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Item No: 7.1

Application: 222151

Applicant: Mr James Hartley-Bond, Low Carbon Solar Park 22 Ltd

Agent: Mr Robert Booth. DWD LLP

Proposal: Construction and operation of a solar photovoltaic (PV) farm and associated infrastructure, including batteries, inverters, security cameras, fencing, access tracks and landscaping and cable run

Location: Land to the north west of, Hardys Green, Birch, Colchester

Ward: Marks Tey & Layer

Officer: James Ryan

Recommendation: Approval

1.0 Reason for Referral to the Planning Committee

- 1.1 This application is referred to the Planning Committee as an officer referral as the scheme is EIA development.

2.0 Synopsis

- 2.1 The application includes an underground cable connection route from the Proposed Development to Abberton substation. The panels would generate no more than 49.99 megawatts (MW), though in light of scheme reductions it is anticipated that the Proposed Development will generate closer to 40MW, enough to power 12,850 homes. Based on the scale and nature of the proposal, it is Environmental Impact Appraisal (EIA) development and the application is therefore accompanied by an Environmental Statement (ES).

Planning permission is sought to operate the plant for 40 years, at which point it would be decommissioned and the land returned to its previous state.

The key issues for consideration are the impact the scheme has on Landscape, Heritage Assets and Ecological Interests which were scoped into the Environmental Statement. Other material considerations are also considered, including the impact of the development in terms of loss of agricultural land, fire safety, highways and the climate crisis amongst others as set out in the report below.

- 2.2 Following a planning balance exercise, the application is subsequently recommended for approval subject to conditions.

3.0 Site Description and Context

- 3.1 The Site is located approximately 5 km south-east of Stanway Green, and 0.3 km north of Hardy's Green. The Site is entirely within the administrative area of CCC.
- 3.2 The Site is bounded by Easthorpe Road, Boarded Barn, a reservoir and Bockingham Hall Farm, Walnut Tree Farmhouse to the north and a tree belt and farmland to the south. The west of the Site is bounded by a further tree belt, Seller Wood (also Ancient Woodland and a Local Wildlife Site (LWS)) and Whitehouse Farm, with Birch Road to the east.
- 3.3 The Proposed Development will connect to an electricity grid 'Point of Connection' ('PoC') approximately 6 km away at Abberton Substation, which is located adjacent to a section of Birch Road located immediately to the west of the village of Layer de la Haye. The Main Site will be connected to the PoC through a buried cable, or 'the Cable Connection Route'. The Cable Connection Route crosses primarily agricultural land, the B1022 and Orpen's Hill to the east of the Site, with a further section passing under the Moors onto Birch Road. It then passes along Birch Road to Abberton Substation.

- 3.4 The Site comprises seven agricultural fields. Potash Wood (which is designated as Ancient Woodland, and a LWS), is located within the southern part of the Site. There is no development currently on the Site.
- 3.5 The topography of the Site and the surrounding area is characterised by relatively flat gently undulating land with limited topographical change. The Site itself has limited topography, with elevation varying between approximately +35 and 40 m Above Ordnance Datum (AOD). The Cable Connection Route passes through an area of lower ground in the vicinity of the connection to Abberton Substation, where the elevation is approximately +15 m AOD at its lowest point.
- 3.6 The main site is located entirely within Flood Zone 1 (lowest risk of flooding as defined by the Environment Agency). A small section of the Cable Connection Route however passes through a tributary of the Roman River which is within Flood Zone 3 (greatest risk of flooding as defined by the Environment Agency).
- 3.7 The wider area is rural in character and dominated by similar agricultural fields and several small, isolated patches of woodland. The Site is situated approximately 5 km south east of Stanway Green, roughly 0.68 km south of the hamlet of Copford Green and approximately 0.3 km north of the hamlet of Hardy's Green. Residential properties are located in Hardy's Green and Copford Green, with some commercial properties in the latter. Scattered farmsteads, electricity pylons and a number of further neighbouring villages, the closest being Birch located approximately 1.3 km south-east of the Site, are also located within the Site's surroundings. The Cable Connection Route passes through arable fields, a section of deciduous woodland and then runs along Birch Road, Malting Green Road and Abberton Road through the village of Layer de la Haye.

Public Rights of Way

- 3.8 Only one Public Right of Way (PRoW) footpath crosses the Main Site (PRoW 124_3). This footpath crosses north-south along the western boundary of the Site. A Bridleway also lies adjacent to the southern boundary of the site, travelling east-west. Only one footpath (PRoW 124_34) crosses the Cable Connection Route. No PRoWs would need to be closed during construction or operation of the Proposed Development, but PRoW 124_3 which crosses north-south along the western boundary of the Site may need to be managed with banksmen during construction to allow for vehicles to cross it. No National Cycle Routes border or pass through the Site.

4.0 Description of the Proposal

- 4.1 The Proposed Development would comprise a solar photovoltaic ('PV') farm and associated infrastructure on approximately 82 ha of land north of Hardy's Green.

- 4.2 The amended scheme is estimated to potentially generate up to 40 MW of electricity, which is enough to power approximately 12,850 homes. The operational life of the Proposed Development is expected to be approximately 40 years.
- 4.3 The Proposed Development would comprise the following elements (subject to detailed design):
- rows of solar photovoltaic ('PV') panels;
 - approximately 30 inverters and transformers (within enclosed structures);
 - approximately 16 batteries;
 - one substation and one customer switchroom;
 - a 33 kV – 132 kV transformer substation compound and cable connection to Abberton Substation (the 'Cable Connection Route');
 - a customer switchroom;
 - internal access tracks;
 - perimeter fence;
 - CCTV cameras; and
 - measures for mitigation including a comprehensive landscaping scheme (to be set out in a detailed landscape and biodiversity management plan).

5.0 Land Use Allocation

- 5.1 The land is not allocated and is in the defined countryside.

6.0 Relevant Planning History

- 6.1 None

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 be taken into account in planning decisions and is a material consideration, setting out national planning policy. Colchester's Development Plan is in accordance with these national policies and is made up of several documents as follows below.

7.2 Local Plan 2017-2033 Section 1

The shared Section 1 of the Colchester Local Plan covers strategic matters with cross-boundary impacts in North Essex. This includes a strategic vision and policy for Colchester. The Section 1 Local Plan was adopted on 1 February 2021. The following policies are considered to be relevant in this case:

- SP1 Presumption in Favour of Sustainable Development
- SP3 Spatial Strategy for North Essex

7.3 Local Plan 2017-2033 Section 2

Section 2 of the Colchester Local Plan was adopted in July 2022. The following policies are of relevance to the determination of the current application:

SG1 Colchester's Spatial Strategy
SG8 Neighbourhood Plan
ENV1 Environment
ENV3 Green Infrastructure
ENV5 Pollution and Contaminated Land
CC1 Climate Change
OV2 Countryside
DM6 Economic Development in Rural Areas and the Countryside
DM7 Agricultural Development and Diversification
DM15 Design and Amenity
DM16 Historic Environment
DM21 Sustainable Access to development
DM23 Flood Risk and Water Management
DM24 Sustainable Urban Drainage Systems
DM25 Renewable Energy, Water Waste and Recycling

7.4 The Neighbourhood Plan for Copford and Easthorpe is at examination currently.

7.5 Regard should also be given to the following adopted Supplementary Planning Documents (SPD):

Sustainable Drainage Systems Design Guide
Managing Archaeology in Development.
Developing a Landscape for the Future
ECC's Development & Public Rights of Way

8.0 Consultations

8.1 The stakeholders who have been consulted and who have given consultation responses are as set out below. More information may be set out on our website.

8.2 Anglian Water

No objection

8.3 Arboriculture Planner (in-house)

Condition tree protection in line with Arboricultural Impact Assessment.

8.4 **Archaeology (in-house)**

The applicant has carried out an archaeological trial trenching evaluation on the land now proposed for development, i.e. broadly the northern half of land within the red line boundary (Wessex Archaeology *forthcoming*). The report on this evaluation should be submitted to support this application (i.e. before the application is determined).

Having visited the site, I am, however, able to comment further on the application. One area of significant archaeological remains has been identified, in the far western part of the proposed development area. The applicant has opted to preserve these remains in situ via a no-dig solution for the photovoltaic panels and associated infrastructure within a defined area.

A condition should be placed on any consent to ensure that an appropriate 'no-dig' area is identified and adhered to. Details of the no-dig strategy should also be submitted to and agreed in writing by the LPA.

8.5 **Braintree DC**

No objection subject to landscape mitigation as set out in the ES.

8.6 **Campaign to Protect Rural England (CPRE) Essex**

Object to scheme – see website for full objection, but in summary the CPRE objects as:

- >The alternative site selection is flawed,
- >solar farms are a highly inefficient land use, especially compared to wind,
- >the loss of agricultural land is unacceptable,
- >the scheme fails local plan policy,
- >the scheme harms heritage assets,
- >the scheme is ecologically harmful,
- >the harm will be lasting,
- >cumulative impact with other solar farms in the area.

8.7 **Contamination (in-house)**

AGS Ground solutions Ltd. Phase I GeoEnvironmental report A2731-1. Dated June 2022. The above-named report is acceptable for the purposes of the Environmental Protection Team. Please note the Geotechnical part of the report has not been assessed. The report's findings and conclusions seem reasonable, and the following condition will apply: Reporting of Unexpected Contamination

8.8 Chelmsford City Council

No objections.

8.9 DLUHC Casework Unit

I confirm that we have no comments to make on the environmental statement.

8.10 Environment Agency

No objection and a note is provided about unexpected contamination.

8.11 Essex Bridleways Association

Essex Bridleways Association ('EBA') is concerned at the potential impact of the construction of the solar farm upon equestrian access and enjoyment to the Bridleway network and surrounding countryside and lanes. The proposed location of the site is an area well used by equestrians and is well served by an extensive Bridleway network.

The Bridleways close to the proposed site are 124-2, (this is the most impacted and runs east-west adjacent to the southern boundary of the site), 124-22, 124-37, 128-28, together with two Restricted Byways (also available to equestrians), namely 124-39 and 124-41. We would ask that site boundary fencing etc in no way encroaches upon the adjacent bridleways.

EBA notes that Mon- Fri construction work will be permitted to 18.00, which likely means the exit of related traffic for a further subsequent period. This eats into the evening when leisure activity is most likely, and we would suggest the latest permitted time for weekday construction be 17.00.

We also believe that there is an application pending to route a Bridleway through the proposed site. If this application is ultimately granted, there is no detail available as to how the developer proposes to accommodate the new PROW within their plans. We consider this should be specifically addressed within the planning application.

8.12 Essex County Fire and Rescue

Access for Fire Service is considered satisfactory subject to fire brigade access and water supplies for firefighting purposes to the proposed development being fully compliant with Building Regulations Approved Document B, B5. Your attention is drawn to ADB, B5 Section 13.

8.13 Essex Police

See report below.

8.14 Essex Wildlife Trust

I can confirm that we have no objection to the revised scheme, subject to securing the recommended biodiversity enhancement and mitigation measures. This should include the submission of a final version of the Skylark Mitigation Strategy and a Landscape and Ecological Management Plan (LEMP), both of which should be secured by suitably worded conditions.

8.15 Forestry Commission

As a Government department we neither support nor object to planning applications but endeavour to supply the necessary information to help inform your decision on the application.

My question is; could the substation including batteries and transformers, be positioned further to the north within the proposed site and the proposed tree planting used to create a much wider link between Potash Wood and Seller Wood, which would have a greater benefit for biodiversity?

8.16 Health and Safety Executive

Solar Farms are usually not a relevant development in relation to land-use planning in the vicinity of major hazard sites and major accident hazard pipelines. This is because they do not, in themselves, involve the introduction of people into the area. HSE's land use planning advice is mainly concerned with the potential risks posed by major hazard sites and major accident hazard pipelines to the population at a new development.

8.18 Historic England

On the basis of this information, we do not wish to offer any comments. We suggest that you seek the views of your specialist conservation and archaeological advisers, as relevant.

8.19 Highway Authority (ECC)

No objection subject to conditions.

8.20 LLFA (ECC SuDS)

No objection subject to conditions.

8.21 Maldon DC

No objections

8.22 **MOD – DIO**

No objections

8.23 **National Highways**

No objections

8.24 **Natural England**

No objection subject to a condition to secure mitigation regarding soil management and protection of soil quality.

8.25 **Office of Nuclear Regulation**

With regard to planning application 222151, ONR makes no comment on this proposed development as it does not lie within a consultation zone around a GB nuclear site.

8.26 **Place Services (Ecology)**

No objection subject to conditions. See ecology section of report for more detail.

8.27 **Tendring DC**

No objection.

9.0 Parish Council Response

9.1 **Birch PC**

Birch Parish Council object to the proposed Birch Solar Farm for the following reasons:

The siting of the proposed solar farm is in a rural area surrounded by housing, including listed properties, ancient woodland, bridleways and wildlife. The proposed site is high grade agricultural land that is best used for growing food, covering the land with solar panels will cause long term damage to the soil and biodiversity.

Access for construction traffic is also a concern, it is estimated that there will be an average of six to eight HGV trips per day. The proposed route for construction traffic is totally unsuitable for HGVs with much of the route being a single-track road with passing places. Alternative routes are also narrow country roads, again unsuitable for HGVs.

The proposed lithium-ion battery installation poses a major health, safety and environmental risk. There have been many reported battery fires and explosions related to lithium-ion batteries which are uncontrollable except by extravagant water cooling. They evolve toxic gases such as Hydrogen Fluoride (HF) and highly inflammable gases including Hydrogen (H₂), Methane (CH₄), Ethylene (C₂H₄) and Carbon Monoxide (CO).

Should this proposal be granted, assuming that, after some years, the solar farm might be dismantled, there should be a binding clause which ensures the land is returned to agricultural use, and is definitely not given over to housing or other development.

Birch Parish Council would like to make it clear that the Council is not against green energy but it is about balance, using the right land in the right place for the right use.

AND;

The amended plans show a significant reduction in size which Birch Parish Council agreed was a vast improvement on the original application, however the original concerns remain, especially around access.

The siting of the proposed solar farm is in a rural area surrounded by housing, including listed properties, ancient woodland, bridleways and wildlife. The proposed site is high grade agricultural land that is best used for growing food, covering the land with solar panels will cause long term damage to the soil and biodiversity.

Access for construction traffic is also a concern, it is estimated that there will be an average of six to eight HGV trips per day. The proposed route for construction traffic is totally unsuitable for HGVs with much of the route being a single-track road with passing places. Alternative routes are also narrow country roads, again unsuitable for HGVs.

The proposed lithium-ion battery installation poses a major health, safety and environmental risk. There have been many reported battery fires and explosions related to lithium-ion batteries which are uncontrollable except by extravagant water cooling. They evolve toxic gases such as Hydrogen Fluoride (HF) and highly inflammable gases including Hydrogen (H₂), Methane (CH₄), Ethylene (C₂H₄) and Carbon Monoxide (CO).

Should this proposal be granted, assuming that, after some years, the solar farm might be dismantled, there should be a binding clause which ensures the land is returned to agricultural use, and is definitely not given over to housing or other development.

Birch Parish Council would like to make it clear that the Council is not against green energy but it is about balance, using the right land in the right place for the right use.

Copford with Easthorpe PC

The Parish Council strongly objects to this application on the grounds that it proposes to use prime arable land that is actively farmed. There can be no reason for this land to be used for solar when there are far more alternatives for installing solar panels, but no other alternatives to farming.

The application wishes to utilise vast quantities of land that is currently used for food production. This makes no sense when solar panels can be installed on roofs of both domestic and commercial buildings to achieve the same impact whilst retaining farming land for food production within the UK. With food shortages predicted in the very near future, to permit this application would not only be risky, but foolish.

This application does not meet the criteria for a DCO purely by staying below the level required to do so by a very small amount. This is concerning as it seems to be intentional to make the most impact without having a thorough consultation process with the public. It should be of great concern to CBC that this "loophole" has been used when considering the very detrimental impact residents will face.

