



An  
Bord  
Pleanála

## Inspector's Report PL02.248164

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<b>Development</b>	Demolition of house and construction of anaerobic digestion facility, storage tanks, power unit, biofilter, office, weighbridge, wash area, access road and associated site works.
<b>Location</b>	Lismagratty, Cavan, Co. Cavan.
<b>Planning Authority</b>	Cavan County Council.
<b>Planning Authority Reg. Ref.</b>	16/264
<b>Applicant(s)</b>	Andrew Fay
<b>Type of Application</b>	Permission
<b>Planning Authority Decision</b>	Grant
<b>Type of Appeal</b>	Third Party
<b>Appellant(s)</b>	Cavan Better Waste Management
<b>Observer(s)</b>	None
<b>Date of Site Inspection</b>	17 <sup>th</sup> May 2017
<b>Inspector</b>	Patricia Calleary

## Contents

1.0	Site Location and Description.....	4
2.0	Proposed Development.....	4
3.0	Planning Authority Decision .....	5
3.1.	Planning Decision .....	5
3.2.	Planning Authority Reports .....	6
3.3.	Prescribed Bodies.....	7
3.4.	Third Party Observations .....	7
4.0	Planning History .....	7
5.0	Policy Context .....	8
5.1.	National Waste Policy and Legislative Context.....	8
5.2.	National Energy Policy.....	9
5.3.	National Climate Change Policy.....	10
5.4.	National Planning Policy .....	10
5.5.	Regional Waste and Planning Policy .....	10
5.6.	Local Planning Policy .....	11
5.7.	Natural Heritage Designations .....	12
5.8.	Cultural Heritage .....	12
6.0	The Appeal.....	13
6.1.	Grounds of Appeal .....	13
6.2.	Applicant's Response.....	14
6.3.	Planning Authority Response.....	15
6.4.	Observations.....	16
7.0	Planning Assessment.....	16
7.1.	Introduction and Background .....	16

7.2.	Principle of the development.....	16
7.3.	Information provided with the application and appeal .....	17
7.4.	Waste Licence or Waste Facility Permit.....	18
7.5.	Surface and Ground Water .....	19
7.6.	Odour, Air Quality and Methane.....	20
7.7.	Noise.....	21
7.8.	Archaeology and cultural heritage.....	22
7.9.	Landscape and Visual Impact.....	22
7.10.	Traffic.....	22
7.11.	Other.....	23
7.12.	Conclusion on planning and sustainable development consideration.....	24
8.0	Environmental Impact Assessment Screening.....	25
8.1.	Introduction .....	25
8.2.	Characteristics of the proposed development .....	26
8.3.	Location of the proposed development .....	26
8.4.	Characteristics of the potential impacts.....	27
8.5.	Conclusion on EIA Screening.....	27
9.0	Appropriate Assessment .....	27
9.1.	Appropriate Assessment – Stage 1.....	27
9.2.	Appropriate Assessment Stage 1 – Screening Conclusion.....	31
10.0	Recommendation.....	31
11.0	Reasons and Considerations .....	31

## 1.0 Site Location and Description

- 1.1. The site, with a stated area of 2.13 hectares, is located at Lismagratty, close to the Cavan-Cootehill road (R188), c.3km northeast of Cavan town centre in County Cavan. It comprises an uninhabited house and associated lands. Access to the site is off an existing private road to the west of the site which connects with the R188 regional road.
- 1.2. It is stated on the application form that the site was used for quarrying activities and on the day of my site inspection I noted significant recent ground disturbance, as a result of excavations and movement of stone and soils, particularly to the rear part of the site. The site also contains a flat area of compacted bare ground serving as a storage area for plant and machinery. The site is bounded by a concrete post and chain-link fence to the west (road side) and by trees and hedgerows to the north east (inner side). There is a steep drop in level to the rear at the northern end. There are two ponds within the site containing stagnant water, which appear to have been created during the quarrying activities / ground disturbance. There are some drainage ditches running in varying directions throughout the site.
- 1.3. Corranure landfill (currently closed) is situated to the west of the site. A civic amenity and recycling centre, managed by McElvaney Waste and Recycling operates at the landfill site. An existing waste facility, McBreen Environmental services headquarters and industrial unit lie to the north. The site to the south is subject to an application for a waste processing and transfer facility which is the subject of a current appeal to the Board (Ref. **PL02.248033**).

## 2.0 Proposed Development

- 2.1. The main features of the proposed development entail the demolition of the existing derelict dwelling house and the construction of an anaerobic digestion facility comprising 1 no. reception building, 2 no. digester tanks, 4 no. pre-storage tanks, 2 no. storage tanks, green waste storage, 1 no. combined heat and power unit (500 kW), 1 no. flare, biofilter, office & control room, weighbridge, wheel wash area, access road, parking spaces, associated site works and services. The gross floor space of the proposed works as stated would be c.829 sq.m.

- 2.2. Section 2.6.9 of the process description and environmental report prepared by the applicant (as updated at further information stage) states that anticipated water demand would be c.328 cubic metres and would be obtained from rainwater harvesting and supplemented from a borehole, if required. Process water would be facilitated by a proposed leachate tank and water used in the reception building for wash down would be recirculated as process water.
- 2.3. It is stated that rainfall and runoff from trafficked and concrete mixing areas would not enter the watercourse and would be directed to a suitably designed interceptor on site before discharge to the Local Authority surface water sewer.
- 2.4. The feedstock stream (input) was initially stated as comprising 10,000 tonnes of foodwaste and 3,000 tonnes of green waste. The site layout drawing (141\_435\_201) received by the Planning Authority on 1<sup>st</sup> June 2016 show an area measuring c.225 sq.m marked 'silage'. It is stated in the applicant's appeal response that no agricultural waste would be used as feedstock. The applicant's response to the appeal also states that a review of the gas yield associated with the feedstock determined that 10,000 tonnes of brown bin waste would be sufficient to support the delivery of a 500 kW biogas plant and requests that should the Board be minded to grant permission that a limit of feedstock of 10,000 tonnes would attach.
- 2.5. The planning application was prepared and submitted by ORS consultants. It was accompanied by a Traffic and Transport assessment (TTA), Civil Services layout, Visual Impact assessment, and a Process and Environmental report. A revised Process and Environmental report was submitted as further information. This report includes an ecological impact assessment, appropriate assessment screening statement, odour management plan, noise report, ecodryer digestate dehydrator detail and a construction and demolition waste management plan.

