

Volume 7A: Figures

Figures for Chapter 21 Land and Soils



Legend

Study Area

Proposed Development Boundary

High Water Mark

Deglacial Landforms

Delta

Glaciofluvial Terrace

Hummocky Sand and Gravel

Indicator erratic source area

Subglacial Moraines

Composite Thrust Block Moraine

Ribbed Moraine

Meltwater Landforms

Esker ridge

Meltwater channel

Subglacial Lineation Large

Crag-and-Tail

Drumlin

Mega scale glacial lineation

Streamlined Bedrock

Subglacial Lineation Striae

NISA

North Irish Sea Array

ARUP

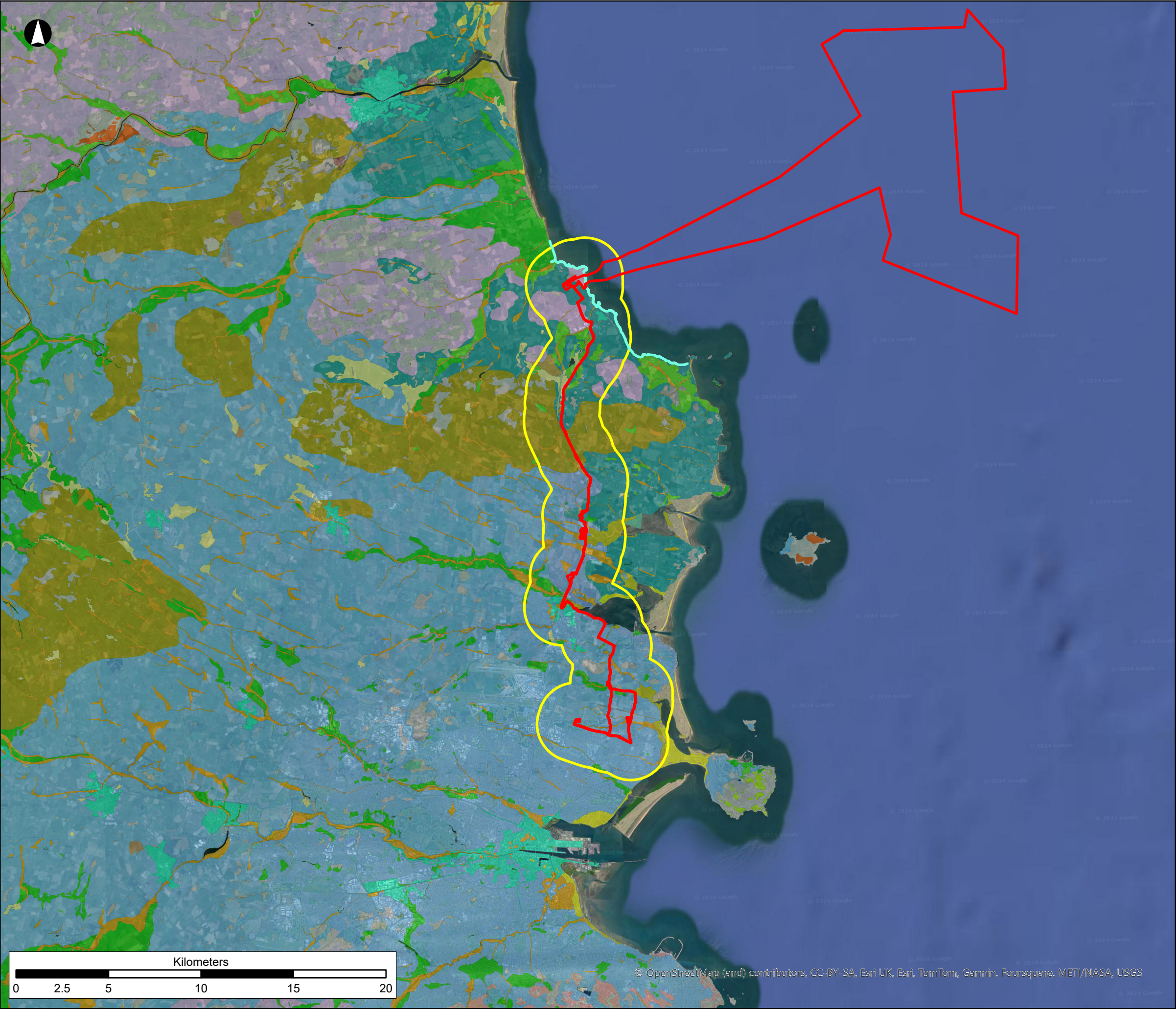
Project

North Irish Sea Array
Offshore Wind Farm

Figure Title

Regional
Geomorphology

| | |
|------------------|-------------------------------|
| Job No: 281240 | Figure No: 21.1 |
| Date: May 2024 | |
| Scale: 1:200,000 | |
| Status: Issue | |