The site will cause congestion on the narrow roads both during construction and beyond. The area is not suited to large construction vehicles.

That a distribution cable needs to go from this proposed site to another one near the reservoir will add to disruption during construction phase and beyond.

The use of highly flammable lithium batteries for storage without appropriate safety precautions is of concern.

There does not appear to be any net biodiversity gain as the site is developed, instead there is a net loss in the short and medium term.

Whilst not a planning consideration, the development of this site as 'the only viable site' (according to the potential operator) may be linked more to the fact the landowner is making this site available to join with his other site. It is likely there are other sites and officers are encouraged to consider very hard the need for such a vast site in such a condensed area. The applicant considers all parts of the UK for sites, so it is believed that this site is not necessary or needed, just convenient.

There would appear to be no net energy gain to local residents who instead will be inflicted with the loss of farming land, local biodiversity reduction or destruction, loss of view and loss of what is essentially their purpose for living in this area, which is rural life. Rural life is about farmland, not solar farms.

In summary, this proposal is too large for the area. It adds to another already large solar farm which is enough for the locality. It offers no benefit to the

local residents in any way. The losses are too many and too significant to find any reason to support it.

Council trusts CBC will take on board all comments and seek to refuse this application and encourage providers of solar energy to use rooftops rather than farmland.

AND

The Parish Council strongly OBJECTS to this application on the same grounds as previously submitted when the application was first made. The added objection is also based on the fact that any solar farm is expected to bring an increase in rural organised crime due to the materials used. This concerns Council very much and is aware that recommended solutions for this is palisade fencing which would turn this very beautiful rural landscape into an industrial looking eyesore with 10 foot fencing.

9.3 **Kelvedon PC**

Kelvedon Parish Council consider that, should planning consent be granted, there are more direct and less intrusive routes for construction traffic to access the site, rather than it being directed off the A12 and through Kelvedon.

9.4 **Tiptree PC**

Tiptree Parish Council will object should there be any change to the National Highways recommendation letter detailing the use of Junction 25 of the A12 as the means of access to the site during the construction period, for example if the use of Junction 23/24 was proposed.

10.0 **Representations from Notified Parties**

10.1 The application resulted in a number of notifications to interested third parties including neighbouring properties.

264 representations were received at the time of writing. 175 were in objection and 58 in support and 31 were general comments. This also includes detailed representations from the Campaign Against Rural Exploitation (CARE) submitted by members of CARE and on behalf of CARE by NWA Planning.

A number of letters were forward on by Priti Patel MP who asked that they were taken into consideration.

It is beyond the scope of this report to set out all of the objections in full and it is noted that some of the representations in objection were very detailed. They can all be read in full on the Council's planning application website, however a summary of the material considerations pursuant to the objections and general comments are set out in a tabulated form below.

No.	Theme	Example Comments	Officer Response
1	Loss of agricultural land for food production	<p><i>"Although I am not against the much needed solar panels, I strongly feel that the 100,000 panels to be installed will be in the wrong place on Grade 2 arable land, much needed right now by the diminishing food supplies."</i></p> <p><i>"We all know how important agriculture is to our future. This proposal will take away some good grade land which has produced crop after crop, year after year."</i></p> <p><i>"The use of Grade 2 land taken from the tenant farmer. The location of the site is too near communities."</i></p> <p><i>"We object to the proposal due to the destruction of farm that provides food and jobs for the community."</i></p>	<p>Regarding the principle of using of agricultural land, it is generally accepted that solar farms are a use that may be appropriate on agricultural land in countryside locations. Sites large enough to accommodate the proposed MW output and that make a significant contribution to meeting the challenging 2050 target are extremely difficult to find in settlements and/or on previously development land, as is demonstrated by the Alternative Site Assessment (ASA) that forms part of the planning application submission. The ASA demonstrates the process that the Applicant went through the identify the Site, including the consideration of previously developed sites. The overall aim of the assessment is to demonstrate that the Applicant has given due consideration to the benefits and constraints associated with the Site when selecting it for development. The assessment concludes that there are no alternative sites that are more suitable than the Site. Importantly, it should also be noted that agricultural land use at the Site would be retained. This is because the land can be grazed once the Proposed Development is in operation, meaning that the land would have the dual benefit of being agriculturally productive whilst providing for the generation of renewable energy, contributing towards the Council's objective of carbon neutrality by 2030 set out in its Climate Emergency Action Plan.</p> <p>An Agricultural Land Classification ('ALC') Survey was</p>

			<p>undertaken by the Applicant and submitted with the planning application to Colchester Borough Council. The ALC Survey results confirm that the developable area for the revised/reduced scheme comprises a mix of subgrades 3a (good quality) (51%) and 3b (moderate quality) (42%), with no higher Grade 1 or 2 land present on Site. The remaining 7% of land is "Other" land comprising farm tracks, woodland, ponds and scrub areas. Whilst subgrade 3a is considered 'best and most versatile' ('BMV') land, the composition of the Site in ALC terms is largely reflective of the surrounding area's grading mix.</p> <p>The Proposed Development would represent only a minor temporary BMV loss to the Colchester's supply. For reference, the DEFRA ALC dataset measures Colchester's BMV at a total of 19,564 hectares, meaning the revised Proposed Development (at 22.3ha of Grade 3a BMV within the reduced developable area) equates to just 0.11% of temporary BMV loss for the Borough. It is also relevant to note that Natural England do not (subject to conditions regarding the preservation of soil) consider the Proposed Development to result in a long term loss of BMV land. The proposed panels require minimal soil disturbance to secure (through pins in the ground every few metres) and will be removed following the expiration of the planning permission, restoring the land to agricultural use.</p>
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			<p>Weighing the borough's supply of BMV land against the urgent need for UK energy security and diversification, it is considered that the Site's potential use of powering 12,850 homes through renewable energy outweighs arguments to continue its use as a mixed subgrade 3a / 3b agricultural site. It should be noted that following the lifespan of the Proposed Development and the removal of temporary infrastructure, the Site would be returned to arable use.</p>
2	Impact on agricultural land quality	<p><i>"The proposed development plan calls for piles to be driven into the ground to support panels. This will destroy the capability of growing crops in the future."</i></p>	<p>It is not considered that the use of piles would detrimentally impact the Site's ability to be used for agricultural purposes in future. Furthermore, the soils present at the Site should improve and regenerate following a prolonged break from intensive arable function.</p>
3	Visual Impact	<p><i>"The visibility of the solar farm is very obvious and the area around the potential solar farm is used by a lot of local people walking, running, riding beside a 3 metre high fence all around 200 acres of visible farming land."</i></p> <p><i>"Completely Ruins the wonderful views. Me and all of hardy's green completely object."</i></p> <p><i>"The landscape will be changed forever. Personal</i></p>	<p>A Landscape and Visual Impact Assessment ('LVIA') Chapter of the Environmental Statement and Environmental Statement Addendum was produced (by a qualified landscape architect) and formed part of the planning application submission. The submitted LVIA considers the effects of the Proposed Development on both the landscape (landscape impact) and on representative viewpoints from around the Site (visual impact) and surrounding area, including from PRoWs. The layout of the Proposed Development was carefully considered in order to minimise effects wherever possible and to be sympathetic to the surrounding landscape. The design retained existing landscape components and</p>

		<p><i>view will be affected by the metal fence.”</i></p> <p><i>“I am also saddened with regard to the visual impact of such a large solar plant will have on landscape.”</i></p>	<p>utilised their screening properties, along with providing a comprehensive planting scheme that has been incorporated as mitigation where appropriate.</p> <p>The updated Landscape and Visual Impact Assessment, contained in Chapter 6 of the ES Addendum further lowers any effects anticipated, with no major impacts anticipated at any of the original agreed viewpoints at Year 1. An additional viewpoint was also requested by Colchester City Council from a PRoW north of Seller Wood, and whilst the assessment noted that the effect would be ‘major/moderate’ during year 1, it would reduce to ‘not significant’ by year 10 (following planting maturity).</p> <p>The proposed mitigation has been made up of a mixture of embedded mitigation within the layout design, such as removing and setting back sections of panels, and further mitigation measures following the completion of construction, including strengthening hedgerows and establishing new tree planting along key boundaries. The proposed planting scheme has been designed so that once hedges and trees reach maturity, site fencing will not be visible from most viewpoints.</p> <p>The Applicant has also noted that the proposed fencing around the Site would be 2 metres (‘m’) in height and would be in the style of deer fencing, with wooden posts. All fencing and site infrastructure is temporary and would be removed following</p>
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			the end of the Proposed Development's 40 year lifespan.
4	Construction vehicle routing	<p><i>"The proposed route to construct this site, affecting Marks Tey, Copford and Easthorpe would directly travel through a small twisting road, adjacent to Copford school. The HGV traffic will not only be a threat to life and lively-hood but also to local business."</i></p> <p><i>"The disruption will be caused during construction and destroy local business put children lives in danger."</i></p> <p><i>"I support the principal of solar energy to reduce dependency on non-renewables, however the site will have impact on the narrows roads both during construction and beyond."</i></p>	<p>The selected construction route has been reviewed for its suitability (including for HGVs) as part of the submitted Revised Transport Report and Construction Traffic Management Plan (CTMP) (dated January 2023). The number of vehicle trips during the construction phase is expected to be relatively limited, with approximately 20 two-way vehicle movements over a working day (with 3 from HGVs), over a 18-20-week period. As a result, it is not considered that there would be any build-up of trips at any particular point in the programme or construction traffic related congestion.</p> <p>In addition, the Applicant has agreed restricted construction delivery hours be implemented for large vehicles, which avoid times where people might be dropping off or picking up children from Copford School.</p> <p>As stated above, there would be approximately 3 HGVs per day, which is broadly equivalent to 1 HGV per hour. In respect of the light vehicles, we would generally expect the majority of staff cars (10) and LGVs (7) to arrive on site in the morning and leave again at the end of the working day. Assuming as a worse-case that they all arrive and leave in the same hour, there would be 17 cars and LGVs travelling to and from site at these times, which is approximately 1 light construction vehicle every 3.5 minutes, which would not be perceptible in terms of daily</p>

			variations in traffic flows. This would also apply to the number of HGV trips that would be undertaken.
5	Construction vehicle movements	<p><i>“School road is already a busy road and could not cope with 9,000 vehicle movements.”</i></p> <p><i>“The school children would be subjected to pollution from the 9,000 vehicles.”</i></p> <p>“Number of lorries which will go to site in construction phase are simply unsustainable on our narrow roads.”</p>	During the construction period there will be approximately 20 two-way vehicle movements over a working day (with 3 from HGVs). If this was to take place over a 18-20-week period, this would equate less than 1,000 vehicle movements over a four month period. As a result, it is not anticipated that there would be any build-up of trips at any particular point in the programme or construction traffic related congestion.
6	Alternative Sites	<p><i>“The inclusion of solar farms as a necessary step towards solving our current energy crisis has never been more relevant and I am in favour of constructing and maintaining such projects; however, these projects must be sited in the correct locations.”</i></p> <p><i>“This proposal is in the wrong place, will lower the value of homes that surrounds it and</i></p>	<p>It is generally accepted that solar farms are a use that may be appropriate on agricultural land in countryside locations. Sites large enough to accommodate the proposed MW output and that make a significant contribution to meeting the challenging 2050 target are extremely difficult to find in settlements and/or on previously development land, as is demonstrated by the Alternative Site Assessment (ASA) that forms part of the planning application submission.</p> <p>The ASA demonstrates the process that the Applicant went through to identify the Site, including the consideration of previously developed sites. The overall aim of the assessment</p>

		<p><i>change the lives of local people and their children.”</i></p> <p><i>“Surely we should build solar farms such as these on brownfield site.”</i></p>	<p>was to demonstrate that the Applicant has given due consideration to the benefits and constraints associated with the Site when selecting it for development. The assessment (including January 2023 revision) concludes that there are no alternative sites that are more suitable than the Site. Importantly, it should also be noted that agricultural land use at the Site would be retained. This is because the land can be grazed once the Proposed Development is in operation, meaning that the land would have the dual benefit of being agriculturally productive whilst providing for the generation of renewable energy, contributing towards the Council’s objective of carbon neutrality by 2030 set out in its Climate Emergency Action Plan.</p> <p>In the consideration of previously development sites, the ASA notes that commercial rooftops have not been considered because (i) there are no known rooftops of sufficient size in the area and (ii) it is considered that assessing the potential for development of multiple rooftops is not comparable or realistic when considered relative to a ground-mounted solar farm. The Government’s National Planning Practice Guidance states that in considering ground-mounted solar farms, the focus should be on the effective use of previously developed and non-agricultural land. Rooftops are not mentioned</p>
7	Cumulative impact with other solar farms	<p><i>“Already two other solar plants within 5 miles of the Site. Permission for</i></p>	<p>The proposed development is supported by an Environmental Statement which addresses the subject of cumulative</p>

		<p><i>larger site at Layer Del Haye.”</i></p> <p><i>“There are already 3 solar farms within a 5 mile radius.”</i></p> <p><i>“With several solar sites in and around Birch, local people will soon be restricted in the amount of open country side available to them.”</i></p>	<p>development. ES Chapter 3 (EIA Assessment Methodology) notes that a search of planning applications in the vicinity of the Proposed Development was undertaken in March 2022 to determine if any other developments of a similar nature are in the planning process which could have the potential to result in significant cumulative effects with the Proposed Development. The search identified ‘Layer Solar Farm’ which (once constructed) will be located approximately 3 km from the Site. From a landscape perspective, there would be no intervisibility between the identified solar developments and the Proposed Development. Within the 3km LVIA radius study area, the proposed development benefits from extremely limited potential visibility through existing on and off site above ground features (such as woodland and boundary vegetation). It is therefore considered that cumulative development can be scoped out.</p>
8	Biodiversity Net Gain	<p><i>“There does not appear to be any net biodiversity gain in line with that published Local Plan, instead there is a new loss.”</i></p> <p><i>“The company make great claims for screening the area and improving biodiversity but this would not be instant and there seems no</i></p>	<p>The proposed development would generate a significant net gain for biodiversity. As part of the submitted Environmental Statement Addendum (January 2023) Annex C (Ecological Appraisal) it is demonstrated that there would be a significant biodiversity net gains with regards to both habitat units (40.55%) and linear hedgerows units (171.14%).</p> <p>To calculate biodiversity net gain, as indicated by the National Planning Policy Framework (NPPF), a Biodiversity Impact Assessment</p>

		<p>evidence for a 10% net biodiversity gain in the area.”</p> <p><i>“I support the development but a planning gain should be applied to the development. Although the farm will be screened by planting it will take 10 years to mature and the open aspect and distant views once matured will be lost. To provide recompense Low Carbon should partner with, and fund, an environmental organisation (ie English Nature or RSPB) to provide long term management of the farm to ensure biodiversity.”</i></p>	<p>(BIA) metric is used. This is a transparent way to calculate the biodiversity value of the habitats and hedgerows on a site before and after development. It is a proxy measure to determine if the development will result in an on-site habitat biodiversity net loss or gain.</p> <p>A BIA was undertaken using the Department for Environment, Food and Rural Affairs (Defra) Biodiversity Metric 3.0 (version date: 07/07/2021), by an experienced ecologist in May 2022.</p> <p>The assessment was undertaken based on the existing habitat information derived from the Extended Phase 1 Habitat survey and Landscape Mitigation Plan. GIS software has been used to accurately calculate areas of habitat to be retained, enhanced, and recreated.</p> <p>Mitigation-by-design within the Proposed Development includes the sowing of pasture with species-rich elements below solar panels, the sowing of wildflower margins along the edges of solar panels and boundary features, as well as the strengthening and extension of the existing hedgerow network through additional shrub and tree planting. The measures will result in beneficial impacts to habitat and species receptors within and adjacent to the Proposed Development site, resulting in a net gain for biodiversity post-development.</p>
9	Impact on Ecology	<p><i>“The land is a beautiful area and is home to a variety of wildlife</i></p>	<p>As noted above, there would be a significant biodiversity net gain associated with the proposed development. The proposed</p>

