81 to the southwest, across former quarry lands and onto the ESB Substation).

- The route for the most part runs along the public road alongside improved agricultural grasslands and is unlikely to have a negative impact on flora and fauna. It is noted that the route passes watercourse crossings (i.e. Goldenhill Stream and Oldpaddocks Stream and a wet ditch). Environmental control measures outlined in the Outline Construction Environmental Management Plan are listed under Section 1.56 of the Appropriate Assessment.
- A small section runs across improved agricultural grasslands, however, these lands are not considered to be conducive towards supporting the foraging and nesting requirements of Greylag Geese and Lesser Black-Backed Gull and will not result in any loss of suitable habitat (direct or indirect).
- The proposed development is to be carried out using best practice measures which should ensure that any significant risks to aquatic ecology are eliminated.

Having regard to the planning history of the site, the nature and scale of the proposed development as set out in the documents lodged and the location of the development outside of designated nature 2000 sites I am satisfied that the proposed grid connection, individually or in combination with other plans or projects, would be unlikely to give rise to any adverse impacts on the qualifying interests and conservation objectives of natura sites, in particular the Poulaphouca Reservoir SPA and therefore the proposed development would not necessitate the carrying out of an Appropriate Assessment in accordance with the requirements of Article 6(3) of the EU Habitats Directive.

On the basis of the above I am satisfied that the development does not fall within the scope of Section 4(4) of the Act.

With respect to the de-exemptions set out under Article 9(1):

- I am satisfied that the proposed development would not endanger public safety by reason of traffic hazard or obstruction to road users traffic. The traffic management proposals set out in the Preliminary Construction Traffic Management Plan are noted in this regard.
- I am satisfied that the proposed development would not interfere with the character of the landscape. In this regard it is noted that the majority of the proposed grid connection is to be placed underground.
- I am satisfied that the proposed development would not impact on archaeological or other sites of interests that are subject to preservation/conservation objectives as set out in the Archaeology & Architectural Impact Assessment are noted in this regard.
- As regards Article 9(1)(a)(i) and the matter of conditions attached to permission for the solar park, the only conditions relating to grid connection is Condition 12 of PRR17/908 (as amended by PRR21/1237), which states that "This permission shall not be construed as any form of consent or agreement to a connection to the National Grid or to the routing or nature of any such connection". I am satisfied that the works proposed under this section 5 application would not contravene this condition.

I am therefore satisfied that the proposed development as set out in the documents lodged, (including the Outline Construction Environmental Management Plan), would not fall within the scope of the deexemptions set out under Article 9.

Conclusion:

With respect to the query under Section 5 of the Planning and Development Act 2000, as to whether Whether the provision of c.3620m of 20kV underground cable forming the grid connection between the consented Threecastles Solar Farm (Refs: 17/908 & 21/1237) to the existing Blessington 38kV substation Co. Wicklow is development and if it is development, if it is exempt development?

The Planning Authority considers that:

The construction of c.3620m of 20kV underground cable forming the grid connection between the consented Threecastles Solar Farm (Refs: 17/908 & 21/1237) to the existing Blessington 38kV substation Co. Wicklow is development but is exempted development.

Main Considerations with respect to Section 5 Declaration:

- The details submitted with this application on the 10th October 2023
- The Planning History of the site in particular: ABP Ref: 247714 (WCC PRR16/1060) and PRR17/908 (as amended by *PRR21/1237*) and EX70/19,
- Sections 2 and 3 of the Planning and Development Act 2000(as amended).
- Sections 4 (4), 172(1) and 177U(9) of the Planning and Development Act 2000(as amended).
- Article 3, 6 and 9 of the Planning and Development Regulations 2001 (as amended)
- Classes 26 and 27, Part 1 Schedule 2 of the Planning and Development Regulations 2001 (as amended)

Main Reasons with respect to Section 5 Declaration:

An Bord Pleanála concluded that:

- (a) The provision of a grid connection involves the carrying out of works and, therefore, constitutes development, under sections 2 and 3 of the Planning and Development Act, 2000, as amended,
- (b) The underground electricity grid connection involves works carried out by an electricity undertaking, and, having regard to the nature of those works, would come within the scope of Class 26 of Part 1 of the Second Schedule to the Planning and Development Regulations, 2001, as amended, and would, therefore, constitute exempted development,
- (c) None of the restrictions on exempted development provided for under section 4 (4) of the Planning and Development Act 2000, as amended, apply in this case, and

(d) None of the restrictions on exempted development provided for under Article 9 (1)(a) of the Planning and Development Regulations, 2001, as amended, apply in this case, Los Agriculty Los

Chris Garde

Executive Planner

Date: 03/11/2023

Page 11 of 11



Compairle Contae Chill Mhantáin Ulicklow County Council

Forbairt Pleanála agus Comhshaol Planning Development and Environment Áras An Chontae / County Buildings Cill Mhantáin / Wicklow Guthán / Tel: (0404) 20148 Faics / Fax: (0404) 69462 Rphost / Email: plandev@wicklowcoco.ie Suíomh / Website: www.wicklow.ie

MEMORANDUM

WICKLOW COUNTY COUNCIL

TO: Chris Garde

Executive Planner

FROM:

Nicola Fleming

Staff Officer

RE:- Application for Certificate of Exemption under Section 5 of the Planning and Development Act 2000 (as amended). EX72/2023 – Threecastles Solar Limited

I enclose herewith for your attention application for Section 5 Declaration received.

The due date on this declaration is the 7th November 2023.

Staff Officer

Planning Development & Environment





Comhairle Contae Chill Mhantáin Ulicklow County Council

Forbairt Pleanála agus Comhshaol Planning Development and Environment Áras An Chontae / County Buildings Cill Mhantáin / Wicklow Guthán / Tel: (0404) 20148 Faics / Fax: (0404) 69462 Rphost / Email: plandev@wicklow.coco.ie Suíomh / Website: www.wicklow.ie

13th October 2023

Neo Environmental Ltd 83-85 Bridge Street Ballymena Co. Antrim BT43 5EN

RE: Application for Certificate of Exemption under Section 5 of the Planning and Development Acts 2000 (as amended). EX72/2023 – Threecastles Solar Limited

A Chara

I wish to acknowledge receipt on 10th October 2023 details supplied by you in respect of the above Section 5 application. A decision is due in respect of this application by 7th November 2023.

Mise, le meas

NICOLA FLEMING

STAFF OFFICER

PLANNING DEVELOPMENT AND ENVIRONMENT



Wicklow County Council County Buildings Wicklow 0404-20100

11/10/2023 11 26 11

Receipt No L1/0/320009

NEO ENVIRONMENTAL 83 - 85 BRIDGE STREET BALLYMENA AT435EN

EXEMPTION CERTIFICATES
GOODS 80 00
VAT Exempt/Non-vatable

80 00

Total

80 00 EUR

0.00

Tendered
Credit Card 80 00
THREECASTLE SOLAR FARM

Change

Issued By Charlie Redmond From Customer Service Hub Vat reg No 0015233H



Wicklow County Council County Buildings Wicklow Co Wicklow Telephone 0404 20148 Fax 0404 69462

Office Use Only

Date Received	
Fee Received _	

APPLICATION FORM FOR A DECLARATION IN ACCORDANCE WITH SECTION 5 OF THE PLANNING & DEVELOPMENT ACTS 2000(AS AMENDED) AS TO WHAT IS OR IS NOT DEVELOPMENT OR IS OR IS NOT EXEMPTED DEVELOPMENT

1. Applicant Details

(a) Name of applicant: Three castles Solar Limited
Address of applicant: Ferry House, 48-53 Mount Street Lower, Dublin, Dublin 2

Note Phone number and email to be filled in on separate page.

WICKLOW COUNTY COUNCIL

1 1 OCT 2023

PLANNING DEPT.

2. Agents Details (Where Applicable)

(b) Name of Agent (where applicable): Neo Environmental Ltd

Address of Agent: 83-85 Bridge Street, Ballymena, Co. Antrim, BT43 5EN

Note Phone number and email to be filled in on separate page.

3. Declaration Details

i. Location of Development subject of Declaration: The townlands of Threecastles,

Crosscoolharbour, Santryhill, Blessington, Newpaddocks, Co. Wicklow.

ii. Are you the owner and/or occupier of these lands at the location under i. above?No.

iii. If 'No' to ii above, please supply the Name and Address of the Owner, and or occupier:

Hudson Brothers Limited - 11 Gorthlum, Britas, Co. Dublin and Wicklow County Council – County Buildinfs, Whitegates, Wicklow Town, Co. Wicklow. Ian Hamilton - Threecastles, Blessington, Co Wicklow, Ireland, W91YT78

iv. Section 5 of the Planning and Development Act provides that: If any question arises as to what, in any particular case, is or is not development and is or is not exempted development, within the meaning of this act, any person may, an payment of the prescribed fee, request in writing from the relevant planning authority a declaration on that question. You should therefore set out the query for which you seek the Section 5 Declaration

This Section 5 Application is in relation to the construction of an underground medium voltage grid connection cable c. 3.62km from the consented Threecastles Solar Farm (Planning Reference 17/908 and 21/1237) to the Blessington 38kV Substation in County Wicklow through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks.

Please see related submission documents for further detail.

Additional details may be submitted by way of separate submission.

v. Indication of the Sections of the Planning and Development Act or Planning Regulations you consider relevant to the Declaration

Section 2(1) of the Planning and Development Act Section 3(1) of the Planning and Development Act Section 4(2)(a)(i) of the Planning and Development Act Section 4 (4) of the Planning and Development Act Section 172 (1) of the Planning and Development Act Section 177U (9) of the Planning and Development Act Article 3(3) of the Planning and Development Regulations
Article 6(1) of the Planning and Development Regulations
Class 26 of Schedule 2, Part 1 Development by Statutory Undertakers
Article 9(1) Restrictions on Exemption of Schedule 2, Part 1 Development by
Statutory Undertakers

Please see related submission documents for further detail.

Additional details may be submitted by way of separate submission.

- vi. Does the Declaration relate to a Protected Structure or is it within the curtilage of a Protected Structure (or proposed protected structure)? No
- vii. List of Plans, Drawings submitted with this Declaration Application

NEO00879 043I A Figure 1 – Cable Route Overall

NEO00879_044I_A Figure 2 – Cable Route – Sheet 2

NEO00879_045I_A Figure 3 - Cable Route - Sheet 3

NEO00879 046I A Figure 4 - Cable Route - Sheet 4

viii. Fee of € 80 Attached? To be Paid on Day of Submission via Debit/ Credit Card.

Signed :_Dated :_11th October 2023

Additional Notes:

As a guide the minimum information requirements for the most common types of referrals under Section 5 are listed below:

- A. Extension to dwelling Class 1 Part 1 of Schedule 2
 - Site Location Map
- Floor area of structure in question whether proposed or existing.

- Floor area of all relevant structures e.g. previous extensions.
- Floor plans and elevations of relevant structures.
- Site Layout Plan showing distance to boundaries, rear garden area, adjoining dwellings/structures etc.

B. Land Reclamation -

The provisions of Article 8 of the Planning and Development Regulations 2001 (as amended) now applies to land reclamation, other than works to wetlands which are still governed by Schedule 2, Part 3, Class 11. Note in addition to confirmation of exemption status under the Planning and Development Act 2000(as amended) there is a certification process with respect to land reclamation works as set out under the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011 S.I. 456 of 2011. You should therefore seek advice from the Department of Agriculture, Fisheries and Food.

Any Section 5 Declaration should include a location map delineating the location of and exact area of lands to be reclaimed, and an indication of the character of the land.

C. Farm Structures - Class 6 - Class 10 Part 3 of Schedule 2.

- Site layout plan showing location of structure and any adjoining farm structures and any dwellings within 100m of the farm structure.
- Gross floor area of the farm structure
- Floor plan and elevational details of Farm Structure and Full details of the gross floor area of the proposed structure.
- Details of gross floor area of structures of similar type within the same farmyard complex or within 100metres of that complex.

Threecastles Threecastles Threecastles Blessington Co Wicklow Ireland W91YT78

Planning Department
Wicklow County Council
County Buildings
Whitegates
Wicklow Town
A67 FW96

6th October 2023

Dear Sir/Madam,

RE: Section 5 – 20kV Underground Cable

I am the legal owner of the lands at Threecastles, Blessington, Co. Wicklow and hereby give my consent to Threecastles Solar Ltd to submit a Section 5 for a 20kV of underground cable over my land.

Yours Sincerely,

lap Hamilton

Wicklow County Council Planning Department County Buildings Whitegates Wicklow Town Co. Wicklow

Date:

Matter:

Interconnection of Solar Park development and associated requirements (the

"Development")

Applicant:

Threecastles Solar Limited

To whom it may concern,

We, **Hudson Brothers Limited** having our registered address at 11 Gorthlum, Brittas, Co. Dublin, being the registered full owner of the property comprised in Folios WW8559F and WW10551 (the "Folios"), hereby give consent to Threecastles Solar Limited and / or its servants or agents, to apply to Wicklow County Council (or such other relevant planning authority) for planning permission and/or planning exemption for the Development, as it relates to the Folios.

Yours faithfully

Director,

Hudson Brothers Limited

Neo Environmental Ltd Johnstown Business Centre, Johnstown House, Co. Kıldare 045 844250 info@neo-environmental.ie

06/10/2023

Comhairle Chontaie Chill Mhantain, Aras an Chontae, Cill Mhantain Planning Department Wicklow County Council, **County Buildings Wicklow**

Dear Sir or Madam,

Re: Section 5 Planning and Development Act 2000-2018 Declaration – 20KV Grid Connection Cable for Threecastles Solar Farm (Planning Application reference: 21/1237 and 17/908) to connect to the existing Blessington 38kV ESB Substation, Co. Wicklow.

Planning Authority - Wicklow County Council

Planning Background

Planning permission was granted for (Planning reference 17/908) a solar PV panel array comprising photovoltaic panels on ground mounted frames within a site area of 21.04 ha, 8 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 securing fencing and access gates, CCTV, associated electrical cabling and ducting, upgraded and new access tracks and all associated ancillary development and landscaping works. The application was consented by Wicklow County Council ("WCC") on 11th May 2018, subject to 12 conditions.

This permission was later amended (Planning Reference 21/1237) to have the following changes;

- Project lifetime proposed to be extended from 30 years to 35 years,
- Substation to increase in size,
- Change in height and angle of solar panels,
- Transformer containers to increase in size,



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- Removal of the customer substation,
- Deer fencing to increase in size,
- MW output to be increased from 10.8 to 15MW to align with existing grid connection offer.
- Slight alteration to the access tracks, and
- Number of CCTV cameras to reduce.

Consent for these changes under Planning Reference 21/1237 was granted on the 7th of December 2021 by Wicklow County Council subject to five conditions.

Wicklow County Council has previously acknowledged a Section 5 for the 20kV grid route of the solar farm development (Exemption Ref 70/19). This was provided 9th October 2019. Following discussions with ESB Networks, changes to the grid route are required and therefore this subsequent submission (Please see Appendix A of Covering Statement for further details).

Section 5 Declaration

The question arising is as follows:

"Whether the provision of c.3620m of 20kV underground cable forming the grid connection between the consented Threecastles Solar Farm (Refs: 17/908 and 21/1237) to the existing ESB Blessington 38Kv substation Co. Wicklow is development and if it is development, if it is exempt development".

The Proposed Development

The proposed cable route is set out in graphic form on the attached plans (Figures 1 -4: of Volume 2) prepared by Neo Environmental Ltd. The Proposed Development will consist of the construction of an underground medium voltage grid connection cable from the consented Threecastles Solar Farm to the Blessington 38kV Substation in County Wicklow through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks The construction phase takes place in line with the following criteria:

• The proposed grid connection is circa c.3.62km in length (with the majority of it on public road) and is to be installed along private agricultural land and public roads with the

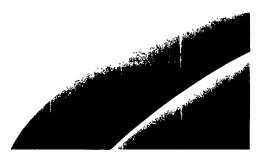


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construction carried out in sections of no more than 100m at any one time. A new 100m section of works will only be excavated once the majority of reinstatement has been completed on the previous section, ensuring only one section is fully opened at any one time.

- Joint bays will be placed at regular intervals between sections of ducts to allow the sections of cables to be connected together prior to the reinstatement of the road
- The final c. 300m of the proposed cable route will within private agricultural land before connecting to the ESB Blessington Substation.
- The base of the excavated trench will be lined with sand bedding to be imported to site from a local licensed supplier. 125mm diameter high-density polyethylene (HDPE) cable ducting will be placed into the prepared trench, which will be inspected and backfilled;

• -

Legal Considerations – Planning and Development Act 2000

Section 2(1)

""works" includes any act or operation of construction, excavation, demolition, extension, alterations, repair or renewal and ..."

"statutory undertaker" means a person, for the time being, authorised by or under any enactment of instrument under an enactment to —

- 1. (a) Construct or operate a railway, canal, inland navigation dock, harbour or airport,
- 2. (b) Provide, or carry out works for the provision of, gas, electricity or telecommunications services, or
- 3 (c) Provide services connected with or carry out works for the purposes of the carrying on of the activities of, any public undertaking."

Section 3(1)

""development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land."



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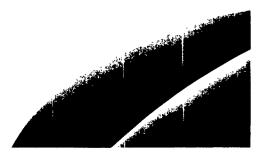
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Section 4(2)(a)(i)

"The Minister may by regulations provide any class of development to be exempted development for the purposes of this Act where he or she is of the opinion that —

(i) By reason of the size, nature or limited effect on its surroundings, of development belonging to that class, the carrying out of such development would not offend against principles of proper planning and sustainable development, or . "

Section 4(4)

"Notwithstanding..... any regulations under subsection (2), development shall not be exempted development if an <u>environmental impact assessment</u> or an <u>appropriate assessment</u> of the development is required"

Section 172(1)

"An environmental impact assessment shall be carried out by a planning authority or the Board, as the case may be in respect of an application for consent for —

- 1. (a) Proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which exceeds a quantity area, or other limit specified in that Schedule, and
- 2. (b) Proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which does not exceed a quantity, area or other limit specified in that Schedule but which the planning authority or the Board determines would be likely to have significant effects on the environment."

Section 177U(9)

"In deciding upon a declaration or a referral under section 5 of this Act a Planning Authority or the Board, as the case may be shall where appropriate, conduct a screening for appropriate assessment in accordance with the provisions of this section".

Planning and Development Regulations, 2001

Article 3(3)

"electricity undertaking" means an undertaker authorised to provide an electricity service".



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Article 6(1)

"Subject to article 9, development of a class specified in Column 1 of Part 1 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in Column 2 of the said Part 1 opposite the mention of that class in the said Column 1."

Schedule 2, Part 1 Development by Statutory Undertakers

Class 26

"the carrying out by any undertaker authorised to provide an electricity service of development consisting of the laying underground of mains, pipes, cables or other apparatus for the purposes of the undertaking",.

Article 9(1) Restrictions on Exemption

"Development to which Article 6 relates shall not be exempted development for the purposes of the Act –

- (a) If the carrying out of such development would:
- (ii) Contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act.
- (III) endanger public safety by reason of traffic hazard or obstruction of road users,
- (vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) pf places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest there preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan,
- (viiA) comprise of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places, pursuant to section 12(1) of the National Monuments



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(Amendment) Act 1994, save that this provision shall not apply to any excavation or any works, pursuant to and in accordance with a consent granted under section 14 or a licence granted under section 26 of the National Monuments Act 1930 (No 2 of 1930) as amended.

(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,

(c) if it is development to which Part 10 applies, unless the development is required by or under any statutory provision (other than the Act or these regulations) to comply with the procedures for the purposes of giving effect to the Council Directive."

Case Law

O Grianna (and others) v An Bord Pleanála (and others) Record L 2014 No 2014 No 19 JR, 20114 No 10 COM.

This High Court judgement was for a judicial review of a permission granted on appeal by the Board for a development comprising six wind turbines and associated infrastructure in County Cork. The High Court judgement, quashing the Board's decision, was based on the conclusion that the windfarm and grid connection constitute one single project and that both elements together would have to be subject to EIA in order to comply fully with the terms of the Directive.

Relevant Appeal Cases

There are a number of appeal decisions relevant to this case which are referred to on the below;

ABP-302895-18 / Kildare County Council Reference ED00656: The Board determined that a medium voltage grid connection from the Dysart solar farm at Johnstownbridge, County Kildare to the Dunfirth ESB substation is exempted development. The reasons for this decision, as per the Inspector's report, are as follows:

(a) The provision of the medium voltage grid connection between the solar farm development permitted under ref no. 16/1265 and the Dunfirth ESB substation comes within the scope of Sections 2(1) and 3(1) of the Act and constitutes development,



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- (b) The said underground cable comes within the scope of Class 26 Part 1, Schedule 2, of the Planning and Development Regulations 2001, as amended, ABP-302895-18 Inspector's Report Page 16 of 16
- (c) The said underground cable does not come within the scope of section 4(4) of the Planning and Development Act, 2000, as amended. In this regard the Board adopts the report of the Inspector in relation to EIA and AA and, thereby has carried out the necessary assessments to conclude that neither EIA nor AA is required,
- (d) The said underground cable does not come within the scope of Article 9(1)(a)(i), (ii), (v), (vii), (vii), or (vii) or Article 9(1)(c) of the of the Planning and Development Regulations 2001, as amended.'

RL3503: The Board determined that the provision of a connection between the 110kv substation of the Yellow River Windfarm granted under PA0032 & the National Grid is development and is exempted development at Rhode, Co Offaly

RL3375: Board determined that 220m of 20kv underground cable forming part of grid connection at Raragh, Kingscourt, Co Cavan is development and is exempted development.

RL3408 RL3409 RL3410 RL3411: The Board determined that the development of grid connection from Crory / Lodgewood substation to Ballycadden windfarm is development and is not exempted development. I note that this determination found that the development came within the scope of Article 9(1) (a) of the Regulations as their construction contravened a condition of the planning permission for the relevant windfarms.

RL 2789: The Board determined that the laying of a 110kv underground electricity cable forming the grid connection to windfarm at Knockacummer Co Cork is development and is exempted development.

RL2778: The Board determined that the provision of 10.2km of underground cable forming the grid connection of windfarm at Loughaun North, Tulla, Co Clare to existing substation at Tooreen Ennis Co Clare is development and is exempted development.

RL3377 RL3401: The Board determined that the provision of a 20kv electrical connection between Cnoc windfarm and Ballybeagh 38kv substation, Tullaroan, Co Kilkenny is development and is exempted development.

Statutory Undertaker/Undertaker



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One of the first items to answer is the issue of the "undertaker" and who can be an "undertaker" for the purposes of the exemption at Class 26 of the Regulations

"the carrying out by any undertaker authorised to provide an electricity service of development consisting of the laying underground of mains, pipes, cables or other apparatus for the purposes of the undertaking"

Article 33 of the Regulations notes that an electricity undertaking means "an undertaker authorised to provide an electricity service. The Electricity Regulation Act 1999 notes at section 2(1) the following.

"Electricity undertaking" means any person engaged in generation, transmission, distribution or supply of electricity, including any holder or a licence or authorisation under this act, or any person who has been granted a permit under section 3u7 of the Principal Act".

This matter was addressed directly in the Dysert solar farm Section 5 application referenced above (ABP-302895-18, Kildare County Council Reference ED/00656). In that case an exemption was granted by ABP to Power Capital Renewable Energy Ltd. The Inspectors report comments on this matter as follows:

"8.2.2. On the requirement for the development to be carried out by an "undertaker authorised to provide an electricity service" I refer to Article 3(3) of the regulations which states that an electricity undertaking means an undertaker authorised to provide an electricity service. The Electricity Regulation Act 1999 provides a definition as follows:

"electricity undertaking" means any person engaged in generation, transmission, distribution or supply of electricity, including any holder of a licence or authorisation under this Act, or any person who has been granted a permit under Section 37 of the Principal Act."

8.2.3 I note the broad definition of "statutory undertaker" provided within the Planning and development Act 2000 as follows

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"statutory undertaker" means a person, from the time being, authorised by or under an_j enactment or instrument under an enactment to-

(b)Provide, or carry out works for the provision of, gas, electricity or telecommunications services,".

In light of these definitions, I am satisfied that Power Capital Renewable Energy Ltd. falls within the category of statutory undertaker on foot of its authorisation under the Planning Act to construct a solar farm that is a project for the provision of electricity. On this basis I am satisfied that the proposed development falls within the scope of Class 26.

8.2.4 I would note that there are a number of cases which are listed above that are relevant In these cases the fact that the applicants have been granted permission for an electricity generating development have been determined to be sufficient to classify the applicants as coming under Class 26, Part 1 Schedule 2 of the Planning and Development Regulations".

In light of these observations and in order for Threecastles Solar Limited Limited to construct the approved solar development, the developer must have an Authorisation to Construct from the Commission for Regulation of Utilities under section 14 of the Electricity Regulation Act 1999. Similarly, in order to generate electricity, it must obtain a Licence to Generate from the Commission. Accordingly, the developer will have to obtain both Authorisation and a Licence prior to the construction of the proposed development and upon obtaining same will be categorised an Electricity Undertaker as defined in the Electricity (Supply) Act, 1927 Therefore, when the development is commenced, including the construction of the grid connection, the developer or ESB will be the 'undertaker authorised to provide an electricity service' satisfying this provision of Class 26 of the Planning and Development Regulations.

Is the proposed Grid Connection Development?

The proposal constitutes development under Class 26 of part 1 of Schedule 2 of the Planning and Development Regulations 2001 (as amended) which includes:

"the laying underground of cables for the purposes of an undertaking"

Environmental Impact Assessment and Appropriate Assessment



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Underground cabling for the transmission of electricity does not fall into a class of development for the purposes of EIA. An EIA is not therefore required. Moreover, the solar farm development to which it would connect did not require an EIA.

A series of winter bird surveys were undertaken for PA Ref 17/908 to determine the potential impact on the qualifying species of the Poulaphouca Reservoir Special protection Area (SPA). It was concluded that with the inclusion of mitigation measures, the risk to Natura 2000 sites will be reduced to a negligible level.

There is currently a Section 42 application lodged with Wicklow County Council for an extension of duration regarding PA Ref 17/908 and 21/1237. The impact upon the Poulaphouca Reservoir Special protection Area (SPA) and other Natura 2000 sites was assessed within the AA screening submitted in conjunction with the Section 42 and concluded that the SPA would not be significantly impacted.

Ecological reports for PA Ref 17/908 outlined best practice measures for the solar farm to eliminate risk to aquatic ecology, it is noted in the report 'The potential for any siltation or chemical pollution entering the drains and impacting on the SPA is therefore highly unlikely.'

An Appropriate Assessment Screening has been carried out by the applicant (Prepared by Neo Environmental Ltd) in this case for the proposed grid connection. It is attached with this application and concludes:

With the inclusion of best practice measures (aligning with those outlined in the original planning application) the Appropriate Assessment concludes that **no likely significant effect** is foreseen upon any Natura 2000 site as a result of the proposals, either alone or in combination with any other development.

Accordingly, there is sufficient information to allow the Competent Authority to conclude that the project individually or in combination will <u>not be likely</u> to have any significant effects on any European sites. A Stage 2 Natura Impact Assessment should not therefore be required in this case. Taking all the above in to account the development does not fall under Section 4(4) of the Planning and Development Act 2000-2018.