Legend

Study Area

Proposed Development Boundary

High Water Mark

GSI Quaternary Sediments

A, Alluvium

Ag, Alluvium (gravelly)

As, Alluvium (sandy)

BasEsk, Eskers comprised of gravels of basic reaction

Cut, Cut over raised peat

Embankment

FenPt, Fen Peat

GCh, Gravels derived from chert

GLPSSs, Gravels derived from Lower Palaeozoic sandstones and shales

GLs, Gravels derived from Limestones

GNSsS, Gravels derived from Namurian sandstones and shales

Hardstand

Industrial

IrSTBi, Irish Sea Till derived from basic igneous rocks

IrSTLPSSs, Irish Sea Till derived from Lower Palaeozoic sandstones and shales

IrSTLs, Irish Sea Till derived from Limestones

KaRck, Kartsified bedrock outcrop or subcrop

L, Lacustrine sediments

Landfill

Lsi, Lacustrine silts

MGs, Marine gravel and sands (often raised)

Mbs, Marine beach sands

Mesc, Esturine silts and clays

Pier

Rck, Bedrock outcrop or subcrop

TBi, Till derived from basic igneous rocks

TGr, Till derived from granites

TLPSSs, Till derived from Lower Palaeozoic sandstones and shales

TLs, Till derived from limestones

TMp, Till derived from Metamorphic rocks

TNSSs, Till derived from Namurian sandstones and shales

TQz, Till derived from quartzites

TdIMr, Tidal Marsh

Urban

Water

Ws, Windblown sands

Wsd, Windblown sands and dunes

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North Irish Sea Array

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North Irish Sea Array Offshore Wind Farm