		<p><i>whose habitat would be lost.”</i></p> <p><i>“Destruction of wildlife habitats.”</i></p> <p><i>“Wildlife and landscape of the area would be compromised.”</i></p> <p><i>“Wild animals will not move freely where they have before.”</i></p>	<p>development includes a landscape scheme which grants the following benefits for wildlife:</p> <ul style="list-style-type: none"> • A notable increase in the local resource of wildflower meadows and pastureland, converted from intensively managed monoculture arable habitats. • The strengthening and enhancement of boundary features through the proposed hedgerow planting. • The strengthening and strengthening of the Green Infrastructure network across the Site. • Increased foraging, commuting and shelter opportunities for a variety of faunal species. • Increased foraging habitat for mammals, reptiles, birds, amphibians in the form of diverse species grassland under and around the solar array where arable was formally present. • Layout designed to allow movement of wildlife within and through the site, including in the form of badger gates – suitable for use by other mammal species also. • Provision of skylark plots (to be agreed with the Council via condition) to provide increased opportunities for breeding and nesting, beyond that of the baseline.
10	Proximity to ancient woodland	<i>“The ancient woodlands would be surrounded”</i>	The design of the proposed development has ensured a buffer of 15m from the boundary

			of any ancient woodland adjacent to the Site to ensure a root protection area, in accordance the Natural England and the Forestry Commission's guidance note: 'Ancient woodland, ancient trees and veteran trees: advice for making planning decisions' (2022).
11	Impact on listed buildings	<p><i>"Will be dangerous blot in landscape and negatively affect the amenity and value of listed buildings."</i></p> <p><i>"Several Listed buildings are close to the site. The owners of these properties are required to and do maintain the buildings in accordance with their status. The removal of adjacent farmland and replacement with industrial landscape makes a nonsense of all that."</i></p> <p><i>"The effect on landscape and view from Listed buildings will have a detrimental effect."</i></p>	Chapter 8 (Cultural Heritage) of the ES Addendum (January 2023) concludes: "Changes to the Proposed Development would reduce the effect upon the setting of Grade II Listed Hoggetts (Asset A) from minor adverse to no effect, as the panels would be removed in the southern section of the site, and therefore removing the setting effect on the asset." There are no other anticipated effects to listed building heritage assets.
12	Noise	<i>"Noise from the site - as the area is so open and quiet, the high pitch hum will be heard by local residents"</i>	The proposed development will not have an adverse impact on health or quality of life. Noise rating levels from the proposed operations would equate to an exceedance of measured daytime and night-time background noise levels at the

			<p>closest receptors by up to +4 dB (i.e. imperceptible), which is considered 'low impact' when reviewed in accordance with British Standard 4142:2014+A1:2019.</p> <p>The above operational noise levels during the daytime and night-time periods are also below the WHO guideline noise intrusion criteria at nearby properties.</p> <p>For context, the Proposed Development Site is situated in Campaign to Protect Rural England (CPRE) Zones 4-6 for tranquillity (1 being least tranquil and 10 being most). As such, the proposed use of the site is not considered sensitive to low impact noise.</p>
13	Ground contamination	<i>"...contamination (cleaning of panels with chemicals such as silicon)."</i>	<p>The panels are cleaned with distilled water every 3-4 years. No chemicals are used in cleaning or maintaining the solar panels.</p> <p>Given the land is taken temporarily out of agricultural production – there will be no pesticides or fertilizers used for the lifetime of the solar farm.</p>
14	Development in the countryside	<p><i>"The proposed development will destroy the countryside that many of us have opted to live around for the benefits of health and our children."</i></p> <p><i>"Will spoil the landscape of the countryside, people choose to live rural locations for a reason, they don't need this"</i></p>	<p>Regarding the principle of using of agricultural land, it is generally accepted that solar farms are a use that may be appropriate on agricultural land in countryside locations. Sites large enough to accommodate the proposed MW output and that make a significant contribution to meeting the challenging 2050 target are extremely difficult to find in settlements and/or on previously development land, as is demonstrated by the Alternative Site Assessment (ASA) that forms part of the planning application submission.</p>

		<i>monstrosity on their doorstep.”</i>	The ASA demonstrates the process that the Applicant went through to identify the Site, including the consideration of previously developed sites. The overall aim of the assessment is to demonstrate that the Applicant has given due consideration to the benefits and constraints associated with the Site when selecting it for development. The assessment concludes that there are no alternative sites that are more suitable than the Site. Importantly, it should also be noted that agricultural land use at the Site would be retained. This is because the land can be grazed once the Proposed Development is in operation, meaning that the land would have to dual benefit of being agriculturally productive whilst providing for the generation of renewable energy, contributing towards the Council’s objective of carbon neutrality by 2030 set out in its Climate Emergency Action Plan.
15	Megawatts Generated	<i>“I would question or want to know the megawatts produced for the local and as I understand the planning proposal was a megawatt short of what would require major planning proposal hence it is deemed a lesser plan and easier to push through.”</i>	It is common practice for solar farm proposals in England to adopt a megawatt (MW) output of approximately 49.9 in order to be considered under the Town and Country Planning Act (1990) as opposed to the Planning Act (2008) NSIP process, which is designed for all proposals of 50 MW and above.
16	Relationship with Layer Solar Farm	<i>“Both this site and the Layer Del Haye site are</i>	Whilst the Applicant is also responsible for the development of Layer Solar Farm, it should be

		<p><i>owned by the same landowner and should be viewed as one large site and subject to national approval."</i></p> <p><i>"It is within a mile of another 240 acres solar farm so it should be considered the same proposal."</i></p>	<p>noted that the two proposals form separate projects, both in their planning application documentation, red line boundaries and their ability to independently function from one and other. It is therefore considered that there is no valid argument to suggest Birch Solar Farm as part of the any other solar project.</p>
17	Impact on house prices	<p><i>"It is in a location where it can be easily be seem and devalues [properties and their desirability in the surrounding area."</i></p>	<p>There are various studies on the impact of renewable energy projects on nearby property prices. The general theme is there is no material long term impact. House prices are not a material planning consideration under the current planning process.</p>
18	Existing easements	<p><i>"There is a current and legal easement clearly marked on the title plan where the proposed panels will be erected."</i></p> <p><i>"The easement is for an Essex and Suffolk Water Board mains 34 inch pipeline, cutting through the top field next to Boarded Barn. It states that a twenty feet access is required either side of this pipe. I am sure the proposal will take this into consideration and not deliberately ignore our legal systems. Essex</i></p>	<p>The Applicant intends to make a minor change and the layout plan has now been amended to respect the water pipeline highlighted.</p>

		<i>and Suffolk Water have expressed their 'deep concerns' and are following this up."</i>	
19	Impact to PRow users	<p><i>"Many people enjoy using the footpath and bridle way but these would simply become industrial corridors."</i></p> <p><i>"The visual impact on landscape will destroy the footpaths and bridleways. People walk these paths to take in the ancient woodlands and wildlife."</i></p>	The proposed mitigation and planting between the infrastructure and the one affected Public Rights of Way (PRow) would mean that any significant effects to users might experience at Year 1 would be substantially reduced over time, the LVIA considers these impacts as 'not significant' at the receptors once planting matures.
20	Sheep Grazing	<p><i>"Also these lovely pictures of sheep in between cells, you and I know it does not happen, it never does."</i></p> <p><i>"In Low Carbon's initial consultation they made much of the potential environmental advantages for instance grazing by sheep and bee keeping, however this hasn't happened at all of Low Carbon's previous developments. As this is potentially the only local advantage this should be mandated and be</i></p>	Low Carbon own and operate 13 solar sites currently (as well as operating 90+ solar farms for other clients) – of the 13 sites currently 8 have sheep grazing and 4 have beehives. It is the applicant's intention to incorporate these features within this project and detailed discussions will be held with local shepherds and local apiarists post approval.

		<i>a condition of any planning proposal.”</i>	
21	Site security	<i>“Solar Farms are coming under increased attacks from thieves to steal valuable elements on the installation. Deer fencing and video cameras with no lighting other than infra-red are of little deterrence. It is probable that the perimeter security and lighting will need to be modified. Thus the Solar farm now becomes a highly visible and intrusive monstrosity.”</i>	Any changes in fencing would require approval of the Council but there is no intention to divert from the proposed fencing provision. It should be noted that the proposed fencing scheme (i.e. deer fencing with CCTV) is generally accepted among solar schemes around the country and is fully insured by the Applicant's policy providers. Therefore, it is not expected that any additional or more robust fencing/security measures will be required.
22	Decommissioning /recycling	<p><i>“I would like to know the life cycle of cells. Can they be recycled.”</i></p> <p><i>“I am concerned with the long term effects of the solar plant components. Will there be a bond lodged to fund the dismantling and recycling of future non operational components.”</i></p>	<p>The applicant have advised that over 90% of material in a solar panel can be recycled.</p> <p>The applicant has a legal duty to the landowner to fully decommission the site and return it to its current condition. The panels and the steel frames will be pulled out of the ground. The concrete pads which the inverters and batteries will be broken up and removed from site. This makes the scheme wholly reversible whilst allowing the land to rest with a complete cessation of the use of any pesticides and fertilizers for the duration of the solar farm.</p>
23	Battery stability in hot weather	<i>“The hazardous Substance Regulation 2015 also has a bearing</i>	All electrical equipment is rated for this country and is monitored and has protections to avoid incidents. All equipment must

		<p><i>on this proposal as the battery storage, (132KV substation Drawing PIII) is not fully stable in hot weather and extreme temperatures - (some evidence of this can be supplied)”</i></p>	<p>comply with industry design standards and is faulted tested prior to energisation and maintained in line with manufacturer guidance and best practice. Fundamentally it is the same equipment used across the electrical network from a small number of approved suppliers.</p>
24	Fire hazard	<p><i>“The proximity to home arising from the use of highly flammable lithium based storage batteries without appropriate safety precautions and fire safety on site or nearby to deal with a potential specialist fire is of great concern.”</i></p> <p><i>“Siting of lithium batteries is of great concern due to fires.”</i></p> <p><i>“In the event of a fire, properties are damaged, will Low Carbon be liable for compensation and if so will a bond be lodged for this?”</i></p>	<p>National policy is clear that the focus of planning decisions should be on whether a proposal is an acceptable use of land, rather than ensuring the security and safe operation of such installations. Such considerations are the subject of other building control and health and safety regimes and planning decision makers should assume that these regimes will operate effectively. On this basis, the safety of the BESS should not weigh against the proposal in the planning balance.</p> <p>Lithium batteries are used in a whole manner devices including mobile phones and electric vehicles and is a widely accepted to be a safe technology. The final battery technology used for this project will be subjected to a detailed procurement process to establish the best possible and safest technology.</p> <p>Each individual battery unit will have its own fire detection and suppression devices to ensure. The solar farm and batteries are remotely monitored 24/7 to detect the slightest of</p>

			<p>irregularities with specific units able to be switched off remotely.</p> <p>A full Fire & Safety Management Plan will be produced and implemented. This will be required via condition prior to the commencement of battery installation. Communication with local Fire Service will be established pre-construction and maintained during operation.</p>
25	Community Benefit	<p><i>“There is nothing tangible or of any consequence given back to the community in terms of compensation or benefits from the landowner.”</i></p> <p><i>“There is no benefit to the local community or economy and any energy produced is not for local use as such but will be subsumed into the National Grid. “</i></p>	<p>Whilst outside the planning process and therefore not a material planning consideration, the applicant offers community benefit funds on all of its projects. This project will offer a Community Benefit Fund equivalent to £112,000 available to the local communities hosting the project.</p> <p>The Proposed Solar Farm will connect into the UK Power Networks (UKPN) substation at Abberton, supplying clean renewable energy direct into the local electricity distribution network. From there the main cables run to Colchester but also to the South towards Mersea, and East towards Tollshunt, Tiptree and Heybridge. While the nature of the daily power flows through the network will change frequently, the renewable energy from the proposed solar farm is highly likely to be used almost entirely by current households, farms, commercial sites and other electricity users in the local region and within Colchester where the main lines join the wider UK Transmission system.</p> <p>This increase in local renewable generation will also reduce the need to import fossil fuel-generated energy from further</p>

			<p>afield, reducing the strain on wider Transmission networks and reducing the need for more or bigger pylons in the region. The proposed solar farm contributes to the area's aspiration for achieving net-zero objectives, crucial to combat climate change and increasing fuel costs.</p> <p>Enhancement of business rates estimated to be equivalent to £80,000 per annum.</p> <p>160 construction jobs in addition to those created in the supply chain plus indirect benefits in worker spend in the local economy. An additional £2.7-3m gross value added (GVA) during construction and around £3.7m during operation is expected to flow out of the project.</p>
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Since the Application was originally submitted, a total of 57 letters of support have been received. The majority of responses also made reference to the pressing need and importance of delivering renewable energy to aid in combating climate change. A few of the support letters explicitly mentioned the long-term benefits of the scheme and its importance for future generations. Another common theme discussed in letters of support was the benefit to the environment generated from the delivery of sizable biodiversity enhancements alongside the scheme. Additionally, due to contemporary issues surrounding energy, the need for increased domestic energy generation and supply security to reduce the reliance on global imports was a recurrent theme. A few responses discussed the potential economic and community benefits as well as the contribution of the scheme in moving toward a sustainable circular economy.

The landowner has also made a representation and confirmed that the Site is capable of growing cereals and some limited vegetable crops. In practice the land within the Site has produced (1) low grade wheat suitable for biscuits and animal feed; (2) Field beans – grown for cattle feed; (3) green energy crops – rye and maize for anaerobic digestion for biofuel; (4) potatoes – which have been grown in limited areas only for crisps (though he notes that these can only be grown 1 in 7 years due to crop rotation). The landowner has also noted that most of the site's crops are sent to Harwich, then exported overseas, with no produce sold locally.

The landowner makes note that the Site does not give high tonnage returns in respect of crop yields, with substantial areas of soil that yield very poorly. He also states that it some of the least productive land within the wider estate.

The landowner has confirmed that current farming practices at the Site include the use of typical agrochemicals such as insecticides, pesticides, herbicides and slug pellets to boost yields and manage pests. These blanket sprays applications (whilst necessary for farming) are hugely detrimental to the biodiversity of the area. Invertebrates are eradicated and no longer provide food for birds and small mammals and the lack of diverse weeds impacts the whole food chain.

The landowner has stated that if approved, the Proposed Development would totally remove the need to use agrochemicals at the Site and enable a fallow 40 year period for soil to regenerate, this in turn will allow greater species diversity at the Site and will benefit all levels of the food chain.

11.0 Parking Provision

11.1 The site raises no parking requirements.

12.0 Accessibility and Equality

12.1 The Equality Act 2010 legally protects people from discrimination in the workplace and in wider society. The proposed development has been carefully considered and is not held to cause impacts, on people who share a protected characteristic (Age; Disability; Gender Reassignment; Pregnancy and Maternity; Race; Religion or Belief; Sex; and Sexual Orientation).

13.0 Open Space Provisions

13.1 There is no requirement for open space provision.

14.0 Air Quality

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

15.0 Planning Obligations

15.1 This application is not classed as a “Major” application and therefore there was no requirement for it to be considered by the Development Team and it is considered that no Planning Obligations should be sought via Section 106 (s.106) of the Town and Country Planning Act 1990.

16.0 Report

16.1 EIA

The legislative framework for EIA is set by the EIA Directive 2014/52/EU (European Commission, 2014) on the assessment of the effects of certain public and private projects on the environment; this is known as the 'EIA Directive'. The EIA Directive is concerned with ensuring that the likely environmental effects of proposed development projects are considered thoroughly in order to inform the decision makers in the development consent process.

Since the UK has a number of different development consent regimes for different types of projects, the EIA Directive (and its predecessors) has been transposed into UK law through a number of Statutory Instruments. The Statutory Instrument implementing the EIA Directive for the purposes of planning applications, and under which this ES is submitted, is the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (HMSO, 2017), as amended. These regulations are hereafter referred to as the 'EIA Regulations'.

