

# ERVIA CCS PRE-FEED STUDY

Constraint Maps - Cork

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- 1 Whitegate Power Station
- 2 Irving Oil Refinery
- 3 Aghada Power Station
- 4 Central Processing Facility
- 5 CO2 Collection Pipeline Network (Valving Station)
- 6 Whitegate Pigging Installation
- 7 Inch Pigging Installation
- 8 Aghada Pigging Installation
- CO2 Gathering Network
- Export Line
- AGI

Client

ervia

Title

OS Map

Issue Details

File Identifier:

MDE1234-RPS-02-CX-DR-Z-AG0109

Status:

S3

Rev:

P01

Model File Identifier:

Drawn:

JS

Date:

21/04/2022

Checked:

IP

Scale:

1:35,000 @A4

Approved:

CB

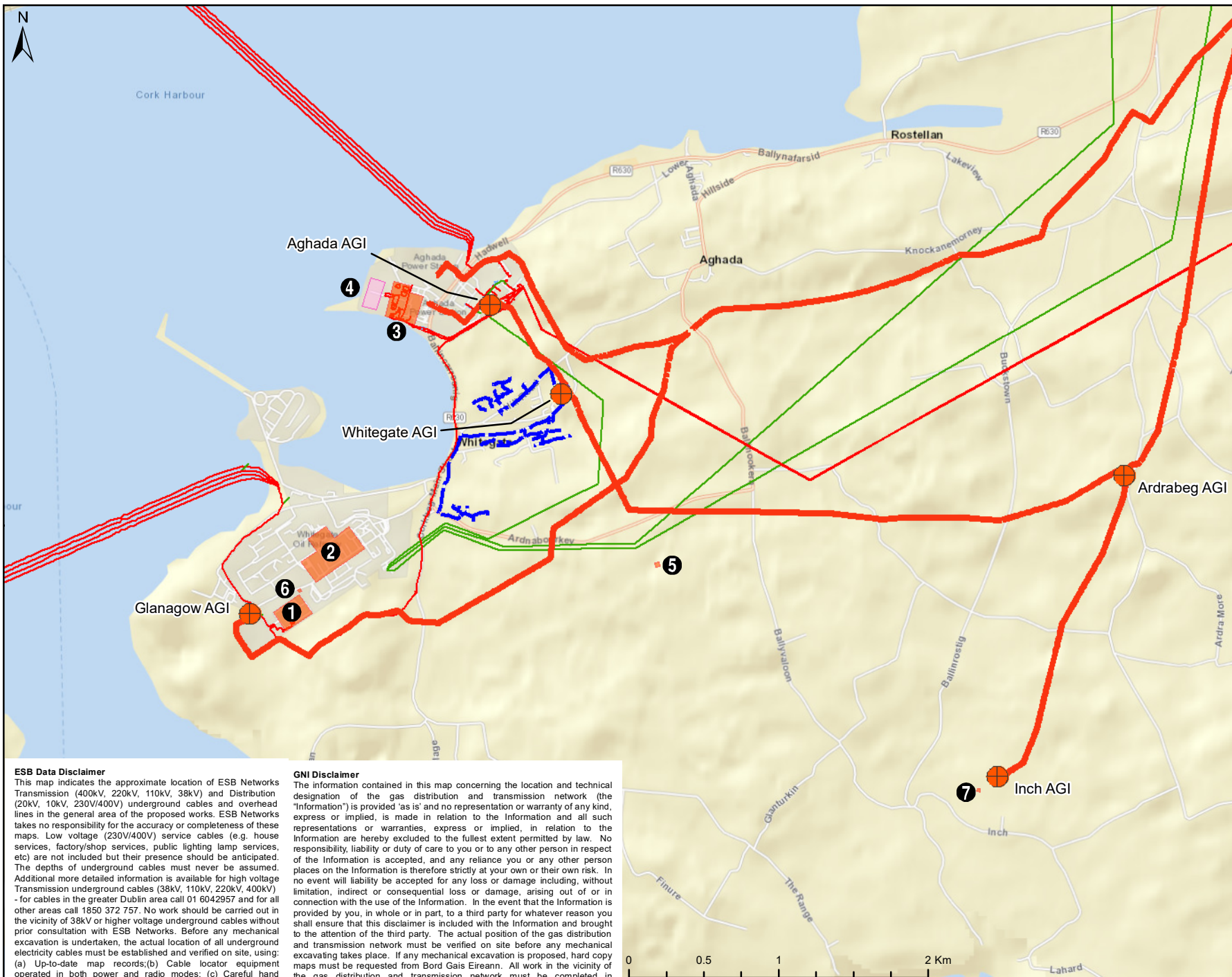
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#### ESB Data Disclaimer

This map indicates the approximate location of ESB Networks Transmission (400kV, 220kV, 110kV, 38kV) and Distribution (20kV, 10kV, 230V/400V) underground cables and overhead lines in the general area of the proposed works. ESB Networks takes no responsibility for the accuracy or completeness of these maps. Low voltage (230V/400V) service cables (e.g. house services, factory/shop services, public lighting lamp services, etc) are not included but their presence should be anticipated. The depths of underground cables must never be assumed. Additional more detailed information is available for high voltage Transmission underground cables (38kV, 110kV, 220kV, 400kV) - for cables in the greater Dublin area call 01 6042957 and for all other areas call 1850 372 757. No work should be carried out in the vicinity of 38kV or higher voltage underground cables without prior consultation with ESB Networks. Before any mechanical excavation is undertaken, the actual location of all underground electricity cables must be established and verified on site, using: (a) Up-to-date map records; (b) Cable locator equipment operated in both power and radio modes; (c) Careful hand digging of trial holes using 'Safe Digging Practice'. Refer also to 'HSA Code of Practice for Avoiding Danger From Underground Services'. ESB takes no responsibility and shall bear no liability in relation to any damage, injury/death or loss of supply as a result of damage or interference with its networks.