Figure Title

Regional Subsoils

Job No: 281240

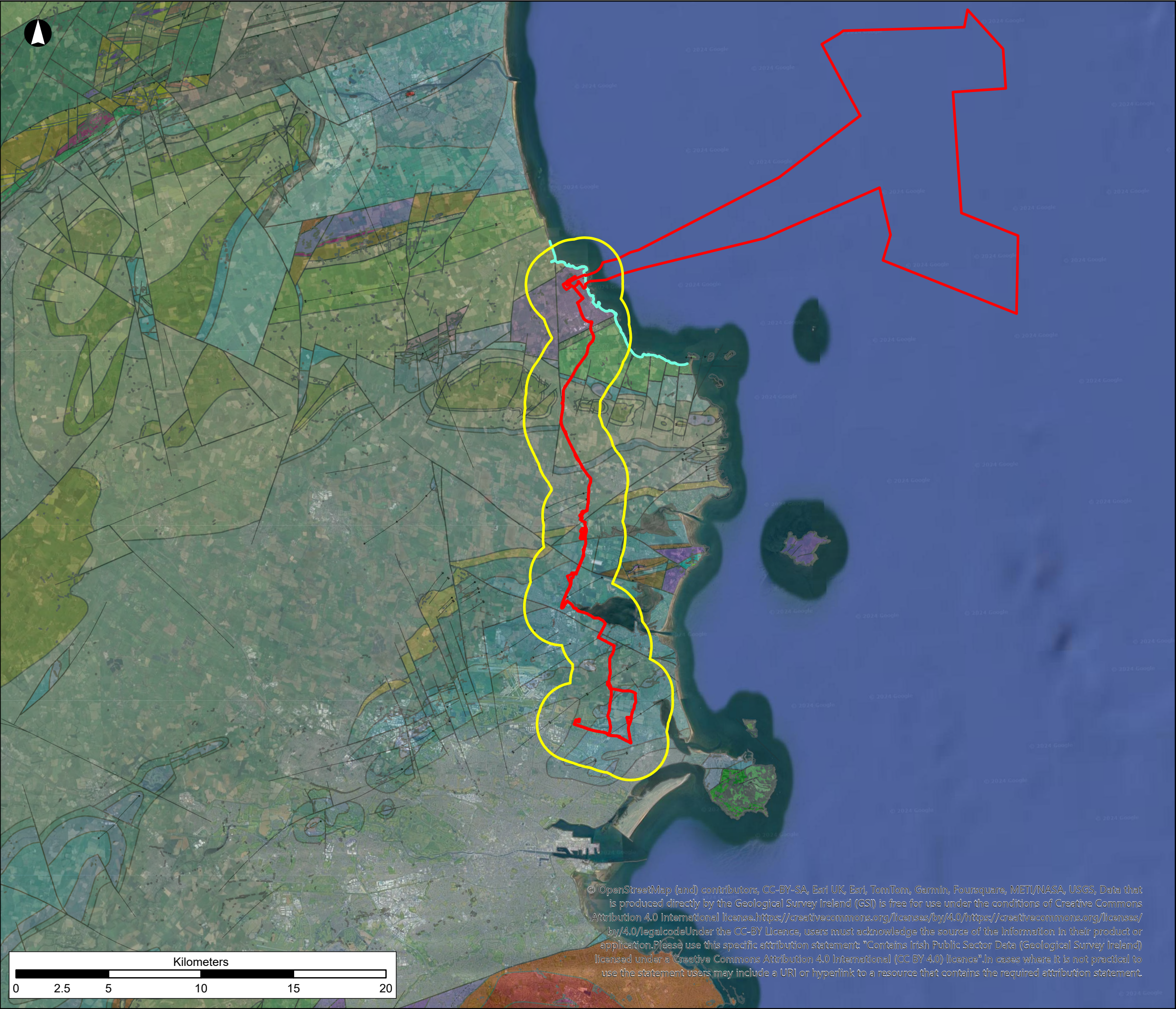
Date: May 2024

Scale: 1:200,000

Status: Issue

Figure No:

21.3



Legend

Study Area

Proposed Development Boundary

High Water Mark

Bedrock Outcrops 100 ITM 2018

Bedrock Linework 100k ITM 2018

Anticlinal Axis

Area

Dyke

Fault

Ghost Line

Lithological boundary offshore

Synclinal Axis

Thrust, bars on hanging-wall side

Unconformity, dots on younger side

X-Section

Bedrock Polygons 100k ITM 2018

Balbriggan Formation

Belcamp Formation

Broomfield Formation

Brittstown Formation

Bryanstown Formation

Bray Group

Drumleck Formation

Elsinore Formation

Gaskins Leap Formation

Hippy Hole Formation

Pipers Gut Formation

Carnes Formation

Ballysteen Formation

Boston Hill Formation

Boyne Formation

Ardmulchan Member

Beauparc Member

Kiln Hill Member

Cionlusk Formation

Cruffy Formation

Donabate Formation

Feighcullen Formation

Fennor Formation

Herbertstown Formation

Holmpatrick Formation

Lane Formation

Loughshinny Formation

Mattock Member

Lucan Formation

Malahide Formation

Mornington Formation

Mooretown Formation

Mullaghfin Formation

Naul Formation

Navan Beds

Platin Formation

Rickardstown Formation

Rush Conglomerate Formation

Slane Castle Formation

Smugglers Cave Formation

Tober Colleen Formation

Tullyallen Formation

Waulsortian Limestones

Clashford House Formation

Clogherhead Formation

Balrickard Formation

Donore Formation

Cruiceraeth Member

Namurian (undifferentiated)

Walshestown Formation

Colton Formation

Clatterstown Formation

Carrickdexter Formation

Old Red Sandstone (undifferentiated)