Under the EIA Regulations, the Proposed Development falls within Schedule 2, Part 3(a): 3.2.4 Schedule 2 developments that do not exceed the relevant thresholds/criteria and which are not located within or adjacent to environmentally sensitive areas or receptors do not usually require EIA. For Schedule 2, Part 3(a) development, the EIA Regulations stipulate that EIA is likely to be required where the area of the development exceeds 0.5 hectares (ha) or where significant environmental effects are likely to be caused. The development falls within the category of an *"industrial installation for the production of electricity, steam and hot water (unless included in Schedule 1)"*.

In March 2022, the Applicant requested an EIA Screening Opinion from the Council in their capacity as determining authority. CCC issued a formal EIA Screening Opinion on 1st April 2022 which stated that the proposal is held to be EIA development and the planning application must be accompanied by an Environmental Statement (ES).

The ES has considered the likely impacts of the Proposed Development and associated effects on its surroundings, neighbours, the wider area and overall context. Beneficial and adverse, short and long term impacts have been considered and classified these in accordance with a standard set of significance criteria. Where avoidance and/ or mitigation measures have been identified to either eliminate or reduce adverse effects, these have either been incorporated into the Proposed Development design or would be included within a site-specific Construction Environmental Management Plan (CEMP), which will be produced by the principal contractor prior to works commencing on-site. The ES reports the remaining or 'residual' effects after mitigation.

Issues that are scoped into the EIA are judged likely, without effective mitigation, to have the potential to cause significant adverse environmental effects. Issues that are scoped out of the EIA are those which it is considered are not likely to lead to significant effects. Where insufficient information is available to make a reasonable judgement, a precautionary approach has been adopted and that issue scoped in. The decision to scope out issues is based upon factors such as a high degree of development-receptor separation, the lack of impact pathways or the known low value or low sensitivity of impacted resources/ receptors.

Scoped In issues

It is considered that the proposal has the potential to result in significant effects on landscape and visual amenity, biodiversity, and cultural heritage. As such, these environmental assessments topics have been scoped into this EIA. The relevant chapters are **Chapter 6: Landscape and Visual Amenity**, **Chapter 7: Ecology** and **Chapter 8: Cultural Heritage** of the ES.

All other material considerations were scoped out of the ES as they were unlikely to have a *significant* effect, however they will still be assessed via the normal application process.

16.2 The Rochdale Envelope

In order to ensure a robust assessment of the likely significant environmental effects of the Proposed Development, the EIA was undertaken adopting the principles of the 'Rochdale Envelope' where appropriate. This involves assessing the maximum (and where relevant, minimum) parameters for the elements where flexibility needs to be retained. For example, the solar panels have been assessed for the purposes of landscape and visual impact as being maximum of 3 m high, which is the worst-case. It is however possible that the panels would be lower at a height of around 2.5 m.

Where the Rochdale Envelope approach is applied to the specific aspects of the EIA, this has been confirmed within the relevant chapters of the ES. Justification for the need to retain flexibility in certain parameters was also justified.

16.3 Design/Layout

Panels

The south-facing panels are typically mounted in four horizontal rows, with one row fixed directly above the other, and angled at the optimum position for absorbing year-round solar irradiation. At the lowest edge the arrays would be approximately 0.9 m from the ground and up to 3 m at the highest edge.

The solar panels would be laid out in rows running from east to west across the Site. There would be a gap of approximately 3-4 m between each row. The panels would be mounted on a frame, to be installed using spiked foundations of approximately 1 to 2 m deep, or concrete pads on the surface where appropriate.

Batteries

The batteries would be contained within shipping containers or a similar cabin type structure. Each cabin would measure up to approximately 12.2 m long, 2.6 m wide and 3.5 m high. Each cabin would be placed on a hardcore base, with a stepped access at one end.

Each battery would be located adjacent to heating, ventilation and cooling ('HVAC') units and a battery power conversation system, which performs a similar role to the inverters.

The batteries would charge at off-peak times and then supply electricity to the local electricity distribution network at times of peak energy demand and/or when solar irradiation levels are lower and the solar panels are generating electricity. This means that the development can supply electricity to the local distribution network at all times.

Inverters

The inverters would be within shipping containers or similar cabin type structures (like for the batteries). Each cabin would measure approximately 12.2 m long, 2.5 m wide and 2.9 m high. Each unit would be placed on a hardcore base (with 1 m deep foundations) and would be similar in appearance to the battery cabin.

The inverters would convert the direct current ('DC') generated by the solar panels into alternating current ('AC'). Transformers, contained within the inverter cabins, convert the low voltage output from the inverters to high voltage suitable for feeding into the local electricity distribution network.

Substation and Cable Connection Route

The connection into the grid network would require a transformer substation compound (measuring up to 6 m in height) to allow for the voltage step-up from 33 kV to 132 kV connection at the Abberton bulk supply point substation – approximately 4 km east of the Site). The electricity generated by the solar panels is proposed to connect into the local electricity distribution network at Abberton Substation via an underground cable. The Cable Connection Route would pass through farmland crossing the B1022 and Orphen's Hill to Layer de la Haye into the Substation on Abberton Road. The Applicant has confirmed that where the cable route reaches Birch Road to the west of Layer de la Haye, it will be fitted within an existing cable trench to take it to Abberton substation, therefore any roadworks required will be very limited.

The new substation compound within the Site would measure up to 50 m by 25 m. This would become partly adopted by the District Network Operator (DNO) for their assets. This would consist of overhead electrical busbars and other electrical infrastructure along with a DNO control building and a customer switchroom housing the metering equipment. These structures would measure up to approximately 6 m high.

The DNO control building would measure approximately 6 m long, 8 m wide and 4.1 m high. From the substation compound, a cable would be installed to DNO substation and then on to a customer switchroom on-site. Each would be placed on a concrete base. They would either be clad in brick or wood to comply with local vernacular, or coloured green (or in any other colour) to minimise any visual impact. The substation, inverters and solar panels would be connected by underground electrical cables (buried approximately 1 - 1.5 m below ground level).

Access

The Site would be accessed during both its construction and operational phase from its north-east corner at Birch Farm, off Birch Road. Construction vehicle routing to / from the Site access is proposed from the A12 via junction 25 then following School Road and Birch Road from the north.

It is envisaged that topsoil layers would be excavated to expose a suitable base on which to build the track. The track would then be built up by laying crushed stone, rolled in layers. It is envisaged that the tracks would also utilise existing access points between field and crossing points over ditches.

Security

It is envisaged that deer fencing (mesh with wooden posts or similar) to a height of approximately 2 m would be installed along the outer edges of the site in order to restrict access.

This would be sited inside the outermost hedges/trees/vegetation, ensuring that the fence is as visually obscured as possible with access available for hedge trimming and maintenance. Gates would be installed at the access point for maintenance access. These would be the same design, material and colour as the fencing.

The perimeter of the Site would be protected by a system of CCTV cameras and/or infra-red cameras, which would provide full 24-hour surveillance around the entire perimeter. An intelligent sensor management system would manage the cameras. The cameras would be on poles of approximately 4 m high, spaced at approximately 50 m intervals along the security fence. There would be no lighting within the Site at night-time.

Construction

The construction period is expected to last for approximately 18-20 weeks.

The construction programme is anticipated to include the following activities:

The sequence of activities would be determined by the appointed principal contractor and may be different than shown in the list above.

- initial site setup works would take place followed by construction of the internal access route(s);
- ground works;
- the installation of the solar panels and other associated infrastructure; and
- Site reinstatement and habitat creation.

The Site working hours would typically be as follows: 08:00 – 18:00 Monday to Friday; and 08:00 – 13:00 Saturday. No work would be undertaken on Sundays or Bank Holidays. The need for construction works outside the hours presented above is considered unlikely and the ES has therefore assumed that there would be no works outside of these hours. If necessary, this would be agreed in advance and in writing with local planning authority.

It is expected that the proposal would require a workforce of approximately 20 – 30 personnel. A small pool of workforce may be sourced locally, whilst the majority of the construction labour would be from the principal contractor's existing workforce. During the construction period, different types of vehicle would need access to the Site, to deliver equipment and supplies. It is anticipated that these would include:

Light Vans – these vehicles would tend to be driven by individual contractors, typically during the final stages of construction and equipment installation. The vehicles would typically be 7.2 m in length and 2.2 m in width;

Large Tippers – these vehicles would be used for the delivery of construction materials and plant. The vehicles would typically not exceed 10.2 m in length and 2.5 m in width; and

HGVs – these vehicles would be used for the delivery of construction materials and plant. The vehicles would typically not exceed 16.5 m in length and 2.5 m in width. No abnormal loads are anticipated.

The delivery of equipment and plant to Site would be staggered throughout the construction programme. It is therefore anticipated that there would typically be 6 HGV deliveries per day, spread across the 18-20 week programme. Approximately 19 cars and 13 low goods vehicles are expected to visit Site each day, arriving in the morning and leaving in the evening, with timings co-ordinated to avoid peak times for children attending Copford School.

Construction plant operating within the Site are anticipated to include those typical of a construction site, including forklift trucks and excavators.

During any excavation works to install foundations, a small amount of spoil would be generated. This spoil would either be retained on-site for use in the Site restoration or would be removed off-site by a licensed waste management facility. Should the spoil be removed from the Site, the levels generated would be very low and would not result in any significant effects on traffic and transport in the local road network.

Regarding the cable connection route, it is envisaged that the length of open excavations during the works, at any one time will be around 50-60 m and that it will take around 3 days to complete this length of excavation and reinstatement. The cable trench excavated is expected to be approximately 1 m wide and 1 m deep. Temporary traffic management measures would be required; however, access would be maintained throughout for emergency vehicles and for local residents.

Compound

Facilities would be provided on-site for construction workers within a compound at the site. This would include provision of a site office and welfare facilities (including toilets, changing and drying facilities, and a canteen). Fencing would be installed around the perimeter of the Site and temporary parking would be provided for the construction workers within the secure compound. No parking would be allowed on the public highway.

At the end of each day, mobile plant would be returned to a secure overnight plant storage area, where drip trays can be utilised under the various types of plant, if needed.

Operation

The operational life of the Proposed Development is expected to be approximately 40 years.

Once operational, occasional maintenance of the solar panels and other infrastructure would be required. The solar panels would also need to be periodically cleaned, to ensure the efficient running of the system.

It is expected that under normal circumstances no more than 3 cars/vans would visit the Site each week (generally less than 1 a day).

The Site would be retained in agricultural use for the life of the proposed development. The majority of the Site would be planted with a combination of grassland/meadow, which would enable grazing (sheep). This would include land between and underneath panels.

Decommissioning

At the end of the proposed developments' lifespan (i.e. circa 40 years), the solar panels and other infrastructure would be removed, and the site restored.

The restoration process is intended to ensure that the land is restored to the same quality as it was previously.

16.4 Changes Made to the Scheme During the Application Period

Since the scheme was submitted last year, the Applicant has reduced the developable area significantly, removing all proposed panels and above ground infrastructure from southern three fields. The revised January 2023 layout (at 43.5ha) represents a reduction of approximately 50% of the development footprint, when compared with the original August 2022 Birch Solar Farm proposals (at approximately 87ha).

Whilst the Original Scheme was proposed to generate 49.9 megawatts of renewable energy, it is hoped that through procuring the latest solar panel technology, the revised scheme could still generate approximately 40MW. This means that despite a 50% reduction in its developable area, the Proposed Development could still power 12,850 homes.

The Applicant has proposed the changes as a result of a combination of reasons, these include seeking to avoid disturbance of tenanted farmland from the intrusion required for archaeological trial trenching; consideration of comments received from members of the local community; and various commercial factors.

In summary, the removal of the three southern fields has the following benefits:

- A significant reduction (25.2 ha) of Grade 3a BMV agricultural land required for solar panel placement within the footprint of the development.
- Significantly lower vehicle numbers anticipated over the 18-20 week construction period, with most numbers per vehicle type cut in half. For instance, the number of HGVs per day required per day over construction would be 3 for the revised scheme, as opposed to 6 with scheme as originally submitted.
- Reduced proximity to listed buildings, including no harm to the setting of listed properties adjacent to the southern three fields;

- No intrusion or temporary construction closures to Public Rights of Way ('PRoW') required with the Revised Scheme;
- A further reduction in potential visibility once operational due to a more compact and enclosed site, when compared to the original redline area; and
- The potential generation of up to 80% of the megawattage of the Original Scheme (at approximately 40MW), whilst using approximately 50% of overall site.

The red line plan has not changed, but the developable area has, and the applicants have stated they are happy to have this clarified via a condition to prevent development in the areas removed.

16.5 Policy Principle

National Policy

The National Planning Policy Framework (NPPF) (MHCLG, 2021) sets out the Government's planning policies for England and how these should be applied to contribute to the achievement of sustainable development. While the EIA methodology forms part of a separate planning regime, the planning decision still takes account of national guidance.

Paragraph 20 indicates that *"Strategic policies should set out an overall strategy for the pattern, scale and design quality of places and make sufficient provision for... d) conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation"*;

Paragraph 130 states that *"Planning policies and decisions should ensure that developments... c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities)"*;

Paragraph 155 is specific to renewable and low carbon energy, and states: *"To help increase the use and supply of renewable and low carbon energy and heat, plans should: a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts); b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers"*;

Paragraph 158 states that Local Planning Authorities (LPAs) should: *"a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and b) approve*

the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas”; and

Paragraph 174 states that planning policies and decisions should contribute to and enhance the natural and local environment by: “a) *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land and of trees and woodland”.*

The Overarching National Policy Statement for Energy (EN-1) sets out general matters relating to all energy related proposals. It covers topics to be considered in determining any application under the 2008 regime for nationally significant infrastructure projects (over 50MW).

Paragraph 4.5.1 states “*The visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. The functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important. Applying “good design” to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area”;*

Paragraph 5.9.1 states “*The landscape and visual effects of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development. In this context, references to landscape should be taken as covering seascape and townscape where appropriate”;*

Paragraph 5.9.8 states “*Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. ... Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate”;*

Paragraph 5.9.21 states “*Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy*

infrastructure project may result in a significant operational constraint and reduction in function – for example, the electricity generation output.

Local Policy

The site is not allocated in the adopted Local Plan (or Neighbourhood Plans for the area) for any specific use. It is 'white land' and is located away from defined settlement limits and sits in the defined countryside. The use as a Solar Farm is therefore a departure from the Adopted Plan and in particular from adopted Policy SG1. This is held to be a technical departure. The plan does not allocate land for solar farms specifically as there is no requirement for it to do so. The adopted local plan contains policies that support renewable energy such as this scheme, for example CC1 and DM25.

Policy CC1 (Climate Change) states that a low carbon future for Colchester will be achieved through a number of measures including *“encouraging and supporting the provision of renewable and low carbon technologies.”*

Policy DM25 (Renewable Energy, Water, Waste and Recycling) states the Council will support proposals for renewable energy projects including solar farms and goes on to state a condition will be attached to planning consents for solar farm proposals to ensure that the site is restored when panels are taken out of service.

In addition, Policy OV2: Countryside states that proposals for sustainable rural business, leisure and tourism schemes, development essential to the effective operation of agriculture, horticulture, forestry, equestrian use, infrastructure, renewable energy generation, and minerals or waste operations in the adopted Essex Minerals and Waste Local Plans may require a countryside location.

Policy DM6 (Economic development in rural areas and the countryside) provides further guidance. In general, proposals for sustainable rural businesses will be supported if they are of an appropriate scale, meet a local employment need, minimise negative environmental impacts, and harmonise with the local character and surrounding countryside where they are being proposed.

A section of the northern part of the site sits in the Emerging Copford with Easthorpe Neighbourhood Plan Area. The examination is underway. The Examiner has written to the Council and Copford with Easthorpe Parish Council to seek some initial points of clarification. The process is ongoing and the plan can therefore be given moderate weight.