Article 9(1) Restrictions on Exemptions

Article 9(1) of the Regulations sets out a series of restrictions on exemptions which we consider in turn below:

(ii) Contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act.



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The grid connection proposal does not contravene any of the conditions associated with application PA Ref: 17/908 and 21/1237 of the Solar Farm permissions noted earlier.

(iii) endanger public safety by reason of traffic hazard or obstruction of road users.

This application is accompanied by a Preliminary Construction Traffic Management Plan (PCTMP), which sets out in detail the overall method for construction including all mitigation and traffic control measures to ensure that the proposed route of the grid connection does not impact on any public road and will not endanger public safety by reason of traffic hazard or obstruction to road users.

(vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest there preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan.

There is no interaction with any places, caves, sites, features or other objects. We refer the Council to the findings of the AA Screening and the Outline Construction Traffic Management Plan (OCEMP) prepared by Neo Environmental Ltd. Also, the Development Plan for the area was reviewed and there are no objectives to protect asset classes noted above, that would be impacted negatively by the proposed grid connection route.

(viiA) comprise of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places, pursuant to section 12(1) of the National Monuments (Amendment) Act 1994, save that this provision shall not apply to any excavation or any works, pursuant to and in accordance with a consent granted under section 14 or a licence granted under section 26 of the National Monuments Act 1930 (No 2 of 1930) as amended.

We refer the Council to the findings of the Archaeology Impact Assessment (AIA) Report prepared by Neo Environmental Ltd. There are no recorded sites within the RMP, RPS and NIAH that are within the Application Site that could be physically impacted by the Proposed Development. In addition, no confirmed features of archaeological significance were identified during the site visit or desk-based assessment of the Application Site. As such, **no direct impacts** upon known archaeological and heritage assets are anticipated and no mitigation measures are considered to be necessary in relation to this.



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There were six archaeological sites identified in the RMP that are within the 500m study zone and the Proposed Development. **Low** indirect visual effects are anticipated for RMP WI005-031 (NA08) during the construction phase, while **Negligible** indirect effects are anticipated for the remaining assets. Within their respective study zones outlined in the AAHIA, a total of two HGDLs and six sites within the RMP have possible visual impacts. There will be no visual impacts to the heritage assets after the construction phase but may be minor visual impacts during the construction phase. Therefore, no specific mitigation is considered to be required for the reduction of any visual impacts.

We refer the Council to the findings of the AAHIA Report prepared by Neo Environmental Ltd.

(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,

As noted earlier, the Proposed Development would not be likely to have a significant effect on the integrity of a European site and does not require a Stage 2 Appropriate Assessment (Natura Impact Assessment).

Concluding Comments

Taking all matters in to account the applicant (Threecastles Solar Limited) can benefit from the exemption at Class 26 of the Planning and Development Regulations 2001 (as amended), namely:

"the carrying out by any undertaker authorised to provide an electricity service of development consisting of the laying underground of mains, pipes, cables or other apparatus for the purposes of the undertaking".

The question posed is:

"Whether the provision of c.3620m of 20kv underground cable forming the grid connection between the consented Threecastles Solar Farm(Refs: 17/908 and 21/1237) to the existing ESB Blessington 38Kv substation Co. Wicklow is development and if it is development, if it is exempt development"

We consider the following conclusion applies:

The proposed grid connection is development and is exempt development.



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The €80.00 fee associated with this application was paid on the day of submission via debit card over the telephone by Miss Chloe McDonnell (Neo Environmental). Should there be any queries relating to this payment, please contact Miss Chloe McDonnell on the details below.

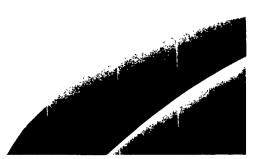
Miss Chloe McDonnell, Neo Environmental, 83-85 Bridge Street, Ballymena, Co. Antrim, BT43 5EN, Northern Ireland. (E: chloe@neo-environmental.co.uk M: +44 (0) 75 1919 3656)

Kınd Regards,

Onla medornell

Chloe McDonnell BSc (Hons) MSc Planning Consultant Neo Environmental Ltd (Agent acting on behalf of the applicant).







Appendix A





Comhairle Contae Chill Mhantáin Ulickloui County Council

Forbairt Pleanála agus Comhshaol Planning Development and Environment

Áras An Chontae / County Buildings Cili Mhantáin / Wicklow Guthán / Tel: (0404) 20148 Faics / Fax: (0404) 69462 Rphost / Email: plandev@wicklowcoco.ie Suíomh / Website: www.wicklow.le

9 October 2019

TU Group, Beenreigh Abbeydorney, Tralee, Co Kerry

RE:

Declaration in accordance with Section 5

of the Planning & Development Acts 2000 - 2011

I enclose herewith Declaration in accordance with Article 5 (2) (A) of the Planning & Development Act 2000 in respect of the following:

Exemption Ref. No:

70/19

Applicant:

Solar Eireann

Nature of Application: the construction of a 20kv underground cable and a small section of 20kv overhead line which form the grid connection (3.2m total length approx.) from the proposed Threecastles Solar Park substation at Threecastles, Blessington to the ESB Blessington 38 kv substation at Edmondstown in Blessington

Location:

Threecastles, Blessington.

Where a Declaration is used under this Section any person issued with a Declaration under subsection (2) (a) may, on payment to An Bord Pleanala of such fee as may be prescribed, refer a declaration for review by the Board within four weeks of the date of the issuing of the declaration by the Local Authority.

Is mise, le meas,

ADMINISTRATIVE OFFICER

PLANNING DEVELOPMENT & ENVIRONMENT

Enci.

REG POST





Comhairle Contae Chill Mhantáin Ulicklow County Council

Forbairt Pleanála agus Comhshaol Planning Development and Environment

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DECLARATION IN ACCORDANCE WITH ARTICLE 5 (2) (A) OF THE PLANNING & DEVELOPMENT ACT 2000.

Applicant: Solas Eireann Location: Three castles, Blessington

DIRECTOR OF SERVICES ORDER NO. 1628/19

A question has arisen as to whether the construction of a 20kv underground cable and a small section of 20kv overhead line which form the grid connection (3.2m total length approx.) from the proposed Threecastles Solar Park substation at Threecastles, Blessington to the ESB Blessington 38 kv substation at Edmondstown in Blessington or not is or is not exempted development.

Having regard to:

- The details submitted with this application on the 12th September 2019.
- The planning history of the site in particular :ABP Ref: 247714 (WCC PRR 16/1060 and PRR 17/908)
- Sections 2 and 3 of the Planning & Development Act 2000 (as amended)
- Sections 4 (4), 172 (1) and 177 U (9) of the Planning & Development Act
 2000 (as amended)
- Article 3, 6 and 9 of the Planning & Development Regulations 2001 (as amended)
- Classes 26 and 27, Part 1 Schedule 2 of the Planning & Development Regulations 2001 (as amended).

Main Reasons with respect to Section 5 Declaration:

- (a) The provision of a grid connection involves the carrying out of works and, therefore, constitutes development, under Sections 2 and 3 of The Planning & Development Act, 2000, as amended.
- (b) The underground electricity grid connection involves works carried out by an electricity undertaking, and , having regard to the nature of those works, would come within the scope of Class 26 of Part 1 of the Second Schedule to the Planning & Development Regulations 2001, as amended.
- (c) The overhead electricity grid connection involves works carried out by an electricity undertaking and, having regard to the nature of those works, would come within the scope of Class 27 of Part 1 of the Second Schedule to the Planning & Development Regulations 2001, as amended.



- (d) None of the restrictions on exempted development provided for under Section 4 (4) of the Planning & Development Act 2000, apply in this case, and
- (e) None of the restrictions on exempted development provided for under Article 9 (1) (a) of the Planning & Development Regulations, 2001, as amended, apply n this case.

The Planning Authority considers that the construction of a 20kv underground cable and a small section of 20kv overhead line which form the grid connection (3.2m total length approx.) from the proposed Threecastles Solar Park substation at Threecastles, Blessington to the ESB Blessington 38 kv substation at Edmondstown in Blessington is development and is exempted development.

Signed:

ADMINISTRATIVE OFFICER

PLANNING DEVELOPMENT & ENVIRONMENT

Dated Oday of October 2019



Comhairle Contae Chill Mhantáin Ulicklow County Council

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DECLARATION IN ACCORDANCE WITH ARTICLE 5 (2) (A) OF THE PLANNING & DEVELOPMENT ACT 2000.

Applicant: Solas Eireann Location: Three castles, Blessington

DIRECTOR OF SERVICES ORDER NO. 1769/2020

A question has arisen as to whether the construction of a 20kv underground cable and a small section of 20kv overhead line which form the grid connection (3.2km total length approx.) from the proposed Threecastles Solar Park substation at Threecastles, Blessington to the ESB Blessington 38 kv substation at Edmondstown in Blessington is or is not exempted development.

Having regard to:

- The details submitted with this application on the 12th September 2019.
- The planning history of the site in particular :ABP Ref: 247714 (WCC PRR 16/1060 and PRR 17/908)
- Sections 2 and 3 of the Planning & Development Act 2000 (as amended)
- Sections 4 (4), 172 (1) and 177 U (9) of the Planning & Development Act 2000 (as amended)
- Article 3, 6 and 9 of the Planning & Development Regulations 2001 (as amended)
- Classes 26 and 27, Part 1 Schedule 2 of the Planning & Development Regulations 2001 (as amended).

Main Reasons with respect to Section 5 Declaration:

- (a) The provision of a grid connection involves the carrying out of works and, therefore, constitutes development, under Sections 2 and 3 of The Planning & Development Act, 2000, as amended.
- (b) The underground electricity grid connection involves works carried out by an electricity undertaking, and, having regard to the nature of those works, would come within the scope of Class 26 of Part 1 of the Second Schedule to the Planning & Development Regulations 2001, as amended.
- (c) The overhead electricity grid connection involves works carried out by an electricity undertaking and, having regard to the nature of those works, would



come within the scope of Class 27 of Part 1 of the Second Schedule to the Planning & Development Regulations 2001, as amended.

(d) None of the restrictions on exempted development provided for under Section 4 (4) of the Planning & Development Act 2000, apply in this case, and

(e) None of the restrictions on exempted development provided for under Article 9 (1) (a) of the Planning & Development Regulations, 2001, as amended, apply n this case.

The Planning Authority considers that the construction of a 20kv underground cable and a small section of 20kv overhead line which form the grid connection (3.2km total length approx.) from the proposed Threecastles Solar Park substation at Threecastles, Blessington to the ESB Blessington 38 kv substation at Edmondstown in Blessington is development and is exempted development.

Signed: (

ADMINISTRATIVE OFFICER

PLANNING DEVELOPMENT & ENVIRONMENT

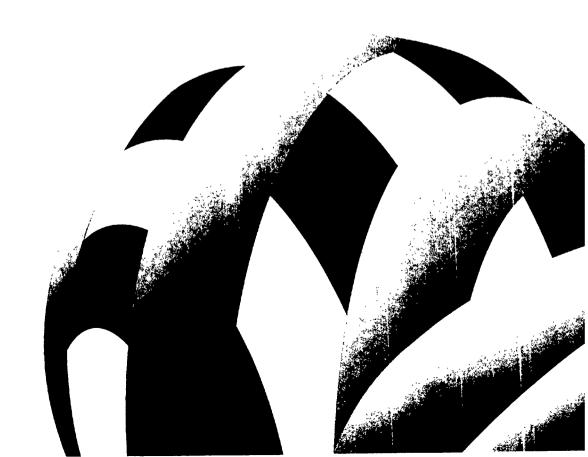
Dated A day of December 2020.



Appropriate Assessment

Threecastles Solar Farm Grid Route

06/10/2023



Prepared For:

Threecastles Solar Limited



Prepared By:

Dara Dunlop BSc (Hons)



	Name			Date
Edited By:	Louis Maloney O'Donoghue	&	Dylan	06/10/2023
Checked By:	Dara Dunlop			06/10/2023
	Name			Signature
Approved By	Paul Neary			,



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EXECUTIVE SUMMARY

- 1 1. Neo Environmental Ltd has been appointed by Threecastles Solar Limited (the "Applicant") to undertake an Appropriate Assessment for the development of grid connection infrastructure to connect the approved Threecastles Solar Farm ("Consented Development") (PA Ref: 21/1237 and PA Ref: 17/908) to the existing Blessington 38kV ESB Substation comprising the laying of underground cables ("UGC") and associated infrastructure, running through the townlands of Threecastles, Crosscoolharbour, Santryhill, Edmonstown, Blessington, Co. Wicklow.
- 1.2. There are five Natura 2000 Sites located within 15km of the Application Site, comprising of Red Bog, Kildare SAC, Glenasmole Valley SAC, Wicklow Mountains SPA and Poulaphouca Reservoir SPA.
- 1.3. The Poulaphouca Reservoir SPA is hydrologically connected to the Application Site. As no connectivity (pathway for impacts) exists between the Application Site and the remaining four Natura 2000 designated sites within the study area, these have been 'scoped out' from further assessment.
- 1.4. Given the nature and design of the Proposed Development, it is considered that any potential impacts on the qualifying features of any Natura 2000 site will be **Negligible**. Therefore, **no likely significant effect** is foreseen upon any Natura 2000 site as a result of the proposals, either alone or in combination with any other development.
- 1.5. It is therefore considered that the next stage (Stage 2; Natura Impact Statement) of the Appropriate Assessment is not required.



INTRODUCTION

Background

- 1.1. Neo Environmental Ltd has been appointed by Threecastles Solar Limited (the "Applicant") to undertake an Appropriate Assessment for the development of grid connection infrastructure to connect the approved Threecastles Solar Farm ("Consented Development") (PA Ref: 21/1237 and PA Ref: 17/908) to the existing Blessington 38kV ESB Substation comprising the laying of underground cables ("UGC") and associated infrastructure, running through the townlands of Threecastles, Crosscoolharbour, Santryhill, Edmonstown, Blessington, Co. Wicklow.
- 1.2. The proposed grid route is shown in **Volume 2**.

Development Description

- 1.3. The proposed cable route is set out in graphic form on the attached plans (Figures 1 -4: of Volume 2) prepared by Neo Environmental Ltd. The Proposed Development will consist of the construction of an underground medium voltage grid connection cable from the consented Threecastles Solar Farm to the Blessington 38kV Substation in County Wicklow through the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks. The construction phase takes place in line with the following criteria:
 - The proposed grid connection is circa c.3.62km in length (with the majority of it on public road) and is to be installed along private agricultural land and public roads with the construction carried out in sections of no more than 100m at any one time. A new 100m section of works will only be excavated once the majority of reinstatement has been completed on the previous section, ensuring only one section is fully opened at any one time.
 - Joint bays will be placed at regular intervals between sections of ducts to allow the sections of cables to be connected together prior to the reinstatement of the road.
 - The final c. 300m of the proposed cable route will within private agricultural land before connecting to the ESB Blessington Substation.
 - The base of the excavated trench will be lined with sand bedding to be imported to site
 from a local licensed supplier. 125mm diameter high-density polyethylene (HDPE) cable
 ducting will be placed into the prepared trench, which will be inspected and backfilled.



Site Description

- 1.4. The Proposed Development consists of grid connection infrastructure to connect the approved Threecastles Solar Farm (PA Ref: 21/1237 and PA Ref: 17/908) to the existing Blessington 38kV ESB Substation, comprising the laying of underground cables and associated infrastructure.
- 1.5. The Application site will be location in the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks Co. Wicklow
- 1.6. Wicklow County Council has previously acknowledged a Section 5 for the 20kV grid route of the solar farm development (Exemption Ref 70/19). This was provided 9th October 2019. Following discussions with ESB Networks, changes to the grid route are required and therefore this subsequent submission (Please see Appendix A of Covering Statement for further details).



Statement of Authority

- 1.7. The assessment has been managed by an ecologist registered with the Chartered Institute of Ecology and Environmental Management ("CIEEM"). All work has been carried out in line with the relevant professional guidance: CIEEM's Guidelines for Report Writing¹, the Environment, Heritage and Local Government's Guidance on Appropriate Assessments² and the European Commission Notice "Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC"³.
- 1.8. Dara Dunlop is a Senior Ecologist at Neo Environmental. She is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) with circa 5 years' experience in the ecology sector. This includes working for an ecological consultancy, undertaking a range of protected species surveys and extended phase 1 habitat surveys for residential schemes and land management of designated sites. Dara has authored a number of reports for various developments including Ecological Impact Assessments and Protected Species Reports.

¹ CIEEM, 2017 Guidelines for Report Writing Available at www.cieem.net

² Environment, Heritage and Local Government, 2009 Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities. Available at www npws.ie

³ Managing Natura 2000 Sites, The provisions of Article 6 of the Habitats Directive 92/43/EEC (European Commission, 2018) Available at.

https://ec.europa eu/environment/nature/natura2000/management/docs/art6/Provisions_Art__nov_2018_endocx.pdf

LEGISLATION

Requirement for Appropriate Assessment

- 1.10. The requirement for Appropriate Assessment of plans or projects originates from Article 6 (3) and (4) of European Union ("EU") Habitats Directive. This is implemented in Ireland through Part XAB of the Planning and Development Acts 2000 2023 where Section 177V sets out the requirements for AA and the European Communities (Birds and Natural Habitats) Regulations 2011 2021 (as amended).
- 1.11. The wording of Article 6 (3) of the Directive is as follows:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

- 1.12. The aim of Stage 1, 'Screening' is to determine whether or not Stage 2 of the Appropriate Assessment is required, therefore, to determine whether the remainder of the proposed works is likely to have a significant, negative effect upon any European Site. This is done by considering the nature, type, and scale of works; its zone of influence, and the conservation objectives of any European Sites within that zone of influence which may be affected.
- 1.13. As outlined in the European Commission document 'Assessment of plans and projects significantly affecting Natura 2000 sites'⁴, any project that is not directly connected with or necessary to the management of a Natura 2000 (or European) site, but likely to have a significant effect upon it, either individually or cumulatively will be subject to Appropriate Assessment.
- 1.14. Where significant effects are uncertain or unknown at the screening stage an AA will be required, due to the need to apply the precautionary principle. Conversely, if a project will have effects on a site, but these effects will clearly not affect or undermine those conservation objectives, it is not considered that it will have a significant effect on the site concerned. In addition, the Court of Justice of the European Union has now confirmed in its determination in Eco Advocacy on 15 June 2023 that the lawful interpretation of Article 6(3) of the Habitats Directive is that mitigation measures may be taken into account at AA screening stage and

⁴ European Commission (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 Available at http://ec europa eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en pdf



- may be used to avoid or reduce likely significant effects of a project, if they are not being applied exclusively for the benefit of a European Site.
- 1.15. Where adverse effects are identified, mitigation measures can now be proposed that would avoid reduce or remedy any such negative effects and a project should then be amended accordingly, thereby avoiding the significant effects which would otherwise occur. An AA screening assessment also considers 'in combination' effects with other plans or projects on European sites
- 1.16. If the AA screening assessment cannot exclude significant effects either alone or in combination with other plans or projects, then the process must proceed to Stage 2 appropriate assessment.

Guidance

- 1.17. The following guidance has been collated and reviewed to inform the AA screening assessment within this report, whilst not all guidance holds direct relevance to AA screening assessments, many of the guiding principles set out are applicable and beneficial to consider when completing reporting to a best practice standard:
 - Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities, 2009 (as amended)⁵;
 - Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10⁶ & PSSP 2/10, 2008⁷;
 - European Commission. 2021. Assessment of plans and projects in relation to Natura 2000 sites Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC⁸
 - CIEEM, Guidelines for Ecological Report Writing, 2017⁹.
 - National Parks & Wildlife Service (NPWS), The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments, Unpublished Report, 2013¹⁰.
 - Court of Justice of European Union's determination in Eco Advocacy, 2023¹¹



⁵ Available at. https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf

⁶ Available at https://www.npws.ie/sites/default/files/general/Circular%20NPW1-10%20%26%20PSSP2-10%20Final.pdf

⁷ Available at: https://www.npws.ie/sites/default/files/general/circular-npws-02-08.pdf

 $^{{}^8\}text{Available at} \quad \underline{\text{https://ec.europa eu/environment/nature/natura2000/management/pdf/methodological-guidance 2021-10/EN pdf}$

⁹ CIEEM (2017) Guidelines for Ecological Report Writing

¹⁰ Available at https://www.npws.ie/sites/default/files/publications/pdf/Article 17 Print Vol 3 report species v1 1 0 pdf

¹¹ Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62021CJ0721

ASSESSMENT METHODOLOGY

Stages of Appropriate Assessment

- 1.18. The Appropriate Assessment process comprises of four stages in order to identify whether proposals have the potential to significantly impact upon Natura 2000 designations. The stages are as follows:
 - Stage 1 Screening: To determine the likelihood of significant impacts;
 - Stage 2 Natura Impact Statement: To assess the impact of proposals on the integrity of the Natura 2000 site, considering the conservation objectives of the site and its ecological structure and function;
 - Stage 3 Assessment of alternatives: Where significant impacts are anticipated despite mitigation measures, the proposal should progress to Stage 3 or no longer proceed;
 - Stage 4 Assessment where no alternative exists and where adverse impacts remain:

 The final stage involves examining whether there are imperative reasons of overriding public interest for allowing the proposal to adversely impact upon a Natura 2000 site.

Screening for Appropriate Assessment

- 1 19. The Screening of Appropriate Assessment process comprises of four stages in order to identify whether proposals are likely to significantly affect European site designations. The stages are as follows:
 - 1. **Describe**: Description of the Proposed Development (or in this case remainder of the proposed works);
 - 2. Identify: Assess relevant European Sites for qualifying interests, conservation objectives potential connectivity, and potential effects;
 - 3. Assess: Highlight likely significant direct and indirect effects on the conservation objectives of European Sites in relation to the project singularly, and in combination with other plans and projects;
 - **4. Screening Determination**: The final stage involves examining whether the conservation objectives of the site(s) could be undermined in absence of mitigation as a result of the project.



Study Zone Identification

- 1.20. The 'Appropriate Assessment Screening for Development Management' states that the AA Screening should include the following:
 - "Any European sites within or adjacent to the plan or project area; and
 - Any European sites identified by the Source-Pathway-Receptor model."
- 1.21. It is considered that the Zone of Influence (ZOI) for the European designated sites and their qualifying features will be determined using the Source-Pathway-Receptor ("SPR") model. Given the habitats present and scale of the remainder of the proposed works, there are no pathways or receptors with influence that extends beyond 15km.

Desk Study

- 1.22. Sources of material that were consulted as part of the desk study for the purposes of the assessment are as follows:
 - Data from a site walkover survey conducted on the 26th June 2023, by Dara Dunlop;
 - National Parks & Wildlife Service ("NPWS") natural heritage database for European sites within the ZOI of the Application Site¹³;
 - NPWS site synopses, Natura 2000 Data Form and conservation objectives relating to each site and aerial images;
 - Environmental Protection Agency ("EPA") maps¹⁴ of river catchments, sub-catchments and flow directions.

AA screening Assessment Process

- 1.23. The assessment process involves:
 - Identifying and characterising European Sites identified by the Source-Pathway-Receptor model and their qualifying features and addressing whether any of these designated sites have any connectivity with the Application Site. If any site is found to



¹² Office of the Planning Regulator, 2021. OPR Practice Note PN01: Appropriate Assessment Screening for Development Management Available at: https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf

National Parks & Wildlife Service Designations Viewer. Available at https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba

¹⁴ Environmental Protection Agency (EPA) maps available at https://gis.epa.ie/EPAMaps/

have no connectivity, then these designated sites will be 'scoped out' and not considered further;

- Assess whether there will be any significant effects on any of the European sites, in regard to an extension of duration of construction for residual unbuilt portions of the development. Qualifying features of a European site that lie outside of the ZOI, not noted as ex-situ specimen, and not subject to any effects from the remainder of the proposed works then these will be 'scoped out' (not considered further);
- Identify any significant adverse effects on the European sites in view of their conservation objectives, best scientific knowledge, and taking into account and applying standard mitigation, and integral design measures resulting from a life extension in respect of the residual unbuilt development 'in combination' with any other relevant plans and projects with an overlapping ZOI with the remainder of the proposed works that encompasses the same European Site(s); and
- Identify the need for the Appropriate Assessment process to move to Stage 2: 'Natura Impact Statement, or if it can be excluded, that the remainder of the proposed works (either individually or in combination with other plans or projects) will have a significant effect on a European site.



BASELINE

Ecological Site Visit

- 1.24. An ecological site walkover was carried out on the 26th June 2023 by Dara Dunlop BSc (Hons). No evidence of protected or notable species associated with connected Natura 2000 sites were observed.
- 1.25. The following habitats were observed within the Ecological Survey Area (ESA):
 - Buildings and Artificial Surfaces (BL3)
 - Recolonising Bare Ground (ED3)
 - Improved Agricultural Grassland (GA1)
 - Amenity Grassland (GA2)
 - Dry Calcareous and Neural Grassland (GS1)
 - (Mixed) Broadleaved/Conifer Woodland (WD2)
 - Scrub (WS1)
 - Drainage Ditches (FW1)
- 1.26. The dominant habitat type under the footprint of the development is Buildings and Artificial Surfaces (BL3). The grid route starts within the footprint of the consented solar farm, under Improved Agricultural Grassland (GA1). Patches of woodland (Mixed) Broadleaved/Conifer Woodland (WD2) are within 50m of the proposed grid route. From the consented solar farm, the grid route follows public roads, before connecting to the Blessington 38kV ESB Substation via land adjacent to a quarry. The majority of this section of the grid route is on Recolonising Bare Ground (ED3).

Identification of Natura 2000 Sites

1.27. In accordance with National Parks & Wildlife Service (NPWS) guidance¹⁵, all Natura 2000 sites located within 15km of the Application Site (**Figure 1**, **Appendix A**) have been identified. The potential impacts associated with the Proposed Development have been identified and assessed to determine if there is potential for the Proposed Development to affect the integrity of a Natura 2000 designated site. This has been done by considering the conservation objectives of Natura 2000 sites and their ecological structure and function. Those Natura 2000

¹⁵ Environment, Heritage and Local Government (2009) Appropriate Assessment of Plan and Projects in Ireland Available at: https://www.npws.ie/sites/default/files/publications/pdf/NPWS 2009 AA Guidance pdf



- sites which will not be significantly impacted upon (due to lack of connectivity) will be ruled out of any further assessment.
- 1.28. These impacts can depend more on the nature of impacts, sensitivity of receptors and causal linkage, rather than actual distances. The assessment below considers connectivity, either ecological or hydrological, that may exist between the Proposed Development and the designated sites.
- 1.29. There are three Special Areas of Conservation (SACs) and two Special Protection Area (SPAs) located within 15km of the Application Site. The designated features of each have been outlined within **Table 1-1** below.
- 1.30. **Figure 1**, **Appendix A** of this report details the location of this site in relation to the Proposed Development.