### 3.0 Planning Authority Decision

#### 3.1. Planning Decision

- 3.1.1. The planning authority decided to **grant permission** on the 13<sup>th</sup> February 2017 for the above described development subject to 26 conditions, the following which are of note:

C3 – Maximum 10,000 tonnes brown bin and 3,000 green waste bin waste;

C6 – Noise limits;

C7 – No feedstock or waste stored externally;

C8-C12 – Surface water;

C13 – Requirement for waste facility;

C14- Requirement for approval from the DAFM;

C19 – Upgrade requirement of access road junction with the R188;

C20 – Archaeological requirements.

### 3.2. Planning Authority Reports

3.2.1. Planning Report - Following **initial assessment** and noting concerns raised in the third-party submissions, the planning officer recommended seeking further information regarding matters relating to the process description and environmental report, Irish Water requirements (water and waste water), Inland fisheries requirements, surface water disposal, effluent disposal, ecology, management of digestate produced for use in agriculture, quarantine area, asbestos, parking, landscape proposals, visual impact, connection to electricity network, appropriate assessment screening, building finishes, sightlines and location of sensitive receptors. Following receipt and consideration of the **further information**, the planning officer concluded that, subject to conditions, the proposed development would be in accordance with the proper planning and sustainable development of the area. The Planning Authority also concurred with the applicants Appropriate Assessment Stage 1 conclusions.

3.2.2. A recommendation to **grant permission** was put forward.

#### 3.2.3. Other Technical Reports

- Environment Section – Concerns were initially raised around monitoring and being able to differentiate between sources of pollution in the area, which would be potentially served by multiple waste management facilities and recommended seeking further information on environmental matters.

Recommended inclusion of **planning conditions** in the event of a grant of permission;

- Waste Enforcement Section – Following receipt of further information, **no objection** raised to the development and conditions were recommended;
- Road Design – **No objection** subject to completion of improvement measures at the access junction with the R188 being carried out by Cavan County Council.

### 3.3. Prescribed Bodies

- Inland Fisheries Ireland – **No objection** raised, conditions around protection of water quality recommended;
- DAHRRG – **No objection** subject to an archaeological impact assessment condition;
- Irish Water – **No objection** subject to standard conditions.

### 3.4. Third Party Observations

A number of third-party submissions were received by the Planning Authority and the Planning Officer's report provides a summary of the concerns raised and states that these have been taken into account in their assessment. I also note the contents of the submissions in my consideration of the appeal.

## 4.0 Planning History

### 4.1. Appeal site

- 4.1.1. There is no planning history brought to my attention on the appeal site.

### 4.2. In the vicinity

- 4.2.1. Permission has been granted by Cavan County Council on a site to the north (McBreen Environmental site) for the following applications:

- **13/188** – permission **granted** for change of use of vehicle maintenance and storage unit to vehicle maintenance and waste handling facility;

- **14/212** – permission **granted** to erect storage unit attached to existing office unit (previous planning ref: 11/326);
- **15/142** – permission **granted** to erect extension to side of existing waste handling facility (previous planning ref: 11/326 and 13/188);
- **16/226** – permission **granted** to retain alterations to storage unit and to change the use of existing first floor storage area to form offices.

4.2.2. In addition to the above, an application for a waste processing and transfer facility on lands immediately south east of the appeal site is currently on appeal with the Board under file reference no. **PL02.248033**.

#### 4.3. **Other recent applications of a similar nature**

- **PL17 .244154** – Permission **granted** on appeal for 2 anaerobic digesters to process farm slurry and biodegradable waste to produce renewable energy and fertiliser at Gillstown, Garlow Cross, Navan, Co.Meath in 2016.
- **PL04 .244878** – Permission **refused** on appeal for a digestion facility and all associated site works at Lisnacunna, Enniskeane, Co. Cork in 2015.

## 5.0 **Policy Context**

### 5.1. **National Waste Policy and Legislative Context**

5.1.1. The Waste Framework Directive (2008/98/EC) imposes a number of obligations on member states, including the application of the waste hierarchy to apply as a priority order in waste prevention and waste management legislation and policy. The applicable legislation in Ireland is set out in the Waste Management Act 1996, as amended, together with several statutory instruments. Waste policy and legislation are implemented largely by the Environmental Protection Agency (EPA) and the local authorities. The current waste management policy is set out in '**A Resource Opportunity – Waste Management Policy in Ireland (2012)**'. This policy includes a range of measures across all five tiers in the waste hierarchy, namely prevention and minimisation, reuse, recycling, recovery and disposal. Section 9 deals with recovery and notes that waste can be used through a number of technologies to produce energy, including through anaerobic digestion, thermal treatment and through the use of solid recovered fuel in facilities such as cement kilns. **Anaerobic**



**Digestion: Benefits for Waste Management Agriculture, Energy and the Environment (2005)** is a discussion paper prepared by the EPA. It outlines the following:

- The main benefits of AD include improved water quality, groundwater; protection, reduced CO<sub>2</sub> emissions and increase of indigenous renewable energy;
- Viability of AD depends on availability of sufficient volumes of waste proximate to the facility;
- Ideal location for AD is close to waste sources (generally within 5-8 miles) and to population centres and electricity grid;
- Co-digesting agricultural and non-agricultural wastes achieves a balanced waste intake and improves biogas production;
- Ideally, AD should be located in close proximity to sources of non-farm organic material to complement the agricultural waste input.

## 5.2. National Energy Policy

5.2.1. **The Energy White Paper – Ireland’s Transition to a low Carbon Energy Future 2015-2030.** This Energy White paper is a complete energy policy update. It sets out a framework for Irish energy policy up to 2030. By 2050, Ireland is required to have a low energy system with a reduction of greenhouse gas emissions by 80-95%.

- Action 133: Bioenergy can contribute to broader policy objectives such as waste recovery and rural development, as is the case with anaerobic digestion, which not only generates energy, but also gives effect to national waste policy in terms of utilising waste as a resource. It has been highlighted in waste management plans as a technology suitable for development at a local and regional level and at varying scales. Anaerobic digestion also has the potential to improve air quality, for example through mitigation of ammonia emissions and odour by diverting slurry from land spreading.

