

7.2 Case Officer: Mark Russell

MAJOR

Site: Fairfields Farm, Fordham Road, Wormingford, Colchester, CO6 3AQ

Application No: 150391

Date Received: 10 March 2015

Agent: Mr Guy French, Whirledge and Nott

Applicant: Fairfields Biogas Ltd

Development: Erection of Farm Based Biogas Digester and associated works

Ward: Fordham & Stour

Summary of Application: Conditional Approval

1.0 Reason for Referral to the Planning Committee

- 1.1 This application is referred to the Planning Committee because it is a major application and material objections have been received.

2.0 Synopsis

- 2.1 This report describes a proposed Biogas Digester at Fairfields Farm in Wormingford. It is explained that the proposed plant would use agricultural feedstock crops which would be digested with resultant gas feeding the National Grid.
- 2.2 Buildings of up to 13 metres in height are described and it is explained that these have been reduced as a result of consultations and discussions with your Officers.
- 2.3 The landscape impact, in common with the setting of the nearby listed buildings, is considered and it is explained that these issues have been resolved through negotiation and amendment.
- 2.4 Objections principally based on visual blight, odour and HGV movements, are listed and considered and it is held that the application (as amended) overcomes all of these concerns.
- 2.5 Finally, approval is recommended, with conditions.

3.0 Site Description and Context

- 3.1 The site consists of a 2.9ha field at the eastern edge of Fairfields Farm. This is located close to an existing group of farm buildings and is within the perimeter of the former airfield. Around the eastern edge and wrapping itself around to the north is Public Right of Way no 48. Across an intervening field the Grade II* listed Jenkins Farm is 200 metres away.

4.0 Description of the Proposal

- 4.1 The proposal is described as a “Farm Based Biogas Digester and associated works”. This consists of agricultural feedstock (typically maize, rye and grass) grown by the applicant or neighbouring farmers, which is broken down in an oxygen-free environment. This results in the production of methane and carbon dioxide and the process is carried out in a sealed vessel and the gas produced is collected and fed into the National Grid through an existing pipeline which runs through the farm.
- 4.2 The remaining material, the “digestate”, which is left over is a high quality soil conditioner or fertiliser. This is to be used on the farm in lieu of imported, inorganic fertilisers.
- 4.3 Left over water is to be stored in the digestate storage tanks adjacent to the reservoir to the west of the airfield, and then trickle irrigated onto the potato crops grown on the airfield between May and August.
- 4.4 The output of the biogas digester is said to be 546 m³ per hour of gas at its peak, equating to 1.2MW of energy providing a supply of gas for approximately 3,218 homes.
- 4.5 The built form of the proposal comprises two digester units (one with a diameter of 26 metres, the other 28 metres) originally at a height of 12.5 and 13 metres and both coloured grey.
- 4.6 These two items are the most dominant in elevation. Meanwhile, on the ground, half of the site (over one hectare) would be filled with silage clamps of up to four metres in height.
- 4.7 Other items of some height are a feeder tank/hopper (4.48 metres + conveyor up to 9 metres); a flare at 8.27 metres (including a 300mm concrete plinth); surface water tank (6 metres); separator and digester (5.45 metres) and Gas Upgrader (3.9 metres at eaves, 4.859 metres at apex).
- 4.8 In the interests of completeness, the remaining items are as follows (heights in brackets):
- Diesel Tank (1.84 metres);
 - Carbon Filter (3 metres);
 - Back-up Generator (3 metres);
 - CHP [Combined Heat and Power generator] (10 metres);
 - LV Distribution (2.5 metres);
 - Compressor (2.7 metres);
 - GEU Unit (2.5 metres);
 - Propane Storage (2.5 metres);
 - LV National Grid Compound (2.5 metres);
 - National Grid Switch (2.5 metres);
 - LV Switching Compound (2.5 metres);
 - Reception Tank (4 metres);
 - Control Room (2.5 metres).

- 4.9 In addition to the above are proposed digestate lagoons by the existing farm reservoir, which would measure approximately 0.47ha.

5.0 Land Use Allocation

- 5.1 Agricultural

6.0 Relevant Planning History

- 6.1 C/COL/03/0322 - Retrospective application - Change of use of agricultural building to Class B2 (General Industrial) Use.
- 6.2 071023 - Agricultural building, potato grading and storage. Approved 16th May 2007.
- 6.3 071971 - Continued change of use for B2 use as previously granted by application no. COL/03/0322 together with portacabin for office use B1. Approved 10th September 2007.
- 6.4 101767 - Change of use of land from agriculture to composting of green waste with enabling development comprising: installation of weighbridge; installation of a modular office/staff amenity building; installation of a green chain mesh weld fence 2.4m in height; creation of a leachate pond (lagoon); construction of a new hard surface; and installation of a shredder (County Matter). Refused 18th October 2010.
- 6.5 110516 - The change of use of land from agriculture to composting of green waste with enabling development comprising; installation of weighbridge; installation of a modular office/staff amenity building; installation of a green chain mesh weld fence 2.4m in height; creation of a leachate pond (lagoon); construction of a new hard surface; and installation of a shredder. Resubmission (County Matter). Refused 8th June 2011.
- 6.6 121150 - Change of use of potato store to potato crisp manufacturing, addition of extract cowlings to roof and changes to the size and elevations of the building (approved under Planning permission 102064).