Table 1-1: Natura 2000 sites within 15km

Site Code SAC	Site Name	Qualifying Features	Distance (km), Direction	Connectivity with the Proposed Development Site
000397	Red Bog, Kildare SAC	Transition mires and quaking bogs [7140]	1.4km Northwest	None
002122	Wicklow Mountains SAC	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060]	2.3km Southeast	None



		Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain		
		areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130]		
		Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]		
		Calcareous rocky slopes with <i>chasmophytic</i> vegetation [8210]		
		Siliceous rocky slopes with <i>chasmophytic</i> vegetation [8220]		
		Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]		
		Lutra lutra (Otter) [1355]		
001209	Glenasmole Valley SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6qgis210]	10.0km Northeast	None
	·	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]		



		Petrifying springs with tufa formation (Cratoneurion) [7220]		
SPA				
004063	Poulaphouca Reservoir SPA	Greylag Goose (Anser anser) [A043] Lesser Black-backed Gull (Larus fuscus) [A183]	0.1km Southeast	Limited hydrological connectivity
004040	Wicklow Mountains SPA	Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103]	5.3km Southeast	None

- 1.31. The cable route will cross two significant watercourse crossings (Goldenhill Stream and its tributary; Oldpaddocks Stream) and one drainage ditch. All three of which run underneath the L4365 road via bridge/culvert crossings. Cable works are proposed to be confined to the L4365 road. Both streams and drainage ditch discharge into the Poulaphouca Reservoir SPA, therefore it is considered that there is hydrological connectivity. This site will be assessed in further detail below.
- 1.32. There is no hydrological connectivity between the Red Bog, Kildare SAC, Wicklow Mountains SAC and Glenasmole Valley SAC and therefore no pathway for the contamination of qualifying habitats.
- 1.33. The Red Bog, Kildare SAC is designated for terrestrial habitats and is 1.41km northwest of the Application Site, therefore, no connectivity exists to the Application Site. The Glenasmole Valley SAC is designated for terrestrial habitats and non-mobile, terrestrial species of plant. This SAC is approximately 10.03km northeast of the Application Site, therefore, has no connectivity to the Application.
- 1.34. Wicklow Mountains SAC is designated for terrestrial habitats and otter. Habitats identified on site during the ecological walkover were considered to be unsuitable for otter. The Goldenhill Stream and the Oldpaddocks Stream are culverted underneath the L4365 road, there will be no direct loss of otter habitat.
- 1.35. The Wicklow Mountains SPA has no connectivity to the Application Site, this site is of special conservation interest to Merlin and Peregrine. Up to 9 pairs of breeding Merlin are found, usually nesting in old crow nests in conifer plantations in the Wicklow Mountains. Breeding Peregrine are associated with the cliffs and crags in the Mountains¹⁶. The habitats which these



¹⁶ https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004040 pdf

- species are associated with will not be affected by the Proposed Development and are not found within the Application Site.
- 1.36. One site, the Poulaphouca Reservoir SPA has limited connectivity to the Application site. As no connectivity (pathway for impacts) exists between the Application Site and the remaining three Natura 2000 designated sites within the study area, these have been 'scoped out' from further assessment.



IMPACT ASSESSMENT

- 1.38. This section discusses and evaluates the likely impacts of the Proposed Development affecting the Natura 2000 sites within the Zone of Influence (ZoI) of the Application Site (i.e. where there is some ecological, ornithological or hydrological connection between the Application Site and the Natura 2000 site).
- 1.39. As outlined within **Table 1-1** above, the Poulaphouca Reservoir SPA has hydrological connectivity with the Application Site. This hydrological connectivity offers a pathway for impacts through the movement of contaminated waters.
- 1.40. Potential impacts for ecological features associated with a Natura 2000 designated site may occur from the contamination of surface and/or ground waters during construction. Those features (species) which are ecologically connected to the Application Site, and are mobile, may be impacted through disturbance as well as loss of habitat through contamination of surface waters.
- 1.41. Aquatic systems and the species/habitats which are dependent on these systems are sensitive to pollution and contamination of surface waters. Pollution can result from any of the following entering a body of surface or groundwater:
 - Poisonous, noxious or polluting matter;
 - Waste matter (including silt, cement, concrete, oil, petroleum spirit, chemicals, solvents, sewage and other polluting matter);
 - Other harmful activities detrimentally affecting the status of a waterbody.
- 1.42. The status of a waterbody can be affected not only by chemical pollution, but also by activities directly or indirectly affecting ecology, including changes in physio-chemical parameters such as temperature and turbidity or physical modification to the hydrology of a waterbody.
- 1.43. **Table 1-2** below details common water pollutants and their effect on the aquatic environment and standard Best Practice Pollution Measures. This table is based on Ciria guidance¹⁷.



 $^{^{}m 17}$ Ciria (2015) Environmental Good Practice on Site guide, fourth edition

Table 1-2: Common water pollutants and their effects on the aquatic environment and standard prevention measures

Potential polluting activity within Proposed Development	Common Water Pollutants	Adverse effect on aquatic environment
Landworks involving top soil removal and excavation	Silt.	Reduces water quality, clogs fish gills, covers aquatic plants, impacts aquatic invertebrates, leads to a reduction in prey for species and leads to degradation of habitat.
Landworks involving top soil removal and excavation	Bentonite (very fine sılt)	Reduces water quality, clogs fish gills, covers aquatic plants, impacts aquatic invertebrates, leads to a reduction in prey for species and leads to degradation of habitat
Construction & operational activities including piling of solar panels	Cement or concrete wash water (highly alkaline)	Changes the chemical balance, is toxic to fish and other wildlife. This can lead to direct impacts for aquatic species (including otter), or indirect through loss of prey resources
Cleaning including wheel washing and boot washing stations. Cleaning of construction vehicles	Detergent	Removed dissolved oxygen, can be toxic to fish and other wildlife present within the aquatic environment
Oil and fuel leaks from construction vehicles and refuelling stations.	Hydrocarbons (e.g. oil, diesel)	Suffocates aquatic life, damaging to the wildlife (e.g. birds), and to water supplies including industrial abstractions
Leaks from restroom facilities	Sewage	Reduces water quality, is toxic to aquatic wildlife, and damages water supplies

1.44. Operations and activities that have the potential to impact on the water environment will be regularly monitored throughout the construction of the Proposed Development. This is to ensure compliance with planning conditions and environmental regulations.



1.45. The Site Manager is responsible for ensuring that all monitoring is carried out according to the Environmental Monitoring Programme, summarised in **Table 1-3**

Table 1-3: Environmental Monitoring

Environmental Aspect	Monitoring Location	Monitoring Frequency	Monitoring Arrangements
Site housekeeping	Entire site	Daily	Visual inspection
Surface water courses	All water courses	After periods of rain Weekly, if no rain	Visual inspection
Fuels and chemicals — appropriate storage	Entire site	Daily	Visual inspection

1.46. These records and results will be maintained by the Site Manager and will be stored on site during the construction phase.

Poulaphouca Reservoir SPA

- 1.47. The Poulaphouca Reservoir SPA is designated for its importance for the following Annex II species:
 - Greylag Goose (Anser anser)
 - Lesser Black-backed Gull (Larus fuscus)

Conservation Objectives for Poulaphouca Reservoir SPA

- 1.48. The overall objective is to maintain or restore the favourable conservation condition of the bird species which the SPA has been selected (please refer to **Table 1-1**).
- 1.49. As outlined in the Conservation Objectives (2021)¹⁸ document:

'Favourable conservation status of a habitat is achieved when:

- Its natural range, and area 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.

¹⁸ NPWS (2021) Conservation objectives for Poulaphouca Reservoir SPA [004063]. Generic Version 8.0 Department of Housing, Local Government and Heritage



The favourable conservation status of a species is achieved 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.'

Character of the Poulaphouca Reservoir SPA

1.50. **Table 1-4** below, identifies the percentage of the extent of various habitat types within the Poulaphouca Reservoir SPA.

Table 1-4 Habitats within the Poulaphouca Reservoir SPA

Habitat Code	Habitats of the Poulaphouca Reservoir SPA	Extent (%)
N10	Humid grassland, Mesophile grassland	1.0
N07	Bog, marshes, water fringed vegetation, fens	1.0
N06	Inland water bodies (Standing water, running water)	98 0

Threats and Pressures on the Poulaphouca Reservoir SPA

1.51. The Natura 2000 form¹⁹ for the Poulaphouca Reservoir SPA outline the following pressures and activities impacting the SPA:

Table 1-5: Threats, pressures and activities impacting the Poulaphouca Reservoir SPA.

Code	Threats and Pressures	Rank	+/-	Inside/Outside
G01.01	Nautical sports	М	+/-	

¹⁹ Available at: https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF002299 pdf



B01	Forest planting on open ground	Н	+/-	0
D01.05	Bridge, viaduct	Н	+/-	1
F03.01	Hunting	L	+/-	I
F02.03	Leisure fishing	L	+/-	I

Assessment of Likely Impacts Affecting the Poulaphouca Reservoir SPA

- 1.52. The Poulaphouca Reservoir SPA is located approximately 0.14km southeast of the Application Site. It has been designated for the following species of the E.U. Habitats Directive: Graylag Goose and Lesser Black-backed Gull, as detailed within **Table 1-1** above. Hydrological and ornithological connectivity exists between this SPA and the Application Site.
- 1.53. Given that the Application Site is hydrologically connected with the SPA, there is potential for habitats within the SPA associated with supporting the ornithological qualifying species to be degraded if contamination of the aquatic environment were to occur.
- 1.54. On the 15 June 2023 in case C-721/21 the Irish High Court ruled that elements of a project design that have not been included with the aim of reducing negative effects to Natura 2000 sites, can be incorporated into the Appropriate Assessment screening report where these elements have the added benefit of reducing harm to Natura 2000 sites.
- 1.55. Measures have been included within the Proposed Development Design to prevent pollution entering the aquatic environment. As outlined in the accompanying **Technical Appendix 1:**Preliminary Construction Traffic Management Plan:

'At watercourse crossings, the contractor will be required to adhere to the environmental control measures outlined within the Section 5 and accompanying reports, the detailed Construction Environmental Management Plan (CEMP) to be prepared prior to the commencement of construction, and best practice construction methodologies.'

- 1.56. Environmental control measures outlined with the Outline Construction Environmental Management Plan include the following;
 - Where the cable route intersects any small culverts or bridges, the culvert or bridges
 will remain in place and the ducting will be installed above it and provide minimum
 separation distances in accordance with ESB and Irish Water specifications.



- The proposed development does not involve the draining or modifying of any of the minor or major tributary watercourses.
- No installation will take place during extreme weather warnings. No construction personnel, operation or maintenance personnel will be permitted to carry out any works during extreme flood events.
- No more than a 100m section of trench will be opened at any one time. The second 100m section will only be excavated once the majority of reinstatement has been completed on the first.
- 50m buffer to stockpiled soils and materials.
- During windy conditions, any dust generating activities will be avoided or minimised,
 where practical.
- Any soil stockpiles will be covered when left for extended periods of time.
- Driving practices which minimise dust generation will be adopted
- Loads into and out of the site will be covered where required.
- Drip trays to be used for all refuelling activities.
- All plant and equipment will utilise biodegradable hydraulic oil.
- Spill kits will be readily available to all personnel. The spill kits will be of an appropriate size and type for the materials held on site.
- All other chemicals will be stored within a storage contained with an accompanying COSHH Datasheet.
- Wastewater from the temporary staff toilets and washing facilities will be discharged to sealed containment systems and disposed via licensed contractors.
- All staff on site will be made aware of the pollution prevention measures being implemented throughout the construction and decommissioning phases using appropriate toolbox talks and the site induction.
- 1.57. The majority of the proposed grid connection route will be installed along public roads with a relatively small section of improved agricultural grassland. These habitats are not conducive towards supporting the foraging and nesting requirements of the Graylag Goose and Lesser Black-backed Gull.



- 1.58. No significant loss of suitable habitat (direct or indirect) is anticipated for these species through the construction of the Proposed Development
- 1.59. Given the level of suitable habitat within the wider landscape, it is considered that the potential noise disturbance from the construction phase will not be significant for qualifying species associated with the SPA. It is considered that the Proposed Development will not result in significant adverse effects for these qualifying bird species of the SPA.
- 1.60. Therefore, with the implementation of best practice, and mitigation measures outlined in the OCEMP and below, no significant adverse effects are predicted for the designated features of the Poulaphouca Reservoir SPA.
- 1.61. The Proposed Development will not result in significant adverse effects to the integrity of the Poulaphouca Reservoir SPA.

Summary of Potential Impacts on Natura Sites within 15km

1.62. From the findings of the above assessment, it is considered that with the implementation of best practice and the specific mitigation measures recommended, the Proposed Development will not adversely affect the integrity of the Natura 2000 sites within the study area.



CUMULATIVE ASSESSMENT

- 1.63. As well as singular effects, cumulative effects also need to be considered. Article 6 of the EU Habitats Directive and Regulation 15 of the European Communities (Natural Habitats) Regulations state that any plan or project that may significantly affect a Natura 2000 site, either alone or in combination with other plans or projects, should be the subject of an Appropriate Assessment.
- 1.64. Cumulative impacts can be an issue when multiple proposals have a small impact on Natura 2000 sites. If other proposals have a small impact, the combined result can have a significant impact on the Natura site.
- 1.65. The European Commission Habitats Directive and the Habitats Regulations 2011 require that the impacts on European sites be assessed for the plan or project in question and in the presence of other plans and projects that could affect the same Natura 2000 sites.
- 1.66 This Appropriate Assessment has identified other plans and projects that could act in combination with the Proposed Development and its associated future elements, to identify if they pose likely significant effects on European sites
- 1.67 It concludes that if these other Plans and Projects have undergone an appropriate assessment themselves and have either been adopted or consented following an AA then it cannot pose likely significant adverse effects on European sites.

Plans

1.68. A review of the following plans was undertaken:

National Planning Framework 2040

- 1.69. The National Planning Framework 2040 is a high-level, national vision and provides the strategic framework and principles to manage future population and economic growth in Ireland over the next 20 years. It informs the parameters for the preparation of Regional Spatial and Economic Strategies (RSESs) by each of the three Regional Assemblies, established under the Local Government Reform Act 2014
- 1.70. In order to comply with the requirements of Article 6(3) of the EU Habitats Directive, an Appropriate Assessment screening was undertaken at an early stage in the drafting of the National Planning Framework.
- 1.71. Adopting the precautionary principle, it was concluded that a Natura Impact Statement (NIS) should be prepared. An NIS was prepared by RPS on behalf of the Minister for Housing, Planning and Local Government. The Natura Impact Report (NIR) considered the potential for the NPF to adversely affect the integrity of any Natura 2000 site(s) with regard to their qualifying interests, associated conservation status, the structure/function of the site(s) and



- the overall site(s) integrity. This was done in a two-stage process, initially assessing the draft NPF and subsequently assessing the changes made post-consultation for the NPF.
- 1.72. The Minster of Housing, Planning and Local Government, having considered the AA and its conclusions, determined that:
 - "the adoption and publication of the NPF as a replacement of the National Spatial Strategy for the purposes of section 2 of the Planning Development Act 2000 will not individually or in combination with any other plan or project adversely affect the integrity of any European Site (as defined)."
- 1.73. Thus, the in-combination impacts from the National Planning Framework, with the Proposed Development, are not predicted to result in any Likely Significant Effects to any European site(s).

Regional Spatial and Economic Strategy for the Eastern and Midland Region

- 1.74. In order to comply with the requirements of Article 6 (3) of the EU Habitats Directive and Part XAB of the Planning and Development Act 2000 (as amended), the process of Screening for Appropriate Assessment (AA) was undertaken at an early stage in the drafting of the Regional Spatial and Economic Strategy (RSES).
- 1.75. The AA Screening undertaken by ecologists at RPS on behalf of the Eastern and Midland Regional Assembly, assessed whether the RSES was likely to have significant effects on any European Sites within the Natura 2000 network, either alone or in combination with other plans and projects.
- 1.76. The screening concluded that an Appropriate Assessment of the RSES was required, as the Plan is not directly connected with or necessary to the management of the sites as European sites and as it cannot be excluded, on the basis of objective information, that the Plan, individually or in combination with other plans or projects, would have a significant effect on a European site.
- 1.77. Therefore, adopting the precautionary principle, it was concluded that a NIR should be prepared. The NIR (prepared by RPS on behalf of the Eastern and Midland Regional Assembly) considered the potential for the Regional Spatial and Economic Strategy to adversely affect the integrity of any Natura 2000 site(s), with regard to their qualifying interests, associated conservation status, the structure/function of the site(s) and the overall site(s) integrity.
- 1.78. The Assembly determined that pursuant to Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Act 2000-2018, that the adoption and publication of the RSES as a replacement for the "Regional Planning Guidelines" for the purposes of Section 24 (4) of the Planning and Development Act 2000 (as amended) would not either individually or in combination with any other plan or project adversely affect the integrity of any European Site.



Wicklow County Development Plan (2023-2028)

- 1.79. A Natura Impact Report was undertaken for the draft 2023-2028 plan, which proposed amendments to the plan. Appropriate Assessment was the carried out for the final Wicklow County Development Plan 2023-2028, and a Natura Impact Statement was undertaken for the Proposed Material Alterations. It was determined that with the incorporation of proposed mitigation measures, the development plan would not adversely affect the integrity of any European Site.
- 1.80. As the above plans are not predicted to result in any significant effects to any Natura 2000 sites, and there will be no effects on Natura 2000 sites from the Proposed Development, it has been concluded from the above assessments that there will be no in combination effect from the reviewed plans with the Proposed Development and associated future elements

Projects

- 1.81. A search of Wicklow and Kildare County Council planning portal was undertaken to identify key planning applications (projects) beyond the vicinity of Proposed Development.
- 1.82. There are a number of smaller projects in the wider area. It is not considered that these projects would result in significant cumulative effects on the Natura 2000 network. It can be concluded that if a Project has been adopted following an Appropriate Assessment, then it cannot pose likely significant adverse effects on any European sites.
- 1.83. The search included key developments preceding the date of issue of this report and excluded retention applications and incomplete, withdrawn or refused applications. The relevant projects with potential for in-combination likely significant effects on European sites are detailed in Table 1-7.

Table 1-7: Key Planning Applications within 5km of the Proposed Development

Planning Reference	Project Type	Distance and Direction	Planning Status	Date Granted
17908	Solar PV panel array comprising photovoltaic panels on ground mounted frames within a site area of 21.04 ha, 8 no single storey MV substations, 1 no single storey DSO substation, 1 no single storey customer substation with 1 no	0.11km northeast	Permission, conditional	11/05/2018



			1	
	communications pole attached, 1 no single			
	storey spares building,			
	_			
	,			
	fencing and access gates,			
	CCTV, associated			
	electrical cabling and			
	ducting, upgraded and			
	new access tracks and all			
	associated ancillary			
	development and			
	landscaping works. The			
	planning application			
	ıncludes a Natura İmpact			
	Statement			
	Amend the design of the			
	approved development			
	(Planning Reference			
	17/908) which comprises			
	consent for a Solar PV			
	Energy Development.			
	Proposed amendments			
	include (1) Project lifetime			
	proposed to be extended			
	from 30 years to 35 years			
	(2) Substation to increase			
	in size (3)Change in height			
24/4227	and angle of solar panels	0.11km	Permission,	4 4_ 4 .
21/1237	(4) Transformer	northeast	conditional	07/12/2021
	containers to increase in			
	size (5) Removal of the			
	customer substation (6)			
	Deer fencing to increase			
	in size (7) MW output to			
	be increased from 10.8 to			
	15MW to align with			
	existing grid connection			
	offer (8) Slight alteration			
	to the access tracks and			
	(9) Number of CCTV			
	cameras to reduce			



1.84. The majority of planning applications within the area are small residential or agricultural developments. In regard to solar related developments in planning, there is one proposed solar farm within the 5km study are of the Application Site. The solar farm was consented under Planning Application 17908, and this permission was later amended under Planning Reference 21/1237.

- 1.85. Wicklow County Council completed a Natura Impact Statement as part of planning application 17908 and it concluded that by following mitigation measures (best practice construction measures) there will be no significant effects of the integrity of any Natura 2000 site. Precautionary mitigation measures are required for the qualifying features of the Poulaphouca Reservoir SPA and Wicklow Mountains SAC.
- 1.86. Integral design measures have been included for water pollutants which prevents impact upon qualifying features of the Poulaphouca Reservoir SPA.
- 1.87. It has been concluded that the construction of the grid route will not have any significant direct or indirect cumulative impact on any European sites and would therefore not give rise to any likely significant effects on the relevant European Sites. This is due to the nature of the proposed works, and the ecological conclusions reached in granting each development relevant to this cumulative search. No likely significant cumulative effects on the Poulaphouca Reservoir SPA are therefore predicted in combination with other proposed developments.
- 1.88. Having assessed all aspects of the development project, it has been concluded that the Proposed Development will not have any significant direct or indirect cumulative impact on any Natura 2000 sites. This is due to the nature of the development, and the ecological conclusions reached in granting each cumulative development. No likely significant cumulative effects on the Poulaphouca Reservoir SPA and Wicklow Mountains are therefore predicted in combination with other proposed developments.



CONCLUSION

- 1.89. The Application Site does not occur within any Natura 2000 sites. Within the 15km zone of influence surrounding the Application Site there are three Special Areas of Conservation (SAC) and two Special Protection Areas (SPA).
- 1.90. The Proposed Development at Threecastles, Co. Wicklow was screened for potential significant adverse impacts upon Natura 2000 sites within 15km of the site boundary. There are five Natura 2000 Sites located within 15km of the Application Site, comprising of Red Bog, Kildare SAC, Glenasmole Valley SAC, Wicklow Mountains SAC, Wicklow Mountains SPA and Poulaphouca Reservoir SPA.
- 1.91. One site, the Poulaphouca Reservoir SPA has limited connectivity to the Application site. As no connectivity (pathway for impacts) exists between the Application Site and the remaining four Natura 2000 designated sites within the study area, these have been 'scoped out' from further assessment.
- 1.92. It is concluded that given the nature of the Proposed Development, there is no likelihood of significant impacts upon any Natura 2000 designated site. Imbedded design principles preventing the contamination of waterways (and therefore the potential contamination of the Poulaphouca Reservoir SPA) are outlined within this report.
- 1.93. It should also be noted that the proposed Threecastles Solar Farm does not form part of this Proposed Development and therefore does not constitute part of this planning application. However, for completeness these have been assessed within the Cumulative Assessment section. No significant in-combination cumulative effects have been identified from this future development when considered in conjunction with the Proposed Development.
- 1.94. It is therefore considered that the next stage (Stage 2; Natura Impact Statement) of the Appropriate Assessment is not required.



APPENDICES

Appendix A

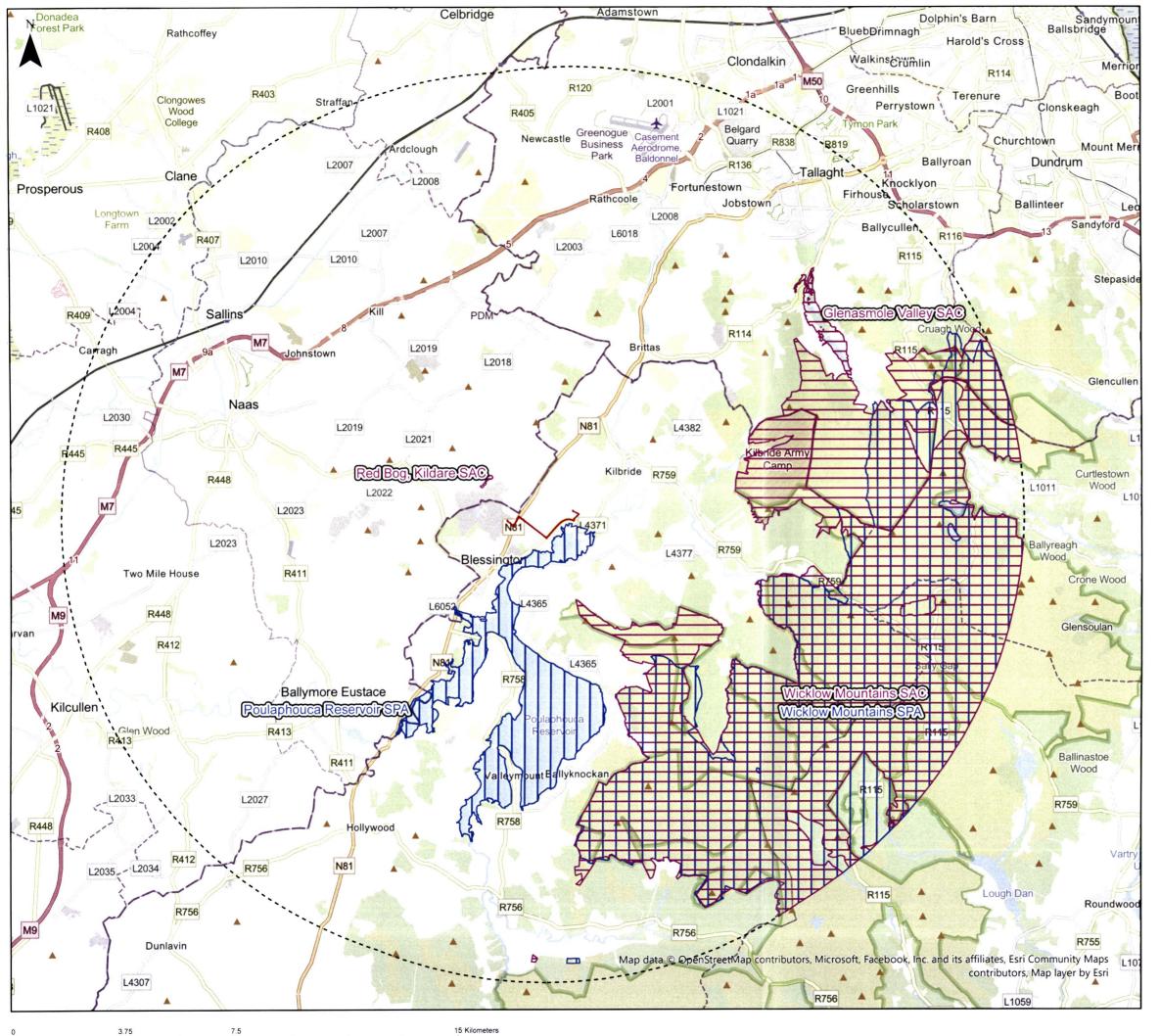
• Figure 1 – Natura 2000 Designated Sites



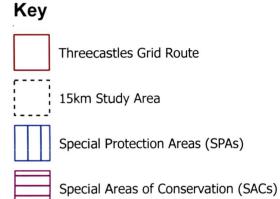


Appendix A

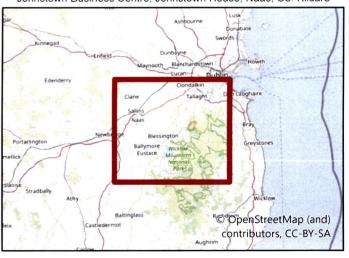




Threecastles Grid Route Natura 2000 Sites Figure 1



Neo Office Address: Johnstown Business Centre, Johnstown House, Naas, Co. Kildare



Date: 20/09/2023 Drawn By: Dara Dunlop Scale (A3): 1:125,000 Drawing No: NEO00879/041IA





Technical Appendix 1: Preliminary Construction Traffic Management Plan

Threecastles Solar Farm Grid Route Section 5 Application

06/10/2023



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	Name	Signature
Approved By	Paul Neary	,



1. INTRODUCTION

BACKGROUND

- 1.1. Neo Environmental Ltd has been appointed by Threecastles Solar Ltd (the "Applicant") to undertake a Preliminary Construction Traffic Management Plan (CTMP) for the development of grid connection infrastructure to connect the approved Threecastles Solar Farm ("Consented Solar Farm") (PA Ref: 17/908 and PA Ref: 21/1237) to the existing Blessington 38kV ESB Substation comprising the laying of underground cables ("UGC") and associated infrastructure..
- 1.2. The proposed grid route and substation is shown in Volume 2.