### 5.3. National Climate Change Policy

- 5.3.1. Climate change policy is reflected in **National Policy Position on Climate Action and Low Carbon Development (2014)** and the **Climate Action and Low Carbon Development Act, 2015**. The national policy position established a commitment to deep decarbonisation of the economy by 2050, and the 2015 legislation provides the enabling statutory framework for this to happen. The first **National Mitigation Plan (July 2017)** represents an initial step to set Ireland on a pathway to achieve the level of decarbonisation required. It states that the bio-economy (the biological element of the circular economy) can provide opportunities for forest-based biomass and residues and agriculture residues such as from crops, animal and dairy by-products, to be used to produce biomaterials and biochemicals through bio-refining or to produce heat and/or power through combustion or anaerobic digestion.

### 5.4. National Planning Policy

- 5.4.1. National Spatial Strategy for Ireland, 2002-2020 (NSS)
- Section 3.7 states that 'efficient, effective and cost competitive waste management facilities are essential if industrial and enterprise activity is to thrive and develop in a balanced way across Ireland'.
- 5.4.2. National Planning Framework (NPF)
- A new National Planning Framework is currently being developed to succeed the National Spatial Strategy. The framework is currently at pre-draft stage.

### 5.5. Regional Waste and Planning Policy

- 5.5.1. Connaught / Ulster Region Waste Management Plan 2015 – 2021
- **Policy E17** – supports the development of at least 40,000 tonnes of additional biological treatment capacity in the region for the treatment of bio-wastes (food waste and green waste);
  - **Policy E18** – Supports the development of biological treatment capacity in the region in particular anaerobic digestion; to primarily treat suitable agri-wastes and other organic wastes including industrial organic waste. The development

of such treatment facilities needs to comply with the relevant environmental protection criteria in the Plan<sup>1</sup>.

#### 5.5.2. Border Regional Authority Planning Guidelines 2010-2022

- Section 5.7 deals with waste management for the border region. It includes objectives; INFP28 (to facilitate provision of waste management facilities), INFP29 (explore and develop waste management practices on an inter-regional and on a cross-border basis) and INFP30 (Energy recovery and thermal treatment).

#### 5.5.3. Regional Economic Spatial Strategies

- The new Regional Economic and Spatial Strategies by the three recently established Regional Assemblies will be prepared in the context of the National Planning Framework. When prepared for the region, they will replace the Border Regional Authority Guidelines. Cavan is in the Northern and Western region.

### 5.6. Local Planning Policy

5.6.1. **Cavan County Development Plan 2014-2020** sets out forward planning policies for County Cavan. Section 4.6 deals with Waste Management. The following objectives are considered relevant.

- **EPO5** - Minimise the amount of waste to landfill;
- **PIO96** - To have regard to the following in the assessment of planning applications for waste management facilities: North East Waste Management Plan 2005 -2010 (or any subsequent Regional Waste Plan that relates to County Cavan)<sup>2</sup>.....;
- **PIO99** - To encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.

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<sup>1</sup> It is of relevance to note that the applicant states that the facility does not intend to include agri-feedstocks (P.16 of the appeal response).

<sup>2</sup> The North East Waste Management Plan 2005 -2010 has since been replaced by the current Connaught Ulster Region Waste Management Plan 2015 – 2021.

5.6.2. The **Cavan Town & Environs Plan 2014-2020** is the operable plan for the area.

Section 4.18 – Waste Management includes the following objectives:

- **WM-01** -Have regard to an array of policy documents; these include DoEHLG policy statements including 'Changing Our Ways' and 'Preventing and Recycling Waste-Delivering Change';
- **WM-02** -Facilitate the implementation of the North East Region Waste Management Plan 2005-2010 and any subsequent waste management plan;
- **WM-04** Encourage waste prevention, minimisation, reuse, recycling and recovery.

Section 9.8.11 – Integrated Waste Management Facility/Industry

- The site is zoned for **Integrated Waste Management Facility/Industry** with an objective 'to promote the development of the integrated waste management facility with complementary activities and uses'. There is no specific reference to an anaerobic digestion facility in the uses which are either 'permitted in principle' or 'not permitted'. 'Alternative Energy Installations are 'permitted in principle'.

## 5.7. Natural Heritage Designations

5.7.1. Lough Oughter and Associated Loughs SAC (Site Code 000007) is located c.3.5km to the west and north west of the site, and Lough Oughter Complex SPA (Site Code 004049) is located c.4.6km west of the site.

## 5.8. Cultural Heritage

5.8.1. There is a Ringfort/Rath national monument c. 80m east of the site. It consists of a raised circular area (internal dimension c.33m) enclosed by two substantial earthen banks. The internal area is overgrown with vegetation.

## 6.0 The Appeal

### 6.1. Grounds of Appeal

6.1.1. A third-party appeal was received from **Cavan Better Waste Management**. The appellant is stated as being a voluntary organisation representing the interests of people living in and around the area of the appeal site.

6.1.2. The following provides a summary of the principal issues raised in the grounds of the appeal:

- Unsuitable choice of site creates difficulty in assessing cumulative impacts;
- Proximity to adjacent Corranure Landfill site (in the ownership of Cavan County Council), which would lead to difficulties around monitoring and attributing responsibility for emissions;
- Applicants reasoning around the development requiring a waste facility permit is incorrect;
- EIA required based on the sub-threshold provisions around EIA, to ensure cumulative impacts are assessed;
- Would conflict with multiple planning policies and objectives set out in the Cavan Town & Environs Development Plan 2014-2020, particularly around waste management. The development is a stand-alone facility and would not integrate with other waste management facilities;
- Uncertainty regarding the legal interest in the land;
- Project-splitting issues arise, given that the details of the grid connection are not put forward;
- Multiple roles of Cavan County Council in deciding on the planning application and planning enforcement would be problematic;
- CHP plant details are lacking;
- Application lacking in detail around the sources of wastes to be digested;
- Control of odour, emissions to atmosphere and production of methane have not been adequately addressed;
- Inadequate public consultation / public participation took place.