7.0 Principal Policies

- 7.1 Planning law requires that applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise. The National planning Policy Framework (NPPF) must also be taken into account in planning decisions and sets out the Government's planning policies are to be applied. The NPPF makes clear that the purpose of the planning system is to contribute to the achievement of sustainable development. There are three dimensions to sustainable development: economic, social and environmental.

- 7.2 Continuing the themes of the NPPF, the adopted Colchester Borough Core Strategy (adopted 2008, amended 2014) adds detail through local strategic policies. Particular to this application, the following policies are most relevant:

SD1 - Sustainable Development Locations
SD2 - Delivering Facilities and Infrastructure
SD3 - Community Facilities
UR2 - Built Design and Character
ENV1 - Environment
ENV2 - Rural Communities
ER1 - Energy, Resources, Waste, Water and Recycling

- 7.3 In addition, the following are relevant adopted Colchester Borough Development Policies (adopted 2010, amended 2014):

DP1 Design and Amenity
DP8 Agricultural Development and Diversification
DP9 Employment Uses in the Countryside
DP14 Historic Environment Assets
DP21 Nature Conservation and Protected Lanes
DP25 Renewable Energy

- 7.4 Regard should also be given to the following adopted Supplementary Planning Guidance/Documents:

- Sustainable Construction
- External Materials in New Developments

8.0 Consultations

- 8.1 Highway Authority: The Highway Authority would not wish to raise an objection to the above subject to the following;

Note: The public's rights and ease of passage over public footpath no48 (Wormingford) shall be maintained free and unobstructed at all times to ensure the continued safe passage of the public on the definitive right of way. Any unauthorised interference with the route will constitute a contravention of the Highways Act 1980.

- 8.2 Essex County Council (SUDS): Initially objected to the application for lack of information, then responded to revisions on 1st June 2015 as follows:

"Having reviewed the revised FRA and Outline Drainage Strategy in response to our earlier objection (23rd April 2015), we now consider that outline planning permission could be granted to the proposed development, if the following planning conditions are included:"

A condition relating to the drainage strategy was proposed and is included at the end of this report.

- 8.3 Environmental Control: Environmental Protection is aware that the applicant site is a sensitive site in that there is an open odour complaint regarding smells from the production of crisps. The nature of the application process is completely different from crisp manufacture.

A site visit has been made to a farm that has a biogas digester and is comparable to the Fairfield's Farm application. Very little odour was noticeable within a few metres of the clamps, feed hopper or the lagoon.

The ADAS Odour Assessment dated 2 March 2015 bases its calculations on worst case and is very cautious, certainly the use of pig slurry as opposed to cow slurry would give higher predictions of European Odour Units and we would expect actual levels to be lower.

Several conditions were also requested – these are at the end of the report.

- 8.4 Environmental Control (Contaminated Land):

This is an acceptable report for Environmental Protection purposes. I note that it is concluded that intrusive land quality assessment is not considered likely to be required but would benefit from some further assessment during any subsequent geotechnical investigation. Based on the information provided, and given the proposed use of this site, this approach would appear reasonable. Consequently, should permission be granted for this application, Environmental Protection would recommend inclusion of the following condition (relating to the reporting of unexpected contamination).

- 8.5 Landscape Planner: Regarding the landscape content/aspect of the proposals lodged on 11.03.15.

With reference to the 'Landscape & Visual Impact Appraisal' dated 22.02.15; the following point need to be considered:

Under clause 8.8; the Council's Coast & Countryside Planner has advised that:

'The Review of the Countryside Conservation Areas document is no longer valid. In the inspectors report for the 2004 Local Plan CBC was encouraged by the inspector to review the CCA's. We completed the review as part of the Landscape Character Assessment studies undertaken to support the preparation of the Core Strategy but the proposed Area Landscape Conservation Importance were rejected by the planning inspector for the Core Strategy because he felt that they added an unnecessary layer of protection the countryside/landscape locally on top of the protection afforded by the RSS at the time.

The Coast & Countryside Planner further advises that 'reference to the Review of the Countryside Conservation Areas document should be considered as invalid as part of any planning application.