DEVELOPMENT DESCRIPTION

- 1.3. The proposed cable route will consist of the construction of an underground medium voltage grid connection cable from the consented Threecastles Solar Farm to the existing Blessington 38kV ESB Substation. The following provides a brief description of the construction to take place:
 - The proposed grid connection is circa 3.62km in length (with the majority on public roads) and is to be installed along private agricultural land and public roads with the construction carried out in sections of no more than 100m at any one time. A new 100m section of works will only be excavated once the majority of reinstatement has been completed on the previous section, ensuring only one section is fully opened at any one time.
 - Joint bays will be placed at regular intervals between sections of ducts to allow the sections of cables to be connected together prior to the reinstatement of the road
 - The final c. 300m of the proposed cable route will within private agricultural land before connecting to the ESB Blessington Substation.
 - The base of the excavated trench will be lined with sand bedding to be imported to site
 from a local licensed supplier. 125mm diameter high-density polyethylene (HDPE)
 cable ducting will be placed into the prepared trench, which will be inspected and
 backfilled.



SITE DESCRIPTION

- 1.4. The proposed cable route consists of grid connection infrastructure to connect the approved Threecastles Solar Farm (PA Ref: 21/1237 and 17/908) to the existing Blessington 38kV ESB Substation, comprising the laying of underground cables and associated infrastructure.
- 1.5. The Application site will be location in the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks Co. Wicklow.
- 1.6. Wicklow County Council has previously acknowledged a Section 5 for the 20kV grid route of the solar farm development (Exemption Ref 70/19). This was provided 9th October 2019. Following discussions with ESB Networks, changes to the grid route are required and therefore this subsequent submission (Please see Appendix A of Covering Statement for further details).

SCOPE OF THE ASSESSMENT

- 1.7. The aim of a CTMP is to put in place procedures to manage grid connection construction traffic effectively. It will outline measures to enhance the efficient transportation of construction materials and machinery whilst minimising delay and disruption to general traffic.
- 1.8. This CTMP will provide details of:
 - The Cable route identification and assessment;
 - Construction Traffic Management Plan; and
 - Typical details to be included in the final CTMP.
- 1.9. This report is supported by the following appendices:
 - Appendix 1A: Figures
 - Figure 1: Traffic Management General Arrangement Up to 60km/h
 - Figure 2: Traffic Management General Arrangement Up to 100km/h
 - Appendix 1B: Standard Specification for ESB MV/LV Network Ducting
 - Appendix 1C: SSWP Working on Roads



STATEMENT OF AUTHORITY

- 1.10. This Construction Traffic Management Plan has been produced by Michael McGhee and Tom Saddington of Neo Environmental. Having completed a civil engineering degree in 2012, Michael has worked on over 1GW of solar farm Construction Traffic Management Plans across the UK and Ireland, as well as more detailed transport statements for major developments.
- 1.11. Tom Saddington has an undergraduate degree in Bioengineering and graduated with an MSc in Environmental and Energy Engineering in January 2020. He worked on many Construction traffic Management Plans for numerous solar farms in Ireland and the UK.



GRID ROUTE IDENTIFICATION AND WORKS DESCRIPTION

2.1. This delivery route and subsequent CTMP is based upon information provided by the Applicant as well as a thorough review of the local and national roads in the vicinity of the proposed cable route.

GRID CONNECTION ROUTE

2.2. The proposed cable route will consist of approx. 3.62km of underground cable (UGC) which follows in a southern direction initially from the Blessington 38kV Substation, through private agriculture land followed by a short run of the UGC in the N81, the cable route follows the local road network (L8371 & L4365) until it meets the solar farm lands. The UGC route will utilise a proportional section of public road network. The UGC, where feasible is to be installed prominently within verges of this roadway where a clear boundary line exists. The final run of the cable route is entirely within the solar farm access tracks, which carries the UGC towards the Consented Solar Farm (PA Ref: 17/908) substation.

CONSTRUCTION WORKS

- 2.3. The following activities will be undertaken during the construction phase:
 - The Contractor, and their appointed Site Manager, will prepare a targeted Method Statement concisely outlining the construction methodology and incorporating all mitigation and control measures included within the Section 5 and accompanying reports;
 - All existing underground services shall be identified on site prior to the commencement of construction works;
 - The proposed grid connection is circa 3.623km in length (with the majority on public roads) and is to be installed along private agricultural land and public roads.
 - The excavated trench will be approximately 450mm in width and approximately 1225mm deep within the public highway and approximately 925mm deep within private lands.



- The base of the excavated trench will be lined with sand bedding to be imported to site
 from a local licensed supplier. The c.125mm diameter HDPE cable ducting will be
 placed into the prepared trench. It is anticipated that this work along the public road
 will be carried out on the carriageway and not the verge;
- At watercourse crossings, the contractor will be required to adhere to the
 environmental control measures outlined within the Section 5 and accompanying
 reports, the detailed Construction Environmental Management Plan (CEMP) to be
 prepared prior to the commencement of construction, and best practice construction
 methodologies;
- Where the cable route intersects any small culverts or bridges, the culvert or bridges
 will remain in place and the ducting will be installed above it and provide minimum
 separation distances in accordance with ESB and Irish Water specifications;
- The proposed cable route does not involve the draining or modifying of any of the minor or major tributary watercourses;
- No installation will take place during extreme weather warnings. No construction personnel, operation or maintenance personnel will be permitted to carry out any works during extreme flood events;
- No more than a 100m section of trench will be opened at any one time. The second 100m section will only be excavated once the majority of reinstatement has been completed on the first;
- The excavation, installation and reinstatement process will take an average of one day to complete a 100m section;
- Following the installation of ducting, pulling the cable will take approximately half a day between each joint bay; and
- Where required, grass will be reinstated by either seeding or by replacing with grass turf.
- 2.4. Appendix 2B shows the standard construction specification for grid connection ducting.



3. CONSTRUCTION TRAFFIC MANAGEMENT PLAN

- 3.1. Prior to the commencement of construction, a fully detailed Construction Traffic Management Plan (CTMP) will be prepared by the Contractor and submitted to Wicklow County Council for approval. The aim of a CTMP is to put in place procedures to manage grid connection construction traffic effectively. It will outline measures to enhance the efficient transportation of construction materials and machinery whilst minimising delay and disruption to general traffic.
- 3.2. A typical Construction Traffic Management Plan will:
 - Identify sensitive areas (e.g. schools, homes and local settlements);
 - Be aware of road restrictions (e.g. narrow roads, bridges with restrictions etc.);
 - Identify the location of suitable parking facilities for private cars and plant;
 - Ensure there are designated vehicular routes on site with speed restrictions;
 - Ensure safe access and egress from site;
 - Gain permissions for any required road closures, diversions etc. from the relevant bodies (N.B. none are expected as part of this grid connection route);
 - Consult with An Garda Síochána and relevant local authorities;
 - Schedule site deliveries outside of times of peak traffic volume;
 - Schedule deliveries with regard to drop-off and collection times of local national schools; and
 - Ensure erection of the required signage as per Chapter 8 of the Traffic Signs Manual.
- 3.3. Careful traffic management procedures will minimize the overall level of disruption experienced. Delays to traffic will be kept to a minimum and full use will be made of the available carriageway and verges.
- 3.4. The CTMP will make provision for safe access at all times to the works zone for all businesses in proximity to the works. Where access is affected, the contractor will engage with the affected business to resolve the issue, such as a temporary route or plan working hours to suit the business.
- 3.5. The CTMP will make provision for safe access at all times to private residences in proximity to the works. Steel plates will be available with all construction crews to facilitate egress and



- access to residential dwellings. All facilitative works shall be done in cooperation with the local residents in the works area. Residents affected by particular works will be made aware in advance of the impending works for that day and the anticipated progress of that particular construction crew. The contractor shall ensure that throughout the course of the works its operations do not put pedestrians at risk.
- 3.6. The signing lighting and guarding cardholder will set up the signs, cones and delineation devices as shown in Figures 1 and 2: Appendix 1A which are in line with the *Traffic Signs Manual Chapter 8*.
- 3.7. Where road widths allow, the UGC installation works will allow for one side of the road to be open to traffic at all times by means of a 'Stop/Go' type traffic management system, where a minimum 2.5m roadway will be maintained at all times. Temporary traffic signals will be implemented to allow road users safely pass through the works area by channelling them onto the open side of the road. Typically, the UGC will be installed in 100m sections, and no more than 100m will be excavated without the majority of the previous section being reinstated. Where the construction requires the crossing of a road, works on one carriageway will be completed before the second carriageway is opened, to maintain traffic flows.
- 3.8. In the event of emergency, steel plates, which will be available on site, can be put in place across the excavation to allow traffic to flow on both sides of the road.

TIMING RESTRICTIONS

3.9. All traffic movements will be carried out between the hours of 08.00 and 18.00 Monday to Friday and 08.00 and 16.00 Saturdays. Public holidays will be observed unless otherwise agreed with the local planning authority. Deliveries will also be scheduled to avoid peak times, i.e. avoiding rush hours and after school pick up times.

CONSTRUCTION PARKING

3.10. It is forecast that there will be a maximum of five staff on site at any one time during the construction period, although this will vary subject to the overall programme of works. It is anticipated that only one crew will be required for each 100m section of works and these will all be one or two vans. These will either park within the coned working area on the public highway, or within the consented solar farms, should space be limited.



4. MITIGATION

- 4.1. The impact of the proposed cable route has been identified as temporary in nature and associated with a short construction stage only. It is still important that any impact is minimised as far as possible and, in light of this, the following mitigation measures should be considered:
 - Advanced publicity outlining the traffic management proposals and duration and giving advance warning of specific traffic management measures;
 - Adequate advance signing of the works;
 - Using the existing road for cabling works at off-peak hours;
 - Using more than one crew at different location along the route to shorten the duration
 of the grid connection works; and
 - Using appropriate machinery to maintain access along the public roads at all times.
- 4.2. Other mitigation measures include:
 - Road signage is to be put in place throughout the site to comply with the traffic management plan;
 - Signage will be cleaned and maintained regularly;
 - Public roads will be kept clean by sweeping when necessary; and
 - All vehicles will be limited to an appropriate maximum speed to be determined in the Construction traffic management plan.

TRAFFIC CONTROL MEASURES

- 4.3. All signs to be put in place before works begin, as per the Department of Transport Traffic Signs Manual, Chapter 8 Temporary Traffic Measures & Signs for Road works.
 - All machine operators must be trained, experienced operators, trained to FAS CSCS standard, as per Construction Regulations. All workers will attend an Induction Course before work begins. All dangers will be explained & a record of this will be kept on file.
 - Warning signs to be posted to highlight the dangers involved. All access points to be closed/barricaded to prevent access by unauthorized persons. Only authorized



personnel allowed on site. A responsible person to be on site at all times. All signs, cones & barriers must be put in place, as per the **Figures 1 and 2: Appendix 1A** and the Traffic Signs Manual, Chapter 8 – Temporary Traffic Measures & Signs for Roadworks.

- All signs and cones will be set up by the responsible person who has completed a 3-day Signing, Lighting and Guarding at Roadworks Course and is the holder of a SAFE PASS card. This complies with requirements under The Construction Regulations for Temporary Traffic operations supervisor.
- All signs to be inspected by a SAFE PASS cardholder before work begins. All employees
 to ensure signs are in place & maintained at all times. Any problems to be reported to
 the responsible person on site.
- A safety zone will be maintained at all times between workers and vehicles using cones
 & barriers.
- All signs to be put in place as per the guidance for The Control and Management for Traffic at Roadworks 2010.
- Follow Guidelines from Department of Transport Traffic Signs Manual.
- For safe passage of pedestrians through any work area, follow the Department of Transport Guidelines.
- A Safe System of Work Plan (SSWP) Working on Roads will be completed on site by the foreman and it will be explained to all staff and they will be asked to sign it (see attached at Appendix 1C).



5. APPENDICES

APPENDIX A: 1FIGURES

- Figure 1. Traffic Management General Arrangement Up to 60km/h
- Figure 2: Traffic Management General Arrangement Up to 100km/h

APPENDIX 1B: STANDARD SPECIFICATION FOR ESB MV/LV NETWORK DUCTING

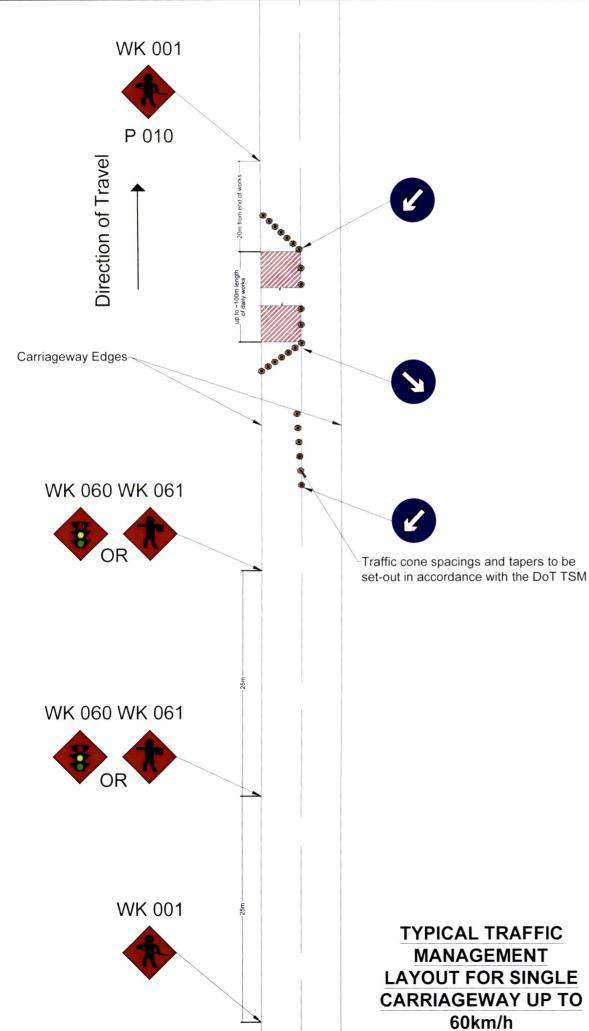
APPENDIX 1C: SSWP - WORKING ON ROADS





Appendix 1A





Design	Roadworks	Roadworks	Roadworks	
Parameters	Type A	Type B	Type C	
	(Full-Time)	(Part-Time)	(Short Duration	
Speed Limit		50km/h	50 or 60km/h	
		rary Signs		
Sign Visibility (m)		50	50	
Number of Signs		3	2	
Cumulative Distance (m)	7	50		
Distance between advance signs (m)		25		
advance signs (iii)	Minimum	Rate of Taper		
Taper at Lane (m)	1 in 5			
Taper at Hard Shoulder (m)	1 i	1 in 5		
oriodiaci (iii)	Maximum	Lamp Spacing		
At Taper (m)		6	6	
Longitudinal (m)		12		
-	Maximum	Cone Spacing		
At Tapers (m)		3	3	
Longitudinal (m)	6	6		
Cone Height (mm)		50	750	
		ty Zone	5	
Longitudinal (m)	inal (m) 25			
Lateral (m)		0.5		
N. C. N. C. L.	Minimum	n Lane Width		
Min Lane Width (m)		3	3	

Notes:

- Refer to Section 8.3.2 for definition of design parameters.
- 45 degree taper is required at active temporary traffic controlled layouts with cones at
- Cone spacing shown is the maximum permitted. Where geometry or any other site specific reason dictates the spacing shall be reduced accordingly.
- The optimum lane width for all classes of vehicles is 3.25m. This may be reduced to a minimum of 3.0m. Below this, HGVs and buses must be marshalled past the works. The absolute minimum lane width, if only cars and light vehicles are present, is 2.5m. Refer to paragraphs 8.3.1.2 to 8.3.1.4 of the department of Transport Traffic Signs Manual.

EXTRACT FROM THE DOT TRAFFIC SIGNS MANUAL TABLE 8.3.2 FOR SINGLE CARRIAGEWAY UP TO 60km/h



Project: Horsepasture Solar Farr Client: Shannon Energy

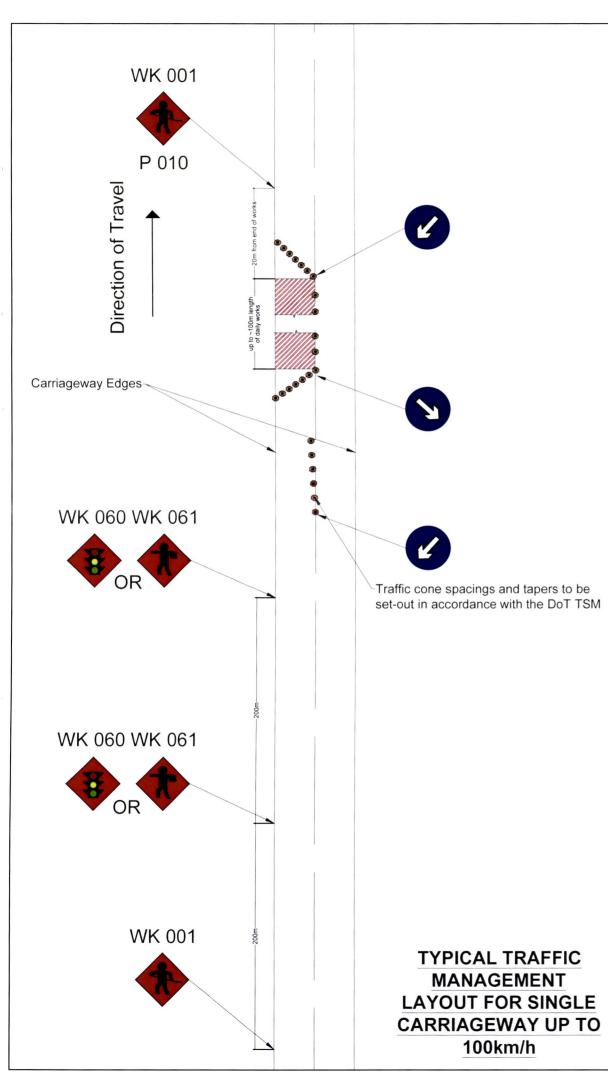
Drawing: Traffic Management General Arrangement Up to 60km/h

Project No.: NEO00796

Drawing No.: NEO00796_005I_A Figure 5

Notes:

- 1. Works to be carried out in accordance with all relevant Local Authorities and contract requirements.
- 2. Seguence of works to be agreed on site.
- 3. Ideally a c.3m wide single lane traffic width (minimum 2.5m) to be maintained at all times with Traffic Management Operatives (TMO) to marshall larger HGVs when required.
- 4. All signs to be reflective.
- 5. Exact sign positions to be agreed on site.
- 6. Existing statutory signs are to be protected if the do not conflict with proposed signage, otherwise existing signs should be covered or temporarily relocated.
- 7. All traffic cones shall conform to BSN EN 13422:2004 and have a reflective sleeve.
- 8. Minimum height of cones to be 750mm.
- 9. Appropriate safety zones, lateral and longitudinal to be provided and maintained at all times.
- 10. Pedestrians are to be assisted by additional TMO's (Traffic Management Operatives) if required.
- 11. All accesses (pedestrian and vehicular) to be maintained at all times.
- 12. Temporary traffic signs, traffic delineators and road markings to be in accordance with 'The Traffic Signs Manual, Department of Transport November 2012' - Chapter 8.
- 13. Traffic Management illustrated for Planning Purposes Only and will be subject to detailed Individual Traffic Management Plans for each element of the project.
- 14. Sign number WK 060 (Temporary Traffic Signals) or WK 061 (Flagman Ahead) to be used as appropriate subject to agreement with the Local Authorities.
- 15. Advance warning signage to be provided in advance of and during the works to warn road users of upcoming and ongoing trenching works



Design Parameters	Roadworks	Roadworks	Roadworks	
	Type A	Type B	Type C	
Cnood Limit	(Full-Time)	(Part-Time)	(Short Duration)	
Speed Limit	80km/h o	r 100km/h	80km/h or 100km/h	
	Tem	porary Signs		
Sign Visibility (m)	1	20	120	
Number of Signs		4	3	
Cumulative Distance (m)	8	00	600	
Distance between advance signs (m)	2	00	200	
	Minimu	m Rate of Taper		
Taper at Lane (m)	1 in 55		1 in 40	
Taper at Lane (m) Taper at Hard Shoulder (m)	1 in 30		1 in 20	
one dide: (iii)	Maximu	ım Lamp Spacing	3 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
At Taper (m)		6	6	
Longitudinal (m)	12		12	
	Maximu	ım Cone Spacing		
At Tapers (m)		3	3	
Longitudinal (m)	12		12 750	
Cone Height (mm)	Cone Height (mm) 750			
		afety Zone	200005 0.00005 0.00005	
Longitudinal (m)		50	45	
Lateral (m)	1.2		1.2	
Min I am a Middle	Minim	um Lane Width	The state of the s	
Min Lane Width (m)		3	3	

Notes:

- Refer to Section 8.3.2 for definition of design parameters.
- 45 degree taper is required at active temporary traffic controlled layouts with cones at
- Cone spacing shown is the maximum permitted. Where geometry or any other site specific reason dictates the spacing shall be reduced accordingly.
- The optimum lane width for all classes of vehicles is 3.25m. This may be reduced to a minimum of 3.0m. Below this, HGVs and buses must be marshalled past the works. The absolute minimum lane width, if only cars and light vehicles are present, is 2.5m. Refer to paragraphs 8.3.1.2 to 8.3.1.4 of the department of Transport Traffic Signs Manual.

EXTRACT FROM THE DOT TRAFFIC SIGNS MANUAL TABLE 8.3.2 FOR SINGLE CARRIAGEWAY UP TO 100km/h



roject: Horsepasture Solar Farm

Client: Shannon Energy

Drawing: Traffic Management General Arrangement Up to 100km/h

Project No.: NEO00796

Drawing No.: NEO00796_006I_A Figure 6

Notes:

- 1. Works to be carried out in accordance with all relevant Local Authorities and contract requirements.
- 2. Sequence of works to be agreed on site.
- 3. Ideally a c.3m wide single lane traffic width (minimum 2.5m) to be maintained at all times with Traffic Management Operatives (TMO) to marshall larger HGVs when required.
- 4. All signs to be reflective.
- 5. Exact sign positions to be agreed on
- 6. Existing statutory signs are to be protected if the do not conflict with proposed signage, otherwise existing signs should be covered or temporarily relocated.
- 7. All traffic cones shall conform to BSN EN 13422:2004 and have a reflective sleeve.
- 8. Minimum height of cones to be 750mm.
- 9. Appropriate safety zones, lateral and longitudinal to be provided and maintained at all times.
- 10. Pedestrians are to be assisted by additional TMO's (Traffic Management Operatives) if required.
- 11. All accesses (pedestrian and vehicular) to be maintained at all times.
- 12. Temporary traffic signs, traffic delineators and road markings to be in accordance with 'The Traffic Signs Manual, Department of Transport November 2012' - Chapter 8.
- 13. Traffic Management illustrated for Planning Purposes Only and will be subject to detailed Individual Traffic Management Plans for each element of the project.
- 14. Sign number WK 060 (Temporary Traffic Signals) or WK 061 (Flagman Ahead) to be used as appropriate subject to agreement with the Local Authorities.
- 15. Advance warning signage to be provided in advance of and during the works to warn road users of upcoming and ongoing trenching works



Appendix 1B



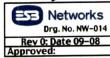
Standard Specification for ESB MV/LV Networks Ducting (Minimum Standards)

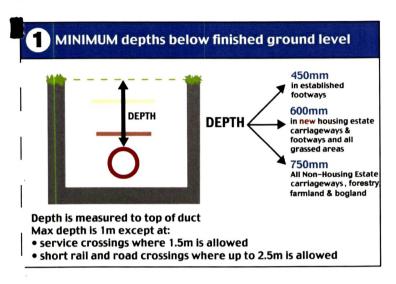
Page 1 of 6

Note 1: ESB Networks reserves the right not to accept ducting which does not conform to these standards and dimensions

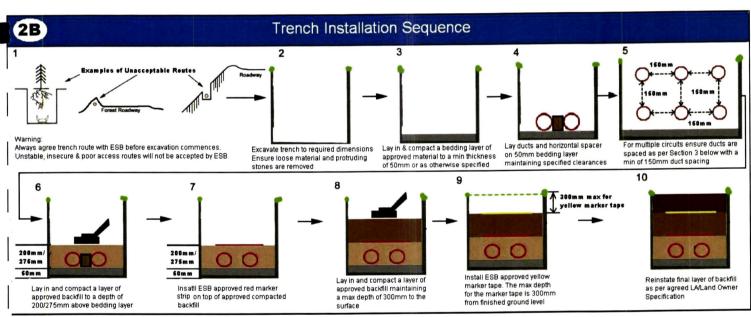
ote 2: Refer to ESB Networks for Specific job Specification. These instructions do not apply to 38kV/110kV/220kV cable

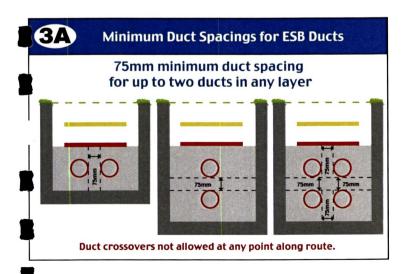
lote 3: All materials (ducts, marker tapes/strips, duct surrounds, mandrels and brushes) must be ESB approved materials

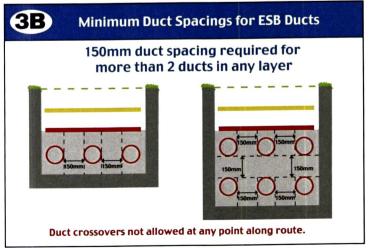


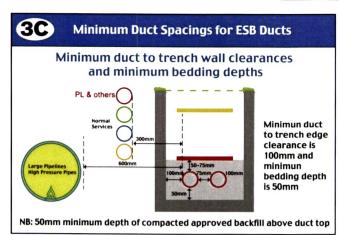






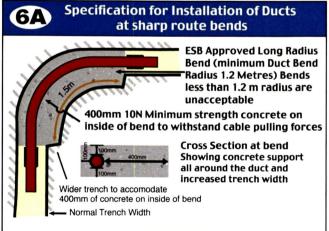


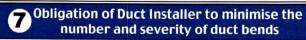






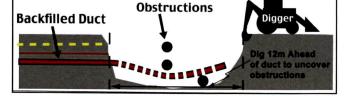


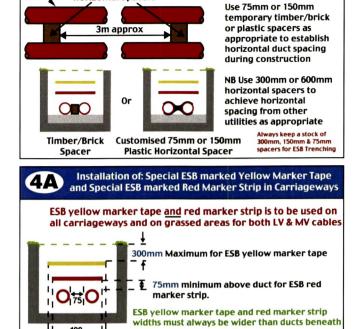




The duct installer must minimise the number and severity of preformed bends in ground with obstructions and other utility service crossings by opening ground 12m ahead of backfilled duct, wherever practical to do so. This safety obligation, which may require use of steel plating, allows the duct installer to pick the least bendy duct route through utility crossings and obstructions.