## 6.2. Applicant's Response

6.2.1. **McCutcheon Halley Planning Consultants**, acting on behalf the applicant responded to the grounds of appeal. The following provides a summary of the response:

- The adjoining Corranure landfill is currently closed and is not currently accepting waste for landfill. The civic amenity facility on the landfill site is operational and managed by McElvaney Waste and Recycling. The 2015 AER report shows that it is largely operating within its licence emission limit values;
- Noise has been addressed. The noise emanating from the CHP and Ecodryer at the closest residential dwelling is 29dB and it would be possible to differentiate the noise source from other sources;
- The odour control system is based on the principles of good-odour management, including containment and treatment. Various measures are proposed around design, management, maintenance and monitoring. In comparison with other waste facilities, the AD of waste has a very low potential for emissions of malodours to the environment and can be monitored independently;
- Surface water will be treated in an interceptor and attenuated, prior to being released at greenfield rate to the existing municipal stormwater sewer;
- Floor washdown from the source separated waste in the reception area will be redirected into the AD process and run-off from the green waste storage area will be collected in a leachate tank and used as a process water within the process;
- History of Corranure landfill site is not relevant to the applicant's planning application and the proposed development, due to the significant differences between the proposals;
- Since the decision to grant permission, the applicant now proposes that the 10,000 tonnes of 'brown bin' waste is sufficient feedstock to support the 500 kW biogas plant and requests that in the event that the Board is minded to grant permission, to limit the throughput to 10,000 tonnes per annum;
- A sub-threshold EIS is not required and hence project splitting does not arise;

- As no likely effects on the Natura 2000 sites occurs, an NIS is not required;
- Development supported by numerous policies in the Cavan Town & Environs Development Plan (policies A4, C2, E2, E6, E17 and G1 referenced) and by applicable zoning;
- Applicant has sufficient legal interest in the land to make a planning application;
- The CHP plant would generate up to 500 kW of renewable electricity (enough to power 1,000 homes) and 511 kW of heat;
- Sources of waste for use as feedstock for the plant have not been identified at this point and would be commercially-sensitive information;
- Odour - The first Terminodour™ system was installed in the UK in 1996 and is approved by the EC as a best available technology for the waste industry (Link to case study provided in appeal response);
- Losses of methane would not be in the interest of the project proponent as it would directly impact on the economies of the plant;
- Applicant complied with the statutory requirements in publishing a notice and separately attempts were made to communicate with members of the public.

### 6.3. Planning Authority Response

The Planning Authority's response is summarised as follows:

- Site and proposed development considered suitable and acceptable in principle under the current zoning in the development plan;
- Planning Authority satisfied that the project does not constitute project splitting;
- Planning Authority satisfied with the proposals for connection to the grid infrastructure. An application will be required for connection to ESB networks;
- Enforcement of planning conditions will be carried out, as necessary;
- Details of CHP were considered sufficient;
- Details of types of waste and quantities were provided;

- Planning Authority accepted the use of Termindour process/system instead of extractive biofilter and references the attachment of condition Nos. 3 (13,000 tonnes per annum), 5 (feedstock acceptance hours), 7 (no storage of waste externally) and 14 (approvals and validations to be obtained from DAFM).

#### **6.4. Observations**

6.4.1. There were no observations received on this appeal.

### **7.0 Planning Assessment**

#### **7.1. Introduction and Background**

7.1.1. Anaerobic digestion (AD) occurs in two stages. In the first stage, hydrolysis converts over 90% of organic matter present to organic acids. In the second stage, slow growing, environmentally sensitive methane bacteria utilise the organic acids to produce gas that is approximately two-thirds methane and one-third carbon dioxide.

7.1.2. The planned facility appears to be designed to accept 13,000 tonnes of waste feedstock per annum, consisting of 10,000 tonnes of brown bin and 3,000 tonnes of green wastes. However, it is stated in the appeal response that the 10,000 tonnes of brown bin waste per annum is sufficient. The facility would combine anaerobic digestion technology to treat these feedstocks to produce biogas, which would be sent to a combined heat and power unit (CHP) on the site. It is stated that electricity produced in the CHP would be used by the facility and surplus electricity can be distributed to the national grid. In addition, the heat produced would be used by the facility for various AD processes. Two post digestion storage tanks are proposed to store the digestate, prior to dispatch for use in agriculture for fertiliser as an alternative to chemical fertilisers.

#### **7.2. Principle of the development**

7.2.1. From a policy context, anaerobic digestion plants have numerous benefits with regards to waste management, sustainable and rural development, renewable energy, greenhouse gas emissions and reduction of organic pollution typically associated with animal slurries and food wastes and often result in a superior



nutrient balance in the digestate material. All of these benefits are outlined in the EPA discussion paper on 'Anaerobic Digestion: Benefits for Waste Management, Agriculture, Energy and the Environment', January 2005.

- 7.2.2. The site is zoned for '**integrated waste management facility/industry**' under the Cavan Town & Environs Development Plan 2014-2020 with an objective 'to promote the development of integrated waste management facility with complimentary activities and uses'. I am satisfied that the development is supported by the zoning objective. The development is also supported by associated waste management objectives, particularly VM-01, VM-02 and VM-04 and by Policy E17 of the Connaught Ulster Region Waste Management Plan 2015 – 2021.
- 7.2.3. I consider the anaerobic digester facility acceptable in principle. Other planning, environmental and appropriate assessment issues that arise are examined in the remainder of my assessment.

### 7.3. **Information provided with the application and appeal**

- 7.3.1. Having assessed the information on file, I wish to highlight to the Board that there are information gaps within the proposal details. Part of the site has been significantly disturbed. I note that there is reference made on the planning application form that the site was used as a former quarry and this is also referenced in the ecological section of the process and environmental report on file. I consider that details about the hydrology and hydrological environment are required. I revisit this aspect under Section 8.5 of my assessment below.
- 7.3.2. In addition, I consider that there is a lack of detail on relevant matters including: the source for the input materials. the final destination of the solid and liquid digestate, details of the biogas flare and risk assessment plans for spillages, leakages, accidents and emergencies. I also note that there is no information on the proposed grid infrastructure, including whether or not transmission lines would run under or over ground. It is stated that a connection to the existing network would be through a substation and that an application will be submitted to ESB networks. No details of the substation or its location are presented.
- 7.3.3. Collectively this information is required in order to carry out a complete assessment of the potential planning and environmental matters that arise. I acknowledge the

applicant's argument that commercial arrangements for supply of digestate would not remain static, but nonetheless information on expected sources of feedstock and onward use of the digestate is required to fully assess the development proposal. In the absence of such information, unresolved environmental matters would remain and the development would be contrary to the proper planning and sustainable development of the area. Accordingly, I recommend that permission is refused on this basis.