Denhamstown Formation

Fieldstown Formation

Fournocks Formation

Glaspistol Formation

Hilltown Formation

Hill Of Slane Formation

Syenite

Type 1 granodiorite

Type 3 muscovite porphyritic

Type 2e equigranular

Type 2p microcline porphyritic

Drogheda Granite

Knockerk Formation

Kennetstown Formation

Lambay Volcanic Formation

Lower Palaeozoic rocks

Diorite

Little Harbour Formation

Mudbank limestone

in Rathkenny Formation, in Central and Northern Belt, in Salterstown Formation

Aghfarrell Formation

Butter Mountain Formation

Oriel Brook Formation

Maulin Formation

Portrane Limestone Formation

Portrane Volcanic Formation

Prioryland Formation

Red Mans Cove Formation

Rathkenny Formation

Salterstown Formation

Carrighill Formation

Glen Ding Formation

Pollaphuca Formation

Slate Quarries Formation

Tipperkevin Formation

St. Marys Basalt

Snowtown Formation

Skerries Formation

St. Itas Formation

White Island Bridge Formation

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North Irish Sea Array

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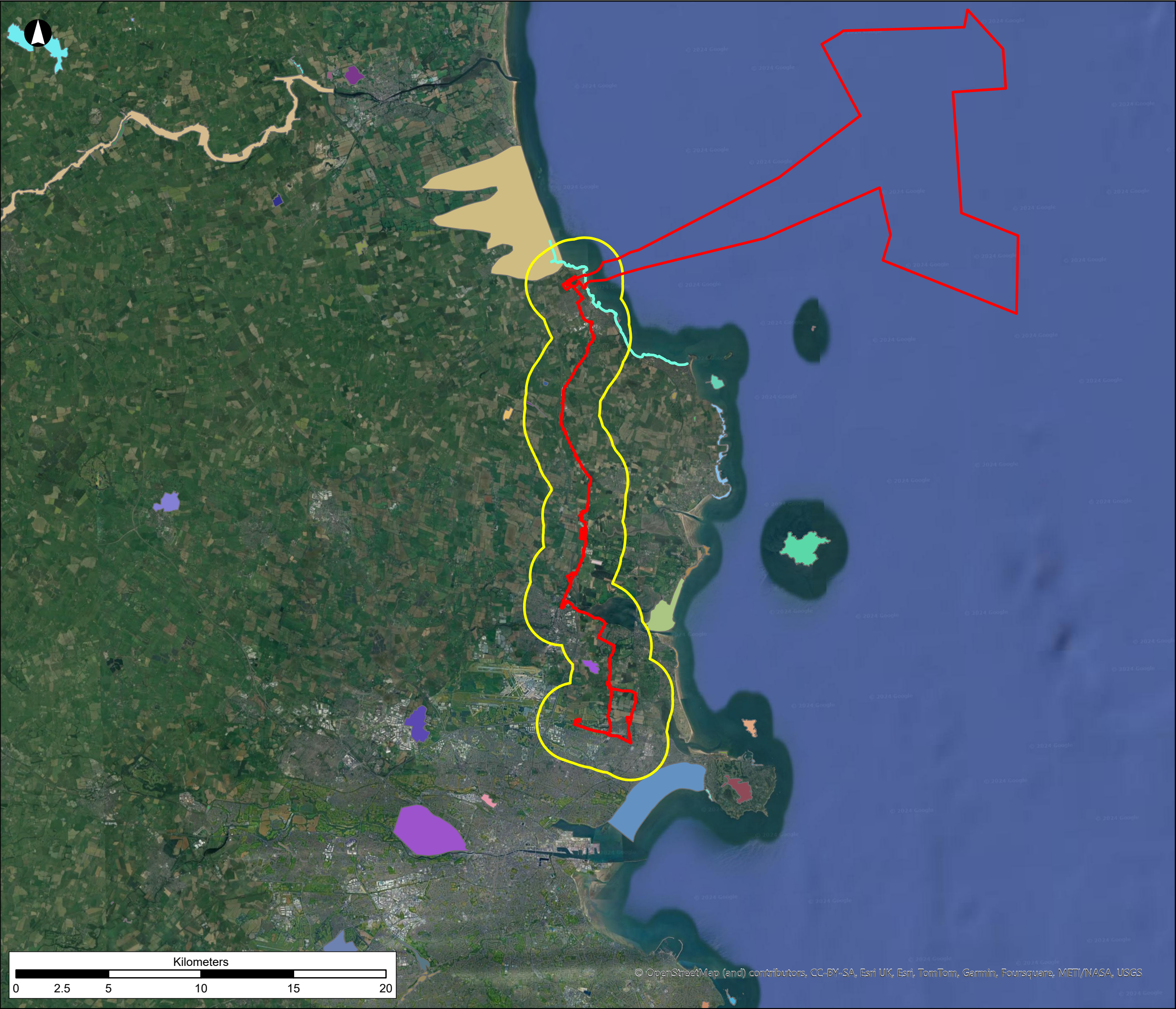
Project