Otherwise, numerous sharp unrecorded duct route deviations will be present making cable installation considerably more difficult and less safe for the cable





Minimum Duct Spacings for ESB Ducts

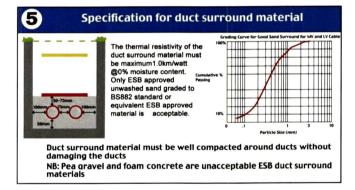
Achievement of Horizontal Duct Spacing

3D

Horizontal Spacers

400

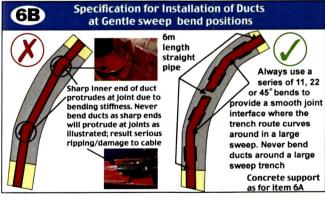
Plan View



Never lay other utility marker tape or strip over ESB ducts

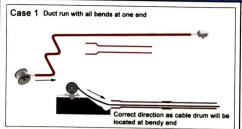
Never lay ESB marker tape or strip over other utility pipes

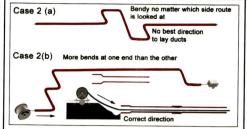
ESB yellow marker tape and ESB red marker strip must never be laid directly on top of ducts

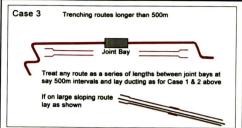




Guidance on Correct Direction to Lay Spigot and Socket Ducting 9





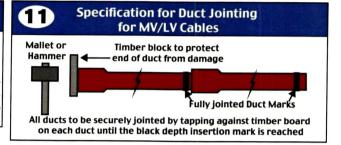


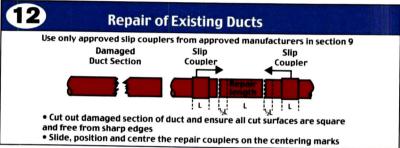
10) Approved ESB Ducting for MV/LV Cables

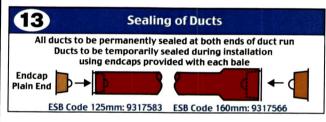
Use only solid wall high impact resistance ESB approved PVC red ducting to IS 370 colour standard and ESB specification 16113 (3.8mm minimum wall thickness) Discoloured or unidentified ducting not acceptable. All duct material must be approved

 Lightweight flexible corrugated twinwall ducting is not acceptable to ESB irrespective of manufacturer

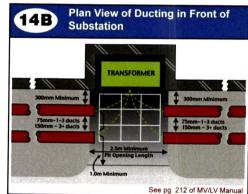
Current approved Duct and duct bend manufacturers are: Lynplast (bend fittings only) Radius Systems, Wavin, Quality Plastics, MFP Plastics, Cork Plastics, Emtelle

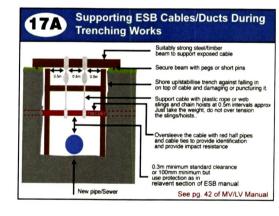


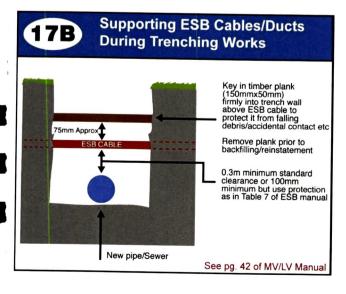


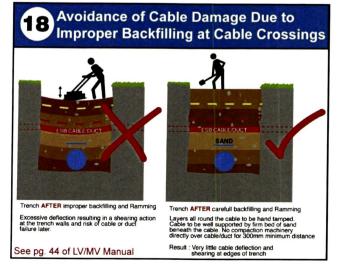


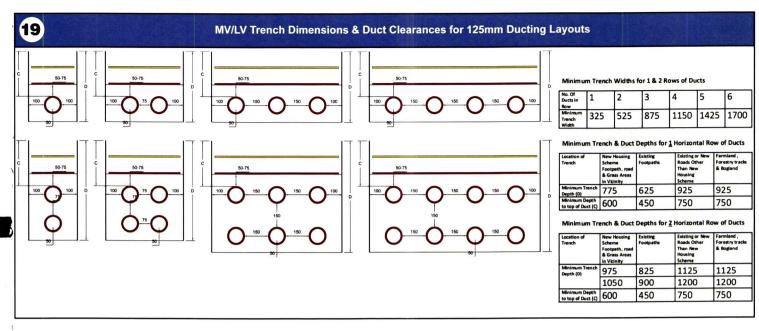


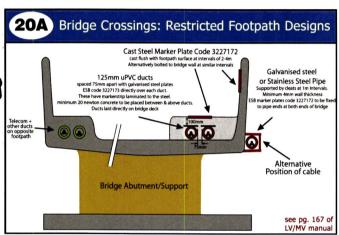


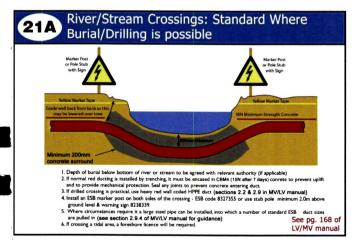


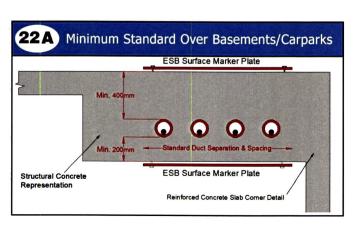








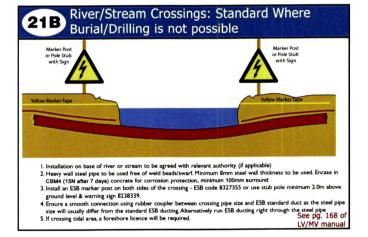




20B Bridge Crossings: Restricted Footpath Designs

- 1. The design must be agreed with the bridge authority. Position in footpath is preferred.
- 2. Minimum cover over ducts on footpath 100mm.
- 3. Where duct cover is > 300mm, marker strip & surface marker plates can be used.
- 4. Red uPVC ducting is not suitable for cable run external to bridges.
- 5. Where possible galvanised steel/stainless steel piping should be used, all joints must be free of weld burrs on inside. Alternatively heavy duty 10mm wall thickness black HDPE material with cast steel marker plates attached must be used to permanently warn of presence of electric cable.

see pg. 167 of LV/MV manual



22 B Minimum Standard Over Basements/Carparks

Minimum depth of duct is 400mm

Minimum thickness from bottom of duct to underside of slab is 200mm.

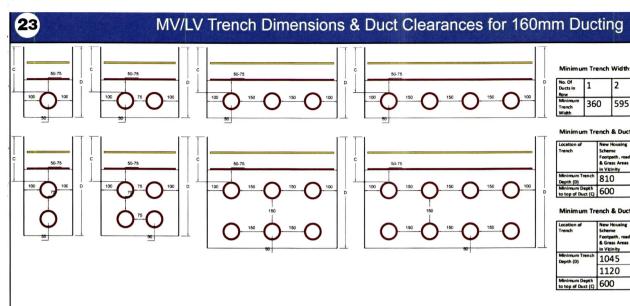
ESB suface marker plates are to be placed at approximate intervals of 3 metres on the top and bottom surfaces of the slab.

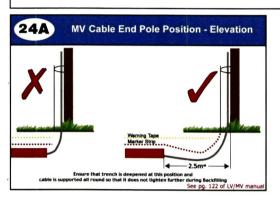
larker plates are to be cast level with the surface and screwed down to to avoid lift off (ESB code: 3227172)

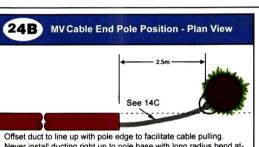
For ESB Ducts concrete surround - same strength for entire slab

Standard Specification for ESB MV/LV Networks Ducting (Minimum Standards) cont. Page 5 of 6

of Duct



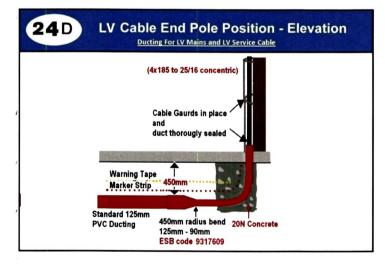


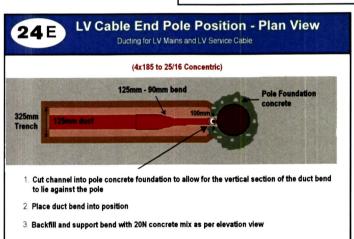


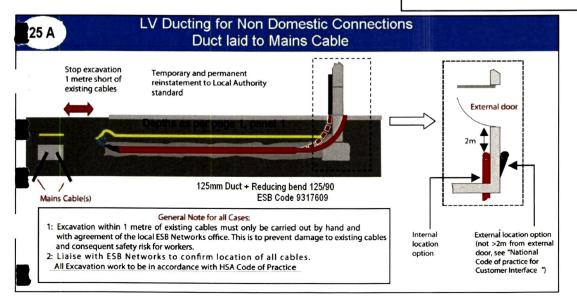
Never install ducting right up to pole base with long radius bend at-

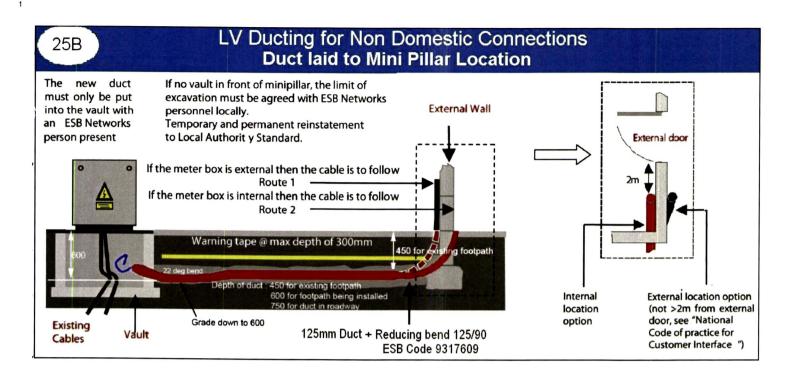
Both marker strip & warning tape to be used between duct & pole Take precautions to prevent pole toppling.

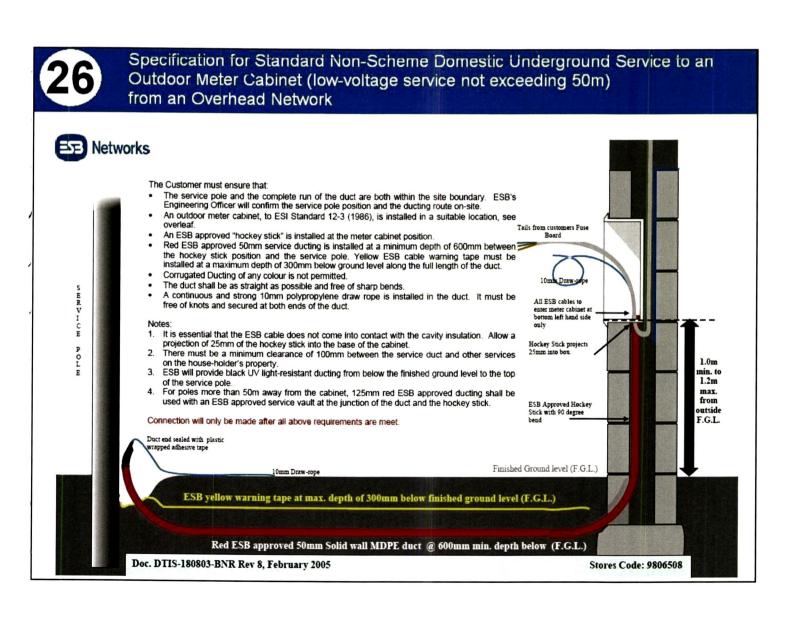














Appendix 1C

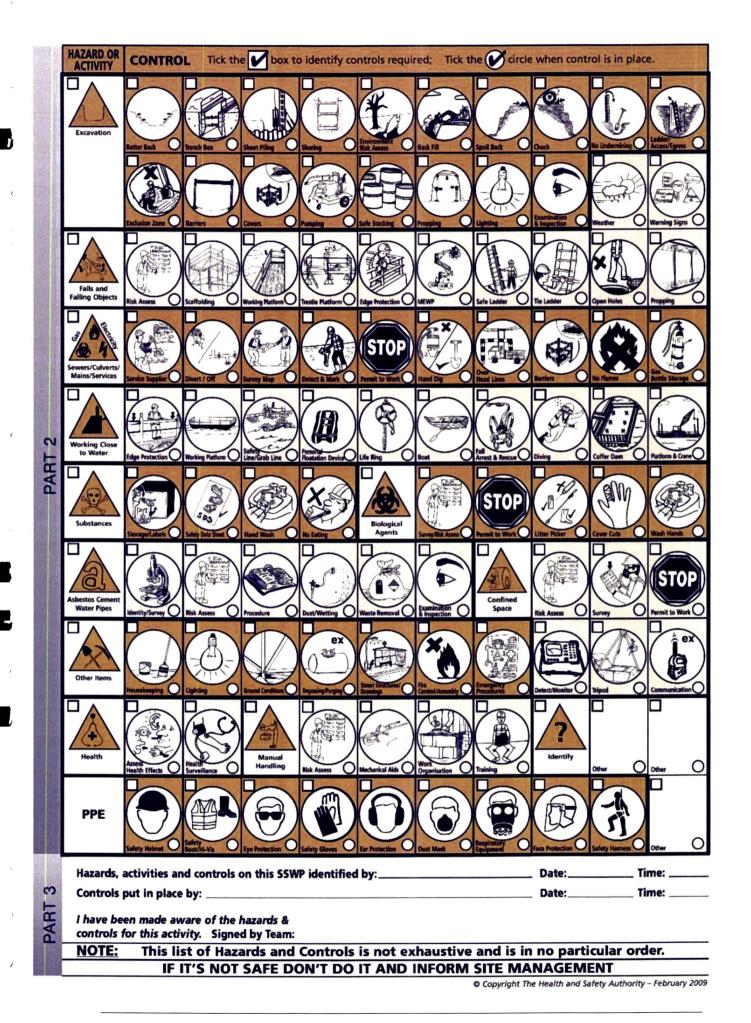


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© Copyright The Health and Safety Authority – February 2009



Preliminary Construction Traffic Management Plan Solar Farm 19-037/SN/Apr 2019



Technical Appendix 2: Outline Construction Environmental Management Plan

Threecastles Solar Farm Grid Route Section 5 Application

06/10/2023



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1. INTRODUCTION

BACKGROUND

- 1.1. Neo Environmental Ltd has been appointed by Threecastles Solar Limited (the "Applicant") to undertake an Outline Construction Environmental Management Plan (OCEMP) for the development of grid connection infrastructure to connect the approved Threecastles Solar Farm ("Consented Solar Farm") (PA Ref: 17/908 and PA Ref: 21/1237) to the existing Blessington 38kV ESB Substation comprising the laying of underground cables ("UGC") and associated infrastructure.
- 1.2. The proposed grid route and substation is shown in **Volume 2**.

DEVELOPMENT DESCRIPTION

- 1.3. The proposed cable route will consist of the construction of an underground medium voltage 20Kv grid connection cable from the consented Threecastles Solar Farm to the existing Blessington 38kV ESB Substation. The following provides a brief description of the construction to take place:
 - The proposed grid connection is circa 3.62km in length (with the majority on public roads) and is to be installed along private agricultural land and public roads with the construction carried out in sections of no more than 100m at any one time. A new 100m section of works will only be excavated once the majority of reinstatement has been completed on the previous section, ensuring only one section is fully opened at any one time.
 - Joint bays will be placed at regular intervals between sections of ducts to allow the sections of cables to be connected together prior to the reinstatement of the road
 - The final c. 300m of the proposed cable route will within private agricultural land before connecting to the ESB Blessington Substation.
 - The base of the excavated trench will be lined with sand bedding to be imported to site from a local licensed supplier. 125mm diameter high-density polyethylene (HDPE) cable ducting will be placed into the prepared trench, which will be inspected and backfilled.



SITE DESCRIPTION

- 1.4. The proposed cable route consists of grid connection infrastructure to connect the approved Threecastles Solar Farm (PA Ref: 21/1237 and 17/908) to the existing Blessington 38kV ESB Substation, comprising the laying of underground cables and associated infrastructure.
- 1.5. The Application site will be location in the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks Co. Wicklow. Scope of the Assessment
- 1.6. Wicklow County Council has previously acknowledged a Section 5 for the 20kV grid route of the solar farm development (Exemption Ref 70/19). This was provided 9th October 2019. Following discussions with ESB Networks, changes to the grid route are required and therefore this subsequent submission (Please see Appendix A of Covering Statement for further details).
- **1.7.** This OCEMP has been produced in support of a Section 5 to Wicklow County Council and includes:
 - A Construction method statement (CMS) which identifies works likely to impact upon water quality;
 - Pollution prevention and mitigation measures;
 - Drainage Management Plan; and
 - Waste management.
- 1.8. The OCEMP has been prepared with reference to the other assessments which have been undertaken in support of the Section application, these include: Natura Impact Statement (NIS). Following the approval of this Section 5 Application, this OCEMP will be developed by the contractor and be amended where necessary.
- 1.9. The Applicant will appoint a main contractor who will be responsible for the construction of the proposed cable route. The contractor will ensure that all measures and mitigation identified within this OCEMP are taken into account and implemented during the construction and decommissioning phases. In addition, the OCEMP will be monitored regularly throughout the duration of the construction phase to ensure best practice is implemented.
- 1.10. A Site Manager will be appointed and will be in charge of activities on site, including personnel. They will ensure that all personnel on site follow and adhere to the procedures outlined within the OCEMP.

STATEMENT OF AUTHORITY



1.11. This OCEMP has been produced by Neo Environmental, with input from Michael McGhee BSc TechIOA. Neo Environmental have produced detailed OCEMPs for a range of development types, including for over 1GW of solar farm developments and associated infrastructure across the UK and Ireland.

2. LEGISLATION

- 2.1. Current legislation has been taken into consideration during the production of this OCEMP. The legislation covers all relevant areas including; water pollution, wildlife species protection, waste and noise. In the case of the proposed cable route, the following legislation has been considered:
 - The Local Government (Water Pollution) Act 19771
 - The Local Government (Water Pollution) (Amendment) Act 19902
 - EC (Water Policy) (Amendment) Regulations, 20033
 - The Wildlife Act 1976 (amended 2000)4
 - EC (Birds and Natural Habitats) Regulations 2011 (amended 2015)5
 - Protection of the Environment (POE) Act 20036
 - Environmental Noise Regulations 20067
 - Environmental Protection Agency Act 19928
 - Waste Management Acts (WMA) 1996 to 20059

⁹ Office of the Attorney General (1996) Waste Management Act 1996, as amended. Available at www.irishstatutebook ie



¹Office of the Attorney General (1977). Local Government (Water Pollution) Act 1977. Available at www irishstatutebook ie

² Office of the Attorney General (1990) Local Government (Water Pollution) (Amendment) Act 1990 Available at www.irishstatutebookie

³ Office of the Attorney General (2003) S.I. No 722/2003 – European Communities (Water Policy) Regulations 2003, as amended 2014. Available at www.irishstatutebook.ie

⁴Office of the Attorney General (1976) Wildlife Act 1976 (amended 2000), available at www.irishstatutebook.ie

⁵ Office of the Attorney General (2011) European Communities (Birds and Natural Habitats Regulations 2011 (amended 2015), available at www.irishstatutebook ie

⁶Office of the Attorney General (2003) Protection of the Environment Act 2003 Available at www.irishstatutebook.ie

⁷ Office of the Attorney General (2006) Environmental Noise Regulations 2003. Available at www.irishstatutebook.ie

⁸Office of the Attorney General (1992) Environmental Protection Agency Act 1992. Available at www.irishstatutebook.ie

- Waste Management (Hazardous Waste) Regulations 199810
- Carriage of Dangerous Good by Road Act 199811
- EC Environmental Objectives (Surface Waters) Regulations 200912
- EC Environmental Objectives (Groundwater) Regulations 201013
- Article 4 of Waste Framework Directive (Directive 2008/98/EC)14
- Water Framework Directive (2000/60/EC)15
- 2008/98/EC)16
- Water Framework Directive (2000/60/EC)17

GUIDANCE

- 2.2. The Environmental Protection Agency has produced Pollution Prevention Guidelines (PPGs).

 The most relevant guidelines to the proposed cable route include:
 - IPC Guidance Note Guidance Note on Storage and Transfer of Materials for Scheduled Activities (EPA 2004) (amended 2012, 2013)¹⁸. This guidance note covers tanks, bunds and pipelines which store or transmit potentially polluting substances.

¹⁸ Environmental Protection Agency, Ireland (EPA) (2004) IPC Guidance Note – Guidance Note on Storage and Transfer of Materials for Scheduled Activities. Available at www.epa.ie



¹⁰ Office of the Attorney General (1998) S.I. No. 163/1998- Waste Management (Hazardous Waste) Regulations 1998. Available at www.irishstatutebook.ie

¹¹ Office of the Attorney General (1998) Carriage of Dangerous Goods by Road Act 1998 Available at www.irishstatutebook.ie

¹² Office of the Attorney General (2009) European Communities Environmental Objectives (Surface Waters) Regulations 2009. Available at www.irishstatutebook ie

¹³ Office of the Attorney General (2010) European Communities Environmental Objectives (Groundwater) Regulations 2010 Available at www.irishstatutebook ie

¹⁴ European Parliament and the Council (2008) Directive 2008/98/EC on waste and repealing certain directives. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098

¹⁵ European Parliament and the Council (2000) Directive 2000/60/EC, establishing a framework for community action in the field of water policy. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060

¹⁶ European Parliament and the Council (2008) Directive 2008/98/EC on waste and repealing certain directives. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098

¹⁷ European Parliament and the Council (2000) Directive 2000/60/EC, establishing a framework for community action in the field of water policy. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX 32000L0060

- National Hazardous and Waste Management Plan 2014-2020 (EPA 2014)¹⁹. The plan details
 guidance on how to prevent, reduce and collect hazardous waste.
- 2.3. Key guidance from other bodies that are relevant to the proposed cable route construction phase include:
 - Best Practice Guide BPGCS005 Oil Storage Guidelines²⁰
 - Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects²¹
 - Construction and Demolition Waste Management a handbook for Contractors and Site Managers²²
 - IEMA Environmental Impact Assessment Guide to: Delivering Quality Development²³.
- 2.4. UK Pollution Prevention Guidelines have also been considered in the production of this plan. The suite of Pollution Prevention Guidelines published by the Scottish Environmental Protection Agency (SEPA), the Environment Agency and the Northern Ireland Environment Agency (NIEA), are considered as a source of information on good practice only. Currently, a review for the PPGs is underway, and will result in a replacement guidance series. However, only some have been completed and therefore a mixture of guidelines and guidance documents are available. These documents provide a sound basis for any OCEMP and can be accessed online.²⁴ The PPGs/GGPs most relevant to the proposed cable route construction phase include:
 - PPG1 'General Guide to the Prevention of Pollution'
 - GPP2 'Above Ground Oil Storage'
 - GGP5 'Works and Maintenance in or Near Water'
 - PPG6 'Working at Construction and Demolition sites'

²⁴ Environmental Guidance (Wales, Scotland, and NI) Available online: http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/



¹⁹ Environmental Protection Agency, Ireland (EPA) (2014) National Hazardous Waste Management Plan 2014-2020. Available at www.epa.ie

²⁰ Best Practice Guide BPGCS005 – Oil Storage Guidelines. Available at www envirocentre.ie

²¹ Department of the Environment, Heritage and Local Government (2006) Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects. Available at www.envirocentre.ie

²² FÁS and Construction Industry Federation (2002) Construction and Demolition Waste Management – A handbook for Contractors and Site Managers. Available at www.ncdwc.ie

²³ IEMA (2016) EIA Guide to: Delivering Quality Development. Available at http://www.iema.net/assets/newbuild/documents/Delivering%20Quality%20Development.pdf

- PPG7 'Safe Storage The Safe Operation of Refuelling Facilities'
- 2.5. These PPGs/GGPs provide guidance as to the various environmental considerations and potential mitigation and prevention measures.

HEALTH AND SAFETY MANAGEMENT

- 2.6. A construction works Health and Safety plan should be implemented and followed during construction of the proposed cable route. All work should be carried out in accordance with the following health and safety regulations:
 - Safety, Health and Welfare at Work Act 2005²⁵
 - Safety, Health and Welfare at Work (Construction) Regulations 2013²⁶
 - Safety, Health and Welfare at Work (General Application) Regulations 2007²⁷

²⁷https://www.hsa.ie/eng/Legislation/Regulations_and_Orders/General_Application_Regulations_2007/General_Application_Regulations_2007_S_I_2007_.pdf



²⁵ Office of the Attorney General, 2005. Safety, Health and Welfare Act 2005. Available at www.hsa ie

²⁶ Office of the Attorney General, 2013. Safety, Health and Welfare at Work (Construction) Regulations 2013. Available at www.hsa.ie

3. RESPONSIBILITIES

KEY CONTACTS & ROLES

3.1. The detailed CEMP will need to confirm the details outlined in **Table 3-1** below.

Table 3 - 1: Key Contacts & Responsibilities

	Name	Role	Address	Name & Contact Details
Developer	Solas Éireann 2 Limited	To ensure all planning condition requirements are implemented	Lower Ground Floor, 14 Merrion Square North, Dublin 2	TBC
Contract Manager	ТВС	Responsible for the development of the CEMP in line with planning condition requirements	ТВС	TBC
Site Manager	ТВС	Responsible for the implementation of the CEMP with all site personnel	TBC	TBC
Environmental Compliance Officer	TBC	Responsible for the coordination and development	ТВС	ТВС
Consulting Engineers	ТВС	Responsible for the development of method statements and design	TBC	TBC



ENVIRONMENTAL SENSITIVITIES

- 3.2. The environmental assessments which were undertaken in support of this Section 5 application identified some sensitivities within the route corridor.
- 3.3. The key potential environmental impacts associated with the site preparation and construction works are set out in **Table 3-2**. Relevant, potentially sensitive receptors to the works are identified. These potential sensitive receptors, the environmental considerations and potential impacts are to be considered as the basis for a future detailed CEMP.