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The information contained in this map concerning the location and technical designation of the gas distribution and transmission network (the "Information") is provided 'as is' and no representation or warranty of any kind, express or implied, is made in relation to the Information and all such representations or warranties, express or implied, in relation to the Information are hereby excluded to the fullest extent permitted by law. No responsibility, liability or duty of care to you or to any other person in respect of the Information is accepted, and any reliance you or any other person places on the Information is therefore strictly at your own or their own risk. In no event will liability be accepted for any loss or damage including, without limitation, indirect or consequential loss or damage, arising out of or in connection with the use of the Information. In the event that the Information is provided by you, in whole or in part, to a third party for whatever reason you shall ensure that this disclaimer is included with the Information and brought to the attention of the third party. The actual position of the gas distribution and transmission network must be verified on site before any mechanical excavating takes place. If any mechanical excavation is proposed, hard copy maps must be requested from Bord Gais Eireann. All work in the vicinity of the gas distribution and transmission network must be completed in accordance with the current edition of the Health and Safety Authority publication, 'Code of Practice For Avoiding Danger From Underground Services' which is available from the Health and Safety Authority (1890 28 93 89) or can be downloaded free of charge at [www.hsa.ie](http://www.hsa.ie).

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- 1 Whitegate Power Station
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  - 5 Valve Installation
  - 6 Whitegate Pigging Installation
  - 7 Inch Pigging Installation
- AGI

#### Gas Transmission Network

- High Pressure transmission pipelines
- Medium Pressure: Distribution Pipe

#### Electricity Transmission Network

- 38kV
- 110kV
- 220kV

#### Data Source

Gas Networks Ireland Q4 2019  
Eirgrid revision date: 2021-01-07

#### Client



CCS Pre-FEED Study

#### Title

### Gas Transmission and Electricity Networks Cork

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#### Issue Details

##### File Identifier:

MDE1234-RPS-02-CX-DR-Z-AG0100

##### Status:

S3

##### Rev:

P01

##### Model File Identifier:

##### Drawn:

JS

##### Date:

14/04/2022

##### Checked:

IP

##### Scale:

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##### Approved:

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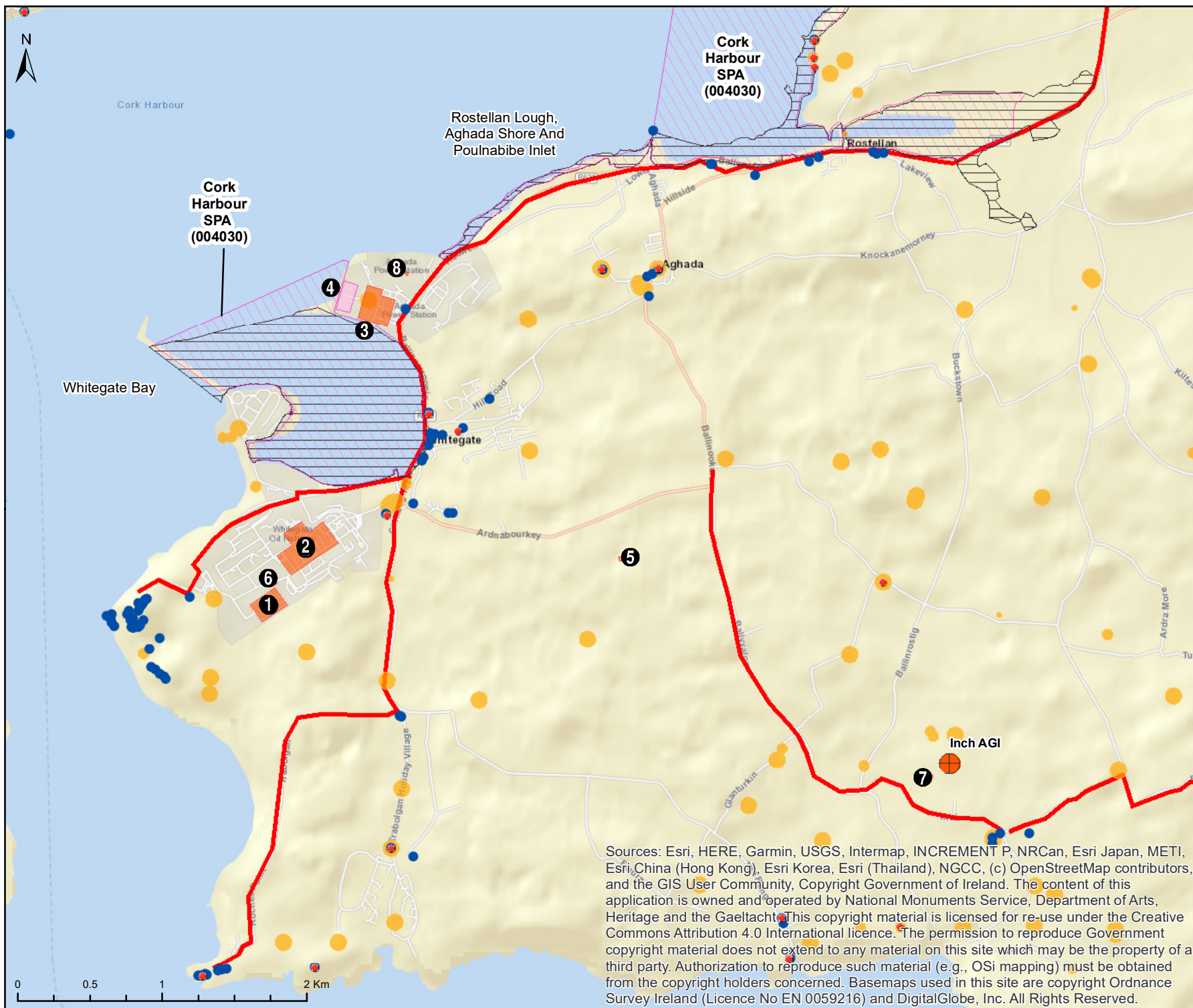
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  - 5 CO<sub>2</sub> Collection Pipeline Network (Valving Station)
  - 6 Whitegate Pigging Installation
  - 7 Inch Pigging Installation
  - 8 Aghada Pigging Installation
- AGI
- Record Protected Structures
- NIAH Sites
- Sites and Monuments Record Zone
- SPA Cork Harbour
- Proposed Natural Heritage Areas
- Scenic Routes