Emerging NP Policy CE1 deals with the overarching spatial strategy and states:

This Policy protects the Parish by resisting development which may lead to the merging of separate village settlement areas; coalescence with neighbouring parishes; the loss of agricultural land; damage to the rural character of the Parish; and urban sprawl as identified by National Planning Policy Framework.

Emerging NP Policy CE2 states:

The policy seeks to protect areas of existing open space, valued views and the bio-diversity of the natural environment which underpins the character of those places within the landscape. The idea of a 'view' is an emotive one, often a matter of personal connection. The parish has a varied landscape, blessed with diverse habitats and many views across fields which, in turn, have been shaped by routeways, settlement and human activity for thousands of years, often in very subtle ways which are not immediately obvious. This 'quiet' beauty needs to be acknowledged and should inform high quality development, rather than preventing it.

NP Policy CE7b states:

This Neighbourhood Plan encourages the Parish Council and residents to be increasingly ambitious in the efficient and effective use of energy. If we are to limit the increase in global temperature rises to a level that will avoid the worst impacts, housing development should not emit greenhouse gases.

This report will deal with the matters scoped into the ES first those being Landscape, Ecology and Heritage, before dealing with other material consideration.

16.6 Landscape And Visual Amenity

Colchester Local Plan 2017 – 2033 Section 2 Policy ENV1 is particularly relevant to this scheme:

Policy ENV1: Environment

The Local Planning Authority will conserve and enhance Colchester's natural and historic environment, countryside and coastline. The Local Planning Authority will safeguard the Borough's biodiversity, geology, history and archaeology, which help define the landscape character of the Borough, through the protection and enhancement of sites of international, national, regional and local importance. The Local Planning Authority will require development to be in compliance with, and contribute positively towards, delivering the aims and objectives of the Anglian River Basin Management Plan.

The policy goes on to state:

The local planning authority will carefully balance the requirement for new development within the countryside to meet identified development needs in accordance with Colchester's spatial strategy, and to support the vitality of rural communities, whilst ensuring that development does not have an adverse impact on the different roles, the relationship between and separate identities of settlements, valued landscapes, the intrinsic character and beauty of the countryside and visual amenity.

The intrinsic character and beauty of the countryside will be recognised and assessed, and development will only be permitted where it would not adversely affect the intrinsic character and beauty of the countryside and

complies with other relevant policies. Within valued landscapes, development will only be permitted where it would not impact upon and would protect and enhance the factors that contribute to valued landscapes.

The ES sets out the assessment process that has been undertaken:

The assessment has involved information review, fieldwork observations and photography, and computer-based data processing and analysis, and has been undertaken in several stages:

Predicted effects and mitigation – a review of the visual characteristics of the Proposed Development to identify the aspects with the potential to give rise to landscape and visual effects and consideration of the measures incorporated into the design to mitigate these effects;

Landscape and visual context – a review of the existing landscape and visual baseline of the Study Area to identify landscape character, landscape designations and visual receptors in the Study Area as well as any operational and/or permitted solar schemes within the baseline;

Visual analysis – visibility analysis using computer-generated Zones of Theoretical Visibility (ZTVs) to identify the locations in the Study Area from where the Proposed Development could in theory be visible, as well as a cumulative ZTV to identify potential combined visibility with other operational and permitted developments. In addition, a viewpoint analysis has been undertaken to predict the changes to views as a result of the Proposed Development and cumulative impacts with other developments from a selection of viewpoints that represent the main visual receptors in the Study Area;

Landscape assessment – an assessment of the potential effects of the Proposed Development on landscape fabric, landscape character and landscape designations in the landscape Study Area; and

Visual assessment – an assessment of the potential effects of the Proposed Development on the visual amenity of receptors in the visual Study Area.

Landscape Character

At a national level, Natural England has divided England into 159 National Character Areas (NCAs). The entire Study Area falls within *NCA 111: Northern Thames Basin* which is a diverse area extending from Hertfordshire in the west to the Essex coast in the east. The suburbs of North London as well as historic towns and cities such as St Albans and Colchester are included within this area. The area contains a diverse range of landscapes with urbanisation mixed in throughout. The proximity to London has put increased pressure on the area, in particular from housing developments and schools etc., with a consequential reduction in tranquility.

The Site and Study Area are characterised in more detail as part of the Colchester Borough Landscape Character Assessment (CBA, 2005). Within the Study Area this assessment identifies five Landscape Character Areas (LCAs) within three Landscape Character Types (LCTs) (River Valley, Farmland Plateau and Wooded Farmland LCTs). The Site itself is located entirely within LCA B2 – Easthorpe Farmland Plateau.

There are no national or local landscape designations within the 3.0 km radius Study Area.

16.7 Summary of the ES/LVIA findings

The ES and Landscape Visual Impact Assessment found that the site is a well vegetated and broadly flat or very gently undulating landscape, where the flatness of the topography creates a layering of vegetation within views and encloses most views to the middle distance. This is illustrated by the almost complete lack of visibility of the operational Birch Gravel Pit and Birch Airfield Solar Farms which are located close to the Proposed Development yet are not visible from any of the viewpoints within this assessment. The viewpoints have also illustrated the lack of potential visibility of the permitted Layer Solar Farm, located at a greater distance away on the eastern edge of the Study Area and entirely screened from view from each of the viewpoints.

The visibility of the proposal would be confined to an area local to the site, in the same way as the two operational solar farms. This is due to the limited height of solar developments, the broadly flat or very gently undulating nature of the topography and the good levels of mature vegetation across the landscape, which combine to serve as useful containment and screening tools.

In cumulative terms, as mentioned above, the two operational solar farms and the permitted solar farm all have extremely limited visibility within the area, where no combined visibility with the proposal has been identified by the viewpoints or fieldwork.

The layout of the proposal has been carefully considered in order to minimise effects wherever possible and to be sympathetic to the surrounding landscape. The submitted LVIA has been assessed by the council's in-house Landscape Advisor who is extremely experienced in landscape matters. The design retains existing landscape components such as hedgerows, tree copses and tree belts and utilises their screening properties in association with surrounding mature woodland blocks. A comprehensive planting scheme has also been incorporated as mitigation where appropriate.

The Landscape Advisor is satisfied with the scheme subject to the imposition of his bespoke landscaping condition and landscape management condition. With those imposed as set out at the end of the report it is considered that the effects on landscape and visual amenity as a result of the proposal would be extremely limited.

On the basis that the visual impact of the scheme can be mitigated over time, the harm to landscape interests is a minor adverse impact in the planning balance. This must be weight up against the clear benefits of the scheme however.

16.8 Ecology

The Environment Act 2021 was passed into law in November 2021. Its overall aims are to strengthen environmental protection and deliver the UK Government's 25-year environment plan following the UK's exit from the European Union. Of greatest relevance to ecology and biodiversity are provisions within the Act for biodiversity gain to be a condition of planning permission in England. When these provisions come into force, following secondary legislation expected to be issued by the Secretary of State within approximately two years of the Act passing into law, the delivery of a net gain in biodiversity of 10% (as measured by a standard biodiversity metric) will become a legal requirement of planning permission for development.

The Conservation of Habitats and Species Regulations 2017 (as amended) enacts, within the UK, EU Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora (as amended) and Directive 2009/147/EC on the Conservation of Wild Birds. These Regulations provide for the designation and protection of statutory designated wildlife sites of European importance ('International sites'), and the protection of a number of rare and vulnerable species in a European context ('European Protected Species'). International sites, including Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites are recommended for designation in the UK by the Joint Nature Conservation Committee (JNCC).

The Wildlife and Countryside Act 1981 (as amended, principally by the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006) enshrines the protection of statutory designated wildlife sites of national importance (Sites of Special Scientific Interest (SSSIs)) in England and Wales. The Act also sets out varying degrees of protection and offences with regard to native species and their habitats that are rare and vulnerable in a national context. The Act also provides for the control, management and offences in respect of invasive non-native species. Sites of national importance (SSSIs and National Nature Reserves (NNRs)), are designated by Natural England (NE) under the Act and are protected from any development that may destroy or negatively affect them, either directly or indirectly.

Section 40 of the NERC Act 2006 places a statutory duty on Local Planning Authorities (LPAs) to consider the effects upon biodiversity when exercising their functions in England. In addition, Section 41 of the Act makes for the provision of a list of habitats and species of principal importance for the conservation of biodiversity.

In addition, the Animal Welfare Act 2006 further protects wild animals from unnecessary suffering when under the control of man and combines with the Wild Mammals (Protection) Act 1996, which protects wild mammals from intentional cruelty.

The Protection of Badgers Act 1992 (as amended) affords protection specifically to badgers (*Meles meles*) and their setts.

Finally, ‘important’ hedgerows, for which there are specific ecological criteria, are protected from removal (up-rooting or otherwise destroying) by the Hedgerow Regulations 1997.

Paragraph 11 of the National Planning Policy Framework (NPPF) (February 2019, updated 2021) advocates a presumption by LPAs in favour of sustainable development. The presumption “...*does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site*” (Paragraph 180).

The NPPF also dictates that planning policies and decisions should contribute to and enhance the natural environment by protecting and enhancing sites of biodiversity importance in a manner commensurate with their statutory status or identified quality in the development plan (Paragraph 170.b); avoiding, adequately mitigating or compensating for significant harm to biodiversity (Paragraph 175.a); and by “...*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*” (Paragraph 170.d).

As above Local Plan Policy ENV1: Environment is of particular importance. This states:

“The Local Planning Authority will conserve and enhance Colchester’s natural and historic environment, countryside and coastline. The Local Planning Authority will safeguard the Borough’s biodiversity, geology, history and archaeology, which help define the landscape character of the Borough, through the protection and enhancement of sites of international, national, regional and local importance...”

In this instance Criterion A, C and D are also relevant:

A. Designated sites

Development proposals that have adverse effects on the integrity of habitats sites, Sites of Special Scientific Interest or significant adverse impacts on the special qualities of the Dedham Vale Area of Outstanding Natural Beauty (including its setting) (either alone or in-combination) will not be supported.

C. Biodiversity and geodiversity

Development proposals where the principal objective is to conserve or enhance biodiversity and geodiversity interests will be supported in principle.

For all proposals, development will only be supported where it:

Is supported with appropriate ecological surveys where necessary; and

Where there is reason to suspect the presence of a protected species (and impact to), or Species/Habitats of Principal Importance, applications should be accompanied by an ecological survey assessing their presence and, if present, the proposal must be sensitive to, and make provision for their needs and demonstrate the mitigation hierarchy has been followed; and

Will conserve or enhance the biodiversity value of greenfield and brownfield sites and minimise fragmentation of habitats; and

Maximises opportunities for the preservation, restoration, enhancement and connection of natural habitats in accordance with the UK and Essex Biodiversity Action Plans or future replacements; and

Incorporates beneficial biodiversity conservation features, measurable biodiversity net gain of at least 10% in line with the principles outlines in the Natural England Biodiversity Metric, and habitat creation where appropriate.

Proposals for development that would cause direct or indirect adverse harm to nationally designated sites or other designated areas, protected species, Habitats and Species of Principle Importance will not be permitted unless:

They cannot be located on alternative sites that would cause less harm; and

The benefits of the development clearly outweigh the impacts on the features of the site and the wider network of natural habitats; and

Satisfactory biodiversity net gain, mitigation, or as a last resort, compensation measures are provided.

The Local Planning Authority will take a precautionary approach where insufficient information is provided about avoidance, mitigation and compensation measures and secure mitigation and compensation through planning conditions/obligations where necessary.”

D. Irreplaceable habitats

Proposals that would result in the loss of irreplaceable habitats, such as ancient woodland, Important Hedgerows and veteran trees will not be permitted unless there are wholly exceptional reasons and a suitable compensation strategy, to the satisfaction of the local planning authority, exists.

Also of some relevance is policy OV2:

Policy OV2: Countryside which states that Proposals for sustainable rural business, leisure and tourism schemes, development essential to the effective operation of agriculture, horticulture, forestry, equestrian use, infrastructure, renewable energy generation, and minerals or waste operations in the adopted Essex Minerals and Waste Local Plans may require a countryside location.

Policy DM6 (Economic development in rural areas and the countryside) provides further guidance. It states: *In general, proposals for sustainable rural businesses will be supported if they are of an appropriate scale, meet a local employment need, minimise negative environmental impacts, and harmonise with the local character and surrounding countryside where they are being proposed.*

Supporting Documentation

The ES has been supported by baseline studies on a species by species basis:

Extended Phase 1 survey (October 2021 by LSC and April 2022 by EDP);

Breeding bird survey (Spring 2021 and 2022);

Bat tree visual assessment (October 2021 by LSC and April 2022 by EDP);

Badger walkover survey (October 2021 by LSC and April 2022 by EDP);

Great crested newt (Triturus cristatus) surveys Habitat suitability Index Assessment (October 2021 by LSC and April 2022 by EDP), with additional Environmental DNA (eDNA) survey in April 2022 by EDP; and

Pilot Wintering Bird Survey (February 2022 by EDP).

The ES sets out the findings of these surveys in detail and goes on to set out the avoidance and mitigation package that will be used:

Within the Site, proposed impact avoidance measures to ecological receptors include:

The retention of the woodland in the south of the Site;

Retention of the arable land in the south of the Site (approximately 25.9 ha);

The retention of all boundary woodlands and trees and the majority of hedgerows (out of 2.77 km of hedgerow on-site, approximately 0.02 km would be lost);

15m development buffer zones from Sellers Wood LWS and Potash Wood LWS Ancient Woodlands, in accordance with NE standing advice for Ancient Woodlands;

5m development buffer zones from all hedgerows, trees and other boundary features;

In respect of proposed infrastructure such as access roads, the utilisation of existing breaks within hedgerows, to avoid large sectional removal of these features. The loss of approximately 0.02 km of hedgerow (out of 2.77 km) is required to facilitate the Proposed Development; and

Beyond the site, the electrical connection route would be laid to the Abberton Substation. This would be connected entirely underground, following a route partly through agricultural fields and partly along the existing road network, At one point the route would be horizontally directional drilled under Moors Wood.

The Mitigation Planting Proposals propose the following habitat creation and enhancement measures to provide a net gain for biodiversity across the Site:

Under proposed solar arrays within the developable area, the conversion of approximately 27.47 ha of cultivated arable habitats to low-intensity grazed permanent pasture with species-rich wildflower elements within the swards;

Along the margins of solar arrays within the developable area and within the development buffer zones previously defined, the conversion of approximately 7.4 ha of cultivated arable habitats to an inter-connected resource of wildflower-rich meadows;

The gapping up of the existing hedgerow network with native shrub and tree species to enhance the Green Infrastructure network within and adjacent to the Site; and

The planting of new native hedgerows (approximately 740 m) and tree belts to enhance connectivity corridors within and adjacent to the Site and provide screening against solar arrays in the Developable Area.

This scheme will provide an ecological benefit. In summary, the proposed avoidance measures and mitigation-by-design provide the following beneficial impacts for local biodiversity and the local landscape:

- A notable increase in the local resource of wildflower meadows and species-rich pasture, converted from approximately 34.87 ha of intensively managed monoculture arable habitats;
- The strengthening and enhancement of ecotones to boundary features such as LWSs, ancient/established woodland and hedgerows, which consequently enhance the ecological importance of these boundary features;
- The extension and strengthening of the connectivity across the Site;
- An increase in the resource of food plants for pollinators, specifically invertebrates;
- An improved network of commuting corridors along the Site boundaries for badgers, with increased opportunities for foraging;
- The strengthening and enhancement of edge habitats for commuting and foraging bats;
- Increased opportunities for foraging and shelter by great crested newts outside of boundary features, where present in on-site ponds;
- An expansion in habitat resources for colonisation and foraging by common reptile species;
- An increase in nesting, foraging and roosting habitat resources for a wide variety of farmland and peri-urban wild bird species; and
- Additional increased foraging and shelter opportunities for other species likely to be present within the locality such as brown hare, hedgehog and small mammals.

Assessment of Impacts

This is dealt with in detail at Chapter 7.6 of the ES.