#### **7.4. Waste Licence or Waste Facility Permit**

- 7.4.1. In the response to the appeal, the applicant initially submits that the feedstock intake would be 13,000 tonnes of non-hazardous waste, comprising of up to 10,000 tonnes of biodegradable waste and 3,000 tonnes of green waste (See section 3 – 'Description of the Development' of the appeal response). Under a separate heading – 'Waste Facility Permit or Waste Licence' in the same report (p.12), the applicant puts forward that 10,000 tonnes of brown bin waste is sufficient to support the delivery of a 500 kW biogas plant and requests that should the Board be minded to grant permission, the throughput would be limited to 10,000 tonnes per annum.
- 7.4.2. I note that 10,000 tonnes per annum is a threshold that if exceeded would entail the operation of the facility requiring a waste licence from the EPA, as distinct from a waste facility permit from the Local Authority. I also note that the EPA discussion paper (2005) highlights the importance of co-digestion of wastes as well as achieving a balanced waste intake. The applicant in the appeal case proposes to develop an AD facility with a maximum production capacity of 500kW. The plant processing capacity (i.e. tank sizing and arrangement) and feedstock requirement are designed accordingly.
- 7.4.3. On receipt of the appeal, the Board invited the EPA to comment on the proposal and in response the EPA notes the limits of Class 8 of Part 1 of the third schedule of the Waste Management (facility permit and registration) Regulations 2007, as amended by SI No.86 of 2008. In particular, the EPA noted the threshold of 6,000 cubic metres of compost, biowaste and digestate proposed to be held at the facility and considered that the data to ascertain this threshold was not found in the available planning documentation. The EPA noted however that the diameter of the digesters and storage tanks would indicate a reason to consider that the total capacity would

exceed 6,000 cubic metres. The EPA also noted the original proposal to accept 13,000 tonnes of biowaste and concluded that a waste licence would be required based on the proposed throughput.

- 7.4.4. In conclusion, I note that the application presented including the design and process description and its overall scale has not changed. It continues to have the capacity for at least 13,000 tonnes throughput, notwithstanding the request made in the appeal response seeking the Board to limit the throughput to 10,000 tonnes. I have therefore centred my assessment around the original proposal of 13,000 tonnes of biowaste, i.e. 10,000 tonnes of brown waste and 3,000 tonnes of green waste.

## **7.5. Surface and Ground Water**

- 7.5.1. Details around the existing hydrology/hydrogeological environment presented with the application are limited. I note that there is some information on surface water presented in the ecological assessment and I also note the contents of the mitigation measures proposed (under section 3.4 of the Environment and process report – P.40). The Lismagratty stream and the Knockatee stream positioned north/north west of the appeal site are stated as being within the catchment area of the appeal site and are downstream receptors. Both of the streams were sampled at points shown on Figure 9 of Page 27 of the ecological assessment submitted and both are stated to have a Q3 rating with a finding of poor ecological status.
- 7.5.2. The EPA maps website and the Boards Interim GIS map viewer indicate the presence of a stream (which appears to be the Ragaskin stream, also known as the Lismagratty stream) positioned closer to the north west corner of the site than indicated on Figure 9 of the applicant's ecological assessment. It is also a feature at the same position on the current OSI discovery series map for the area. This stream is located c.40m downstream of the site in a north westerly direction. It joins the Knockatee stream c.300m north of the site boundary and flows onwards in a northerly direction. It then enters the Annalee river 4.5 km to the northeast and after passing Ballyhaise and Buttersbridge it enters Lough Oughter SAC complex.
- 7.5.3. In consideration of the operation stage, I have also considered the proposed management of site drainage as presented on Dwg No.141\_435\_400 (Proposed Site Services) received by the Planning Authority as part of the response to further

information, which show that all stormwater would be collected and attenuated on site. The surface water would then enter the Local Authority stormwater network at a discharge point located to the southern boundary of the site. Surface water leaving the site would be capable of being monitored as there is a shut off valve proposed to allow for control. It appears from notes on the services drawing that the connection is agreed with the Local Authority in principle. Floor wash-down from the surface separated waste reception area would be directed into the AD process and run-off from the 'green waste' storage would be collected in a leachate tank and reused as process water.

7.5.4. In terms of hydrogeology, there is no information on the classification or vulnerability rating of the underlying aquifer or protection measures proposed to the aquifer or overburden depth. As I have referenced earlier, the site appears to have been partly subject to quarrying activities and has been significantly disturbed in part. Given the presence of significant recent ground disturbance and the nature of the quarried ground on site, there is potential for rapid water movement during construction. There is potential for impacts to water quality during the construction phase of the development including risk of surface water becoming laden with silt and hydrocarbons and an increase in vulnerability of the underlying aquifer during excavations caused by a reduction in subsoil depth.

7.5.5. In the absence of adequate information on the existing hydrological and hydrogeological environment, the effectiveness of control measures proposed to prevent pollutants from entering the surface or ground water during construction cannot be determined with certainty.

7.5.6. In conclusion, I consider that it has not been sufficiently demonstrated that adverse impacts on the receiving surface water and groundwater environment arising from the proposed construction phase of the development would not arise. Accordingly, I recommend that permission is refused on this basis.

## 7.6. **Odour, Air Quality and Methane.**

7.6.1. Concerns are raised within the grounds of appeal regarding emissions to the atmosphere, which could generate offensive or noxious odour from the plant itself and from vehicles transporting wastes to the plant for digestion. This concern is

merited having regard to the nature of the waste material which is proposed to be received and which is biodegradable and odourous in nature. However, odour mitigation measures are proposed. These include reducing building air leakage by employment of modern construction techniques and through use of negative air pressure, together with installation of fast acting roller doors when operational. It is proposed to utilise a biofilter odour system (Terminodour<sup>TM</sup>), which serves to oxidise the odour at the point of source. It is stated in the appeal that this system is approved by the European Commission's waste treatment BAT Reference document (BREF). It is also stated that twice daily 'sniff tests' would be carried out at locations downward of the site. In the long term, it is proposed that an independent odour audit would be conducted on an annual basis.