Otherwise this report concurs with the Summary & Conclusions as detailed under part 13 of the Appraisal.

It is recommended the Council's Historic Buildings & Areas Officer and Coast & Countryside Planner be consulted regarding the acknowledged potential impact on 2

Grade II* buildings and impact on the countryside in Planning Policy terms respectively.

In conclusion, there would be no Planning Projects Team objection to this application on landscape grounds subject to the above.'

8.6 Historic Buildings Officer:

"I visited the site today and have concerns that the impact on designated heritage assets has not been addressed in the submission. In this case, Jenkins farm (II*) and Rochfords (II*) have the potential to be affected by the development in terms of their wider setting. The height of the proposed structures in this elevated and open plateau landscape creates a potential for a significant landscape intrusion in the form of skyline development (despite the conclusions drawn in the Landscape Appraisal that do not appear to be evidenced).

The NPPF requires that:

128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation."

This work needs to be undertaken by a practice with specialist expertise in this field and I believe this should be supported by winter season photomontages to demonstrate the magnitude of the potential impact and the cumulative impact with existing and planned development. The widely cast definition of setting in the NPPF and its experiential dimension needs to be taken into account. Any assessment should include the impact of HGV movements on tranquility and include issues such as odour as the smell of frying was clearly detectable on my site visit.

Please reconsult once we have received the report."

NOTE – a revised Heritage Impact Assessment was received on 8th June 2015. Our specialist considered this and commented as follows:

"I do not agree. (that views from the farmhouse are likely to be unaffected). The screening is a single hedgerow of deciduous shrubs. The structure could be highly visible by reason of its height and the openness of the wider landscape. There is a cumulative impact here - in terms of industrialisation. Not covered."

"Limited impact (from the addition of a single further agri-industrial structure) - why? What about cumulative adverse impact? Barnwell and Forge Field decisions clearly indicate that all harm is by definition undesirable and to be avoided if possible. Is it possible to avoid here or if not how does the design solution mitigate the adverse impact?"

“This does not logically follow (that the impact of the proposed development on the setting of the listed buildings is low - the setting is already degraded for both by industrialising development. Harm does not justify further harm.”

“The alteration is cumulatively harmful and so why is the harm necessary or desirable?”

NOTE – The height of the proposed buildings has been much reduced and sunk in to the ground and a further assessment has taken place. Our Historic Buildings Officer has now replied: “I am satisfied that in my opinion the revised proposals strike an appropriate balance in terms of heritage impact.”

- 8.7 Urban Designer: “The proposal represents a significant increase in built massing within the countryside, with predominantly structures industrial in nature which would be difficult to mitigate through building/structure design. It might be argued that development is justified as the area already has a surprisingly large loose grouping of industrial-type development for the isolated rural location, though the counter-view is that further incremental development would simply emphasise the perception that such incremental development is at odds with the area’s location. My leaning would be toward the latter, especially considering new/increased visual impacts, the overtly industrial type massing and without a more compelling and evidenced proposal.

Therefore, for the moment I would recommend refusal. With regard to appreciating the full impact of the proposal, I would expect CGI coloured representation. Within the visual impact assessment it would be useful for all interested to see a table showing the grading of views with regard to visual impact and importance of the view. On this issue, it appears development would have a significant detrimental impact on view points 4, 5, 6, 9 and 11 for example. With regard to design, further details on materials and colours should be provided, to help recess the building into its landscape setting. I would also expect to see substantial native tree screen planting and shown in the visual impact images at various stages of growth and for winter and summer. However, on this note, just because it might be screened and therefore not that visible does not mean it won’t be seen at all and therefore be perceived as in conflict with the rural setting.”

NOTE – This matter has now been addressed. An amended Visual Impact Assessment has been received, as have amended drawings (as discussed above). There are no objections from the Urban Designer, Landscape Planner or Historic Buildings Officer.

- 8.8 Planning Policy:
“The Spatial Policy team has been asked to consider this proposal in terms of its impact on the countryside.

This proposed development site is located on unallocated land in the countryside adjacent to the existing Fairfields farm complex.

The proposal supports the objectives of paragraph 28 of the NPPF which seeks to support the rural economy and rural land based businesses. The proposal is a rural diversification initiative and policies DP8 and DP9 are relevant. It requires the construction of several new built structures (anaerobic digesters, combined heat and

power plant and storage tanks/lagoons) and therefore in principle conflicts with criteria (i) and (iv) of policy DP8. The proposal satisfies the remaining policy criteria of DP8. It also potentially conflicts with policy DP9 (part D) which states that new rural employment buildings will only be supported where there are no appropriate existing buildings or where the need is justified. Given the specialist nature of the buildings proposed, it is unlikely that these could be accommodated within existing conventional farm buildings on the farm.