Table 3-2: Environmental Considerations and Impacts

Environmental Issue	Potential Receptor	Potential Impacts
Water	Waterways adjacent to the Development	Contamination of aquatic environment
Soil	Soıl on site	Contamination, compaction & soil degradation
		Reduced filtration

ECOLOGY

Environmental Designations

- 3.4. The desk-based assessment identified five Natura 2000 Sites located within 15km of the Application Site, comprising Red Bog, Kildare SAC, Glenasmole Valley SAC, Wicklow Mountains SAC, Wicklow Mountains SPA and Poulaphouca Reservoir SPA.
- 3.5. The cable route will cross two significant watercourse crossings (Goldenhill Stream the Goldenhill Stream and small tributary of it; Oldpaddocks Stream) and one drainage ditch. All three of which run underneath the L4365 road via bridge/culvert crossings. Cable works are proposed to be confined to the L4365 road. Both streams and drainage ditch discharge into the Poulaphouca Reservoir SPA. There is ornithological and hydrological connectivity between the Application Site and the
- 3.6. Poulaphouca Reservoir SPA. Additionally, the proposed cable routehas potential ecological connectivity regarding otter associated with the Wicklow Mountains SAC
- 3.7. The findings of the Natura Impact Statement concluded that the proposed cable route will not adversely affect the integrity of any Natura 2000 designated site due to measures inaugurated during the design phase and following relevant guidance to prevent pollution



during the construction and operation phases. Also, with the implementation of ecological mitigation measures, any potential impacts/effects from the proposed cable route will be further reduced.

HYDROLOGY

- 3.8. The grid connection is to be kept mostly on the public road; however, a small section of the cable will be within the agricultural land within the Threecastles solar farm and on private land at the Blessington substation (please see the **Planning Drawings** within **Volume 2** for the route).
- 3.9. The proposed grid route is within Hydrometric Area 9 (Liffey and Dublin Bay) of the Irish River Network System and within the Liffey (SC_020) sub catchment.
- 3.10. The cable route will pass through the Goldenhill_010 and Liffey_040 river sub basins, as defined by the Water Framework Directive (WFD).
- 3.11. The cable route crosses the Goldenhill Stream and its tributary; Oldpaddocks Stream. Where it crosses these watercourses, the cable will be buried in the public highway as shown in **Drawing No.** 05665-DR-150 submitted with this Section 5.



4. CONSTRUCTION METHOD STATEMENT

INTRODUCTION

4.1. This Construction Method Statement (CMS) outlines the management plan for the construction and decommissioning phases of the proposed cable route. Employed contractors will be instructed on compliance with the contents of this document prior to accessing the site for construction.

CONSTRUCTION OPERATIONS

4.2. The proposed cable route will be constructed in accordance with standard best practice.

Construction Activities

4.3. The following activities will be undertaken during the construction phase:

Trenching Methodology

- The Contractor, and their appointed Site Manager, will prepare a targeted Method Statement concisely outlining the construction methodology and incorporating all mitigation and control measures included within the Section 5 Application and accompanying reports;
- All existing underground services shall be identified on site prior to the commencement of construction works:
- The proposed grid connection is circa 3.62km in length (with the majority on public roads) and is to be installed along private agricultural land and public roads;
- The excavated trench will be approximately 450mm in width and approximately 1225mm deep within the public highway and approximately 925mm deep within private lands;
- The base of the excavated trench will be lined with sand bedding to be imported to site
 from a local licensed supplier. The 125mm diameter HDPE cable ducting will be placed
 into the prepared trench. It is anticipated that this work along the public road will be
 carried out on the carriageway and not the verge;



- At watercourse crossings, the contractor will be required to adhere to the environmental
 control measures outlined within the Section 5 Application and accompanying reports,
 the detailed Construction Environmental Management Plan (CEMP) to be prepared prior
 to the commencement of construction, and best practice construction methodologies;
- Where the cable route intersects any small culverts or bridges, the culvert or bridges will
 remain in place and the ducting will be installed above it and provide minimum
 separation distances in accordance with ESB and Irish Water specifications;
- The proposed cable route does not involve the draining or modifying of any of the minor or major tributary watercourses;
- No installation will take place during extreme weather warnings. No construction personnel, operation or maintenance personnel will be permitted to carry out any works during extreme flood events;
- No more than a 100m section of trench will be opened at any one time. The second 100m section will only be excavated once the majority of reinstatement has been completed on the first;
- The excavation, installation and reinstatement process will take an average of one day to complete a 100m section;
- Following the installation of ducting, pulling the cable will take approximately half a day between each joint bay; and
- Where required, grass will be reinstated by either seeding or by replacing with grass turf.

Equipment

4.4. Plant equipment required for the construction phase may include but not be limited to the following:

Table 4-1: Plant Equipment

Equipment	Function
4 x 4 vehicle	Transport for operatives
Tracked Excavator	Excavating trenches
Dumper Truck	Moving excavated materials



Cut off saw	Setting out trenches on road surface
Telehandler(s)	Distributing materials

4.5. All plant, machinery and equipment will be stored on site within the works area or within the temporary construction compound to be located within the Consented Solar Farm. Oils and fuels will not be stored on site and will be stored in an appropriately bunded area within the temporary storage compound.



5. WASTE MANAGEMENT

Introduction

- 5.1. Surplus or waste may arise from materials imported to the site, or those generated on site during the construction and decommissioning phases.
- 5.2. The Waste Management Plan follows the waste hierarchy, as outlined within Article 4 of the Waste Framework Directive 2008/98/EC. The waste hierarchy, as defined within the legislation, is detailed below:
 - Prevention;
 - Re-use;
 - Recycling;
 - Other recovery; and
 - Disposal.

IDENTIFICATION OF WASTE

- 5.3. There will be limited waste generated during the construction phase of the proposed cable route.
- 5.4. The contractor on site during each phase will ensure that all waste will be disposed of responsibly from the site. Potential waste generated during the construction phase is likely to include:
 - Excavated material will be temporarily stockpiled onsite for re-use during reinstatement.
 Stockpiles will be restricted to less than 2m in height. Stockpiles will be located a minimum of 50m from surface water features and all stockpiling locations will be subject to approval by the Site Manager and Project Ecological Clerk of Works (ECoW);
 - Excavated material shall be employed to backfill the trench where appropriate and any surplus material will be transported off site and disposed of at a fully authorised soil recovery site;
 - Any earthen (sod) banks to be excavated will be carefully opened with the surface sods being stored separately and maintained for use during reinstatement;



- Wooden crates or cardboard boxes in which the building materials will be packaged.
 These will be removed from the site and recycled appropriately at regular intervals;
- Packaging materials from various components will also be removed regularly and recycled;
- Oils/fuels, paints, solvents or other chemicals; and/or
- Burning of waste on site will be prohibited.

STORAGE OF FUELS AND CHEMICALS

- 5.5. Oils and fuels will not be stored on site and will be stored in an appropriately bunded area within the temporary storage compound on the Consented Solar Farm.
- 5.6. Where chemicals are required on site, they must be placed in an appropriate bund to prevent ground contamination. All chemicals must be stored in a correctly marked container clearly identifying the contents. Where labels are worn off, they must have a new label placed on them or the contents transferred to a correctly marked container. Safety data sheets for all chemicals should be filed on site as part of the final CEMP.
- 5.7. Spill kits will be on site and contingency plans will be in place for dealing with a spillage should a spillage occur.

REFUELLING

- 5.8. Where refuelling of vehicles on site is necessary, the following guidelines will be strictly adhered to:
 - All plant, machinery and equipment will be stored on site within the works area or within the temporary construction compound to be located within the Consented Solar Farm.
 This is where refuelling will also take place;
 - Mobile plant will be filled in a designated area, on an impermeable surface well away from any drains or watercourses;
 - A spill kit will be stored (and clearly marked) near refuelling areas;
 - Vehicles will never be left unattended during refuelling and drip trays should be located under all static plant vehicles;



- Hoses and valves will be checked regularly for signs of wear, and will be turned off and securely locked when not in use;
- Vehicles will not be left running unnecessarily and low emission fuels will be used where possible; and
- Diesel pumps and similar equipment will be checked regularly and any accumulated oil removed for appropriate disposal.

EXCAVATION AND EARTHWORKS

- 5.9. All excavation and earthworks will be carried out in accordance with BS6031:2009 Code of Practice for Earthworks.²⁸ Soil handling, extraction and management will be undertaken with regard to best practice guidelines such as Guidance on the Waste Management (Management of Waste from the Extractive Industries) Regulations 2012.²⁹
- 5.10. The following practices will be followed in relation to the excavation of cable trenches, topsoil stripping and any other earthworks:
 - Any excavated material will be stored and re-used to infill excavations. Where the soil is
 to be re-used, this will be side casted. All side casted soil to be kept a minimum of 50m
 from surface water features and all stockpiling locations will be subject to approval by
 the Site Manager and Project Ecological Clerk of Works (ECoW);
 - Although unlikely, if any contaminated earth is uncovered, this will be stored separately
 and disposed of accordingly once the contaminant has been identified.
 - Efforts will be made to ensure that water does not accumulate in excavated areas. Should excavated trench's need to be dewatered, this will be from a sump installed within the low section of the opened trench. Where dewatering is required, dirty water will be fully and appropriately attenuated, through silt bags, before being appropriately discharged to vegetation or surface water drainage feature;
 - Earthworks shall not occur during unsuitable weather conditions, including when soils are waterlogged or very dry.

²⁹ Environmental Protection Agency (EPA) 2012. Guidance on the Waste Management (Management of Waste from the Extractive Industries) Regulations 2012. Available at www epaile



²⁸ British Standards Institute (BSI), 2009 BS 6031·2009 Code of Practice for Earthworks

CONCRETE

5.11. Concrete will not be allowed to enter watercourses under any circumstances, and drainage from excavations in which concrete is being poured will not be discharged directly into existing watercourses without appropriate treatment and consent from the relevant authority. Delivery trucks, tools and equipment will be cleaned at the wheel wash facility located near the entrance and within the site boundary.

Monitoring

- 5.12. Operations and activities that have the potential to impact on the water environment will be regularly monitored throughout the construction of the proposed cable route. This is to ensure compliance with planning conditions and environmental regulations.
- 5.13. The Site Manager is responsible for ensuring that all monitoring is carried out according to the Environmental Monitoring Programme, summarised in **Table 5-1** below.

Table 5-1: Environmental Monitoring

Environmental Aspect	Monitoring Location	Monitoring Frequency	Monitoring Arrangements
Site housekeeping	Entire site	Daily	Visual inspection
Surface water courses	All water courses	After periods of rain Weekly, if no rain	Visual inspection
Fuels and chemicals – appropriate storage	Entire site	Daily	Visual inspection

5.14. These records and results will be maintained by the Site Manager and will be stored on site during the construction phase.

SITE OFFICE WASTE

5.15. Portaloos and/or containerised toilets and welfare units with storage tanks will be used to provide toilet facilities for site personnel during construction. The location of these areas will be identified by the contractor prior to commencement of construction; however, they will more than likely be within construction compound of the Consented Solar Farm.



5.16. The sanitary waste will be removed from site by a licensed waste disposal contractor. All portaloo units located on site during the construction phase will be operated and maintained in accordance with the manufacturer's instructions and will be serviced under contract with the supplier. All such units will be removed off-site following completion of the construction phase.



6. POLLUTION PREVENTION

INTRODUCTION

6.1. This OCEMP identifies elements of the proposed cable route which are potentially capable of giving rise to pollution and identifying pollution prevention and mitigation measures.

MITIGATION MEASURES

- 6.2. Suitable protection for watercourses potentially affected by the works will be installed prior to relevant works proceeding. These measures will be in-line with Environmental Protection Agency (EPA) Pollution Prevention Guidelines. Protection measures will include:
 - Drip trays to be used for all refuelling activities;
 - All plant and equipment will utilise biodegradable hydraulic oil;
 - Spill kits will be readily available to all personnel. The spill kits will be of an appropriate size and type for the materials held on site;
 - All other chemicals will be stored within a storage contained with an accompanying COSHH Datasheet;
 - Wastewater from the temporary staff toilets and washing facilities will be discharged to sealed containment systems and disposed via licensed contractors; and
- 6.3. All staff on site will be made aware of the pollution prevention measures being implemented throughout the construction and decommissioning phases using appropriate toolbox talks and the site induction.

Noise and Vibration

- 6.4. Operating plant noise will be kept within the standards and time periods dictated for the site.

 Any noncomplying plant will be stopped and stood down until it can be rectified or removed from the site.
 - The British Standard which gives guidance on noise from construction and mineral working sites is BS 5228. This document does not specify absolute noise limits relating to construction activities; however, it does provide detailed guidance on the steps that can be taken to minimise potential noise & vibration effects. Reasonable mitigating



measures are as follows: vehicles and machinery will be switched off when not in use and properly maintained.

- Operation of plant, including fitting and proper maintenance of silencers and/or enclosures, avoiding excessive and unnecessary revving of engines and parking of equipment in locations which avoid possible effects on residential properties.
- Traffic movement limited to:
 - 08.00 to 20.00 Monday to Friday and 08.00 to 18.00 Saturdays
 - Public holidays will be observed unless otherwise agreed with the local planning authority
 - When loading and unloading material, attempts shall be made not to drop material from a height
- Controlling the spread of noise, e.g., by increasing the distance between plant and noise-sensitive receptors or by the provision of acoustic screening.
- 6.5. Any noise complaints shall immediately be directed to the site agent. Depending on the nature of the complaint, the initial response could be to immediately cease the activity until suitable mitigation measures have been put in place and agreed with the affected individual.

Dust

- 6.6. In order to control, prevent and minimise dirt on the access route and emissions of dust and other airborne contaminants during the construction works, the following measures will be implemented:
 - During windy conditions, any dust generating activities will be avoided or minimised,
 where practical.
 - Any soil stockpiles will be covered when left for extended periods of time.
 - Driving practices which minimise dust generation will be adopted.
 - Loads into and out of the site will be covered where required.



7. DRAINAGE MANAGEMENT PLAN

INTRODUCTION

7.1. The measures described in this section will be adopted during the construction phase in order to manage on-site drainage in accordance with current best practice and legislation.

Drainage Management Plan

7.2. No specific drainage is planned for the works.

Emergency Spill or Pollution Response

- 7.3. In the event of a liquid spill occurring on a construction site, the Contractor shall cease work immediately in the vicinity. Contractor's trained personnel shall do an appropriate PPE and as follows:
 - Locate the source of the pollution and stop/contain any further flow if possible;
 - If spillage is flammable, extinguish all ignition sources;
 - Immediately deploy the spill kit in accordance with the manufacturer's instructions;
 - Clean up the spill; and
 - All used spill kit materials should be disposed of in the proper manner as outlined in spill summary procedures.
- 7.4. The Site Manager shall contact:
 - The Client;
 - Environmental Protection Agency ("EPA") 24-hour emergency incident line 1890 33 55
 99; and
 - Inland Fisheries 24-hour pollution line 1890 34 74 24. The pollution hotline number shall be referenced in the construction site rules and displayed in the Site Office and in the Emergency preparedness & response plan.
- 7.5. Each Contractor working with controlled substances shall supply appropriate spill kits which shall be kept on site. The spill kits shall be made accessible at all times to all site personnel.



7.6. In the event of a fire, all personnel must evacuate the site and assemble at the site entrance. The Site Manager is responsible for calling the Fire Service, who will handle the emergency.



8. SUMMARY & CONCLUSIONS

8.1. The mitigation measures identified throughout this OCEMP have been summarised in **Table** 8-1 below.

Table 8-1: OCEMP Mitigation Measures

Potential Receptor	Potential Impact	Recommended Mitigation		
Water				
Streams and Rivers outside the proposed cable route boundary where surface water runoff will be discharged to	Pollution	Implementation of pollution prevention measures detailed within this OCEMP. 50m buffer to stockpiled soils and materials		
Soil				
Soil	Pollution	Implementation of pollution prevention measures detailed within this OCEMP		

8.2. The overall objective of this OCEMP is to reduce the potential impact on the environment during the construction phase of the proposed cable route. As outlined previously, the appointed contractor will need to incorporate this OCEMP into a detailed CEMP and construction method statements prior to the commencement of development and will be implemented in full during the construction phase.





Technical Appendix 3: Archaeology & Architectural Heritage Impact Assessment

Threecastles Solar Farm Grid Route

06/10/2023



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EXECUTIVE SUMMARY

- 3.1. An Archaeology & Architectural Heritage Impact Assessment has been produced to evaluate the potential direct and indirect effects upon cultural heritage assets and archaeological remains resulting from the development of grid connection infrastructure to connect the approved Threecastles Solar Farm ("Consented Development") (PA Ref: 21/1237 and PA Ref: 17/908) to the existing Blessington 38kV ESB Substation comprising the laying of underground cables ("UGC") and associated infrastructure, running through the townlands of Threecastles, Crosscoolharbour, Santryhill, Edmonstown, Blessington, Co. Wicklow.
- 3.2. A search of high-grade heritage assets such as World Heritage Sites, National Monuments in State Care and Historic Gardens and Designed Landscapes has been carried out within a 500m study zone of the Proposed Development, while Protected Structures, Historic Buildings within the National Inventory of Architectural Heritage, Architectural Conservation Areas, and sites within the Record of Monuments and Places have been assessed within a 500m study zone.
- 3.3. Baseline information was also obtained through a site walkover survey, map regression analysis, placenames analysis, aerial photography and consultation with relevant records and databases. There are no recorded sites within the RMP, RPS and NIAH that are within the Application Site that could be physically impacted by the Proposed Development. In addition, no confirmed features of archaeological significance were identified during the site visit or desk-based assessment of the Application Site. As such, no direct impacts upon known archaeological and heritage assets are anticipated and no mitigation measures are considered to be necessary in relation to this.
- 3.4. The Application Site is considered to have a Low potential for sub-surface remains, in consideration of the relatively small number of features in the surrounding 500m study area. Any requests and requirements for archaeological work is at the discretion of the NMS and Wicklow County Council.
- 3.5. Indirect effects upon the surrounding heritage assets have been assessed as overall **Low** in the worst case. Therefore, no specific mitigation is considered to be required for the reduction of any visual impacts.

Introduction



Background

- 3.1. Neo Environmental Ltd has been appointed by Threecastles Solar Limited (the "Applicant") to undertake an Archaeology and Architectural Heritage Impact Assessment for the development of grid connection infrastructure to connect the approved Threecastles Solar Farm ("Consented Development") (PA Ref: 17/908 and PA Ref: 21/1237) to the existing Blessington 38kV ESB Substation comprising the laying of underground cables ("UGC") and associated infrastructure.
- 3.2. The proposed grid route and 2no substations are shown within Volume 2.

Development Description

- 3.3. The Proposed Development will consist of the construction of an underground medium voltage 20Kv grid connection cable from the consented Threecastles Solar Farm to the existing Blessington 38kV ESB Substation. The following provides a brief description of the construction to take place:
 - The proposed grid connection is circa 3.62km in length (with the majority on public roads) and is to be installed along private agricultural land and public roads with the construction carried out in sections of no more than 100m at any one time. A new 100m section of works will only be excavated once the majority of reinstatement has been completed on the previous section, ensuring only one section is fully opened at any one time.
 - Joint bays will be placed at regular intervals between sections of ducts to allow the sections of cables to be connected together prior to the reinstatement of the road
 - The final c. 300m of the proposed cable route will be within private agricultural land before connecting to the ESB Blessington Substation.
 - The base of the excavated trench will be lined with sand bedding to be imported to site
 from a local licensed supplier. 125mm diameter high-density polyethylene (HDPE) cable
 ducting will be placed into the prepared trench, which will be inspected and backfilled.

Site Description

3.4. The Proposed Development consists of 20Kv grid connection infrastructure to connect the approved Threecastles Solar Farm (PA Ref: 17/908 and PA Ref: 21/1237) to the existing Blessington 38kV ESB Substation, comprising the laying of underground cables and associated infrastructure.



- 3.5. The Application site will be location in the townlands of Threecastles, Crosscoolharbour, Santryhill, Blessington, Newpaddocks, Blessington, Co. Wicklow.
- 3.6. Wicklow County Council has previously acknowledged a Section 5 for the 20kV grid route of the solar farm development (Exemption Ref 70/19). This was provided 9th October 2019. Following discussions with ESB Networks, changes to the grid route are required and therefore this subsequent submission (Please see Appendix A for further details).

Scope of the Assessment

- 3.7. The assessment has been produced to evaluate the cultural heritage assets and archaeological remains relevant to the Application Site. A search of high-grade heritage assets such as World Heritage Sites, National Monuments in State Care (Environmental NMSCs) and Historic Gardens and Designed Landscapes (HGDLs) has been carried out within a 500m study zone of the Proposed Development, in line with previous similar assessments produced by Neo. This study zone allows assets of national significance to be appropriately considered for indirect impacts, both on the assets themselves and their settings.
- 3.8. Architectural heritage assets such as Protected Structures, Historic Buildings recorded within the National Inventory of Architectural Heritage (NIAH) and Architectural Conservation Areas (ACAs) have been assessed within a 500m study zone, as well as sites and monuments within the Record of Monuments and Places (RMP). This study zone is also in line with previous solar farm assessments produced by Neo Environmental. It is considered to be appropriate for assets of regional and local significance. These features are potentially sensitive to visual impacts but not to the same extent as those of national significance.
- 3.9. Where appropriate, sites of exceptional value or sensitivity outside the study zones have also been assessed. The aims of the assessment are as follows:
 - To identify all known heritage assets within the study zone based on all available public resources;
 - To identify the archaeological potential of the Application Site;
 - To determine what if any level of recording will be required for any extant remains;
 - To assess the significance of any direct or indirect effect of the Proposed Development on cultural heritage assets and their settings and potential archaeological remains within the study zone, from construction through to decommissioning;
 - To identify mitigation measures where possible and aid in the design process to reduce the potential impacts of the proposed scheme;
 - To provide recommendations for any further archaeological/heritage assessment work that should be undertaken as part of the Proposed Development.



- 3.10. The report is supported by the following Figures and Technical Appendices:
 - Appendix 3A: Figures
 - o Figure 3.1 HGDL & RMP within 500m
 - Figure 3.2 OSI 6" Historic Map (western section)
 - o Figure 3.3 OSI 6" Historic Map (eastern section)
 - o Figure 3.4 OSI 25" Historic Map (western section)
 - o Figure 3.5 OSI 25" Historic Map (eastern section)
 - Appendix 3B: Tables
 - Appendix 3C: Plates
 - Plate 1: Quarry, looking west.
 - o Plate 2: Grid route along L8371 (Red Lane), looking east.
 - o Plate 3: RMP WI005-031, looking southeast.
 - o Plate 4: Hedgerow along grid route, looking northeast

Statement of Authority

- 3.11. The assessment has been conducted by registered archaeologists with the Chartered Institute for Archaeologists (CIfA), of Associate (ACIfA) level or above and/or members of the Institute of Archaeologists of Ireland (IAI). The assessment has been conducted in accordance with the appropriate professional guidance outlined in the Codes of Professional Conduct, Institute of Archaeologists of Ireland (adopted April 2006)¹.
- 3.12. Paula Slaughter BA BSc (Hons) MSc undertook the site inspection and associated site visit report for this assessment. She is an experienced licence holder with over 18 years of experience within both Ireland and the UK, including fieldwork of all types as well as extensive management experience for numerous projects in the residential, commercial and renewable energy sectors.
- 3.13. Paul Neary BA H.Dip MA MSc MIEnvSc MIAI ACIFA CEnv was the primary editor and had the final sign-off on the report. Paul is dual-qualified as a Chartered Environmentalist and archaeologist. Paul has over 14 years of archaeology and heritage experience, the majority of



¹ IAI (2006) *IAI Code of Professional Conduct*. IAI

which relates to Ireland. Paul has worked on large road projects, EIA developments and energy projects across Ireland and the UK. He is licensed to direct archaeology work in the Republic of Ireland and has also held archaeology director licenses in Northern Ireland.



LEGISLATION AND PLANNING POLICY CONTEXT

Planning and Development Act 2000 Revised (Updated 24th October 2019)

3.14. Part IV of the Planning and Development Act² contains two chapters outlining the various classifications of heritage assets that have a primarily architectural heritage value, as well as their place within the planning system and development control. Chapter one considers Protected Structures while chapter two deals with Architectural Conservation Areas and Areas of Special Planning Control.

Protected Structures

"For the purpose of protecting structures, or parts of structures, which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, every development plan shall include a record of protected structures, and shall include in that record every structure which is, in the opinion of the planning authority, of such interest within its functional area." (Section 51)

3.15. The protection of these assets is therefore achieved through the maintenance of a Record of Protected Structures (RPS) by each planning authority. Each RPS contains sites of architectural heritage from a wide range of chronological and functional backgrounds that will be of various sensitivities to direct and indirect impacts from development. For example, views from certain types of structures may be more integral to their heritage value than others and will therefore be more sensitive to indirect impacts as a result. The sites held within the RPS will therefore be assessed for their significance and sensitivity to the Proposed Development in order to accurately predict the potential impacts upon them.

Architectural Conservation Areas

"A development plan shall include an objective to preserve the character of a place, area, group of structures or townscape, taking account of building lines and heights, that —

- (a) Is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or
- (b) Contributes to the appreciation of protected structures,

If the planning authority is of the opinion that its inclusion is necessary for the preservation of the character of the place, area, group of structures or townscape concerned and any such

² Office of the Attorney General (OAG) (2000) Planning and Development Act (amended 2002), in *Irish Statute Book*. Dublin: Stationery Office.



- place, area, group of structures or townscape shall be known as and is in this Act referred to as an 'architectural conservation area'." (Section 81)
- 3.16. The local planning authority therefore also designates Architectural Conservation Areas (ACAs) where concentrated or important areas of heritage area present. As such, these assets will also be assessed in addition to the heritage assets it contains. While the purpose of such areas is primarily to protect the architecture and character of the immediate area, indirect impacts can sometimes cause harm to an ACA.

Project Ireland 2040

3.17. Project Ireland 2040 was adopted on 29th May 2018 as the joint publication of two main documents: the National Planning Framework and the National Development Plan. In their own words, these documents align their "investment strategy with our strategic planning documents to, for the first time in the history of our State, create a unified and coherent plan for the country". Project Ireland 2040 therefore offers an overall strategy document for development within Ireland but does not contain any specific policies relating to archaeology or heritage within development management.

National Monuments Act 1930

- 3.18. The National Monuments Act³ establishes a number of provisions to ensure the protection of archaeological monuments in Ireland. The Register of Historic Monuments Act (1997) was one of the provisions of this act which stated that interference to a monument would be illegal.
- 3.19. The 1994 Amendment Act to the document required the Record of Monuments and Places (RMP) to be created and maintained by the authorities and holds information on recorded sites that are to be protected from development. The National Monuments Service (NMS) also holds an additional list of National Monuments under ownership or guardianship of the Minister (Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA)) or the local authority.

"The expression 'national monument' means a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic, or archaeological interest attaching thereto and also includes (but not so as to limit, extend or otherwise influence the construction of the foregoing general definition) every monument in Saorstát Eireann to which the Ancient Monuments Protection Act, 1882, applied immediately before the passing of this Act, and the said expression shall be construed as including, in addition to the monument itself, the site of the

³ OAG (1930) National Monuments Act (amended 1954, 1987, 1994, 2004), in Irish Statute Book. Dublin: Stationery Office



monument and the means of access thereto and also such portion of land adjoining such site as may be required to fence, cover in, or otherwise preserve from injury the monument or to preserve the amenities thereof." (Section 2)

3.20. Both NMSCs and sites within the RMP, as well as their associated land and access, will therefore be considered for impacts within this assessment.