**Data Source**  
**NPWS-Designated site data**  
revision date: pNHA- 2019-01-28  
revision date: SPA- 2021

Client



CCS Pre-FEED Study

Title

**Environmentally  
Designated Areas  
and National Inventory  
of Architectural Heritage**



Issue Details

File Identifier:

MDE1234-RPS-02-CX-DR-Z-AG0101

Status:

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Rev:

P01

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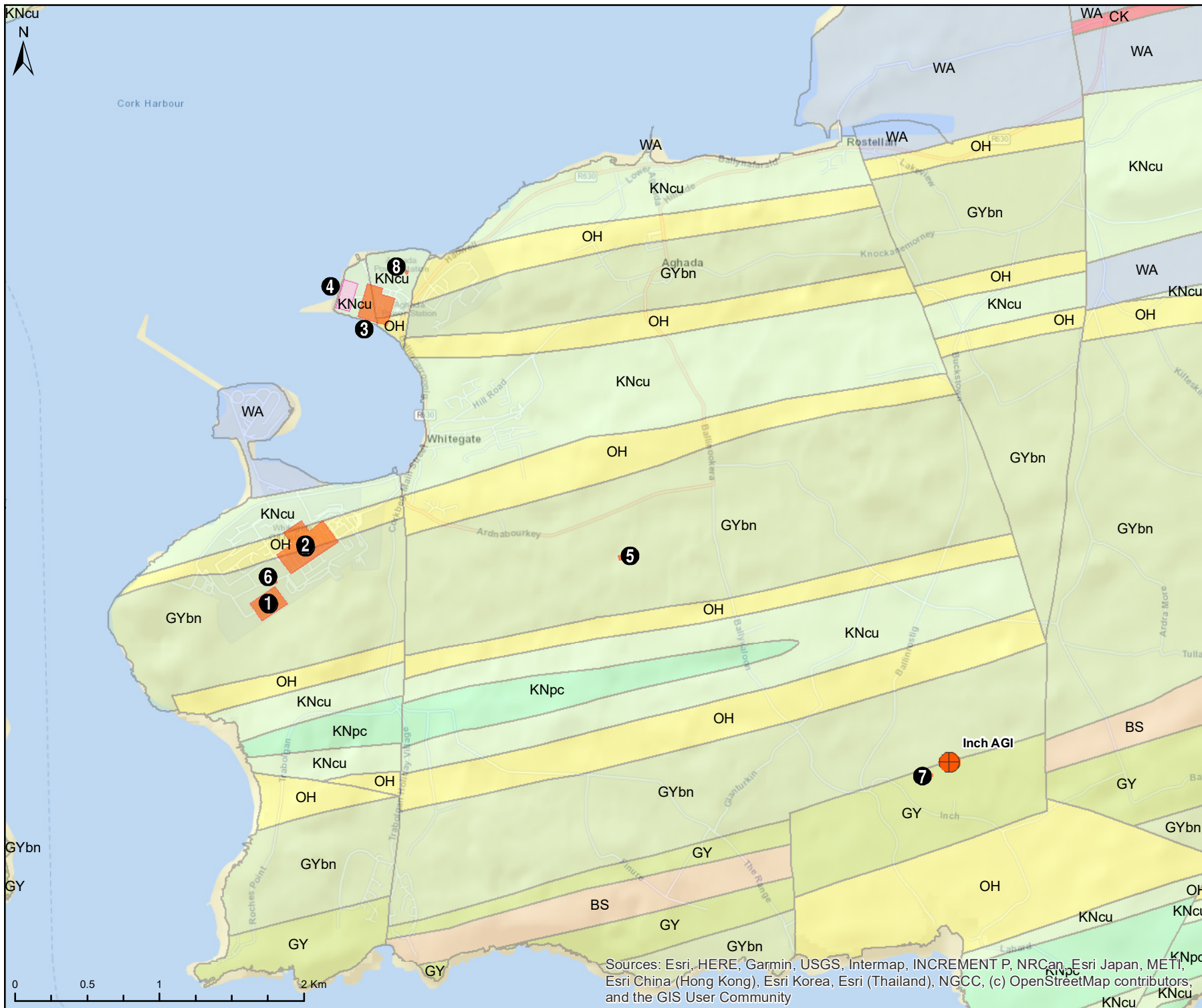
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#### Bedrock Polygons 100k

- Cork Red Marble Formation (CK)
- Cuskinny Member (KNcu)
- Pigs Cove Member (KNpc)
- Waulsortian Limestones (WA)
- Ballytrasna Formation (BS)
- Gyleen Formation (GY)
- Ballyknock Member (GYbn)
- Old Head Sandstone Formation (OH)

#### Data Source

ESI Bedrock 100k revision date: 2018-09-18  
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#### Client

**ervia**



CCS Pre-FEED Study

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### Ground Conditions Bedrock Polygons

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##### Scale:

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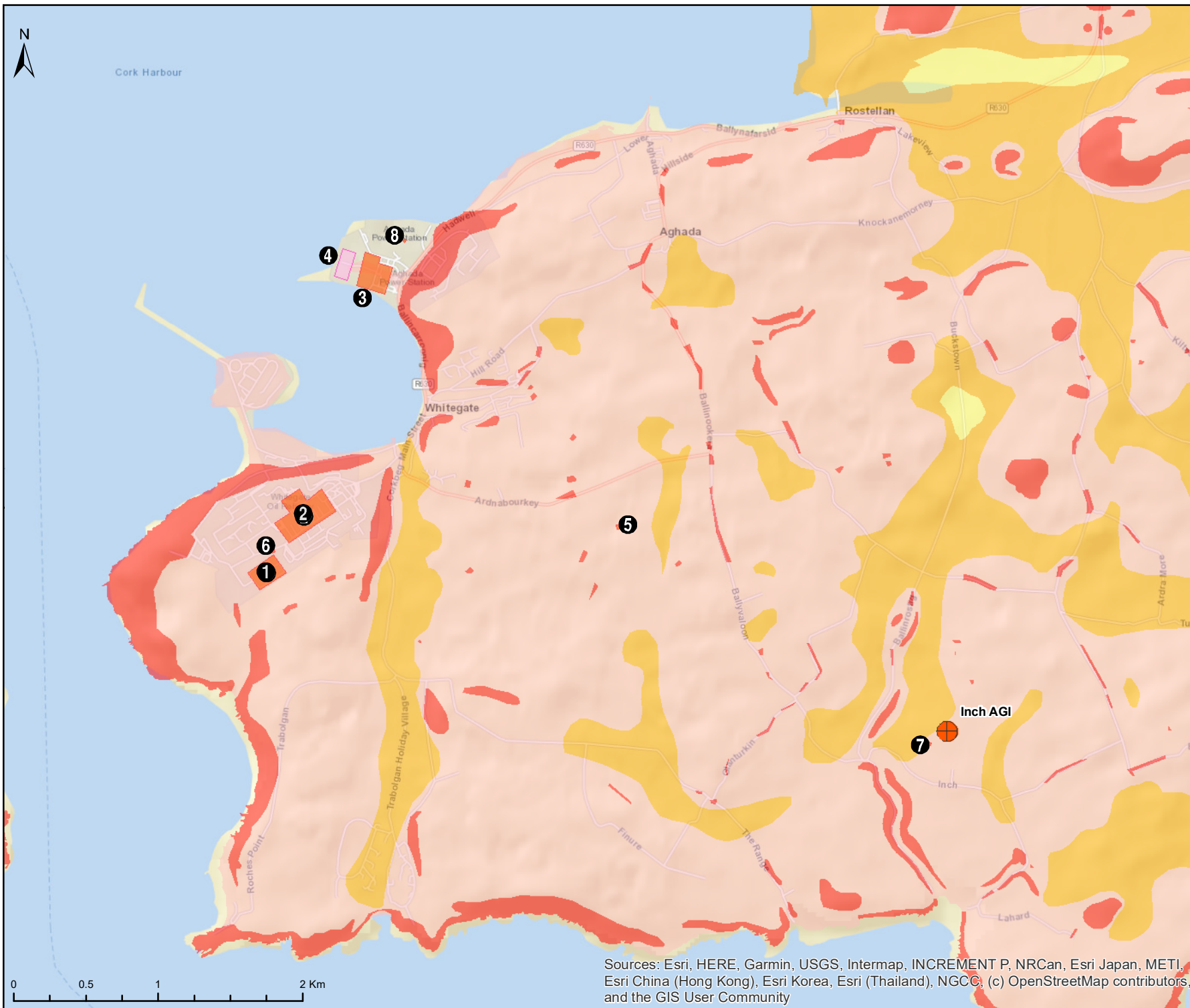
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1 Whitegate Power Station

2 Irving Oil Refinery

3 Aghada Power Station

4 Central Processing Facility

5 CO<sub>2</sub> Collection Pipeline Network (Valving Station)

6 Whitegate Pigging Installation

7 Inch Pigging Installation

8 Aghada Pigging Installation

AGI

National Groundwater Vulnerability

Rock at or near Surface or Karst

Extreme

High

Moderate

Aquifer Classification

Locally Important Aquifer -

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

Regionally Important Aquifer

Unclassified

Data Source

GSI Bedrock Aquifers

revision date: 2020-02-17

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Client

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CCS Pre-FEED Study

Title

Groundwater Aquifer Vulnerability

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Issue Details

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Status:

Rev:

Model File Identifier:

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Drawn:

JS

Date:

13/04/2022

Checked:

IP

Scale:

1:35,000 @A4

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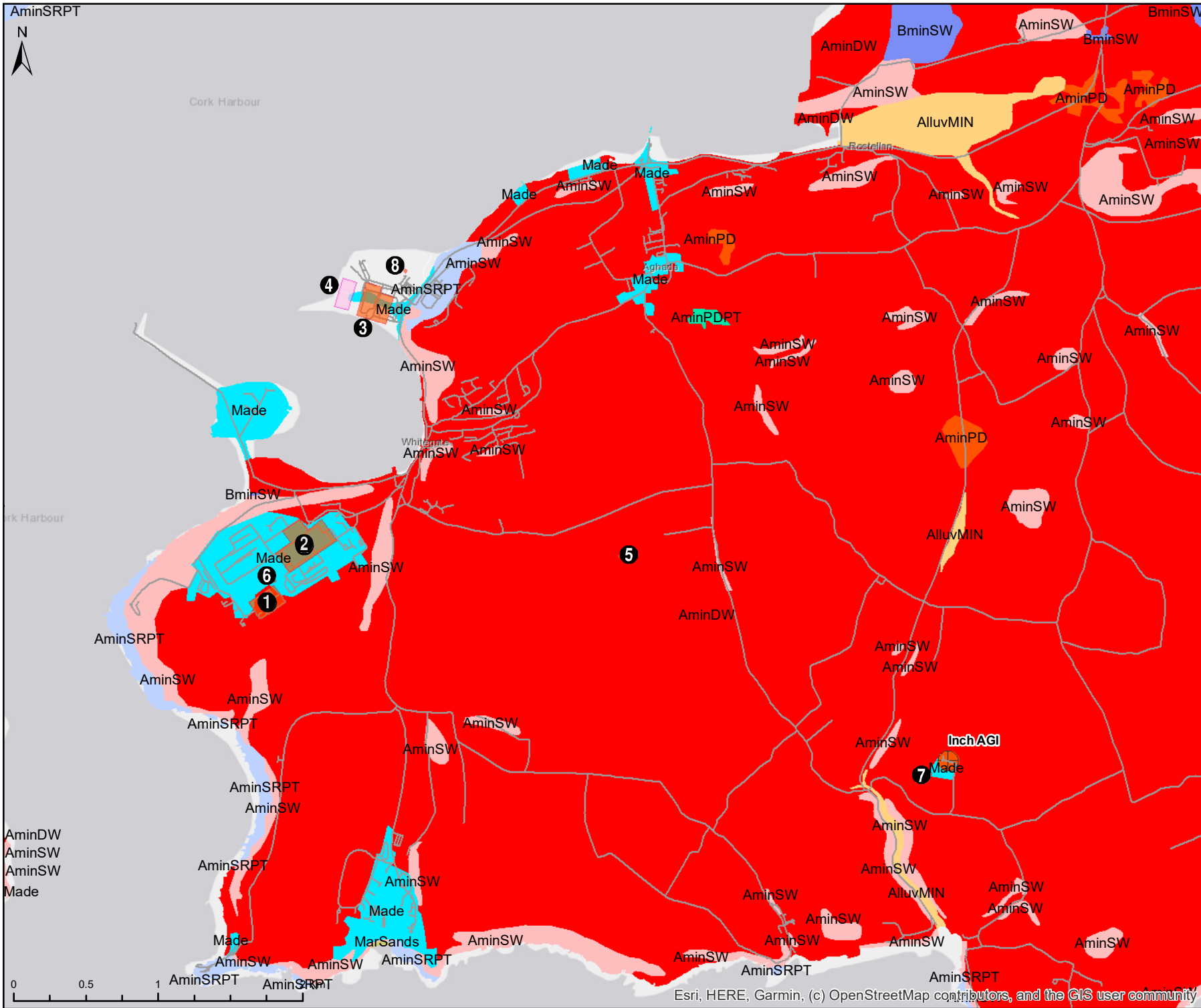
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  - 7 Inch Pigging Installation
  - 8 Aghada Pigging Installation
- Roads
- AGI

#### Soil Description

- Mineral Alluvium (AlluvMIN)
- Acid Brown Earths/Brown Podzolics (AminDW)
- Surface Water/Groundwater Gleys Acidic (AminPD)
- Peaty Gleys Acidic (AminPDPT)
- Podzols Peaty (AminSRPT)
- Lithosols/Regosols (AminSW)
- Rendzinas/Lithosols (BminSW)
- Marine Sands
- Made Ground

#### Data Source

EPA-National Soils Data

#### Client



CCS Pre-FEED Study

#### Title

### Ground Conditions Soils



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##### Rev:

P01

##### Model File Identifier:

##### Drawn:

JS

##### Date:

13/04/2022

##### Checked:

IP

##### Scale:

1:35,000 @A4

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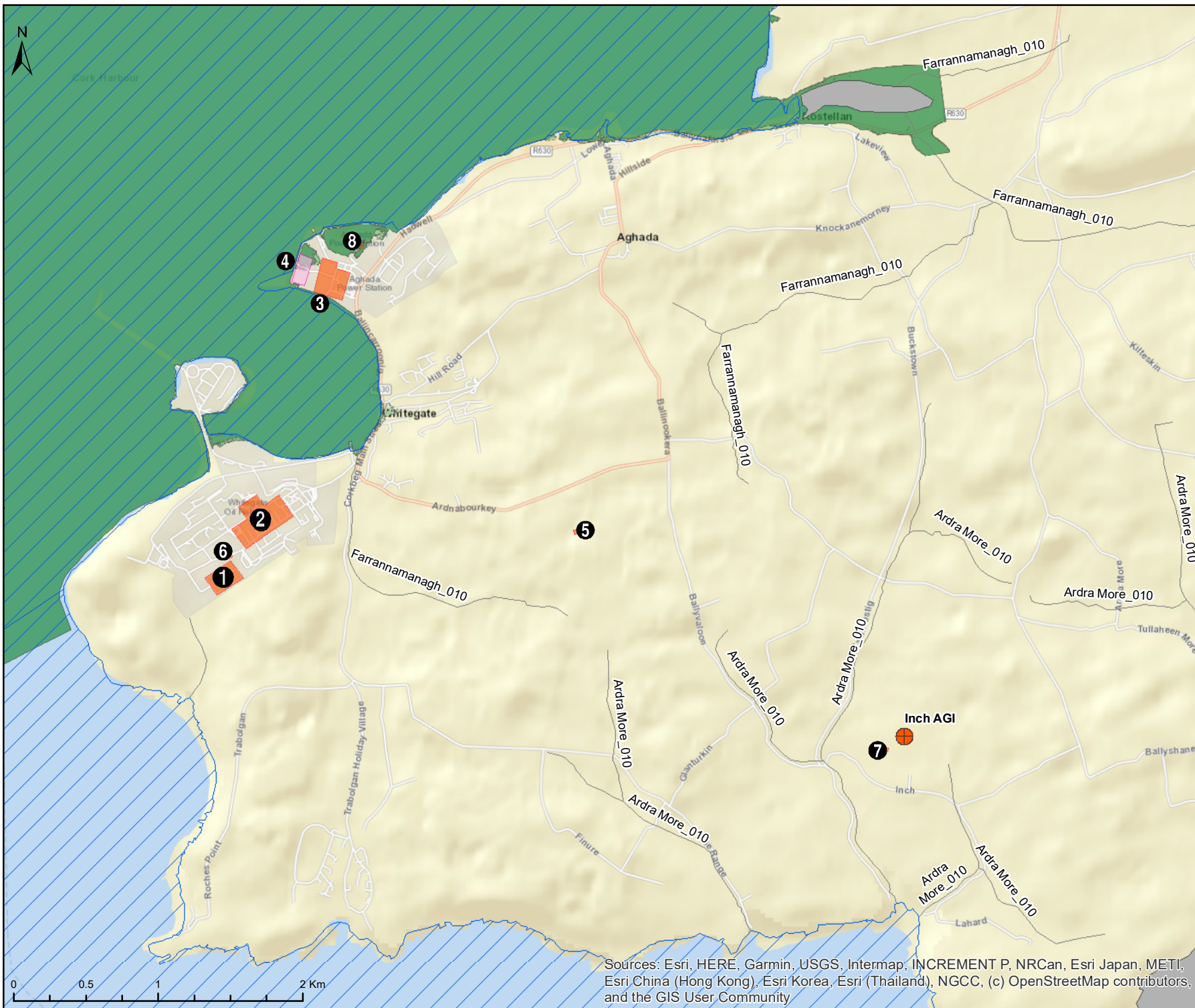
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1