There is an allocated Local Employment Site in Wormingford but the development site falls outside it. Policy DP9 requires proposals outside LEZ's to contribute to the rural economy which this proposal does, however schemes should also be small scale, and respect rural character with regards to the nature and level of activity generated. These are also requirements of Core Strategy policy ENV2.

The proposed development covers an area of 2.9ha (including buildings and storage lagoons) and therefore cannot be considered small scale. The new buildings when viewed from a distance integrate well visually with the existing farm complex. Despite this development management should be satisfied that the **construction** of the new buildings will not adversely impact on local landscape character and where it does ensure that adequate landscaping is carried out to mitigate any landscape impacts. This is necessary to comply with policies DP1, and ENV2.

This scheme as well as being a rural diversification scheme will provide a renewable energy supply to fuel a combined heat and power unit for Fairfield's Farm and energy to the national grid. It therefore does not raise any conflicts with the objectives of policy ER1 in the Core Strategy or policy DP25.

Co-locating the biogas digester adjacent to the farm should reduce the number of trips by large agricultural equipment in the Wormingford area which meet the policy requirements of policies ENV2.

A desk top ecological survey has been carried out but no actual sites surveys have been completed. This is a requirement of policy DP21. The desk top search concluded that the site supported the following farmland birds; Corn Bunting, Yellow Wagtail and Lapwing which are all priority species under the UK Biodiversity Action Plan and also Red List species of high conservation concern, as well as Grey Partridge and Turtle Dove. The latter are protected under the Wildlife and Countryside Act 1981.

While the site is not hugely diverse in terms of the existing habitats and species the proposal provides an opportunity to enhance the biodiversity of this site. New flower rich grassland habitats should be requested as part of detailed landscaping requirements if planning permission is granted to provide foraging and feeding habitats for the birds using this site. This approach accords with criteria (ii) and (iv) of policy DP 21.

While the proposal does not comply with policy DP9 in terms of new buildings in the countryside, overall it delivers a number of wider benefits and is considered to satisfy Local Plan policies in terms of transport, renewable energy, managing climate change, landscape and biodiversity.

- 8.9 Archaeology: “This applications lies on the site of a locally significant heritage asset recorded in the Essex Historic Environment Record. Originally the site of a First World War landing ground for the Royal Flying Corps, Wormingford was reconstructed during 1943 as an American fighter and fighter/bomber base. It was equipped with three runways, perimeter track, 50 loop dispersals and bomb stores. The main technical site lay along the eastern perimeter and there were over 300 huts and domestic facilities in the fields to the east of the airfield.

There will need to be an evaluation (both of the digester site and the reservoir), by consent:

I will, on request of the applicant, prepare a brief for the desk-based assessment.”

A condition was proposed which is included at the end of this report.

- 8.10 Natural England: Natural England has no comments to make regarding this application.
- 8.11 Environment Agency: We have inspected the application, as submitted, and have no objection to the application.

In addition to the details reported above, the full text of all consultation responses is available to view on the Council’s website.

9.0 Parish Council Response

- 9.1 Initial response (25th March 2015) “Wormingford Parish Council discussed this application at its March Meeting and would at present object to this application in its current form

The Council’s current concerns are regarding:

- Odour
- Traffic movement for the construction of the biogas digester along with the long term movements of traffic once operational.
- Hours of Operation.
- Noise.
- The amount of concrete needed for the site in such a rural setting.
- Creation of gas for the National Grid, but currently no gas available for the Village of Wormingford.

The Parish Council is currently seeking advice from other Local Parishes who have had a similar application passed, to seek some guidance on actual impact to the local community.

The Parish Council would like to receive further information from the applicant and would welcome a presentation at its May Parish Council meeting to provide answers to the above concerns. The Chairman of Wormingford Parish Council has spoken to the applicant and he is in agreement to this idea.”

9.2 Following an extraordinary meeting, the Parish responded as follows:

“The Parish Council agreed a majority vote at its April extraordinary meeting to SUPPORT the above planning application.

The Parish Council would encourage the applicant to continue village engagement in this project as the Parish Council are aware of some continued concerns from residents over this project especially regarding possible odour. The council also explained the critical need for the applicant to be a good neighbour in all respects. This was highlighted owing to the ongoing complaints regarding the existing crisp manufacturing operation on Fairfields Farm.”

10.0 Representations

10.1 At the time of writing (15th July 2015) eight letters of objection four of support and three mixed had been received.