Heritage Act 1995

3.21. The Heritage Act⁴ seeks to promote the profile of both archaeological and architectural resources within Ireland. The Heritage Council was established in order to help achieve this and as required by Section 2 of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999, the DAHG subsequently established the National Inventory of Architectural Heritage (NIAH) in order to undertake a nationwide survey of the Irish architectural heritage. This survey provides a comprehensive overview of the architectural resource within Ireland and is still currently ongoing. The Act also contains the following definitions within Section 2:

Architectural Heritage

"all structures, buildings, traditional and designed, and groups of buildings including streetscapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents, and, without prejudice to the generality of the foregoing, includes railways and related buildings and structures and any place comprising the remains or traces of any such railway, building or structure"

Heritage Building

"any building, or part thereof, which is of significance because of its intrinsic architectural or artistic quality or its setting or because of its association with the commercial, cultural, economic, industrial, military, political, social or religious history of the place where it is situated or of the country or generally, and includes the amenities of any such building"

Heritage Gardens and Parks

"areas of natural heritage, and gardens and parks whose plant collections, design, design features, buildings, setting, style or association are of significant scientific, botanical, aesthetic or historical interest or which illustrate some aspect of the development of gardening or of gardens and parks"



⁴ OAG (1995) Heritage Act, in *Irish Statute Book*. Dublin: Stationery Office.

Monument

"includes the following, whether above or below the surface of the ground or the water and whether affixed or not affixed to the ground:

- (a) Any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections,
- (b) Any cave, stone or other natural product, whether or not forming part of the ground, that has been artificially carved, sculptured or worked upon or which (where it does not form part of the place where it is) appears to have been purposely put or arranged in position,
- (c) Any, or any part of any, prehistoric or ancient
 - (i) Tomb, grave or burial deposit, or
 - (ii) Ritual, industrial or habitation site, and
- (d) Any place comprising the remains or traces of any such building, structure or erection, any such cave, stone or natural product or any such tomb, grave, burial deposit or ritual, industrial or habitation site, situated on land or in the territorial waters of the State, but does not include any building, or part of any building, that is habitually used for ecclesiastical purposes."

Framework and Principles for the Protection of the Archaeological Heritage

3.22. While the international and national legislation details the definitions and requirements for protection of archaeology and cultural heritage, the specifics of this protection is laid out in Part III of the Framework and Principles for the Protection of the Archaeological Heritage⁵ document.

Archaeological Assessment

"The first option in all circumstances must be non-destructive investigation and study. Non-destructive techniques should wherever possible be used instead of destructive ones." (Section 3.2(b))

"Where it is considered that a Proposed Development may (due to its location, size, or nature) have archaeological implications, then an archaeological assessment should be carried out." (Section 3.6.2)

⁵ Department of Arts, Heritage and the Gaeltacht (DAHG) (1999) Framework and Principles for the Protection of the Archaeological Heritage. Dublin: Stationery Office.



"It is always essential that the report on archaeological assessment contain an archaeological impact statement describing the possible direct or in-direct effects of the Proposed Development on elements of the archaeological heritage." (Section 3.6.4)

3.23. This impact assessment constitutes a non-destructive investigation into the possible direct and indirect impacts of the Proposed Development. A site visit will be undertaken as part of the archaeological assessment within this report. This will provide considerably more information on any existing archaeological assets present within the site boundary and inform any further assessment or mitigation strategy.

Mitigation Requirements

3.24. If significant possible direct impacts are identified, mitigation in the form of further archaeological works may be required. In this case such works:

"should only be carried out if it is a necessary and appropriate follow-on to the results of suitable non-destructive methods in order to secure the further progression of archaeological research, or otherwise where there is no practicable or archaeologically acceptable alternative." (Section 3.2)

"Whenever the archaeological heritage is affected, or proposed to be affected, by development the approach to be followed must be preservation in-situ or preservation by record through archaeological excavation and recording." (Section 3.3)

"There should always be a presumption in favour of avoiding developmental impacts on the archaeological heritage. Preservation in-situ must always be the first option to be considered rather than preservation by record in order to allow development to proceed, and preservation in-situ must also be presumed to be the preferred option." (Section 3.4)

"Where archaeological sites or monuments (or portions of such) are to be removed due to development then it is essential that the approach of preservation by record be applied." (Section 3.5)

3.25. Therefore, in the case of direct impacts upon any known or unknown archaeological resource, preservation in situ is the preferred option for mitigation, through the use of buffer zones or non-penetrative construction methods for example. Where this is deemed unviable, preservation by record must be implemented in agreement with the relevant authorities and IAI standards. Such methods may involve test excavations (Section 3.6.5(b)) where an archaeological site or monument, or sub-surface features, are thought to be directly impacted by the Proposed Development. Otherwise, a system of archaeological monitoring may be sufficient where "only slight grounds for believing that the particular location contains archaeological deposits or features" (Section 3.7.2(i)).



National Cultural Institutions Act (1997)

3.26. The National Cultural Institutions Act (1997)⁶ does not provide any specific policies or guidance on protection of heritage and archaeology, but contains legislation on several aspects of cultural heritage, including "Indemnities in Respect of Certain Cultural Objects", "Provisions Relating to Heritage Collections" and "Acquisition of Certain Cultural Objects". The Act also establishes the bases for the National Museum, Library and Gallery of Ireland. As such, the Act does not apply directly to this assessment but provides context for other legislative and policy documents.

Architectural Heritage (National Inventory) and National Monuments Act (1999)

3.27. The Architectural Heritage (National Inventory) and National Monuments Act (1999)⁷ is another legislative document that details the legal maintenance and protection of heritage as well as the punitive measures for any violations. As such, this Act also provides context for other legislative and policy documents. However, the Act provides a definition of 'architectural heritage' as:

"all -

- (a) structures and buildings together with their settings and attendant grounds, fixtures and fittings,
- (b) groups of such structures and buildings, and
- (c) sites.

Which are of architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest" (Section 1).

Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland⁸

3.28. This guidance document was produced in October 2016 as a set of policy and guidance recommendations for all planning considerations for proposed solar developments within Ireland. This includes sections on archaeology and heritage which detail how to set out policies for their protection and development management. Section 5.2.6 regarding Archaeology and Cultural Heritage states:

⁸ Future Analytics (2016) Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland.



⁶ OAG (1997) National Cultural Institutions Act, in *Irish Statute Book*. Dublin: Stationery Office

⁷ OAG (1999) Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, in *Irish Statute Book*. Dublin: Stationery Office.

"It is recommended that geophysical assessment of proposed USSPV sites should only take place in areas of archaeological potential. Any application for a USSPV scheme should submit an archaeological assessment predicated on a site walk over and desk research of possible archaeological potential on a subject site.

The planning pipeline study has identified an increasing incidence in volume of RFIs seeking geophysical surveys of entire sites of proposed utility scale solar PV schemes. Proportionality should be applied regarding the requesting of geophysical assessments in circumstances where the likely presence of archaeological remains is low. It is considered that current practice in relation to other extensive rural-based types of development (i.e. quarrying) is not necessarily appropriate in guiding the approach toward the assessment of the archaeological impacts of USSPV as this form of development has a relatively limited impact on the site upon which it is erected. Notwithstanding the above, where a USSPV scheme is being proposed for development in an area of archaeological potential, a geophysical survey at RFI stage would be proportionate."

Wicklow County Development Plan 2016 – 2022

3.29. The Wicklow County Development Plan (CDP) 2016 – 2022 came into effect on the 11th December 20 and presents an extensive list of policies and objectives regarding development management within the County. Of these, the following policies are considered relevant to this heritage impact assessment.

BH1

'No development in the vicinity of a feature included in the Record of Monuments & Places (RMP) will be permitted which seriously detracts from the setting of the feature or which is seriously injurious to its cultural or educational value'.

BH₂

'Any development that may, due to its size, location or nature, have implications for archaeological heritage (including both sites and areas of archaeological potential / significance as identified in Schedule 10.01 & 10.02 and Map 10.01 & 10.02 of this plan) shall be subject to an archaeological assessment. When dealing with proposals for development that would impact upon archaeological sites and/or features, there will be presumption in favour of the 'preservation in situ' of archaeological remains and settings, in accordance with Government policy. Where permission for such proposals is granted, the Planning Authority will require the developer to have the site works supervised by a competent archaeologist'.

BH3

'To protect previously unknown archaeological sites and features, including underwater sites, where they are discovered during development works'.



BH4

'To facilitate public access to National Monuments in State or Local Authority care, as identified in Schedule 10.02 and Map 10.02 of this plan'.

BH5

'To protect the Hillforts in west Wicklow and to engage with the relevant central Government department to seek to undertake a detailed study of their importance'.

BH6

'To facilitate the designation of the Glendalough Monastic Settlement as a UNESCO World Heritage Site'.

- 3.30. The scope of this impact assessment has therefore included all of the classes of archaeological and architectural heritage assets defined within the above documents. This will ensure that the design of the Proposed Development does not cause significant harm, direct or indirect, to any assets or their settings, in order to comply with policies at both national and local levels.
- 3.31. In relation to the solar farm proposal, the CDP also states in Section 6.15 (Energy) that:

"This Development Plan has an overarching role in progressing a sustainable energy future for the County by recognising the central role of land use planning in promoting a low carbon society and mitigating the impacts of climate change."

3.32. Section 6.15.3.1: Solar Energy, states that:

"There are a range of technologies available to exploit the benefits of harnessing energy of the sun, including solar panels, solar farms, solar energy storage facilities all of which contribute to a reduction in energy demand. Solar technologies can be designed into buildings or retrofitted. Large scale solar farms have been positively considered on suitable sites within the County in the recent past."



ASSESSMENT METHODOLOGY

Desk Based Assessment

- 3.33. The desk-based assessment was conducted to ascertain all historical and archaeological information relevant to the Application Site and the local area. NMSCs, HGDLs, ACAs and sites within the RMP, RPS and NIAH were assessed within a 500m study zone. The sizes of these study zones were selected to ensure that comprehensive and informative data was collated to characterise the direct and indirect effects that the Proposed Development may have on historical and archaeological assets within the local area. Due to the nature of the records, some degree of overlap was possible, and some assets may have been repeated. However, where historic structures are recorded within both the RPS and the NIAH, efforts have been made to reduce duplication. Buildings of historic interest that are recorded within the NIAH are treated as having the same level of protection as those recorded as Protected Structures for the purposes of this assessment.
- 3.34. Historical databases and various archives were consulted to identify the designated assets and undertake the DBA. These assets were imported into ArcGIS Pro as shapefiles in order to determine their locations relative to the Application Site and produce the figures supporting this assessment. The main sources which were consulted include the:
 - Record of Monuments and Places (RMP) held by the National Monuments Service (NMS);
 - Sites and Monuments Record (SMR);
 - National Inventory of Architectural Heritage (NIAH);
 - Record of Protected Structures (RPS);
 - Archaeological Survey of Ireland (ASI);
 - Database of Historic Gardens and Designed Landscapes (HGDL);
 - Database of Irish Excavation Reports⁹;
 - Historic Maps;
 - Aerial imagery via Google Earth, Bing Maps and ArcGIS Pro global mapping;
 - Cambridge University Collection of Aerial Photography;



⁹ http://www.excavations ie/

- National Collection of Aerial Photography;
- http://www.britainfromabove.org.uk/;
- Open Topographic Data Viewer (LIDAR) at https://dcenr.maps.arcgis.com/apps/webappviewer/; and
- Placenames Database of Ireland.

Map Regression Analysis

3.35. Analysis of historic maps can reveal the changes in landuse and field boundaries in the area and can highlight potential areas of archaeological interest that may have been lost in the subsequent years. Relevant maps were consulted to undertake this analysis as part of the desk-based assessment and site walkover survey.

Aerial Photography and Placename Assessments

- 3.36. To identify potential archaeological features within the Application Site that are not recorded within the relevant databases, aerial photography of the land was examined in order to identify any cropmarks or markings within the Application Site that may be indicative of previously unknown features.
- 3.37. Similarly, a placename analysis of the baronies, townlands and parishes containing the land was undertaken as this can often determine the historical landuse associated with the Application Site even when other evidence of this usage has been lost.

Assessment of Direct Effects

3.38. Potential direct effects during the construction phase are considered as physical disturbance of known or associated archaeological remains. These impacts can be caused through the construction processes within the footprint of the Development, including ancillary works such as access tracks. Direct impacts can affect both above ground and subsurface remains, which will both be considered within this assessment. The presence and character of any existing archaeological features will be identified within the site boundary, and the archaeological potential of the site assessed through a desk-based assessment of the surrounding archaeological resource and landscape. The significance of any impacts will be determined by considering the construction methodology within the Application Site and to what extent this would disturb any sub-surface remains.

Assessment of Indirect Effects

3.39. The assets that were identified through the sources previously listed were assessed for their significance using the criteria presented in **Table 1: Appendix 3B**. The magnitude of the



indirect impacts upon these assets was determined by considering the views and intervisibility shared with the Proposed Development, as well as the nature, character, date, extent, setting and surviving remains of the feature where relevant. Indirect effects were then assigned using this information on the following scale:

- Major
- Major to moderate
- Moderate
- Moderate to low
- Low
- Low to negligible
- Negligible
- 3.40. Indirect effects of 'moderate' or above are considered significant and appropriate mitigation measures have been recommended where appropriate to lower the potential impact.

Site Visit

3.41. A walkover survey was conducted at the Application Site during 20th January 2022. The primary aim of the survey was to identify any potential archaeological or historical features within the Application Site that are not recorded. The land and fields within the Application Site were documented photographically along with any possible features identified. The results of this survey also considered available information on the known designated and non-designated sites within and close to the Application Site.

Assessment Limitations

- 3.42. The consulted sources contain records of known archaeological and historic features. The record is not an exhaustive record of all surviving historic environment features and does not preclude the possible existence of archaeological remains of significance within the study zone, which are at present unknown or have been added to the records recently. It was assumed that official data provided by public bodies was accurate and up-to-date.
- 3.43. Views and effects were carefully assessed, but restrictions due to accessibility because of private land ownership or issues regarding Health and Safety may have limited assessment. However, no significant issues were encountered during the walkover survey.



The Importance of Setting

- 3.44. Setting can be important to the way in which historic assets or places are understood, appreciated, and experienced.
- 3.45. Where development is proposed it is important to identify and define the setting of the heritage asset and to assess how development might impact upon this resource. Setting often extends beyond the property boundary, or 'curtilage', of an individual historic asset into a broader landscape context. Less tangible elements can also be important in understanding the setting. These may include function, sensory perceptions or the historical, artistic, literary, and scenic associations of places or landscapes. In the light of this guidance, development proposals should seek to avoid or mitigate detrimental impacts on the settings of historic assets.



BASELINE CHARACTERISATION

3.46. The following section outlines the historical and archaeological background within the extent of the study zones and the local area. This provides a clear depiction of the context and significance of the heritage assets that could potentially be impacted by the Proposed Development. The report outlines an assessment of the direct and indirect impacts of the Proposed Development and proposed mitigation measures. The potential for disturbing any remains within the footprint of the Proposed Development has been assessed and recommendations produced for any further investigative work.

Archaeological Period Classifications

- 3.47. The period classifications below provide chronological context for the archaeological assets which are discussed as part of this report.
 - Mesolithic (8000BC 4500BC)
 - Neolithic (4500BC 2500BC)
 - Bronze Age (2500BC 500BC)
 - Iron Age (500BC AD400)
 - Early Christian (AD400 AD800)
 - Medieval (AD800 AD1535)
 - Post Medieval & Modern (AD1535 onwards)

Archaeological and Cultural Heritage Assets

- 3.48. The full list of assets identified within their respective study zones is presented within **Table**2: Appendix 3B. A total of two HGDLs and six RMPs were identified within the 500m study zone (Figure 3.1: Appendix 3A), These assets have therefore been assessed for potential indirect effects within this report. However, no ACAs or World Heritage Sites were identified within their respective study zones.
- 3.49. The assets identified within the study zones were considered along with the results of previous archaeological work, the site visit and map regression analysis, in order to assess the archaeological potential within the Application Site. These results informed part of the direct impacts assessment.



Placenames Assessment

- 3.50. The Application Site is spread across a total of five townlands: Threecastles, Crosscoolharbour, Santryhill, Edmonstown, Blessington, Co. Wicklow. The names of these townlands were analysed for their origins and meanings in case they refer to historical features within their boundaries that are not recorded by other means. This was done by consulting the Placenames Database of Ireland, which collates various historical sources regarding the names of townlands, in particular the Ordnance Survey Parish Namebooks¹⁰.
- 3.51. The name of the townland Threecastles is assumed to be derived from the Irish term 'Bhaile na dTrí Chaisleán'. The Irish word 'Bhaile' is translated as 'townland or homestead' and dTrí Chaisleán' deriving from 'Trí' meaning three and 'Chaisleán' meaning castle. There are, although outside the study area, three castles to the southeast where the name derives from. The townland was first mentioned in 1531 in the Calendar of Archbishop Alen's Register *Bliain: 1172-1534* as Villa Owes alias the iii castells, with the present name of 'Threecastles' appearing in 1538 in Calendar of Carew Manuscripts, 1515-1623.
- 3.52. There is no information held in the database relating to the origin of the name 'Crosscoolharbour'. However, examination of the component parts reveals that 'Cross' derives from the gaelic word 'Cros' and 'cool' from the gaelic word 'coole' meaning corner or nook. Therefore, the name most likely translates as 'the cross of the corner' or the 'corner of the cross'. No reference to a cross or a crossroads was found in any database to establish an origin from where the name originated.
- 3.53. There is little information held in the database in relation to 'Santryhill', translating to 'Chnoc na Foraire'. Chnoc or cnoc translates as hill. However, the translation of 'Santry' is more difficult, when we first see the townland name in 1723 within 'Clárlann na nGníomhas' the Registry of Deeds, it is mentioned as 'Centry Hill'. The gaelic translation of santry in this instance being 'Foraire' is 'keeper'. So therefore, the name could mean 'Hill of the Keeper', although the origin is unclear as to whether this could be in a military or domestic sense.
- 3.54. Edmonstown or 'Fhaiche Bhaile Éamainn' translates as 'The green townland or homestead of Éamainn or Edmond. The origin of the name is unknown and cannot be found in any database.
- 3.55. Blessington or 'Bhaile Coimín' mean the 'townland or homestead of Cumin', Cumin being an Irish surname common throughout the southern half of Ireland.

Map Regression Analysis

3.56. **Figures 3.2 & 3.3: Appendix 3A** contains the 6" historic OSI map of the site from 1829 – 1841, while **Figures 3.4 & 3.5: Appendix 3A** shows the 25" historic OSI map from 1897 – 1913. These maps show the progression of land use and field boundaries in the area and can highlight potential areas of archaeological interest that may have been lost in the subsequent years.



¹⁰ O'Donovan, J ex al (1836) Ordnance Survey Parish Namebooks (OD:AL).

- 3.57. The 6" map shows that land within the Application Site at the time was mainly road and verges, comprising a large number of fields of various shapes and sizes at either side. A farmstead is depicted on the corner where the N81 and Led Land intersect. Further Red land a farmstead called 'Miley Hall' is depicted and although this seems to be a substantial building, it's not included within the NIAH. At the end of Rd Lane another building 'Liffey Cottage' is shown along with 'Scurlocks Graveyard' (WI005-027----) and 'Scurlocks Holy Well' (WI005-028----). Within the eastern section of the grid route one of the castles from which Threecastles gets is name is shown (WI005-031----). No other notable features are depicted within the grid route although there are a number of developments visible adjacent to various points of the site boundary, including numerous houses/farm buildings and local roads.
- 3.58. The 25" map shows that since its depiction on the 6" map, the Application Site contains very little or no changes, with the surrounding lands remaining fully in agricultural usage. A few internal field boundaries have changed, these changes resulted in creating a field system with more uniform fields, visibly more consistent in their shape and size in order to facilitate their agricultural use. No other features of note are discernible on the map.

Local Archaeological Fieldwork / Previous Excavations

3.59. A search of the Database of Irish Excavation Reports¹¹ identified no previous archaeological fieldwork having been undertaken within or near to the Application Site. The nearest recorded events are a 2002 programme of monitoring (2002:1957) c. 0.71km to southwest of the Application Site¹². No archaeological deposits were encountered. As such, the local record of excavations does not indicate any heightened archaeological potential within the Application Site.

Site Visit

- 3.60. An archaeological walkover survey of the Application Site was conducted on 20th January 2022 by Robert Mulraney on behalf of Neo Environmental. Chosen plates from the photographic survey are referred to below and are contained within **Appendix 3C** attached to this assessment.
- 3.61. The survey area was a walked and partially driven route beginning from the Blessington substation at Old Paddocks, Co. Wicklow. The initial 300m runs southeast to the Dublin-Blessington Road along a route of considerable industrial development, where the natural landscape is heavily altered by quarrying activities (Plate 1: Appendix 3C) and subsequent construction of warehouses and shops. It then turns northeast along the main road for 300m, where development continues on the west and farm fields to the east. Nothing of archaeological significance was identified and is unlikely to exist in this area of high development.



¹¹ https://excavations.ie

¹² https://excavations.ie/report/2009/Derry/0020522/ last accessed 22/10/19

- 3.62. A minor road runs southeast for 1.2km (Plate 2: Appendix 3C) This is a largely modern residential area. While there are a small number of fields, most of the grid route along this section is fronted by private dwellings along the roadside.
- 3.63. The final 1.5km of gridline turns northeast along a narrow road. This area is partially residential but the vast majority of it is occupied by forestry plantations. Therefore, it is impossible to determine any extant archaeological features.
- 3.64. The remaining 200m of the route enter northwest into farmland.
- 3.65. From the point where the grid route turns north to enter farmland, 400m to the southeast of this point is located Threecastles castle (RMP WI005-031, Plate 3: Appendix 3C) a protected national monument. A second castle, not visible on the surface is located 300m to the east (RMP WI005-032). The grid route is not visible from Threecastles castle, but it is possible that the Proposed Development would be visible from the intact roof of the castle.
- 3.66. The grid route runs north, from the road, through a 60m long laneway and into farmland for a further 500m. It initially runs northwest along the southeastern extremity immediately adjacent to a mature hedgerow (Plate 4: Appendix 3C). The hedgerow is a significant field boundary and is raised and banked in places.
- 3.67. The walkover survey concluded that no unknown features of archaeological significance was present along the Application route.



ASSESSMENT OF DIRECT EFFECTS

Known Archaeological and Heritage Assets

3.68. There are eight recorded sites within the RMP, RPS and NIAH that are within or near to the Application Site that could be impacted by the Proposed Development. However, no features of archaeological significance were identified during the site visit. As such, **no direct impacts** upon known archaeological and heritage assets are anticipated.

Archaeological Potential

- 3.69. Due to the absence of any recorded archaeological or architectural features within the Application Site and that most of the grid route is along existing road, it is considered to have no confirmed indicators for archaeological potential. A small percentage 0.3% is through greenfield but has no internal archaeological features. In addition, the relatively small number of recorded sites within the RMP in the 500m study area, indicates that the site has a **Low** archaeological potential. As such, while no specific indicators are present within the Application Site, it is considered to have a **Low potential throughout its extent**.
- 3.70. No further potential for sub-surface remains is indicated through the desk-based assessment or site inspection. Specific impacts relating to the archaeological potential identified above cannot be accurately ascertained at this stage, but the predicted likelihood of such impacts can be estimated by considering the ground disturbance of the construction methods that will be used.

Ground Disturbance from Construction Methods

3.71. Construction involving topsoil stripping has, in general, a lower potential for impacting upon sub-surface remains below the archaeological horizon but retains a similar potential for encountering archaeological remains as construction involving deeper excavation work.

Excavation works

Cable Trenches

3.72. Depending on the functionality of the cable trenches, they will measure up to **0.5m** wide and their total ground disturbance area is estimated to be c. **3.62km**. in length. **3.32km** of trenching will be excavated along a public road and therefore previously disturbed ground and **0.3km** of trenching will be within agricultural land, however this will be running parallel to a mature hedgerow.



ASSESSMENT OF INDIRECT EFFECTS

3.73. Within their respective study zones, a total of two HGDLs and six sites within the RMP have possible visual impacts. These assets are therefore assessed for indirect impacts below. There will be no visual impacts to the heritage assets after the construction phase but may be minor visual impacts during the construction phase.

Historic Gardens and Designed Landscapes

6023 (NA01) Miley Hall

• Detailed information for the asset is very limited within its NIAH entry. However, its depiction on the 6" OSI map shows that it comprised a group of small, well-defined fields on the north side of the local road. This included a parkland area, orchard, formal gardens and a core area containing its principal building. Since this depiction, the footprint of the HGDL itself is largely unchanged and is recognisable on modern aerial imagery, but most of its original features such as the formal gardens have been cleared away. In addition, significant modern development has occurred within the western extent of the asset and along the outside of its western boundary, notably compromising its setting on this side. As such, while the asset retains some value from its surviving principal house and overall footprint, its setting is not considered to be particularly sensitive to indirect impacts.

6024 (NA02) Liffey Cottage

• Detailed information for the asset is very limited within its NIAH entry. However, its depiction on the 6" OSI map shows that it comprised a small, well-contained group of fields on the south side of the local road. A core of buildings, presumably principal house and associated outbuildings, were depicted within the centre of the demarcated area, while the graveyard NAxx is depicted within the field to the southeast of this. Since this map depiction, the area of the HGDL is largely unrecognisable, now containing significant modern development including large farm buildings, residences and new roads. The character and composition of the HGDL has therefore been altered considerably since its original depiction.



Record of Monuments and Places

3.74. There is a total of six archaeological sites in the RMP that are within the 500m study zone. These sites can be used to evaluate the potential for archaeological remains within the Application Site. Indirect effects upon many RMP sites are anticipated to be **Negligible** during the construction phase. However, exceptions such as monuments close to the Application Site or those with well-preserved remains or settings will be assessed below.

WI005-024---- (NA03) Ritual Site-Holy Well

3.75. Situated at the foot of a gentle SE-facing slope. Natural spring housed in a modern pumphouse.

WI005-027001- (NA04) Ecclesiastical Enclosure

3.76. Situated on a steep SE-facing slope, now overlooking the Blessington Reservoir. Pentagonal graveyard (max. Wth 35m) defined by a modern wall. The earliest identifiable grave dates to 1747. A curving dip in the ground on the NE side of the site may represent the perimeter of a circular enclosure (max. diam. c. 65m). A holy well (WI005-028----) lies to the E.

WI005-028---- (NA05) Ritual Site-Holy Well

3.77. Situated c. 90m E of Scurlock's Graveyard (WI005-027001-) on a gentle SE-facing slope c. 35m from the shore of the Blessington Reservoir. A spring feeding into a natural gully.

WI005-029---- (NA06) Enclosure

3.78. Situated on a SE-facing slope c. 300m N of the River Liffey. Circular enclosure (diam. c. 30m) within a forestry plantation. Visible on aerial photographs (GSIAP, O 73, N 332).

WI005-030---- (NA07) Enclosure

3.79. Situated on a gentle S-facing slope overlooking the River Liffey. Small circular enclosure (diam. c. 30m) within a forestry plantation. Visible on aerial photographs (GSIAP, O 73, N 332).