- 7.6.2. In conclusion, I am satisfied that odour and emissions to air can be adequately controlled to prevent any loss of amenity to neighbouring sensitive land users and residents. Noting that the operation of the facility would also be likely governed by conditions of a waste licence, odour can be regulated on an ongoing basis.
- 7.6.3. The anaerobic digestion process would take place inside sealed tanks and the gas would be used to generate electricity in the CHP plant. The digestate which is a by-product of the anaerobic digestion process is much less odorous than feedstock materials and would not give rise to a nuisance.
- 7.6.4. In relation to concerns that methane would be produced which is highly inflammable and explosive under certain conditions leading to a risk (albeit low) of fire or explosion, the applicant states that losses of methane from the process would not be in the interest of the project or the economics of the plant.
- 7.6.5. Overall, I am satisfied that permission should not be refused for reasons of odours and air quality. Risk of explosives from methane would be low subject to proper design and management, however further information would be required around risk assessment in this regard.

## 7.7. Noise

- 7.7.1. The noise assessment on file in my view has adequately demonstrated that the proposal, if implemented, would give rise to noise generation which would be within the specified limits set out in the EPA Guidance note for Noise: Licence Applications,

Surveys and Assessments in relation to scheduled activities (Jan 2016). It included environmental monitoring at nine locations to measure **baseline noise** which fell within 46 – 80 dB; the higher noise levels were associated with passing traffic on the R188 regional road.

7.7.2. I consider that in general terms activities on-site should not give rise to noise levels off-site at noise-sensitive locations, which would exceed values of 55dB (A) during the day and 45dB (A) at night time.

7.7.3. I am satisfied that the operation of the proposed facility would not seriously injure the residential amenities of nearby houses by way of noise pollution.

## 7.8. **Archaeology and cultural heritage**

7.8.1. I am satisfied that the development would not significantly impact on protected structures and should the Board decide to grant permission, a standard archaeological pre-testing condition should be attached, taking into account the advice received from the DAHRRG.

## 7.9. **Landscape and Visual Impact**

7.9.1. Having regard to the character of the area and the site zoning which informs intended uses in the vicinity of the site, together with the relatively modest height of the buildings proposed and the fact that the land is not designated in terms of its scenic amenity value, I consider that the proposal would not represent a significant impact on the landscape.

## 7.10. **Traffic**

It is clear from the Traffic and Transport assessment that the surrounding road network (a regional road) is capable of accommodating the relatively modest levels of traffic that would be generated from the delivery of feedstock to the site and the removal of digestate from the site. Cavan County Council roads department have confirmed that works to the junction with the R188 would be undertaken by Cavan County Council, who raised no objection to the proposal.

## 7.11. Other

### Public Consultation

- 7.11.1. The appellant submits that the **public consultation** was not effective or meaningful and accordingly the Board should refuse permission for the proposed facility. This was stated in the context of the growing awareness of the need for public engagement and the requirements of the Aarhus convention which sets out rules to promote public involvement in environmental matters. The Aarhus convention has 3 pillars around access to environmental information, public participation in environmental decision making and access to justice in environmental matters.
- 7.11.2. I am satisfied that the public consultation followed the statutory requirements and that third parties were aware of the proposed development, had access to the planning application and supporting documents. The appellants engaged with the process by making their views known through written submissions to the Planning Authority in the first instance and to the Board at appeal stage.
- 7.11.3. Having regard to the information on file, I am satisfied that the applicant has complied with the statutory requirements, particularly that the applicant published the required newspaper notice and erected a site notice in accordance with the requirements of Article 17 (1)(a) and (b) of the Planning and Development Regulations 2001-2017.

### Legal Interest

- 7.11.4. The appellant contends that the application should have included a letter of consent from Cavan County Council as though the sale of the land was agreed at the time of lodgement of the planning application, the sale had not completed.
- 7.11.5. I am satisfied, based on the information on file, that the applicant is legally entitled to make the planning application. The planning authority accepted the application as valid and the Board's function now is the determination of the appeal rather than validation of the application. It is also of relevance to note that a grant of planning permission does not in itself confer the right to implement the permission as set out under 34(13) of the Planning and Development Act 2000, as amended. Accordingly, I am satisfied that the permission should not be refused because of legal interest/ ownership issues.

### Proximity to similar emission sources

- 7.11.6. In the appeal the appellant outlined the planning, procurement and licencing history and enforcement matters relating to the adjoining Corranure landfill which is currently closed and is not accepting waste for landfill. Details of EPA's consideration of licence applications by Oxigen Environmental (refused) and by Cavan County Council (granted) are presented. It is submitted that concerns raised by the EPA in deciding on Oxigen Environmental's licence application (including complex physical relationship between Oxigen Environmental and Cavan County Council) are concerns which also apply to this appeal because of the site's proximity to other waste facilities. It is submitted that the attribution of responsibility for environmental pollution, contamination of ground or surface water and nuisances including odour would be problematic and that this concern was raised in an internal report from the Environment section.
- 7.11.7. I do not consider that the history of the operation of the landfill or the issue of the licence being previously split over 2 entities (which appears to be the reason for a refusal of an application for a licence from one entity – Oxigen Environmental) is relevant in the consideration of the planning merits of this current proposal for an anaerobic digestion facility, which is an entirely separate entity to the Corranure landfill, is located on a separate site and would have separate infrastructure. Outside of the planning process the facility would be required to hold a waste licence and the facility would not be able to operate without such a licence. Matters around monitoring of emissions from the facility would follow as a function of the EPA.

### Development Contributions

- 7.11.8. Cavan County Council Development Contribution Scheme 2017-2020 is applicable. Under the Scheme, the contribution to be paid (except where an exemption or reduction applies) in respect of commercial/industrial is €25 per square metre of gross floor area. A Section 48 contribution condition should accordingly be attached in the event of a grant of planning permission.