10.2 The reasons for objecting were:

- Odour;
- Reliance on the “crust” to prevent odours is uncertain;
- Visual blight to Colne and Stour Valleys, buildings up to 13 metres in height;
- Loss of farmland;
- Extra HGV movements (and lack of clarity on claimed movements);
- Adverse effects on local footpaths;
- Wrongly describing the site as an “airfield.”
- Lagoon will produce odours;
- Ditches will not be able to cope with water run-off;
- It is appropriate for farmland to generate energy?
- Concerns as to the construction and operational phases of the project;
- Out of keeping with traditional farm buildings in this part of rural Essex;
- Potential polluted water seepage into the Colne;
- There is no assurance that neighbouring farmers will agree to supply the required additional feed;
- Soil erosion and compaction;
- Pesticide required for growing maize;
- If potato waste is to be used, this would need the involvement of the Waste Planning Authority at Essex County Council. (NB – no it wouldn’t as not “waste transfer”);

10.3 The reasons for support were:

- Reduction in traffic
- Good for the environment/less reliance on fossil fuels
- New jobs
- The development will be well-screened

10.4 The Essex Bridleways Association also commented, requesting that some of the existing local footpaths be upgraded to bridleways.

NOTE – this was considered by the Development Team. However, the Highway Authority advised that this was not necessary to make the scheme acceptable and, therefore, this could not be insisted upon.

10.5 NOTE – A further letter of consultation was sent out following the receipt of the second set of amended drawings. The deadline for comment falls after the publication of this report. Any additional comments will be reported on the amendment sheet.

11.0 Parking Provision

11.1 Not relevant to this application. The larger Fairfield Farm landholding has ample space for the parking of many vehicles.

12.0 Open Space Provisions

12.1 n/a

13.0 Air Quality

13.1 The site is outside of any Air Quality Management Area and will not generate significant impacts upon the zones.

14.0 Development Team and Planning Obligations

14.1 This application is classed as a “Major” application and therefore there was a requirement for it to be considered by the Development Team. It was concluded that no Planning Obligations should be sought via Section 106 (S106) of the Town and Country Planning Act 1990.

15.0 Report

Policy

15.1 One of the twelve key principles of the NPPF is to “support the transition to a low carbon future in a changing climate...and encourage the use of renewable resources (for example, by the development of renewable energy.” The NPPF adds, at paragraph 93: “This is central to the economic, social and environmental dimensions of sustainable development.” Succeeding paragraphs within that document encourage Local Authorities to have “a positive strategy to promote energy from renewable and low carbon sources.”

- 15.2 Explicitly, paragraph 98 states that local authorities should “approve the application if its impacts are (or can be made) acceptable.”
- 15.3 Therefore, at the heart of government guidance is a presumption (all other things being equal) in support of proposals such as this.
- 15.4 Further, Paragraph 28 of the NPPF supports the rural economy and rural land based businesses.
- 15.5 These tenets are passed down through Colchester Borough Council’s own local policies in the core strategy and development policies, both reviewed in 2014. Of particular relevance is Core strategy ER1 which clearly states: “The Council will encourage the delivery of renewable energy projects, including micro-generation, in the Borough to reduce Colchester’s carbon footprint.”

Visual Amenity

- 15.6 As discussed in the consultations section above, there were several concerns raised by specialists in the Planning Projects Team (Commercial Services) and by third parties. These related to landscape impact as well as the setting of listed buildings, particularly Jenkins farmhouse and to a lesser degree Rochfords (both grade II* listed).
- 15.7 Our Historic Buildings & Areas Officer expressed concern at the original proposal with its spread of high buildings and their effect on the wider setting, specifically in relation to the setting of the nearby Jenkins. A Planning Authority has a statutory duty (under s.66(1) of the Listed Buildings and Conservation Areas Act 1990) to ensure that no avoidable harm is caused to the setting of such assets. The NPPF defines setting widely as the whole environment in which the asset is experienced.
- 15.8 The applicant had amended their scheme in June. However, it was held that this was still potentially harmful. Therefore, further amendment was negotiated in terms of building height. As a result, following installation and establishment of the planned landscape mitigation, the bio-digester and Jenkins should not be read together, with Rochfords (Also Grade II*) even further away and not materially affected by the proposal.
- 15.9 The heights of the main buildings are now no more than approximately six metres (for the digester, which is now to be sunk two metres below ground), with the only elements above this height being a very small amount of the gas store dome and a few centimetres of the gas store as well as the slender objects the solid input batch feeder (nine metres high and 1500mm across), the CHP (10 metres high, 500mm across) and the flare (eight metres high, one metre across). The clamps are only about four metres in height.