North Irish Sea Array Offshore Wind Farm

Figure Title

Regional Bedrock Geology

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| Job No: 281240 | Figure No: 21.4 |
| Date: May 2024 | |
| Scale: 1:200,000 | |
| Status: Issue | |



Legend

Study Area

Proposed Development Boundary

High Water Mark

GSI Geological Heritage Site

51 St. Stephens Green

Ardgillan House Boulder

Balrickard Quarry

Balscaddan Bay

Belgard Quarry

Bellewstown

Benhead

Blackrock Breccia

Bottle Quay

Boyne Valley

Claremont Strand

Curkeen Hill Quarry

Dalkey Hill

Dalkey Island

Dodder Terraces

Dublin City Walls

Duleek Quarry

Dunshaughlin

Fancourt Shore

Feltrim Quarry

General Post Office

Glasnevin Cemetery

Grangegeeth

Greenhills Esker

Guinness Wells

Hill of Howth

Huntstown Quarry

Ireland's Eye

King William's Glen

Lambay Island

Laytown to Gormanston

Liffey Oxbow

Liffey Valley Centre Road Sections

Louisa Bridge Cold Spring

Louisa Bridge Warm Spring

Lucan Esker

Malahide Coast

Malahide Point

Mell Quarry

Milverton Quarry

Mulhuddart Holy Well

Museum Building, Trinity College

N4 Lucan cutting

Nags Head Quarry

Newcastle Buried Channel

North Bull Island

Oscar Wilde Statue

Painestown Quarry

Phoenix Park

Portrairie Shore

Rathkenny

River Dodder

River Poddle

Rockabill

Rockwood Cliffs

Shenick's Island

Skerries to Rush

St. Patrick's Well 2

Temple Bar Street Well

Trim Esker

Walshestown Stream Section

Waterunderbridge-Dry Bridge

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North Irish Sea Array

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Project

North Irish Sea Array Offshore Wind Farm

Figure Title

Regional Geological Heritage Sites

Job No: 281240

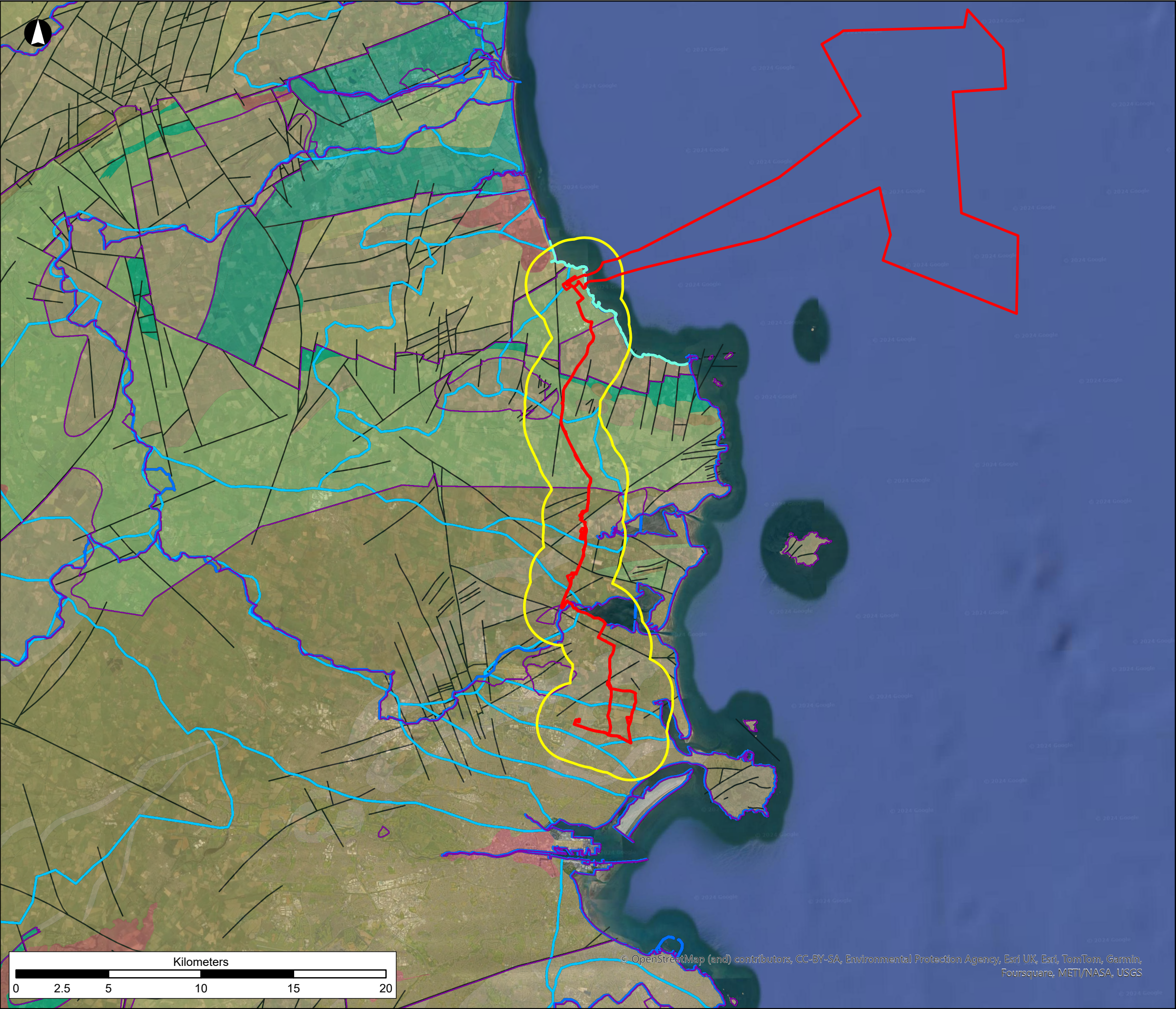