Whitegate Power Station

2

Irving Oil Refinery

3

Aghada Power Station

4

Central Processing Facility

5

CO<sub>2</sub> Collection Pipeline Network (Valving Station)

6

Whitegate Pigging Installation

7

Inch Pigging Installation

8

Aghada Pigging Installation

AGI

**Transitional Waterbodies**

**Ecological Status**

Unassigned

**Coastal Waterbodies**

**Ecological Status**

Good

Unassigned

**River Waterbodies**

**Ecological Status**

Unassigned

**Flood Risk**

**Coastal Extents**

High Probability Annual Exceedance Probability (AEP) of 10%

Medium Probability Annual Exceedance Probability (AEP) of 1%

Low Probability Annual Exceedance Probability (AEP) of 0.1%

**Data Source**

**OPW** - [www.floodinfo.ie](http://www.floodinfo.ie)

Web Map Image Service from <http://www.floodinfo.ie/geowebcache/service/>

Present Day Scenario for

-Coastal Flood extents

**NPWS-Designated site data**

revision date:SAC- 2019-01-28

**Client**

**CCS Pre-FEED Study**

**Title**

**Flood Zones and Water Bodies Ecological Status**

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**Issue Details**

**File Identifier:**

MDE1234-RPS-02-CX-DR-Z-AG0105

<b>Status:</b>	<b>Rev:</b>	<b>Model File Identifier:</b>
S3	P01	

<b>Drawn:</b>	JS	<b>Date:</b>	18/04/2022
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<b>Approved:</b>	CB	<b>Projection:</b>	ITM

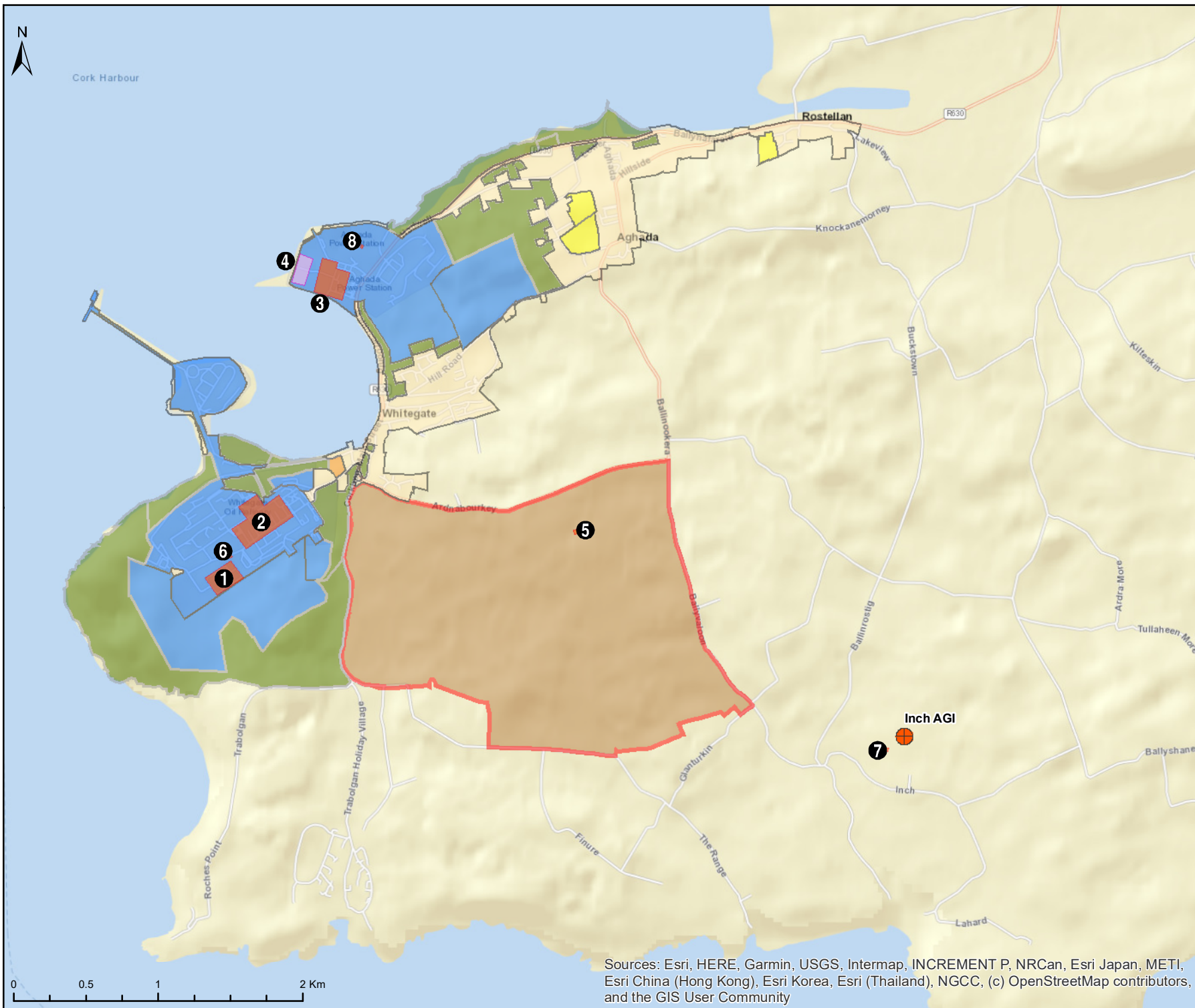
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#### Land Use Zonings