- 15.10 In further mitigation, it is proposed to introduce additional hedge and tree planting to the immediate east of the site, with thick woodland belt planting (up to 30 m in depth) to the eastern edge of the applicant's larger landholding. This should deliver significant mitigation to protect the setting of Jenkins farmhouse. Further, woodland copse planting is proposed for the northern edge of the landholding to screen views from Fordham Road. Further landscape mitigation is also shown, including gapping up of the roadside hedgerow and the introduction of standard trees along the Fordham Road boundary. These works should mitigate the wider impact on the landscape setting of Rochfords farmhouse.
- 15.11 Cumulatively, the amendments and landscape mitigation are held to overcome any lasting concerns about the wider landscape setting and the effect on the setting of the listed buildings. Whilst there will inevitably be an impact during the construction phase and during the early years of operation, as the landscape mitigation matures, a significant landscape enhancement would be delivered that will address any potential creeping industrialization of the locality.

Residential Amenity

- 15.12 This has several elements to it – potential noise during construction, noise during operation. These are looked at below, but the chief concern relates to odour.
- 15.13 Odour: It must be recalled that our Environmental Control Officer has not objected to the proposal. However, this is a complex matter and several concerns have been raised by objectors. These can be listed as follows:
- i) There are existing odours from the crisp factory;
 - ii) Odour will be constant and not intermittent;
 - iii) There will be odours from liquid digestates;
 - iv) The reliance on the crust to prevent odours cannot be depended upon;
 - v) The Environmental Control Officer did not witness a hopper being filled with feed-stock;
 - vi) Loading would be a daily process taking about 2 hours;
- 15.14 First and foremost, it is recognised that there have been longstanding issues with odour from the crisp factory (including for some dwellings which are at a considerable distance from the factory). However, this should not inform or confuse consideration of the matter at hand.
- 15.15 Turning to the other points raised: Our Environmental Control Officer witnessed activities at the Earls Colne plant and has reported that odours are virtually undetectable other than within a few metres. Given that the nearest residential property (Jenkin's) is about 200 metres away the general concerns about odour are not compelling. The applicant has added: "The odour report from ADAS concluded that there will be not be a negative impact to local receptors from the proposed development. The odour report carried out assumed the worst case scenario. We have visited the two most local running biogas plants to Colchester with both Parish Council members from Wormingford and our local EH Officers. On both occasions it was noted that odour was not an issue. Neither site has ever received a complaint about odour and has potential receptors within similar distances to the proposed Fairfields site."

- 15.16 The separated digestate solids, in terms of odour potential, are biologically relatively inert, and “do not generate significant odour emissions in undisturbed stockpiles”. Storing this material outside will pose a lower risk of odour impact than manure storage in heaps in farm yards. However, the applicant acknowledges that (in common with manure handling) “periodic loading of digestate solids to trailers or spreaders for removal from the site will give short term increases in odour emissions”. Thus, there will be an intermittent – not constant – issue of odour.
- 15.17 The applicant has clarified this last point and that relating to the crust, stating: “The odour from the liquid digestate is very much limited and controlled when in storage in the lagoon. The crust that forms over the top reduces odour escaping or travelling. This was seen by the EH Officers when they attended the site at Elmstead Market. Once the crust forms, the digestate is then pumped out from underneath the crust and dribble fed via an umbilical system, or trickle irrigated onto a growing crop or stubble, thus directly applying the digestate to the soil and not releasing into the open atmosphere. This method of application is non-atomising, so odour from the digestate is prevented because it is dribbled in liquid form, onto the farmland. Liquid digestate for the purpose of agriculture can be applied onto land under an Environment Agency exemption and could be applied to the farmland even if a biogas digester were not present at Wormingford Airfield.”
- 15.18 In reference to concerns about the crust not working, the applicant advises: “Experience from other biogas sites suggests that the crust is sufficient at suppressing odours.”
- 15.19 On the final point relating to smell, the clamp face exposed whilst loading the crop into the hopper is not a high risk odour situation. The clamp face was open when the EH Officers visited the site at Elmstead Market and it was acknowledged that there was no odour from the open clamp face, except when right next to the clamp face. The loading process is with a loading shovel which cuts the clamp face and moves the feedstock to the hopper which is then automatically fed into the biogas digesters.
- 15.20 The applicant has further clarified: “There is no merit in producing a feedstock which is stored and releases odour as all of the energy within the feedstock needs to be conserved and used in the biogas process. Any release of odour (which will be a loss of energy) will affect the productivity of the biogas plant.”
- 15.21 It is concluded that the issue of odour is satisfied.
- 15.22 Noise: It is claimed by the applicant that the digestion process itself is silent. This leaves for consideration the other parts of the operation – principally the construction phase and the delivery and loading of the agricultural feedstock.
- 15.23 Your Environmental Control Officer has requested that hours of both construction and delivery be restricted to the usual times - Weekdays: 8am – 6pm Saturdays: 8am – 1pm Sundays and Bank Holidays: Not at all. This means that any vehicle movements should not occur at sensitive times.