## **7.12. Conclusion on planning and sustainable development consideration**

- 7.12.1. I consider the proposal is acceptable in principle and would if designed and operated effectively have numerous benefits for waste management, agriculture and the



environment. However, as outlined under Section 7.3 above, the application and appeal collectively have information gaps which lead to unresolved consideration of potential environmental impacts in particular and in that context would, if permitted, be contrary to the proper planning and sustainable development of the area.

- 7.12.2. **Note:** Should the Board come to a different conclusion and decide to grant planning permission, I refer to the Board to the attachment of a Planning condition to a previous AD facility under **Appeal Ref: PL 17.244154**. On that appeal case, the Board concluded that there was no likelihood of the 10 tonne limit for biogas being exceeded and further concluded that the proposed development would not comprise an 'establishment' for the purposes of the Seveso III Directive. For the avoidance of doubt the Board included a condition limiting the maximum quantity of biogas present on site at any one time to not exceed 10 tonnes.

## 8.0 Environmental Impact Assessment Screening

### 8.1. Introduction

- 8.1.1. Part 1 of Schedule 5 of the Planning and Development Regulations 2001-2017 sets out the types of development which require the submission of an Environmental Impact Statement (EIS), Part 2 of Schedule 5 sets out the types of sub-threshold developments that may require the submission of an EIS subject to the criteria set out in Schedule 7. The proposed development is not listed in Part 1 of Schedule 5 and a mandatory EIS is therefore not required.
- 8.1.2. The applicant states that the facility would receive an input of 13,000 tonnes of waste material per annum, which would not exceed the threshold of 25,000 tonnes identified in Section 11 (b) 'Other Projects' of Part 2 of Schedule 5 'Development for the Purposes of Part 10', as per the Planning and Development Regulations 2001-2017. The proposed development would produce 0.5MW of electricity and it would not exceed the thresholds specifically identified in Section 3 (a) of Part 2, of Schedule 5 (Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more).

8.1.3. The development would however constitute sub-threshold development for the purpose of EIA. Accordingly, I consider the proposal requires screening to assess whether it requires Environmental Impact Assessment. I have had regard to the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding sub-threshold Development' (Department of the Environment, Heritage and Local Government, August, 2003).

## 8.2. **Characteristics of the proposed development**

8.2.1. The proposed development is for an anaerobic digestion plant with a feedstock intake of 13,000 tonnes of green waste and foodwaste to produce biogas which would be burned in the combined heat and power plant (CHP) to generate electricity and heat other liquid and solid matter to be used as fertiliser on the surrounding agricultural land. The electricity power would be fed directly into the power grid infrastructure and the heat generated would be utilised to heat the building and in the AD processes.

8.2.2. The development would result in a change to the landscape of the area, however it is sited on lands zoned for integrated waste management. I am also mindful that there may be cumulative impacts when considered with other existing planned and permitted development in the area, including a current proposal for a waste processing and transfer facility proposed to the south of the site, if permitted (Appeal Ref PL02.248033). Environmental emissions (including odour, dust and noise) would be regulated by conditions attached to a waste licence. Surface water would be attenuated on site after which it would be directed to the Local Authority's public surface water infrastructure. Foul water generated would be low and would be directed to the public foul water infrastructure.

## 8.3. **Location of the proposed development**

8.3.1. A description of the site location is provided in Section 2.0 above. The site is located within an area where waste and related facilities are existing and proposed.

8.3.2. The site is in an area zoned for '**integrated waste management facility/industry**' under the Cavan Town & Environs Development Plan 2014-2020 with an objective which seeks to promote the development of integrated waste management facilities.

8.3.3. There are no residential properties immediately adjacent to the site and there are no designated heritage assets which would be impacted on as a result of the development. Having considered all of these factors, I conclude that that the absorption capacity of the environment is significant.

#### **8.4. Characteristics of the potential impacts**

8.4.1. The impacts from odours, dust and noise are likely to be limited given the existing controls which would be set down in a waste licence under which the operation of the facility would be regulated. I have noted that there are no residential properties immediately adjacent to the site. Neither is the landscape designated as of being of historical, cultural or archaeological significance. Adverse impacts on the Ringfort/Rath national monument c.80m east of the site are unlikely given its separation distance and elevated position. There is some potential for impacts to surface and ground water quality during the construction phase which I have dealt with under Section 7.5 of my report above and this has not been resolved.

8.4.2. However, I accept that in all probability, subject to further details being provided, particularly around the hydrological and hydrological environment, impacts can be mitigated against and that the development would not ultimately result in significant impacts to either ground or surface water.

#### **8.5. Conclusion on EIA Screening**

8.5.1. In conclusion, I am satisfied that the proposed development would not be likely to have significant effects, direct or indirect, on the environment alone or cumulatively with other proposed plans or projects. Accordingly, having regard to all of the above matters, it is considered that sub-threshold Environmental Impact Assessment and the preparation of an Environmental Impact Statement are not required.

### **9.0 Appropriate Assessment**

#### **9.1. Appropriate Assessment – Stage 1**

9.1.1. This section of my report considers the likely significant effects of the proposal on the relevant European sites in view of the conservation objectives, with each of the

potential significant effects assessed in respect of each of the Natura 2000 sites considered to be at risk.

- 9.1.2. The development would consist of an anaerobic digester on a 2.13 ha site. Further details are set out under Section 2 above. As proposed the facility would be able to receive 13,000 tonnes per annum of brown bin waste (10,000 tonnes) and green waste (3,000 tonnes). Electricity generated would be used for consumption and exported to the national grid. The site is stated as being formerly used for quarrying activities and I note that sand and gravel excavations have taken place on a significant area predominately to the rear of the site with other ground disturbance evident throughout various parts of the site.
- 9.1.3. The applicant undertook an Appropriate Assessment Stage 1 screening exercise to assess if the activity, individually or in combination with other plans or projects are likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Lough Oughter and Associated Loughs SAC (000007) and Lough Oughter Complex SPA (004049). There are no other designated European sites located within a 15km radius of the appeal site and I am satisfied therefore that no other European sites could potentially adversely impacted upon by the development due to the large separation distances involved.
- 9.1.4. Lough Oughter and associated Loughs SAC (000007) consists of a network of waterways, islands, small lakes and peninsulas including some 90 inter-drumlin lakes and 14 basins in the course of the Erne River. The site is an important example of a flooded drumlin landscape in Ireland and has many rich and varied biological communities. Lough Oughter Complex SPA (004049) is of ornithological importance for its wintering water bird populations. Of particular note is the internationally important population of Whooper Swan that is based in the area. The site also supports nationally important populations of a further two wintering species and, notably, holds the highest breeding concentrations of Great Crested Grebe in the country. Two of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan and Greenland White-fronted Goose.
- 9.1.5. The qualifying interests and conservation objectives associated with the two sites are listed in Table 1 under.