- Green Infrastructure
- Residential
- Existing Residential/Mixed Residential and Other Uses
- Community
- Special Policy Area
- Industry

Data Source  
Draft Cork County Development Plan  
2021 Map Viewer  
publication date: 22nd of April, 2021

Client



CCS Pre-FEED Study

Title

### Land Use Zoning From Draft Cork County Development Plan 2021

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#### Issue Details

File Identifier:

MDE1234-RPS-02-CX-DR-Z-AG0106

Status:

S3

Rev:

P01

Model File Identifier:

Drawn:

JS

Date:

13/04/2022

Checked:

IP

Scale:

1:35,000 @A4

Approved:

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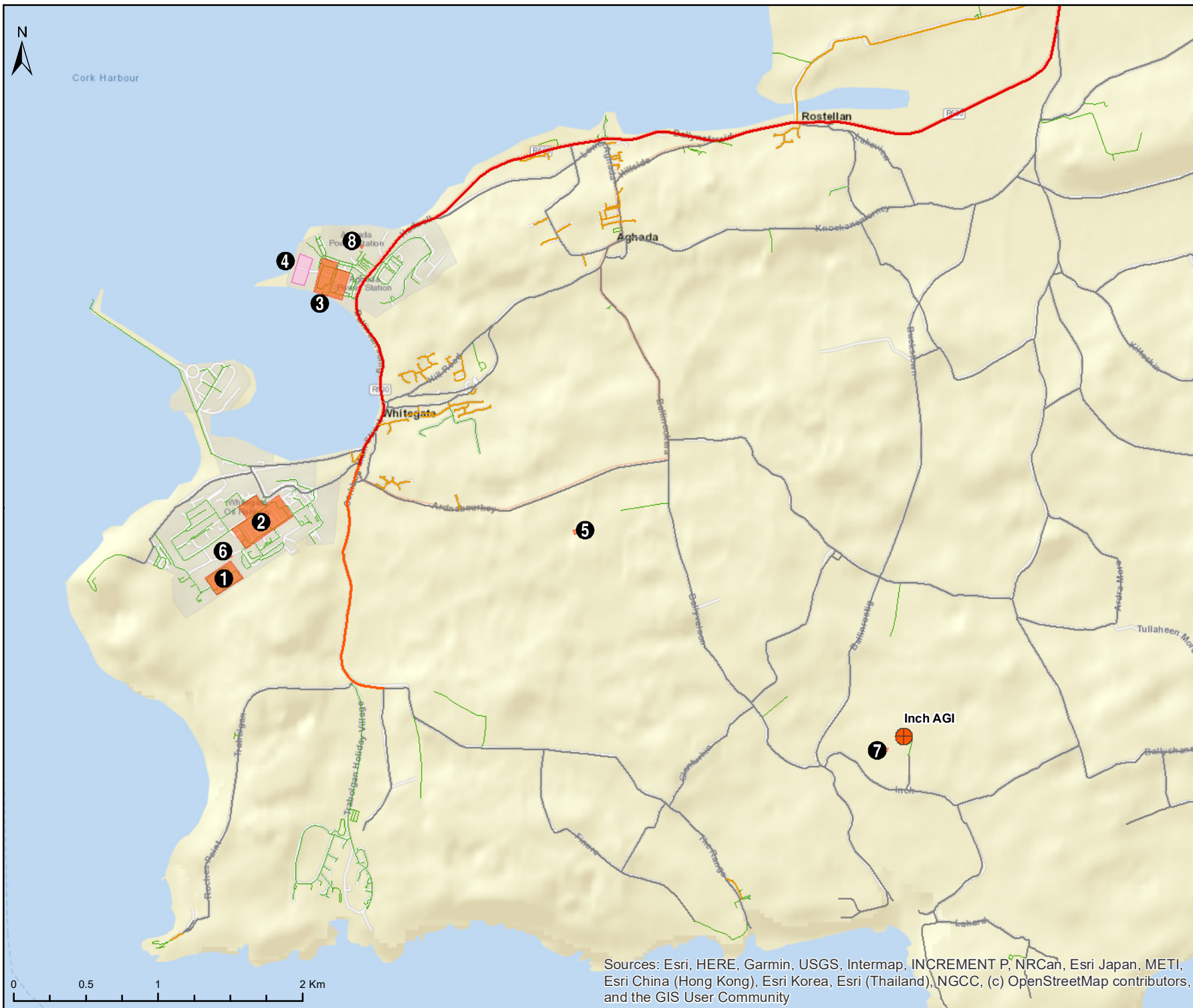
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- AGI