- 15.24 Regarding the loading. This breaks down in to two parts, the first of which has the potential to be the noisiest part of the operation – namely the loading of crops into the clamps. The applicant has clarified that this will occur two to three times a year, namely April-May and June-July for the grasses and September for the maize. This has the potential to make some noise, but is time sensitive according to the day that the crops are at their optimum. Any noise involved would be typical of normal farming activity.
- 15.25 The second element is the loading of the crop in to the digester. This takes up to two hours (possibly as little as one hour) and needs to be done every day. This is a very quiet activity, but for the avoidance of doubt a condition will be in place to restrict this to 07:30 and no later than 18:00.

16.0 Conclusion

- 16.1 Central government guidance and Local Plan policies are supportive of low-carbon proposals such as this, provided other matters are satisfied.
- 16.2 After much negotiation, the issues of visual impact and setting of listed buildings have been satisfied.
- 16.3 Whilst residential amenity concerns are noted, the effects are found to be limited.
- 16.4 There are no issues of Highway safety or efficiency which need to be satisfied.
- 16.5 Therefore, approval is recommended.

17.0 Recommendation

- 17.1 APPROVE subject to the following conditions

1 - Time Limit for Full Permissions

The development hereby permitted shall be begun before the expiration of three years from the date of this permission.

Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990, as amended by the Planning and Compulsory Purchase Act 2004.

2 - *Development to Accord With Approved Plans

The development hereby permitted shall comply in all respects with the amended approved plans (205341-12-P4, 205341-10-P3 and FIGURE 7a.

Reason: For the avoidance of doubt as to the scope of this permission and in the interests of proper planning.

3 - Non-Standard Condition/Reason

The public's rights and ease of passage over public footpath no48 (Wormingford) shall be maintained free and unobstructed at all times to ensure the continued safe passage of the public on the definitive right of way. Any unauthorised interference with the route will constitute a contravention of the Highways Act 1980.

Reason: In the interests of highway safety.

4 - Limits to Hours of Work

No construction work shall take outside of the following times;

Weekdays: 8am – 6pm

Saturdays: 8am – 1pm

Sundays and Bank Holidays: Not at all

Reason: To ensure that the construction phase of the development hereby permitted is not detrimental to the amenity of the area and/or nearby residents by reason of undue noise at unreasonable hours.

5 - Limits to Hours of Construction Deliveries/Worker Traffic

No construction deliveries to or from the site, worker vehicle movements, or construction work shall take place outside of the following times;

Weekdays: 8am -6pm

Saturdays: 8am -1pm

Sundays and Bank Holidays: Not at all

Reason: To ensure that the construction phase of the development hereby permitted is not detrimental to the amenity of the area and/or nearby residents by reason of undue noise at unreasonable hours.

6 - Site Boundary Noise Levels

Prior to the first use or occupation of the development as hereby permitted, a competent person shall have ensured that the rating level of noise emitted from the site's plant, equipment and machinery shall not exceed 0dBA above the background levels determined at all boundaries near to noise-sensitive premises. The assessment shall have been made in accordance with the current version of British Standard 4142 and confirmation of the findings of the assessment shall have been submitted to, and agreed in writing by, the Local Planning Authority and shall be adhered to thereafter.

Reason: To ensure that the development hereby permitted is not detrimental to the amenity of the surrounding area by reason of undue noise emission and/or unacceptable disturbance, as there is insufficient information within the submitted application.

7 -Non-Standard Condition/Reason

The plant shall be installed and maintained in-accordance with the manufacturer's instructions. A log shall be kept detailing any faults and remedial action taken.

Reason: In the interests of residential amenity.

8 - Non-Standard Condition/Reason

A maximum of two clamp faces shall be open at any one time.

Reason: In the interests of residential amenity.

9 - No External Light Fixtures

No external lighting fixtures shall be constructed, installed or illuminated at any time.

Reason: To ensure that there are no undesirable effects of light pollution.

10 - Non-Standard Condition/Reason

The development permitted by this planning permission shall be carried out in accordance with the approved Flood Risk Assessment (FRA) (13/05/2015, ref 205341, Canham Consulting) and Drainage Strategy (13/05/2015, ref 205341 Rev P5, Canham Consulting) and the following mitigation measures detailed within the FRA:

- Provide a storage volume of 105m³ within the swales for the attenuation of surface runoff from roofs and concrete bases.
- Surface water runoff to be discharged at a maximum allowable greenfield run-off rate of 2.3l/s/ha (1 in 1 year greenfield rate).
- Provide 1 level of treatment for surface water discharge from the roofs and concrete bases.
- Provide details of adoption and maintenance of the SuDS scheme for the lifetime of the development.
- Obtain authorization and submit proof of discharge permit from the Environment Agency for the discharge of waste water generated from the silage storage area, to be discharged via the lagoons.

The mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reason

- To prevent flooding by ensuring the satisfactory storage of/disposal of surface water from the site.
- To ensure the effective operation of SUDS features over the lifetime of the development.
- To reduce the risk of pollution as a result of waste discharge from the development.
- To mitigate environmental damage caused by runoff during a rainfall event.

11 - Landscape Management Plan

Prior to the first occupation of the development, a landscape management plan including long term design objectives, management responsibilities and maintenance schedules for all landscape areas other than small, privately owned, domestic gardens shall be submitted to and agreed, in writing, by the Local Planning Authority. The landscape management plan shall thereafter be carried out as approved at all times.

Reason: To ensure the proper management and maintenance of the approved landscaping in the interests of amenity and the character and appearance of the area.

12 - Earthworks

No works shall take place until details of all earthworks have been submitted to and agreed, in writing, by the Local Planning Authority. These details shall include the proposed grading and mounding of land areas including the levels and contours to be formed, showing the relationship of proposed mounding to existing vegetation and surrounding landform. The development shall thereafter be carried out in accordance with the approved details.

Reason: To ensure that any earthworks are acceptable in relation to their surroundings.

13 - Tree or Shrub Planting

No works shall take place until details of tree and/or shrub planting and an implementation timetable have been submitted to and approved, in writing, by the Local Planning Authority. This planting shall be maintained for at least five years following contractual practical completion of the approved development. In the event that trees and/or plants die, are removed, destroyed, or in the opinion of the Local Planning Authority fail to thrive or are otherwise defective during such a period, they shall be replaced during the first planting season thereafter to specifications agreed in writing with the Local Planning Authority.

Reason: To ensure an appropriate visual amenity in the local area.

14 - Non-Standard Condition/Reason

No works shall take place until the implementation of a programme of archaeological work has been secured, in accordance with a Written Scheme of Investigation that has been submitted to and approved, in writing, by the Local Planning Authority.

The Scheme shall include an assessment of significance and research questions; and:

- a. The programme and methodology of site investigation and recording
- b. The programme for post investigation assessment
- c. Provision to be made for analysis of the site investigation and recording
- d. Provision to be made for publication and dissemination of the analysis and records of the site investigation
- e. Provision to be made for archive deposition of the analysis and records of the site investigation
- f. Nomination of a competent person or persons/organisation to undertake the works

The site investigation shall thereafter be completed prior to development, or in such other phased arrangement, as agreed, in writing, by the Local Planning Authority. The development shall not be occupied or brought into use until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

Reason: To safeguard archaeological assets within the approved development boundary from impacts relating to any groundworks associated with the development scheme and to ensure the proper and timely investigation, recording, reporting and presentation of archaeological assets affected by this development, in accordance with Policy SD1 and ENV1 of Colchester Borough Council's Core Strategy (2008).

15 - Non-Standard Condition/Reason

The feedstock digester shall not be loaded outside of 07:30 – 18:00.

Reason: In the interests of residential amenity.

19.0 Informatives

(1) **ZT0 – Advisory Note on Construction & Demolition** The developer is referred to the attached advisory note Advisory Notes for the Control of Pollution during Construction & Demolition Works for the avoidance of pollution during the demolition and construction works. Should the applicant require any further guidance they should contact Environmental Control prior to the commencement of the works.

(2) All works affecting the highway should be carried out by prior arrangement with, and to the requirements and satisfaction of, the Highway Authority and application for the necessary works should be made by initially telephoning 08456 037631.

(3) **ZTA - Informative on Conditions Stating Prior to Commencement/Occupation**
PLEASE NOTE that this permission contains a condition precedent that requires details to be agreed and/or activity to be undertaken either before you commence the development or before you occupy the development. This is of critical importance. If you do not comply with the condition precedent you may invalidate this permission. Please pay particular attention to these requirements.

(4) The applicant is reminded that the transfer of waste on to or off of the site may require separate permission from Essex County Council.

(5) All work within or affecting the highway is to be laid out and constructed by prior arrangement with, and to the requirements and satisfaction of, the Highway Authority, details to be agreed before the commencement of works. The applicants should be advised to contact the Development Management Team by email at development.management@essexhighways.org or by post to: Essex Highways, Colchester Highways Depot, 653 The Crescent, Colchester, CO4 9YQ.

(6) Any drainage features proposed for adoption by Essex County Council should be consulted on with the relevant Highways Development Management Office.

20.0 Positivity Statement

20.1 The Local Planning Authority has acted positively and proactively in determining this application by identifying matters of concern within the application (as originally submitted) and negotiating, with the Applicant, acceptable amendments to the proposal to address those concerns. As a result, the Local Planning Authority has been able to grant planning permission for an acceptable proposal, in accordance with the presumption in favour of sustainable development, as set out within the National Planning Policy Framework.