Potential impacts identified which could arise as a result of the construction of the proposal, taking into account the embedded mitigation through sensitive design but in the absence of further mitigation, include the following:

- Impacts to nearby statutory and non-statutory designated sites;
- Impacts of direct habitat loss and fragmentation/severance due to land take upon habitats and species;
- Indirect impacts to habitats and species due to habitat degradation and damage, including dust deposition;
- Impacts of noise, light and human disturbance to species; and
- Pollution of groundwater and surface water flows.

The ES looked at the possible impact to the Nationally and Internationally designated Abberton Reservoir. The Site is not considered to support functionally linked land for any of the SPA/Ramsar/SSSI qualifying species. During the construction best practice standard construction measures (to be included in a Construction Environmental Management Plan (CEMP)) would be followed to further reduce the risk of harm or disturbance to birds.

Potential for likely significant adverse effects upon Abberton Reservoir designated sites have been screened above and conclude that the risk of such effects is negligible.

In terms of impact on non-designated areas;

Sellers Wood and Potash Wood LWSs are surrounded by the Site with a connective tree line between the two LWSs on-site. However, owing to the development buffer (15 m) afforded around the areas of ancient woodland, no direct impacts are anticipated during construction of the proposal.

Beckingham Hall Road Verge, Billets Wood, Cooks Wood and Malting Green are adjacent to and/or within the Cable Connection Route. The construction of the cable route would avoid the LWSs. Where work would be required within LWSs (Beckingham Hall Road Verge) there is potential for temporary effects through the trenching of the cable. The cable route would avoid sensitive features (utilising areas of bare ground) so to avoid potential negative effects.

In terms of specific habitats on site:

Ponds

All ponds within the site would be retained and protected and so no direct effects are therefore anticipated as a result of the construction of the Proposed Development.

During the construction period there is a low risk that retained ponds may be subject to indirect degradation effects, such as pollution events and destruction of marginal habitats through the encroachment of construction machinery resulting from adjacent construction works. This impact would be minimised by virtue of the ponds' locations within retained and proposed Green Infrastructure corridors, which are situated away from proposed areas of built development.

Woodland

All woodland within the Site would be retained within the design of the Proposed Development. The Sellers Wood and Potash Wood LWSs, located on the Site boundary, would be protected during construction and no direct impact is expected.

In terms of specific species that were scoped in to the ES:

Breeding Birds

The loss and degradation of potential bird nesting and foraging habitats during construction would primarily be restricted to the loss of arable and grassland. The grassland habitats are already subject to a level of indirect disturbance from agricultural management and were not found to support any populations of notable ground nesting birds. The arable fields supported ten territories of skylark (six of which would be impacted by the Proposed Development). The hedgerows and woodland are used by conservation concern species such as song thrush and dunnock for breeding and the fields provide foraging habitat for a range of species.

All woodland, the majority of hedgerows and approximately 25.91 ha of arable land would be retained and breeding bird habitat loss would be restricted to approximately 34.87 ha of open ground nesting birds, principally skylark. The permanent loss of habitat would result in a certain significant adverse effect at a Local level on the skylark population.

The direct killing or harm to birds at the nest (and their eggs and young) could occur during construction works in the breeding season. However, such effects would be an offence under the Wildlife and Countryside Act (1981) and the applicants have stated that this would be avoided through adoption of standard sensitive working practices as set out in a construction ecological management plan.

In the absence of further mitigation, disturbance of nesting and foraging habitat through noise, visual and human disturbance during construction would only be short duration given the four month construction programme. As such, this temporary adverse effect is therefore considered to only be significant at a site level.

The Council's consultant ecologists have assessed the scheme and requested skylark mitigation by condition. This will ensure that any on-site loss of skylark habitat will be compensated for off-site.

Great Crested Newts

All ponds on-site would be retained within the landscaping as part of the Proposed Development. Great crested newts have been confirmed on-site within Pond 3.

The loss of small areas of semi-improved grassland, are considered to have the potential to cause the fragmentation of terrestrial habitat and the species' ability to move across the landscape. However, given the fact that habitat between ponds known to support great crested newts would be retained and the location of the ponds close to the Site's southern boundary, these adverse effects are considered to be significant only at a Site level.

Additionally, during construction ponds may be subject to indirect degradation effects, such as pollution events and destruction of marginal habitats through the encroachment of construction machinery during construction works.

There is a low risk that direct killing or harm to great crested newt individuals and disturbance during their terrestrial phase and hibernation could arise during construction works, given the limited terrestrial habitat suitability within the construction zone. In the unlikely event that such incidence occurred, such effects would be an offence under the Conservation of Habitats and Species Regulations 2017 (as amended). To ensure legal compliance derogation licencing would be secured through the adoption of NE's DLL (district level licencing) scheme. DLL would ensure that there are no significant effects on great crested newts.

Badgers

Badger setts are known to be present on-site and are to be retained and protected via a 30 m buffer from the badger setts built into the design. Badger gates are also built into the design to allow for movement of badgers throughout the Proposed Development. There would also be a short term and temporary loss in foraging habitats and potential disruption to movement across the Site. Owing to the protection of badger setts a limited duration of works, such direct effects upon badger during construction are anticipated to be negligible.

Indirect disturbance (e.g. light spill, visual and noise) may also result from adjacent Site works during construction or through vehicular encroachment into the buffer zones around the setts. However, given the temporary nature of such impacts, the adverse effects on the badger population are considered to be negligible.

In summary, the ES concludes that the scheme will only have a negligible impact on Abberton Reservoir due to the level of separation to it from operation. It would be ecologically beneficial to non-statutory designated areas and on site habitats.

Ecological Cumulative Effects with Layer Solar Farm

An application for Layer Solar Farm was submitted and approved by the Council under planning application number: 202695. The solar farm is not currently under construction. The application site boundary for the Layer Solar Farm lies approximately 2 km to the east of the Site and overlaps with the Cable Connection Route. There are no other known projects located within proximity to the Site that are anticipated to have any level of cumulative effect.

The Layer Solar Farm did not identify any significant adverse effects and included mitigation to deliver ecological enhancements.

The ES set out how with regard to wintering and migratory bird interests, given the distance of separation and the intervening abundance of agricultural land and better-quality habitat for wintering species in closer proximity to the designated Abberton Reservoir designated sites, it is considered that wintering birds would not be adversely affected by cumulative impacts of the two developments combined.

Physical effects on any other ecological receptor would be on highly localised features, wholly within the developable area, upon which there would be no cumulative effects from other developments.

Ecological Conclusion

The scheme including the ES and the supporting documentation has been independently assessed via the Council's consultant ecologists, ECC Place Services Ecology. Following an initial holding objection regarding Priority species (farmland birds) and Priority habitats (hedgerow). Places Services have since been supplied with a draft Skylark Mitigation Strategy (Environmental Dimension Partnership Ltd, January 2023) and received clarification that no material lengths of hedge will be removed as part of the proposal. They are satisfied with the scheme from an ecological point of view subject to conditions which are proposed at the end of this report. Considering that the scheme has been assessed by the Council's independent consultants for ecological matters and found to be acceptable, the scheme is held to be satisfactory in terms of its impact on ecological interests.

On the basis that the ecological impact can be mitigated successfully, it therefore holds neutral weight in the planning balance.

16.9 Cultural Heritage

Chapter 16 of the NPPF is concerned with 'Conserving and enhancing the historic environment'. It identifies heritage assets as 'an irreplaceable resource' and notes that they should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations. The NPPF states that 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 (Paragraph 194).

The 'Colchester Local Plan 2017 – 2033' was formally adopted in July 2022. The Local Plan has one policy specific policy relating to heritage, Policy DM16: Historic Environment. This policy outlines the considerations for developments in relation to the historic environment. In particular, any development which would substantially harm heritage assets must have "*substantial public benefits that outweigh the harm or loss*" to be allowed to proceed.

Developments should also seek to conserve and enhance the value of affected heritage assets. There would be "*an expectation that any new development will enhance the historic environment or better reveal the significance of the heritage asset, in the first instance, unless there are no identifiable opportunities available*".

The PPG

The Planning Practice Guidance (PPG) provides further advice and expands on the guidance and policy outlined in the NPPF (MHCLG, 2021).

The value of heritage assets and its importance in decision taking is explored in Paragraph 009 of the PPG which states that heritage assets may be affected by direct physical change or by change in their setting. Being able to properly assess the nature, extent and value of a heritage asset, and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals.

The setting of the heritage asset is also of importance and a thorough assessment of the impact on setting needs to take into account, and be proportionate to, the value of the heritage asset under consideration. The degree to which the proposed changes enhance or detract from that value must also be considered. The extent and importance of setting is often expressed by reference to visual considerations. Although views of or from an asset will play an important part, the way in which an asset is experienced in its setting is also influenced by other environmental factors such as noise, dust and vibration from other land uses in the vicinity, and by our understanding of the historic relationship between places.

Paragraph 013 of the PPG recognises that the contribution that setting makes to the value of the heritage asset does not depend on there being public right or the ability to experience that setting. When assessing any application for development which may affect the setting of a heritage asset, LPAs may need to consider the implications of cumulative change.

Paragraph 018 of the PPG discusses how to assess if there is substantial harm. It states that what matters in assessing if a proposal causes substantial harm is the impact on the value of the heritage asset. Ultimately, whether a proposal causes substantial harm will be a judgement for the decision taker. However, it acknowledges that substantial harm is a high test so may not arise in many cases. A key consideration when assessing

whether there is an adverse impact on a Listed Building is whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset's value rather than the scale of the development that is to be assessed.

ES Chapter 8 includes a Heritage Impact Assessment (HIA) that covers the matter of cultural heritage, including above-ground built heritage and archaeology.

The Study Area for the collation of information on heritage assets was defined by a 1km buffer from the Site boundary, and a 50m buffer from the Cable Connection Route. This distance has been judged as appropriate to provide the context of, and potential for, surviving archaeological remains on the site given the nature of the proposal and its location.

There are no designated heritage assets within the Site. There are 42 Listed Buildings within the Study Area, of these one is Grade I Listed, two are Grade II* Listed and the remaining 39 are Grade II Listed. The nearest designated heritage asset lies c. 10m south of the Site and comprises the Grade II Listed Hoggetts.

There are no Scheduled Monuments within the Study Area or Registered Parks. There is the potential for below ground assets.

Listed Buildings

Section 66(1) of the Planning (Listed Buildings & Conservation Areas) Act 1990 requires decision makers to pay *special regard* to the desirability of preserving the listed building together with its setting and any features which it may possess. There are no direct impacts on listed buildings arising from the proposal, only indirect impacts as a result of changes within the wider rural setting of some of the listed buildings within the study area. All harm to the significance of heritage assets is undesirable and needs to be justified and mitigated where possible.

The magnitude of impact is at the lower end of *less than substantial harm* as the proposed solar farm would have a modest effect resulting from the introduction of solar panels and associated infrastructure within existing arable fields. There would thus be a change in the character of the wider setting of those listed buildings set in closest proximity to the proposed solar arrays. The perceived change would not detract from the essential qualities of the listed buildings as examples of historic rural vernacular architecture but would erode the apparent synergy of the building with its wider agricultural setting and the impression of an unchanging rural scene. The rural landscape has in fact been subject to constant change with the amalgamation of field parcels and the loss of elms and hedgerows in the twentieth century coupled with a transition from mixed pastoral/arable farms to exclusive arable cereal and beet production. The reinstatement of sections of missing hedgerows will mitigate the presence of the solar arrays in the longer term with a commensurate decline in the magnitude of impact.

The setting of listed buildings in the study area will remain essentially that of a rural landscape with enclosed fields and areas of woodland.

Designated heritage assets within the Study Area have been subject to a detailed settings assessment within the ES. A number of Listed Buildings within the Study Area include the Site as part of their setting and are therefore susceptible to harm through changes to their setting. These comprise:

- Grade II Listed Hoggetts (Asset A);
- Grade II Listed Whitehouse Farmhouse (Asset B);
- Grade II Listed Barn to the west of Whitehouse Farmhouse (Asset C);
- Grade II Listed Bockingham Hall (Asset F);
- Grade II Listed Barn to the south of Bockingham Hall (Asset G); and
- Grade II Listed Hellens (Asset L).

No other designated heritage assets are considered to be potentially sensitive to the proposed development.

The Heritage Impact Assessment confirms that buildings and the historic landscape will not be materially affected by the proposed development. The reduction made to the proposed development area in January 2023 would remove the potential effect upon the setting of Grade II Listed Whitehouse Farm and Hoggetts from minor adverse to no effect, as the panels would be removed in the southern section of the site, and therefore removing the setting effect on these assets (as confirmed in the submitted ES Addendum). There are no other anticipated effects to listed building heritage assets.

Bockingham Hall farmhouse and corn barn are associated grade II listed buildings (F & G Figure 8.3) The farmhouse is substantially screened from the array to the south by reason of its orientation and the substantial modern barn complex that surrounds the listed barn. The listed barn would have only limited intervisibility to the south and west due to these agribusiness large sheds and any impact on the setting of the listed barn would be minimal and capable of effective screen and filter boundary planting, both to wrap around its southern boundary but moreover this should usefully be extended south along the open frontage to the lane leading to Hardy's Green. Given the duty to minimise harm to designated assets regardless of magnitude, additional screen/filter planting should be sought along the southern boundary of the listed barn to provide effective mitigation.

The revised proposals received in January 2023 are welcomed insofar as they remove the greatest potential for impacts on the setting of adjacent listed buildings. The setting of the listed buildings in the study area remains an essentially agricultural landscape, with large fields continuing to the north and east, which make a limited contribution to their heritage significance. This setting would be changed by the proposed development to a minor

extent. However, the impact would be low and needs to be weighed in the planning balance against the public planning benefits of the proposed development. There are no grounds to refuse the proposed development solely based on the impact upon the setting of listed buildings.

Archaeology

The scheme has been discussed at pre-application stage and throughout the application phase with the Council's in-house Archaeological Advisor. Following assessment of the ES, they requested additional trial trenching which was undertaken. The ES was then updated in line with the findings of the investigation.

The Trial Trench Evaluation comprised 148 trenches across the Site, with a total of 66 archaeological features identified across 34 of the trenches. The remains of a probable Roman rural settlement were identified by the Trial Trench Evaluation (Trench 17 – Trench 27) in the north-western part of the Site (Development Zone 2). These remains were not identified by the Geophysical Survey or the Desk-Based Assessment, but comprise a possible occupation layer, pits and trackway. The occupation layer was identified in Trench 25 and comprised a compacted surface and pits, associated with over 100 sherds of Roman pottery, ceramic building material (roof tile and brick) and animal bone. A further concentration of Roman pottery (40 sherds), animal bone, ceramic building material and iron sheets was identified in Trench 26. The possible Roman trackway was identified in Trench 27. Trench 32 contained a possible Iron Age pit.

The remains are likely to relate to a rural settlement dated to the 'Middle Roman' period, and likely had an association with the route of a Roman road projected to run through the north of the Site. The Roman pottery assemblage was dominated by utilitarian coarsewares, suggesting a relatively low-status settlement. These sub-surface features comprise a heritage asset of archaeological interest. Such remains have the potential to contribute to regional research agendas. As such, the ES states the remains are of Medium value.

A cropmark in the southern part of the Site (Asset 5) is likely to relate to the below ground remains of a late prehistoric or Roman enclosure. This feature is described within the Desk-Based Assessment and was also identified by the Geophysical Survey. It is likely that sub-surface features survive in this part of the Site. Such remains have the potential to contribute to regional research agendas, and are therefore of Medium value.

A cropmark extending across the Cable Connection Route (Asset CR3) is likely to relate to the below ground remains of a late prehistoric or Roman boundary or trackway. It is likely that sub-surface features survive in this part of the Site. Such remains have the potential to contribute to regional research agendas and are therefore of Medium value.

The historic landscape character of the Site can be characterised as 21st century intensive farmland, defined by large open fields. Whilst some of the boundaries relate to historic boundaries recorded on historic mapping, the

degree of boundary loss means the character of the landscape is predominantly modern agricultural. This comprises a heritage asset of Negligible value.