### Roads Classification

- Service
- Residential
- Secondary
- Tertiary
- Unclassified

Data Source  
OSM Data

Client

**ervia**



CCS Pre-FEED Study

Title

**Road Network**

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### Issue Details

File Identifier:

MDE1234-RPS-02-CX-DR-Z-AG0107

Status:

S3

Rev:

P01

Model File Identifier:

Drawn: JS

Date: 14/04/2022

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- ❻ Whitegate Pigging Installation
- ❼ Inch Pigging Installation
- ❽ Aghada Pigging Installation

— CO<sub>2</sub> Gathering Network

- - - Export Line

Data Source  
OSM Data

Client

**ervia**



CCS Pre-FEED Study

Title

**Proposed CO<sub>2</sub>  
Pipeline Routes**

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#### Issue Details

File Identifier:

MDE1234-RPS-02-CX-DR-Z-AG0108

Status:

S3

Rev:

P01

Model File Identifier:

Drawn: JS

Date: 14/04/2022

Checked: IP

Scale: 1:24,000 @A4

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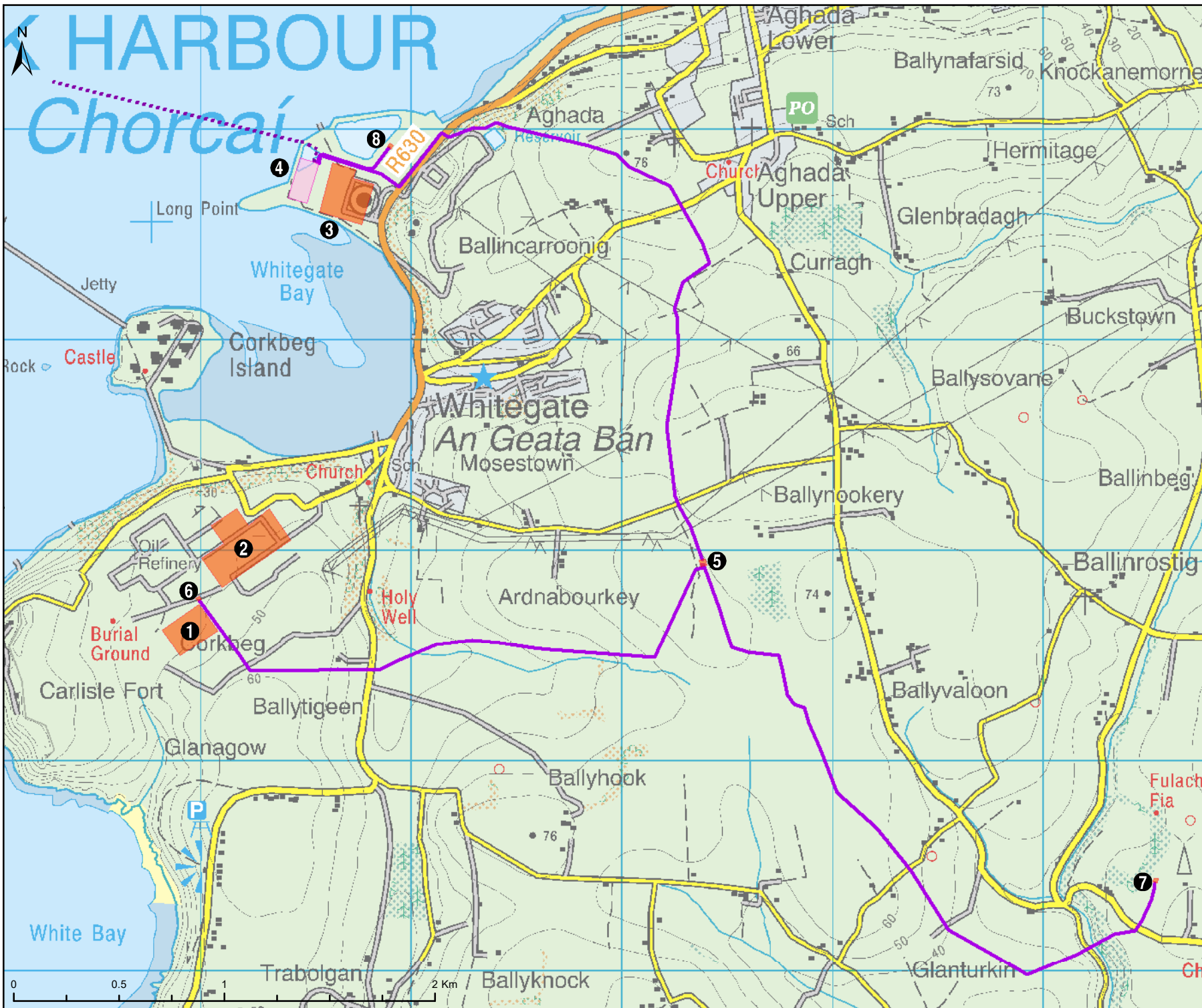
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- 8 Aghada Pigging Installation
- CO<sub>2</sub> Gathering Network
- ... Export Line

Client

**ervia**

European Commission

CCS Pre-FEED Study

Title

**Proposed CO<sub>2</sub> Pipeline Routes**

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**rps**

**BECHTEL**

Issue Details		
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