Table 1: Qualifying interests and conservation objectives of the Natura 2000 sites

Site	European site (site code)	Distance and direction from site	Qualifying interests	Conservation objectives
1	Lough Oughter and Associated Loughs SAC (000007)	3.5km west of the site.	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Bog woodland [91D0]  Lutra (Otter) [1355]	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.
2	Lough Oughter Complex SPA (004049)	4.6km west of the site	Great Crested Grebe ( <i>Podiceps cristatus</i> ) [A005] Whooper Swan ( <i>Cygnus cygnus</i> ) [A038] Wigeon ( <i>Anas penelope</i> ) [A050] Wetland and Waterbirds [A999]	To maintain or restore the favourable conservation condition of the wetland habitat at Lough Oughter Complex SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

9.1.6. The Appropriate Assessment screening references the presence of a short drain in the northern section of the site and the presence of Lismagratty stream which it states lies c.240m north-west of the application site. A review of the EPA website and the latest Discovery series map for the area indicates a stream located closer to the site (c.40m north west). As stated in the screening statement, the Lismagratty stream flows to the Knockatee stream and onwards to the Annalee River, east of Ballyhaise. Information extracted from the Water Maps section of the Water Matters website would show that the Lismagratty and Knockatee streams are classed as moderate ecological status. Under the requirements of the Water Framework directive these waterbodies were required to achieve good ecological status within a defined period and were at risk of not achieving this 'good status'.

9.1.7. No **direct effects** would arise as there is no proposed landtake or habitat alteration.

- 9.1.8. The screening assessment considered that the distance between the proposed site and Lough Oughter SAC and SPA is sufficient to ensure that construction or operation of the proposed development, either individually or in combination with other plans or projects, would not have any impact upon the SAC or SPA. It is also stated that the drainage ditches on site do not connect with the SAC or any tributary leading to the SAC and SPA. I am not satisfied based on the information on file that physical and/or ecological pathways between the site and Lough Oughter and Associated Loughs SAC can be ruled out. Information on the hydrological and hydrological environment on file is limited and in the absence of sufficient scientific evidence, I consider potential remains for **indirect effects** on ground water and surface water (from contamination with pollutants) during construction phases, which in particular could give rise to effects on the biological integrity of the conservation interests of habitats / species associated with Lough Oughter and Associated Loughs SAC.
- 9.1.9. **Secondary effects** on Lough Oughter and Associated Loughs SAC and Lough Oughter Complex SPA could arise as a result of importation of alien invasive plant species resulting impact on water quality and on prey. **In-combination effects** could also arise on water quality taking into account the location of the area in which I note is zoned / designated for 'Integrated Waste Management Facility/Industry' and having regard to plans/projects which could potentially adversely affect the Natura 2000 sites.
- 9.1.10. On the basis of my screening assessment, I conclude that the proposed development:
- (i) is not directly connected with or necessary to the management of a Natura 2000 site; and
  - (ii) may have significant effects on two Natura 2000 site, the Lough Oughter and Associated Lakes SAC and Lough Oughter Complex SPA.
- 9.1.11. Having regard to the nature, scale and characteristics of the proposed development, the proximity of the facility to a nearby watercourse to the north east of the site, which is linked to Lough Oughter SAC (Site Code Site Code 000007) and Lough Oughter Complex SPA (Site Code 004049) over a short distance, I am satisfied that

a stage 2 Natura Impact Statement is required in order to enable the Board to carry out an Appropriate Assessment of the likely effects of the proposed development on the integrity of the designated European Sites.

## 9.2. Appropriate Assessment Stage 1 – Screening Conclusion

- 9.2.1. It is reasonable to conclude that on the basis of the information on the file, which I consider to be adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on any European site in view of the sites' conservation objectives **with the exception** of Lough Oughter and Associated Loughs Special Area of Conservation (Site Code 000007) and Lough Oughter Complex Special Protection Area (Site Code 004049). Accordingly, a Stage 2 Appropriate Assessment is required to determine the potential of the proposed development to adversely affect the integrity of these two European sites.
- 9.2.2. On the basis of the information provided with the application and appeal and in the absence of a Natura Impact Statement 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 European sites Lough Oughter and Associated Loughs Special Area of Conservation (Site Code 000007) and Lough Oughter Complex Special Protection Area (Site Code 004049), in view of the sites' conservation objectives. In such circumstances I recommend that the Board **refuse** permission.

## 10.0 Recommendation

- 10.1. I recommend that permission be **refused** for the proposed development based on the reasons and considerations hereunder.

## 11.0 Reasons and Considerations

1. On the basis of the information provided with the application and appeal and in the absence of a Natura Impact Statement 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 European sites Lough Oughter and

Associated Loughs Special Area of Conservation (Site Code 000007) and Lough Oughter Complex Special Protection Area (Site Code 004049) in view of the sites' conservation objectives. In such circumstances the Board is precluded from granting permission.

2. The Board is not satisfied that adequate information has been submitted in relation to the scale of the proposed facility relative to the reduced volume of input material which it appears are proposed at appeal stage, the source for the input materials, the final destination and frequency and volume of removal of the solid and liquid digestate, details of the biogas flare stack, risk assessment plans for spillages, leakages, accidents and emergencies, details of a grid connection and details of existing hydrology and hydrogeological environment such as would enable the Board to carry out an assessment of the proposal in the context of proper planning and sustainable development and an assessment of the potential environmental impacts on the area which might arise. In the absence of such information, the Board is not satisfied that the proposed development would not be likely to have significant adverse effects on the environment. The proposed development would thus be contrary to the proper planning and sustainable development of the area.

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Patricia Calleary

Senior Planning Inspector

16 August 2017

**Appendix:**

Maps and photos