A cropmark in the northern part of the Site (Asset 9) potentially relates to the below ground remains of a late prehistoric or Roman enclosure. However, this feature was not identified by the Geophysical Survey) or by the Trial Trenching Evaluation, which included three trenches that specifically targeted this feature. As such, it is considered unlikely that sub-surface features survive in this part of the Site.

The Trial Trench Evaluation identified other archaeological heritage assets of Negligible value. These comprise medieval ditches (e.g. Trench 17, Trench 83, Trench 123, Trench 132) that are likely to be of agricultural origin. Furthermore, former field boundaries (Asset 14 and Asset 19), as depicted on historic maps and observed on aerial imagery, would be of comparable value.

Further archaeological features identified by the Trial Trench Evaluation are of insufficient value to be considered heritage assets (such as the below ground remains of field boundaries recorded on historic mapping) and are therefore not identified as receptors.

Mitigation

The programme of evaluation by trial trenching has identified the remains of a probable Roman rural settlement within the Site boundary. To avoid disturbing these remains mitigation measures are proposed in the vicinity of the identified archaeological deposits, including a 20 m buffer around the archaeological features. This buffer area is referred to as a 'Mitigation zone'. Within the 'Mitigation zone' a mitigation strategy would be agreed with the Archaeological Advisor for CCC. The strategy would include the use of non-intrusive construction techniques (such as concrete pad foundations and surface cable routes) which would not extend beyond the depth of the topsoil (which has been recorded to a minimum depth of 0.29 m below ground level). As such, the mitigation strategy would ensure that any disturbance of the identified archaeological remains of the Roman rural settlement is avoided.

This mitigation strategy has been agreed with the Council's in-house Archaeologist. They are now satisfied that the scheme can take place without causing harm to below ground heritage interests. Due to the level of work carried out already and the mitigation that can be agreed by condition, no further investigation is required.

Cumulative Effects with Layer Solar Farm

An application for Layer Solar Farm was submitted to and approved by CBC under planning application number: 202695. The solar farm is not currently under construction. The Application Boundary for Layer Solar Farm lies approximately 2 km to the east of the Site and overlaps with the Grid Connection Route.

Given this distance of separation and the intervening presence of settlements in these cases no assets which would be cumulatively impacted by these developments have been identified and thus there would be no cumulative impacts upon the settings of heritage assets resulting from the addition of the Proposed Development to the current cumulative baseline. No additional cumulative impacts associated with these schemes have been identified.

Physical effects on archaeological assets would be on highly localised features, wholly within the site boundary of the Proposed Development, upon which there would be no cumulative effects from other developments.

Heritage Conclusions

A number of Listed Buildings have been identified within the Study Area. These would not be adversely impacted by the proposal either physically or by changes within their setting that could be considered material. The relevant legal test is therefore met with mitigation.

Following further investigation, the scheme has been accompanied by sufficient archaeological evidence. Subject to a mitigation condition, officers are satisfied the scheme is acceptable in that regard.

It is therefore considered that proposed development complies with statute, relevant national and local planning policy relating to the historic environment. The impact on cultural heritage therefore holds neutral weight in the planning balance.

16.10 Other matters – This report will now deal with matters that were scoped out of the ES

Site Selection

Many of the representations noted that the site selection documents were insufficient and more suitable sites are proposed.

The Alternative Site Assessment ('ASA') report that forms part of the planning application submission demonstrates the process that the Applicant went through to identify the Site. The overall aim of the assessment is to demonstrate that the Applicant gave due consideration to the benefits and constraints associated with the Site when selecting it for development.

As detailed in the ASA, the Search Area is defined as a 4.5km radius surrounding the final 3km of the proposed cable run, from the Layer Solar Farm substation (where the proposed cable would join an existing trench/duct) to the Abberton Substation (the PoC). A total of 96 sites identified in the previously developed land search were added to the long-list. With regard to undeveloped land, the area is considered to be relatively unconstrained, with the main constraints comprising small areas of Flood Zones 2/3, settlements and various heritage assets. The remainder comprises predominantly agricultural land. A total of 66 sites were added to

the long-list following the analysis of lower grade agricultural land. A total of 22 sites were then added to the short-list for assessment.

As outlined in the ASA, the short-listed sites were similar to the proposed site, but none were considered to comprise a more feasible alternative to the Proposed Site for a number of reasons, including environmental designations and unknowns regarding land availability. A number of sites were also deemed unsuitable due to distance to the Abberton substation, when considering Abberton Reservoir, which forms a significant obstacle between a number of sites in the south east of the search area and the substation, resulting in protracted and potentially unfeasible underground connections. The ASA therefore concludes that whilst many of the sites comply with the main criteria and are comparable to the proposed site, none comprise a more feasible alternative.

The comments stating that the ASA is insufficient have been carefully considered but it is important to note that there is no formal requirement to undertake any sequential assessment of alternative sites. In an appeal at Westerfield Farm, Carterton, Oxfordshire (APPD3125/A/14/2214281) the Inspector observed, at para. 43, that: “It is not local or national policy for a developer to be required to prove that there is no better alternative location for a development before planning permission may be granted.” Notwithstanding this, the Applicant has undertaken and submitted two versions of the ASA, one for the original scheme in August 2022 and a further one submitted in January 2023 which considered additional smaller sites in the area to account for the reduced scheme.

The availability of alternative sites therefore holds neutral weight in the planning balance.

Best and Most Versatile Land

Many of the representations noted the loss of high-quality agricultural land. They stated that the land should be left in food production and the War in Ukraine has amplified the need for food security. They also state that planning policy is soon to change to give stronger protection to the highest quality agricultural land. It is noted that the emerging Copford with Easthorpe Neighbourhood Plan seeks to direct development away from agricultural land.

The NPPF currently states that where “significant” development agricultural land is “necessary”, “areas of poorer quality land should be preferred to those of a higher quality”. In the consultation draft for amendment to the NPPF the footnote in question adds that “availability of agricultural land used for food production should be considered”, alongside the other policies in the NPPF, “when deciding what sites are most appropriate for development”

The scheme can only be assessed against the NPPF in its current format, however the proposed amendment to the NPPF still clearly leaves the weighting process in the hand of the decision maker.

It is also noted that the Emerging Copford with Easthorpe NP Policy CE1 looks to protect agricultural land. The Emerging NP can only be given moderate weight at this stage as it is still at examination. It is noted that much of the site sits outside of the NP area.

The applicants have undertaken two agricultural land classification surveys which both demonstrate that the Proposed Scheme (both original and revised) would represent only a minor temporary BMV loss to the Colchester's supply. For reference, the DEFRA ALC dataset measures Colchester's BMV at a total of 19,564 hectares, meaning the revised proposal (at 22.3ha of Grade 3a BMV within the reduced developable area) equates to just 0.11% of temporary BMV loss for the Borough.

It is also relevant to note that Natural England do not (subject to conditions regarding the preservation of soil) consider the proposed development to result in a long term loss of BMV land. The proposed panels require minimal soil disturbance to secure (through pins in the ground every few metres) and will be removed following the expiration of the planning permission, restoring the land to agricultural use.

CARE have also commissioned a soil quality assessment. This disputed the grading of the agricultural land on the southern three fields. Representations have also stated the manner in which this land is being farmed is exemplary and also noted the quality of the irrigation system. It is noted that these fields have since been removed from the developable area so will not be used for the siting of solar panels.

It is accepted that this scheme will result in the temporary loss of 22.3ha of BMV agricultural land. As set out above that cannot reasonably be seen as a significant amount of land in the CCC area. The benefit of the scheme with regards to its contribution to CCC's climate emergency agenda is held by officers to outweigh the loss of BMV agricultural land. The loss of BMV land is therefore held to have a very minor adverse impact in the planning balance.

The Need/Climate Crisis

There is a significant and quantifiable need for the deployment of solar farms and other renewable energy generation, which is being driven by government at local and national level in the UK.

In June 2019 the Government raised the UK's ambition on tackling climate change by legislating for a net-zero greenhouse gas emissions target for the whole economy by 2050. Decarbonising the power sector is integral to achieving this goal and requires major investment in proven technologies, such as solar, which are supported by planning policy at local and national level.

The purpose of the planning system is to contribute to the achievement of sustainable development as defined in the National Planning Policy Framework. Achieving sustainable development means that the planning

system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways. These are economic, social and environmental objectives.

The Council has declared a Climate Emergency and has committed to being carbon neutral by 2030. In order for Colchester City Council to move towards carbon neutrality and support Essex County in its own self-supply and carbon-neutral aims, it will need to consent a significant capacity of local renewable generation capacity to contribute towards meeting its own annual consumption.

It is estimated that the solar panels would generate enough electricity to power approximately 12,850 homes (approximately 16% of the homes within the Council's area). This is a very significant benefit of the scheme which is held to be a significant benefit in the planning balance.

With regard to meeting the targets of CCC's Climate Emergency, and along with relevant National Policy, the Proposed Development would make an important contribution to delivering decarbonisation, energy security and affordability; and

It is recognised that significant capacities of low-carbon solar generation are urgently needed in the UK, as set out and supported planning policy at the national and local level. The proposed development would be a significant step in meeting government objectives of delivering sustainable development to enable decarbonisation and by doing so, will address the climate change emergency that affects everyone's lives and the environment.

This report has taken into account the Climate Emergency and the sustainable development objectives set out in the NPPF.

Impact on Amenity/Neighbours

Policy ENV5 (Pollution and Contaminated Land) states that *"proposals will be supported that will not result in an unacceptable risk to public health or safety, the environment, general amenity or existing uses due to the potential of air pollution, noise nuisance, surface/ground water sources or land pollution."*

Policy DM25 (Renewable Energy, Water, Waste and Recycling) states that *"energy proposals should be located and designed in such a way to minimise increases in ambient noise levels."*

The nature of the proposal is such that it is not likely to cause any form of pollution during its operational stage. This is because there are no significant noise sources, associated traffic would be very low and it would not be lit at night. The proposal includes no plans to divert or close any PRoWs. A significant buffer would be provided for the PRoW that crosses the Site.

In order to mitigate any potential noise from proposed emitters within the Site, the proposed battery compound and substation area have been located within the central area of the Site between Seller Wood and Potash Wood, the furthest point away from residential receptors. In addition to its remote location, the battery compound has also been provided with a 2.5m high bund which further reduces any noise emission.

It is notable that the Applicants have agreed restricted delivery hours for larger vehicles during construction which avoid pick up and drop off hours for Copford School (located on the construction route). These hours are described in more detail in the transport section of this report.

Officers consider that the proposal has been carefully designed to ensure there are no adverse impacts on residential amenity. The scheme has been assessed by the Council's Environmental Protection Team who have no objection subject to conditions.

Glint and Glare

Glint and Glare must also be considered. Glint and glare are essentially the unwanted reflection of sunlight from reflective surfaces. Glint is a "*A momentary flash of bright light*" whereas Glare is a "*A continuous source of bright light*".

A glint and glare assessment report has also been prepared and submitted with the application. This assessment considered the potential impacts on ground-based receptors such as roads, rail and residential dwellings as well as aviation assets. A 1km study area around the Application Site is considered adequate for the assessment of ground-based receptors, whilst a 30km study area is chosen for aviation receptors. Geometric analysis was conducted at 34 individual residential receptors and 40 road receptors, as well as one runway and an air traffic control tower at Earls Colne Airfield. Following an initial assessment, rail receptors were scoped out as assets that will be impacted upon from the Proposed Development as no rail receptors fell within the 1km study area.

Solar reflections are possible at 25 of the 34 residential receptors assessed within the 1km study area. The initial bald-earth scenario identified potential impacts as High at 11 receptors, Medium at five receptors, Low at nine receptors and None at the remaining nine receptors. Upon reviewing the actual visibility of the receptor, glint and glare impacts are Medium at one receptor, Low at two receptors and None at all remaining receptors. Once mitigation measures were considered, impacts reduce to None at all receptors.

Solar reflections are possible at 33 of the 40 road receptors assessed within the 1km study area. The initial bald-earth scenario identified potential impacts as High at 33 receptors and None at the remaining seven receptors. Upon reviewing the actual visibility of the receptors, glint and glare impacts remain High at three receptors, reduce to None at all remaining receptors. Once mitigation measures were considered, impacts reduce to None at all

receptors. No impact on train drivers or railway infrastructure is predicted. No impact was found at the runways and ATCT assessed at Earls Colne Aerodrome.

Mitigation is required to ensure the medium impact from one residential receptor and three road receptors. This includes native hedgerows to be planted/infilled along the north, east and northeast boundaries of the Proposed Development and maintained to a height of at least 3 - 4m. Also, native tree belts and scattered trees to be planted along the east and northeast boundaries of the Proposed Development. It is suggested that this is secured via a bespoke condition to ensure that the planting that the glint and glare report envisages accords with the planting scheme for the site that will also be dealt with via condition.

The effects of glint and glare and their impact on local receptors has been analysed in detail and once mitigation measures have been introduced via condition, any harm will be successfully mitigated. On that basis this matter is held to hold neutral weight in the planning balance.

Flood Risk

Paragraph 159 of the NPPF outlines that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Paragraph 161 notes that all plans should apply a sequential, risk- based approach to the location of development- taking into account the current and future impacts of climate change- so as to avoid, where possible, flood risk to people and property. The paragraph details that the sequential test should be applied, and if necessary, the exception test. Paragraph 162 explains that the aim of the sequential test is to steer new development to areas with the lowest risk of flooding.

Policy DM23 (Flood Risk and Water Management) states “*development will only be supported where it can be demonstrated that the proposal meets flood management requirements in the NPPF, the PPG and the policy DM23.*” It goes on to state proposals must deliver measures to minimise the risk of increased flooding within the boundary and off-site. Furthermore, developments must comply a number of criteria as set out in the Colchester Surface Water Management Plan.

Policy DM24 (Sustainable Urban Drainage Systems) states that all new development should incorporate Sustainable Drainage Systems appropriate to the nature of the site.

A Flood Risk Assessment and Drainage Strategy forms part of the planning application submission. The Proposed Solar Site is sited within Flood Zone 1 where there is the lowest risk of flooding. The proposed development will have a very limited extent of impermeable ground cover.

The area beneath the solar panels will remain grassed and the post development site infiltration rate will not adversely change. The excavation

of cable trenches which would be backfilled with a granular surround to the cables and with excavated material to potentially increase the infiltration capacity of the site as the cable trenches act as land drains.

The NPPF classifies Solar Farms as that of 'essential infrastructure' and is therefore appropriate for development in Zones 1 and 2 with an exception test required if the site is situated within Flood Zones 3a or 3b. The proposed solar panels and associated infrastructure are located within Flood Zone 1 with the exception of the underground cable connection to the point of connection, which passes under small areas of Flood 3 associated with existing watercourses. It is proposed that where the cable passes these areas, drilling techniques will be employed during construction, so as to leave them undisturbed. Once constructed, the cable route will not be at risk from flooding from any source due to being located underground.

The Substation and Battery Storage Area compound will be located on crushed stone which is considered to be permeable. Additional drainage management measures have been proposed in this area, such as a porous subbase for both areas which would be designed to ensure any outflow is suitably controlled into surrounding drainage ditches.

The proposed drainage measures are set out in the drainage strategy that form part of the FRA and are considered sufficient for the Proposed Development. The LLFA has assessed the scheme and has no objections to the scheme subject to conditions which will be imposed. It follows that the Proposed Development complies with relevant planning policy. On that basis this matter is held to hold neutral weight in the planning balance.

Trees

The scheme has been assessed by the in-house Arboriculture Planner who has asked for the buffer zones between trees and solar panels/infrastructure to be conditioned. This is in line with the advice from the Forestry Commission. This will ensure the woodlands close to the site have at least 15m of buffer between them and the proposed solar panels. The standard tree protection condition will as be imposed to ensure all trees that are already on site and not shown to be removed on the drawings are protected in line with the current British Standard.