Date: May 2024

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Status: Issue

Figure No:

21.5



Legend

Study Area

Proposed Development Boundary

High Water Mark

Aquifer Description

Rkd - Regionally Important Aquifer - Karstified (diffuse)

Lm - Locally Important Aquifer - Bedrock which is Generally Moderately Productive

Lk - Locally Important Aquifer - Karstified

LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones

Pl - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones

Pu - Poor Aquifer - Bedrock which is Generally Unproductive

Unclassified

Gravel Aquifer Description

Locally important gravel aquifer

GSI Aquifer Geological Lines

WFD GROUNDWATERBODIES

WFD Catchments

WATER SubCatchments

WATER HydrometricAreas

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North Irish Sea Array

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North Irish Sea Array Offshore Wind Farm

Figure Title

Regional Groundwater Aquifers

| | |
|-------------------------|--------------------------------------|
| Job No: 281240 | Figure No: 21.6 |
| Date: May 2024 | |
| Scale: 1:200,000 | |
| Status: Issue | |



Legend

- Study Area
- Proposed Development Boundary
- High Water Mark
- GSI Groundwater Vulnerability
 - Extreme
 - High
 - Low
 - Moderate
- Rock at or near Surface or Karst
- Water

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North Irish Sea Array

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North Irish Sea Array Offshore Wind Farm

Figure Title
Regional Groundwater Vulnerability

| | |
|-------------------------|--------------------------------------|
| Job No: 281240 | Figure No: 21.7 |
| Date: May 2024 | |
| Scale: 1:200,000 | |
| Status: Issue | |