WI005-031---- (NA08) Castle - tower house

3.80. National Monument in state ownership No. 491. Situated on an E-facing slope overlooking the River Liffey. Rectangular three-storey tower house with a projecting stair turret at the NE angle. It originally had a structure attached at the W side, where the springing of a barrel vault is visible. A doorway above the present entrance gave access from the original building to the later addition. Another barrel vault roofs the third floor in the surviving portion. Ascent to the first floor appears to have been by stairs in the W structure. This floor level has a large fireplace, decorative mouldings on the windows, and a garderobe with a chute built into the



wall thickness of the stair turret. The site of another castle (WI005-032----) is indicated on the OS 6-inch map 300m to the E.

Summary of Indirect Effects

- 3.81. There were no NMSCs identified within the 500m study zone around the Proposed Development. As such, this heritage resource will not be impacted by the Proposed Development.
- 3.82. There were two HGDLs identified within the 500m study zone that are close to the Proposed Development. This heritage resource will not be impacted by the Proposed Development.
- 3.83. There were six archaeological sites identified in the RMP that are within the 500m study zone and the Proposed Development. **Low** indirect visual effects are anticipated for RMP WI005-031 (NA08) during the construction phase, while **Negligible** indirect effects are anticipated for the remaining assets.
- 3.84. There were no ACAs or World Heritage Sites identified in their respective study zones.



MITIGATION MEASURES

Direct Effects upon Known Assets

3.85. As the Proposed Development has no internal RMP sites and their associated ZoN areas (see Figure 3.1: Appendix 3A), no direct effects will occur on these assets. As such, no additional mitigation measures will be required to avoid impacts upon these assets.

Archaeological Potential

- 3.86. Due to the absence of any recorded archaeological or architectural features within the Application Site. In consideration of the relatively low number of archaeological features in the surrounding 500m study area it is considered to have no confirmed internal indicators for specific archaeological potential.
- 3.87. It is anticipated that no further mitigation is required during the construction stage; however, this may change at the discretion of the National Monuments Service (NMS) and Wicklow County Council.
- 3.88. Any requests and requirements for archaeological work is at the discretion of the NMS and Wicklow County Council.

Indirect Effects

3.89. Indirect effects upon the surrounding heritage assets have been assessed as overall **low to negligible**. Therefore, no specific mitigation is considered to be required for the reduction of any visual impacts.

RESIDUAL EFFECTS



- 3.90. As the Proposed Development has no internal RMP sites and their associated ZoN areas (see Figure 3.1: Appendix 3A), no direct impacts will occur on these assets. As such, no additional mitigation measures will be required to avoid impacts upon these assets and residual direct impacts will remain as none.
- 3.91. As such, residual direct effects upon hitherto-unknown archaeology are anticipated to be **Negligible**.
- 3.92. As no mitigation is expected to be required for indirect effects, residual indirect effects can be considered to be unchanged at **low to negligible**.



SUMMARY

- 3.93. All potential direct and indirect effects upon designated and non-designated heritage assets within the study zones have been assessed through appropriate methods. There are no recorded sites within the RMP, RPS or NIAH that are within the Application Site that could be physically impacted by the Proposed Development. In addition, no confirmed features of archaeological significance were identified during the site visit or desk-based assessment of the Application Site. As such, no direct impacts upon known archaeological and heritage assets are anticipated and no mitigation measures are considered to be necessary in relation to this.
- 3.94. The Application Site is considered to have a **Low** potential for sub-surface remains, in consideration of the relatively small number of features in the surrounding 500m study area. Any requests and requirements for archaeological work is at the discretion of the NMS and Wicklow County Council.
- 3.95. Indirect effects upon the surrounding heritage assets have been assessed as overall **Low** in the worst case. Therefore, no specific mitigation is considered to be required for the reduction of any visual impacts.

Compliance with Relevant Policies

- 3.96. This assessment has been conducted to meet the criteria set out by the NMS and the DAHG (now the Department of Culture, Heritage and the Gaeltacht), and has been conducted to the relevant IAI standards.
- 3.97. The Proposed Development has been considered in relation to international, national, and local policies throughout the design process. The Proposed Development has been assessed in compliance with the heritage protection strategies outlined within the Planning and Development Act, Heritage Act and National Monuments Act. As such, the full array of archaeological and architectural heritage features at risk of potential impacts from the Proposed Development have been identified from the NMS, RMP, RPS and NIAH sources. Each asset identified has been assessed for impacts that may constitute interference or harm to their character or setting, in line with the relevant policy and guidance.
- 3.98. With the implementation of appropriate mitigation, the proposed solar farm will not significantly affect the assets or their settings and complies with the relevant policies and guidance at both national and local levels.



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Appendix 3A – Figures





Threecastles Solar Farm Heritage Assets within 500m Figure 3.1

Key

Development Boundary

500m Study Area

- Historic Gardens and Designed Landscapes
- Record of Monuments and Places

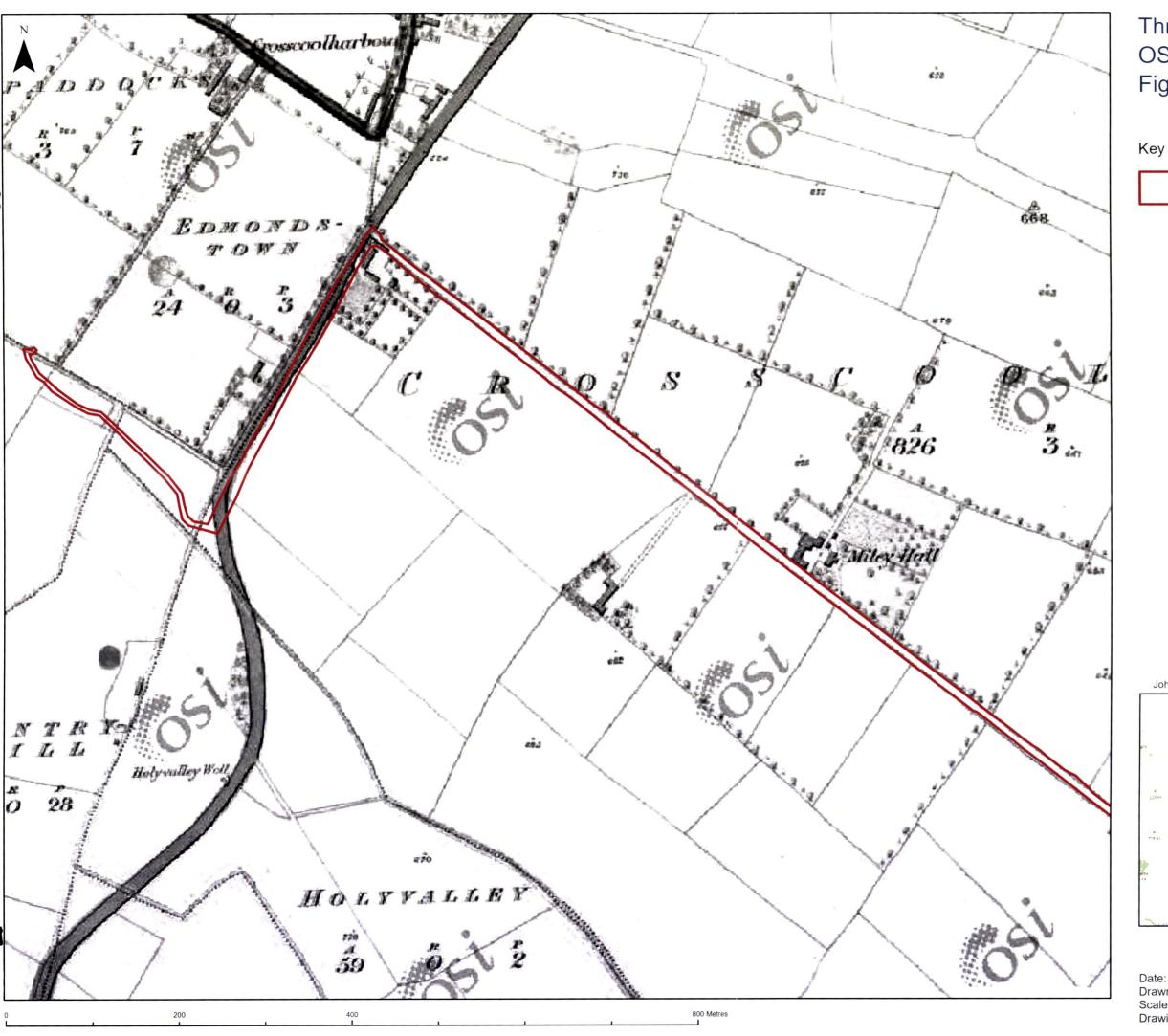
Zones of Notification

Neo Office Address: Johnstown Business Centre, Johnstown House, Naas, Co. Kildare



Date: 20/05/2022 Drawn By: Michael Briggs Scale (A3): 1:12,000 Drawing No: NEO00879/037IA

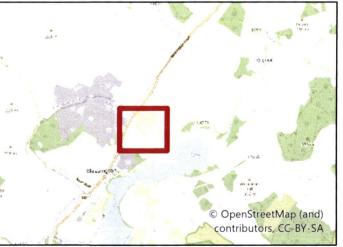




Threecastles Solar Farm OSI 6" Map (Western Section) Figure 3.2

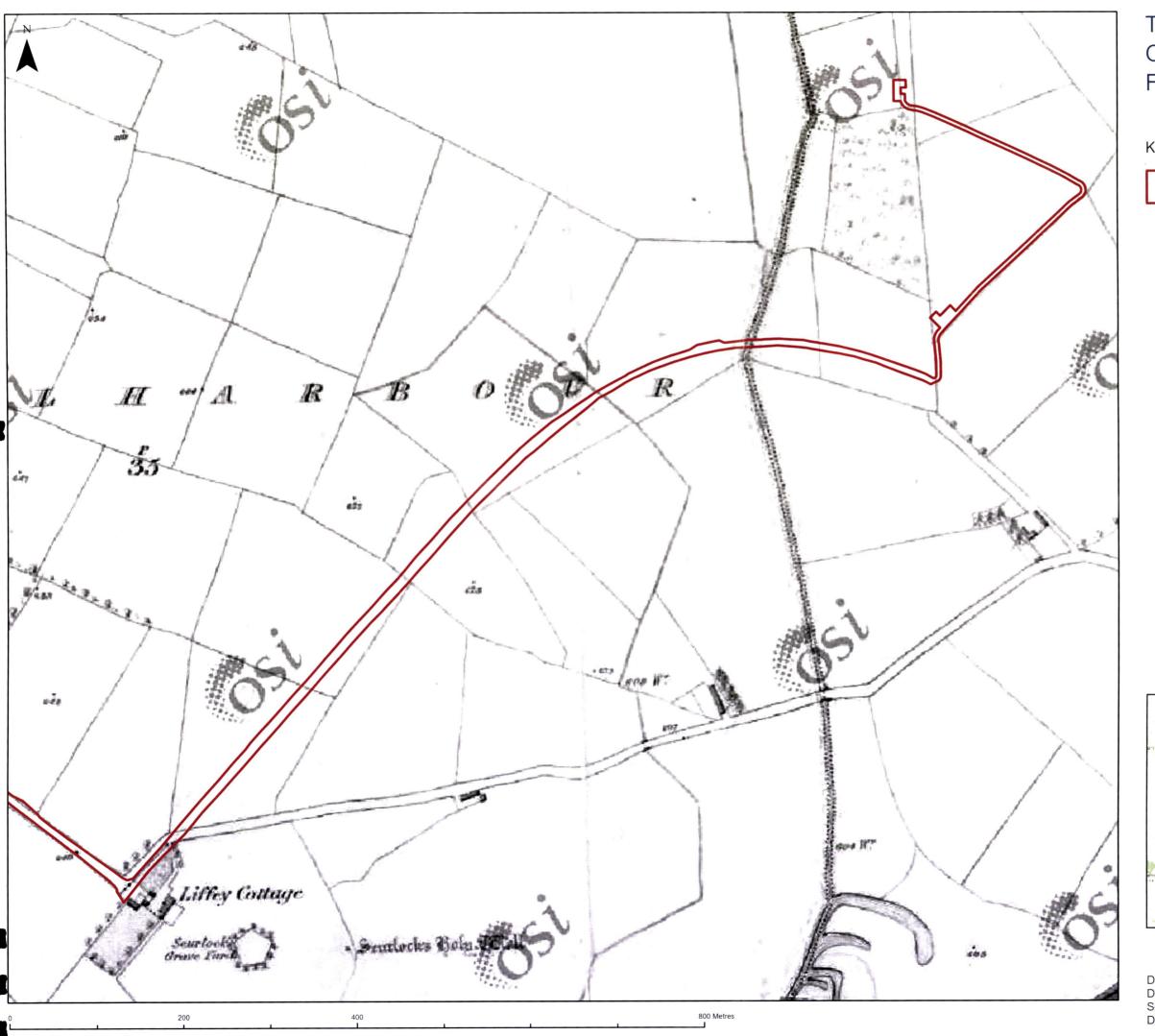
Development Boundary

Neo Office Address:



Date: 20/05/2022 Drawn By: Michael Briggs Scale (A3): 1:4,200 Drawing No: NEO00879/038IA



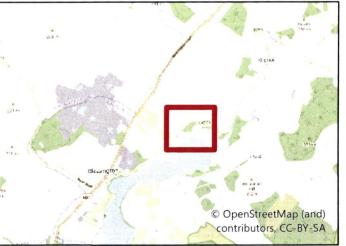


Threecastles Solar Farm OSI 6" Map (Eastern Section) Figure 3.3

Key

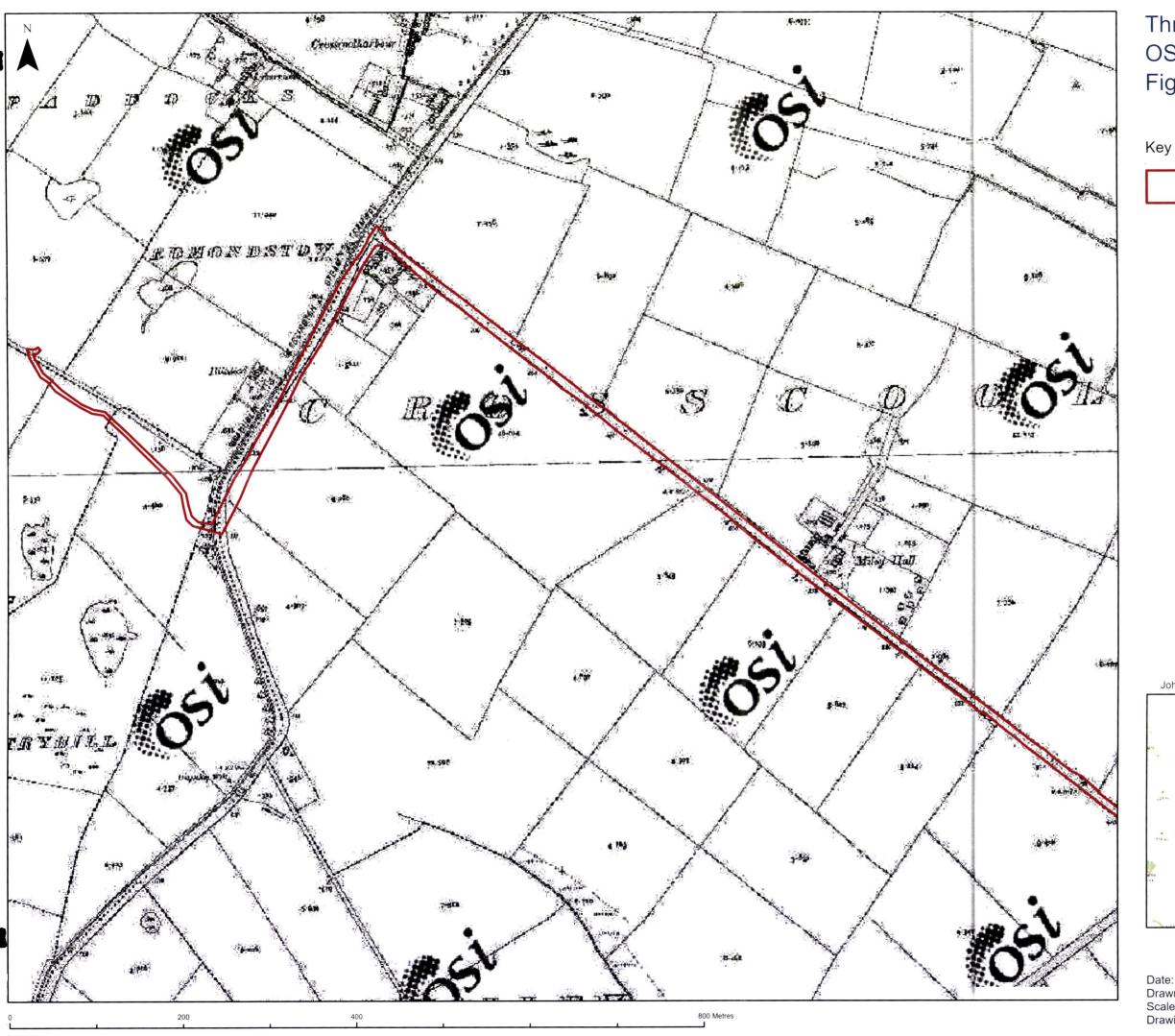
Development Boundary

Neo Office Address: Johnstown Business Centre, Johnstown House, Naas, Co. Kildare



Date: 20/05/2022 Drawn By: Michael Briggs Scale (A3): 1:4,200 Drawing No: NEO00879/038IA

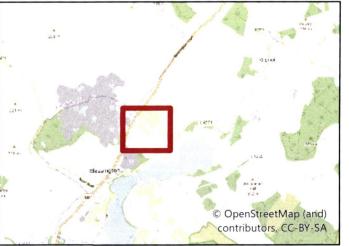




Threecastles Solar Farm OSI 25" Map (Western Section) Figure 3.4

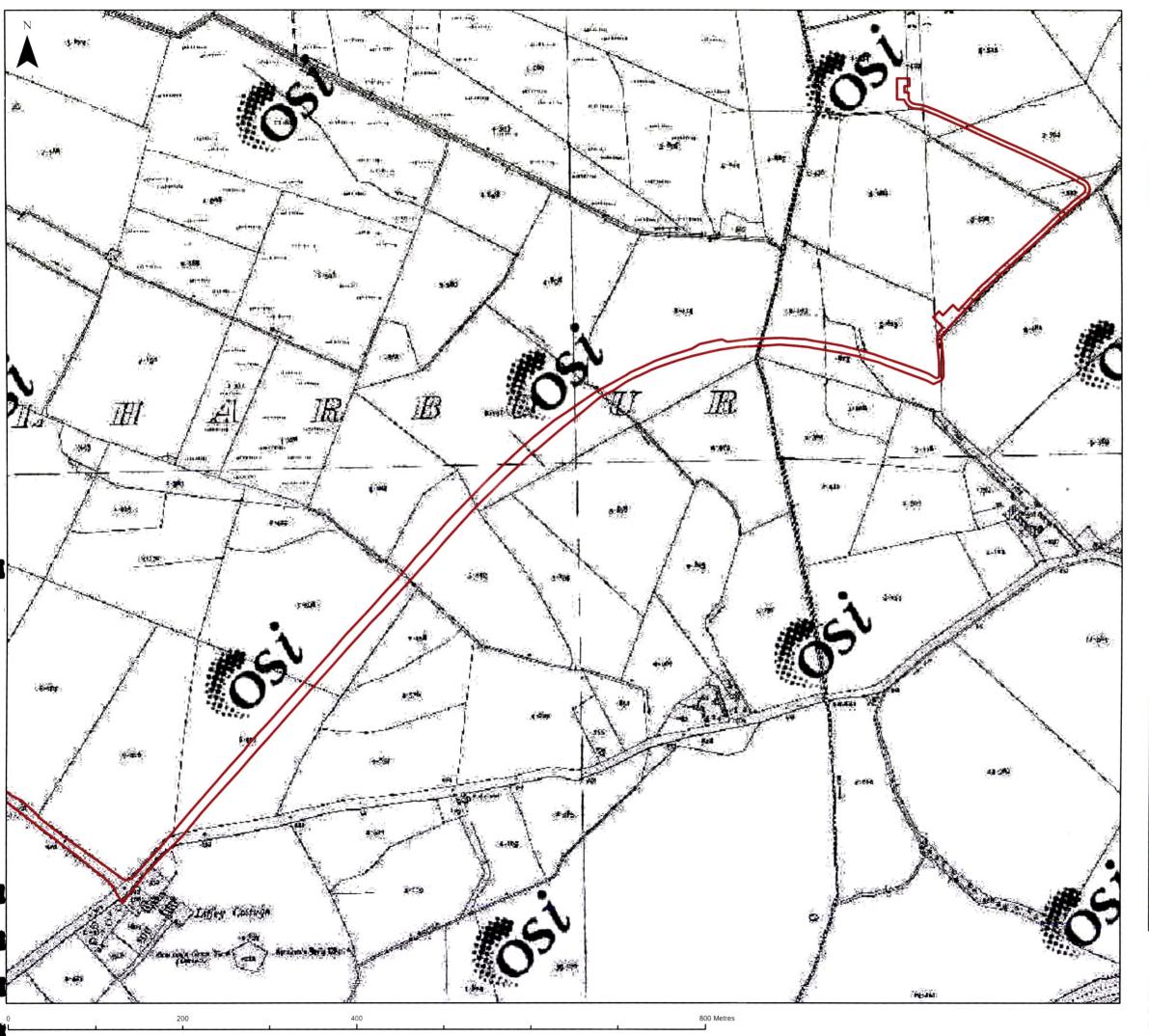
Development Boundary

Neo Office Address:



Date: 20/05/2022 Drawn By: Michael Briggs Scale (A3): 1:4,200 Drawing No: NEO00879/039IA



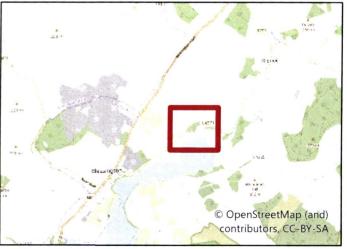


Threecastles Solar Farm OSI 25" Map (Eastern Section) Figure 3.5

Key

Development Boundary

Neo Office Address: Johnstown Business Centre, Johnstown House, Naas, Co. Kildare



Date: 20/05/2022 Drawn By: Michael Briggs Scale (A3): 1:4,200 Drawing No: NEO00879/039IA





Appendix B – Tables



Table 1: Grading of the Significance of Cultural Heritage Resources Based on DMRB 2009^1

	Assessment Considerations			
Significance	Archaeological Remains	Historic Buildings	Historic Landscapes	
Very High	 World Heritage Sites Assets inscribed as of universal importance Assets that can contribute substantial knowledge to international research 	 World Heritage Sites Structures of recognised international importance 	World Heritage Sites Historic landscapes of international historic value	
High	 National Monuments in State Care (NMSC) Monuments or places of clear national importance Heritage assets that contribute to national research objectives 	NMSC which incorporate standing remains Some Protected Structures that have exceptional historic or architectural qualities or associations not adequately reflected in their listing Some Architectural Conservation Areas containing very important buildings	 Historic Gardens and Designed Landscapes (HGDL) of outstanding interest Historic landscapes of demonstrable national value 	
Medium	 Monuments or places that contribute to regional research objectives NMSC compromised by poor preservation or poor survival of contextual associations 	 Protected Structures of regional importance Buildings containing exceptional qualities in their fabric or historical associations Architectural Conservation Areas containing buildings important to its historic character 	 Historic landscapes or HGDL of particular interest Undesignated historic landscapes showing quality justifying designation 	



 $^{^{1}}$ Highways Agency (2009) $\it Design \, Manual \, for \, Roads \, and \, Bridges \,$ Highways Agency.

	Manusantanaka	Historic townscapes with important historic integrity in their buildings or settings Protected Structures of	
Low	 Monuments or places of local importance Assets compromised by very poor preservation or survival of contextual associations Assets with potential to contribute to local research objectives 	 Protected Structures of local importance Historic buildings of modest fabric or historical association Historic townscapes of limited integrity features within urban areas 	 Historic landscapes or HGDL of local interest Historic landscapes whose value is limited by poor preservation or survival of contextual associations
Negligible	Assets with little or no surviving evidence	Buildings of no architectural or historical note	Landscapes with little or no historic interest

Table 2: HGDL Assets within the Study Zones

Neo Ref.	Database No.	Name
NA01	6023	Miley Hall
NA02	6024	Liffey Cottage

Table 3: RMP Assets within the Study Zones

Neo Ref.	Database No.	Name
NA03	WI005-024	Ritual Site-Holy Well
NA04	WI005-027001-	Ecclesiastical-Enclosure
NA05	WI005-028	Ritual Site-Holy Well
NA06	WI005-029	Enclosure
NA07	WI005-030	Enclosure
NA08	WI005-031	Castle-Tower House







Appendix 3C – Plates





Plate 1: Quarry, looking west.



Plate 2: Grid route along L8371 (Red Lane), looking east.



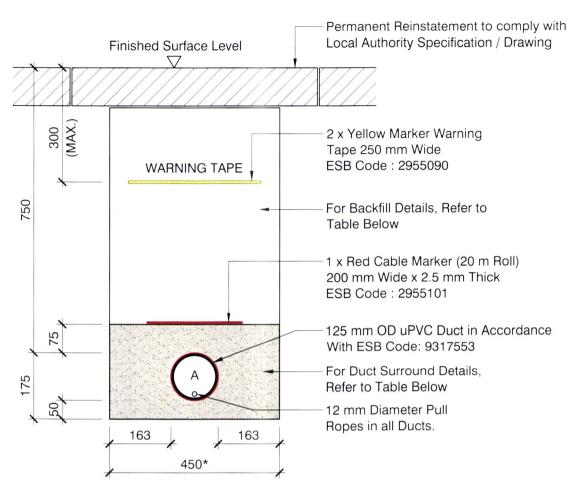


Plate 3: RMP WI005-031, looking southeast.



Plate 4: hedgerow along grid route, looking northeast.





325 mm TRENCH WIDTH IS ALSO ACCEPTABLE TO ESBN PROVIDED TRENCH COMPACTION MEASURES ARE IN ACCORDANCE WITH THE DDTAS PURPLE BOOK SECTION 6.3.5 REQUIREMENTS (GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS) OR TII SPECIFICATION CC-PAV 04-007 (2019) GUIDELINES FOR REINSTATEMENT OF OPENINGS IN NATIONAL ROADS, AS APPROPRIATE.

TRENCH LOCATION	MIN. DEPTH OF COVER TO TOP OF DUCTS (C)	TRENCH BACKFILL DETAILS	DUCT SURROUND MATERIAL
PUBLIC ROAD	750 mm	CL 804	ESB N APPROVED SAND
PUBLIC LANDS	750 mm	CL 804	СВGM В

NOTES:

- CBGM B BACKFILL IN ACCORDANCE WITH CLAUSE 822 AND COMPACTED TO CLAUSE 813.10 AND TABLE 8/4 OF T.I.I SPECIFICATION FOR ROADWORKS (15 N/mm AFTER 7 DAYS)
- 2. ESB NETWORKS APPROVED WELL COMPACTED THERMAL SAND FROM ESB NETWORKS PUBLISHED APPROVED SUPPLIERS LIST ON LINE.