Legend

Study Area

Proposed Development Boundary

High Water Mark

GSI Groundwater Recharge

501-550

451-500

401-450

351-400

301-350

251-300

201-250

151-200

101-150

51-100

1-50

0

water

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North Irish Sea Array

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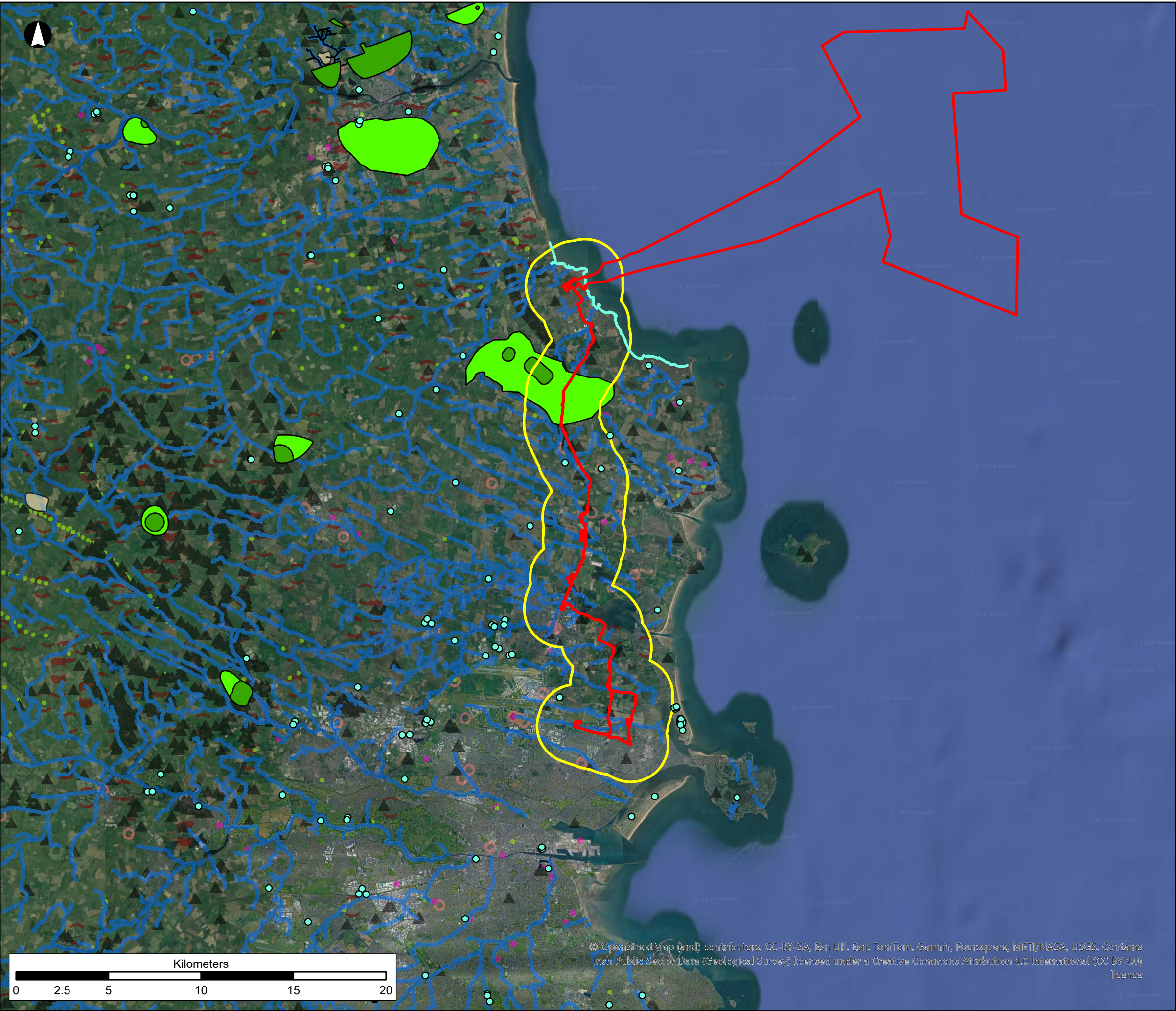
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North Irish Sea Array Offshore Wind Farm

Figure Title

Regional Groundwater Recharge

| | |
|------------------|------------------------|
| Job No: 281240 | Figure No: 21.8 |
| Date: May 2024 | |
| Scale: 1:200,000 | |
| Status: Issue | |



Legend

Study Area

Proposed Development Boundary

High Water Mark

EPA River Network

IRL_ZOCs_ITM

Wells 10 to 50m

Wells 100 to 50m

Wells 200 to 100m

Wells 500 to 250m

Wells 1km to 500m

Public Supply Source Protection Areas

SI-Inner Protection Area

SO-Outer Protection Area

Group Scheme Preliminary Source Protection Areas

Water Abstraction Register Points (December 2023) - Groundwater

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North Irish Sea Array

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North Irish Sea Array Offshore Wind Farm

Figure Title

Regional Groundwater Resources

| | |
|------------------|------------------------|
| Job No: 281240 | Figure No: 21.9 |
| Date: May 2024 | |
| Scale: 1:200,000 | |
| Status: Issue | |