The Forestry Commission have asked for a link between the two woodlands adjacent to the site. This has been discussed with the applicants, but it is not possible to provide due to the impact it would have on the site layout. This is not held to warrant a refusal of the scheme.

As the harm to trees can be adequately mitigated, this matter is held to hold neutral weight in the planning balance.

Biodiversity Net Gain and Canopy Cover

The ecological impact of the scheme has been assessed in detail in the ES and in the relevant section above. This section deals with the requirement for BNG and CC increase.

Policy CC1 (Climate Change) states that *“green infrastructure should be used to manage and enhance existing habitats.”*

Policy CC1 also requires major applications to increase canopy cover on site by a minimum of 10%, and in certain circumstance where this isn't possible, schemes may require compensatory provision.

Policy DM25 (Renewable Energy, Water, Waste and Recycling) states that *“the Local Planning Authority will support proposals for renewable energy projects including solar farms at appropriate locations in the Borough, which will need to be subject to a Habitats Regulations Assessment and if necessary, an Appropriate Assessment”*.

The amended scheme delivers a net biodiversity gain in valuable habitats without the need to look off-site, as shown below, thereby delivering benefits for a range of habitats and species:

- Net biodiversity units (habitat units) = + 73.37 units (40.55% net gain); and
- Net biodiversity units (linear units) = + 15.87 units (171.14% net gain)."

Note, the 'BNG' figure is the 40.55% above, whereas the 'linear' figure refers to hedgerow units created.

The BNG on site will be secured via condition suggested at the end of this report. It is therefore considered that the scheme provides an uplift in excess of the policy requirement. This holds significant weight in the planning balance.

The scheme will result in a significant canopy cover increase as no trees are proposed to be removed but significant hedge and tree planting is proposed (in the region of 740m of new hedging). Subject to the final detail it is expected this is well in excess of a 10% canopy cover uplift. This holds significant weight in the planning balance.

Highways/Traffic

Policy DM21 (Sustainable Access to Development) states that *“access to all development should be created in a manner which maintains the right and safe passage of all highway users”* and *“development will only be allowed where there is physical and environmental capacity to accommodate the type and amount of traffic generated in a safe manner.”* Policy DM25 (Renewable Energy, Water, Waste and Recycling) of the Emerging Local Plan states that *“Transport Assessments covering the construction,*

operation and decommissioning of any solar farm proposal will be required and should be produced at the pre-application stage so acceptability can be determined and mitigation measures identified.”

The assessment and consideration of the transport arrangements for the Proposed Development is set out in the Transport Statement that forms part of the planning application submission.

The Site would be accessed via an existing farm access (Birch Farms / Bockingham Hall Farm) and internal farm track leading into the Site as the main access for the solar farm, during both the construction and operational periods. The existing farm access is located on Birch Road, approximately 270m south from the Birch Road / Fountain Lane junction.

During Operation, access for maintenance to the District Network Operator ('DNO') would also be from the existing north east farm access (Birch Farms / Bockingham Hall Farm), following which the DNO would continue on an internal site access track south to the substation compound.

A further secondary access is shown on the plans as an alternative to the main Bockingham Hall Farm access, the Applicant confirms that this shall only be used during operation by infrequent maintenance vehicles, if required.

Surveys and preliminary layout drawings, including swept path analysis, has concluded that the proposed access would be suitable and safe for construction and operation.

Construction vehicle routing to / from the Site is proposed via the A12 at junction 25 then following School Road and Birch Road from the north.

The number of vehicle trips during the construction phase is expected to be relatively limited, with approximately 20 two-way vehicle movements over a working day with 3 from HGVs, over a 18-20-week period. As a result, it is not considered that there would be any build-up of trips at any particular point in the programme or construction traffic related congestion.

In consultation with Copford School, the following restricted working hours for large vehicle deliveries during construction have been proposed by the Applicant:

- AM (Mon-Fri): 10:00 – 12:00
- PM (Mon-Fri): 12:00 – 14:30 and 16:00 – 17:00
- Sat: 09:00 – 13:00

The above restricted hours are considered to ensure that no construction traffic is disruptive of school pickup and drop off times. Should work be required to be undertaken outside of these times, this would be agreed in writing with the Council.

During the operational phase, traffic movements are expected to amount no more than 2-3 cars / vans would visit the Site each week (generally less than 1 per day).

In the event that a new or replacement item of equipment was to be brought to the Site, it is estimated that 1 HGV trip may occur per annum. No abnormal loads are anticipated.

The Transport Statement includes a framework Construction Traffic Management Plan ('CTMP') and it is proposed that a detailed plan could be secured by planning condition. The CTMP would be sufficient to adequately manage the limited transport impacts associated with the Proposed Development and it is therefore considered that the Proposed Development complies with relevant planning policy. It is considered the proposal would not have an adverse impact on the local highway network and would provide safe access/egress in line with local and national planning policy.

The Highway Authority (Essex County Council) have assessed the scheme and have no objections to the scheme subject to conditions.

As any harm to highway safety and efficiency could be successfully mitigated this matter holds neutral weight in the planning balance.

Minerals and Waste

The Site, along with much of the area surrounding Colchester is located within a Minerals Safeguarding Area for sand and gravel, as defined by Policy S8 of the Essex Minerals Local Plan 2014.

It should be noted that the Proposed Development is temporary in nature and would preserve the land underneath for the period of 40 years before being returned to its original state. A suitably worded planning condition (to be agreed between the LPA and the Applicant) would be added to any forthcoming planning permission in order to ensure the site is restored following the cessation of the proposed development's operational period. It follows that any restriction on mineral extraction caused by the proposal would only be temporary as the site would ultimately become available again in years to come. Considering the high volume of sand and gravel safeguard sites within the surrounding area, it is considered that the public and environmental benefits of renewable energy generation at the site outweigh any temporary restriction on sand and gravel extraction. This matter therefore holds neutral weight in the planning balance.

Site Security

As set out in the 'proposal' section above, it is envisaged that deer fencing (mesh with wooden posts or similar) to a height of approximately 2 m would be installed along the outer edges of the Site in order to restrict access.

This would be sited inside the outermost hedges/trees/vegetation, ensuring that the fence is visually obscured, and access is available for hedge trimming and maintenance. Gates would be installed at the access point for maintenance access. These would be the same design, material and colour as the fencing.

The perimeter of the site would be protected by a system of CCTV cameras and/or infra-red cameras, which would provide full 24-hour surveillance around the entire perimeter. An intelligent sensor management system would manage the cameras. The cameras would be on poles of approximately 4 m high, spaced at approximately 50 m intervals along the security fence. There would be no lighting within the Site at night-time.

Essex Police have stated the following:

“Essex police are appreciative of the desire to preserve open site lines across the countryside wherever possible and on balance, accept the proposed ‘deer fencing’ boundary however, due to the potential increased crime risk, it is strongly recommended that consideration is given to installing welded mesh or high security palisade fencing that complies with LPS 1175: B3 (SR2) security rating. The introduction of a black or green powder coated weld-mesh fence has been shown to be less obtrusive, sustainable and robust. Essex Police considers that it is important that the boundary of this site is appropriate to protect the high-value assets and sensitive locations within it, as well as deterring unauthorised incursion whether for theft or anti-social behaviour”.

The applicant has stated in the Design and access statement “*The perimeter of the Site would be protected by a system of CCTV cameras and/or infra-red cameras, which would provide full 24-hour surveillance around the entire perimeter. An intelligent sensor management system would manage the cameras.*” Essex Police would strongly recommend that all CCTV has Perimeter Intrusion Detection System (PIDS), that provides a 24hour response with movement reactive / audio interactivity connected to an Alarm Receiving Centre (ARC) compliant with BS 8584:2015. Supported by judicious defensive planting, this combination may provide a compromise solution to mitigate crime”.

The applicants do not wish to pursue welded mesh or palisade fencing and are satisfied with their approach, bearing in mind it is their financial assets that will be at risk. The Council would not support the approach the Police suggest due to its visual impact.

It is therefore considered that the site security is acceptable. This matter holds neutral weight in the planning balance.

Fire Safety

A number of representations have noted the risk of fire and specifically the difficulties in putting battery fires out.

National policy is clear that the focus of planning decisions should be on whether a proposal is an acceptable use of land, rather than ensuring the security and safe operation of such installations. Such considerations are the subject of other building control and health and safety regimes and planning decision makers should assume that these regimes will operate effectively. On this basis, the safety of the BESS should not weigh against the proposal in the planning balance.

Notwithstanding this, a condition will be imposed on any permission requiring that prior to the commencement of construction of the BESS, Battery Safety Management Plan (BSMP) will be submitted for approval.

As part of preparation of the BSMP, the Applicant will be required to take into account the latest good practices for battery fire detection and prevention, along with an emergency response plan, as guidance continues to develop in the UK and around the world. The BESS will need to be designed in accordance with the UK and internationally recognised good practice guidance available at the time, and informed by expert assessment of the causes and consequences of past BESS fires and explosions.

There are several battery storage technologies available to system designers. The exact technology and system chemistry type for the BESS at Birch is still to be determined, but it is likely to be a lithium ion battery cell type. The final battery chemistry will be confirmed as part of the detailed design prior to the commencement of construction. It is possible that by the time of construction that other battery technology may be available. This will be reflected in the BSMP prepared in consultation with the Health and Safety Executive (HSE), Essex Fire and Rescue Service and the Environment Agency.

The overall approach is to follow the HSE's hierarchy of controls:

- Elimination
- Substitution
- Engineering Controls
- Administrative Controls
- Personal Protective Equipment

A summary of the anticipated site-wide fire safety provisions are as follows:

- The BESS will be designed, selected and installed in accordance with international guidance, good practice, and related standards.
- Risk assessments will be carried out for the entire system and elements across the project lifecycle.
- The specific location of the BESS will be chosen to minimise impacts on receptors.
- Separation distances between components will be selected to minimise the chance of fire spread based on Best Practice, currently represented by NFPA 855.

- Equipment will, where possible, be selected to be fire limiting, such as selection of transformer oils with low flammability and the fire resistance of the BESS enclosure.
- In the case of the BESS, it will be designed with multiple layers of protection to minimise the chances of a fire or thermal runaway.
- All equipment will be monitored, maintained and operated in accordance with manufacturer instructions.
- 24h monitoring of the BESS via a dedicated control room: the monitoring system will automatically alert Essex Fire and Rescue Service in the event of an incident.
- The BESS will include integrated fire detection with automated suppression systems to deal with electrical fires. Following Best Practice (e.g. NFPA 855 2023) and in line with a safety strategy, the build-up of explosive gases will be avoided by gas venting. Fires involving the batteries will be addressed in an Emergency Response Plan (ERP), again based on Best Practice.
- The Applicant will have a dedicated ERP in place, with consideration of credible plant failure scenarios. The ERP will include 24/7 availability of a Subject Matter Expert (SME).
- Communication with Essex Fire and Rescue Service will be undertaken through the design and construction phases. This anticipates Dame Marie Miller's Lithium-Ion Battery Storage (Fire Safety and Environmental Permits) Bill, due for its second reading in March 2023 and will ensure a robust ERP.

It is therefore considered that subject to the extra control that the suggested condition affords, the site is not at a significant risk of danger from fire. This matter therefore holds neutral weight in the planning balance.

17.0 Planning Balance and Conclusion

17.1 The NPPF and local policy seeks to approve sustainable development. The NPPF 2021 sets out three strands in its definition at paragraph 8:

8. Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open

spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

This scheme will have a modest **economic** benefit from the jobs created during construction and the fact the scheme will be run as a commercial operation once fully operational. A scheme of this scale comprises a significant investment in the City. This benefit attracts moderate weight.

This scheme will have a neutral **social** benefit attracting neutral weight.

This scheme will have a strong **environmental** benefit. Whilst it is accepted that the proposed development will have a degree of visibility from some viewpoints the impact has been demonstrated not to be significant once mitigated with planting, so this attracts only moderate adverse weight. As set out in the report it will cause no impact to designated Heritage Assets. The impact on archaeology is recorded as minor adverse but can also be mitigated. The delivery of low carbon energy however is a benefit that adds significant weight in favour of the scheme, alongside the significant additional planting and the biodiversity net gain both of which also add significant weight in favour of the scheme.

Proposals for planning permission must be determined in accordance with the Development Plan unless material planning considerations indicate otherwise. The scheme is on land that is not allocated in the adopted Local Plan for any particular purpose and is therefore in the defined countryside. In that respect the scheme is a departure from the Development Plan Policy SG1. To some degree this is inevitable as the Local Plan has not (as it did not need to) specifically allocate land for solar farm development, or other renewable energy generation for that matter.

The proposal is held to comply with Section 2 Local Plan Policy ENV1: Environment as set out above as the impact it has on the landscape and ecological interests can be satisfactory mitigated. It also complies with Policy CC1 (Climate Change) which states that a low carbon future for Colchester will be achieved through a number of measures including *“encouraging and supporting the provision of renewable and low carbon technologies”* and Policy DM25 (Renewable Energy, Water, Waste and Recycling) which states the Council will support proposals for renewable energy projects including solar farms.

The scheme is therefore held to comply with the Development Plan as a whole, including the Emerging Copford and Easthorpe Neighbourhood Plan.

Importantly, this proposal will actively and tangibly contribute to the Council's climate crisis by providing low carbon energy for approximately 12,850 homes and contribute to the Council's ambition to achieve net zero by 2030. It will also result in large scale additional hedge and tree planting as a further contribution towards ecological interests to ensure biodiversity net gain significantly in excess of policy requirements.

It is accepted that this scheme has generated significant local objection, along with a number of representations of support. These representations have been carefully considered and when assessed as an overall package, officers consider that the planning balance tips strongly in favour of an approval of this scheme, subject to the following conditions set out at the end of this report.

18.0 Recommendation to the Committee

18.1 The Officer recommendation to the Committee is for:

APPROVAL of planning permission subject to the following condition, along with Delegated authority to make amendments to planning conditions as necessary.

The Permission will also be subject to the following conditions:

1. Time Limit

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. Temporary Permission

Within one year of the site ceasing power production or 40 years of the date of this permission (whichever is the least), the site shall be cleared of all infrastructure, panels, cables, fencing and all associated paraphernalia in accordance with a scheme that will have been agreed in writing by the Local Planning Authority. The Scheme shall set the methodology that will be followed to decommission this site in its entirety and ensure the land be returned to beneficial agricultural use and the approved methodology shall be carried out in full prior to the expiration of the 40 years.

Reason: This scheme is a temporary one and this condition is needed to ensure the site is decommissioned in an appropriate manner.

3. Plans Condition

The development hereby permitted shall be carried out in accordance with the details shown on the submitted Drawing Numbers:

Birch Solar Farm – Development Zones Plan – LCS061-DZ-01 – Rev. 04

Birch Solar Farm – Site Location Plan – LCS061-SP-01 – Rev.07

Reason: For the avoidance of doubt and to ensure that the proposed development is carried out as approved.

4. Detailed Layout Plans

Prior to their installation, a set of detailed drawing showing the precise location of the solar plans and all other on site infrastructure, including the substation and associated infrastructure, shall be submitted to and agreed in writing by the Local Planning Authority. The scheme shall then be carried out in complete accordance with the approved drawings.

Reason: As the submitted application does not contain sufficient details on such matters.

5. No development in Southern Fields

No panels or associated infrastructure such as batteries or inverters or fencing shall be located in the 'southern fields' that were removed during the application period as per the covering letter setting out the amendments dated 25/01/2023 and Plan Ref. LCS061-DZ-01_rev04.

Reason: As this was the basis on which the amended proposed development was assessed.

6. Approval of Type of Panels and other Structures

Prior to their installation, drawings showing the precise type size and manufacture of the solar panels and inverter cabins shall be submitted to and agreed in writing by the Local Planning Authority. The scheme shall then be carried out in complete accordance with the approved drawings.

Reason: As the submitted application does not contain sufficient details on such matters.

7. Power Output

The scheme hereby permitted shall at no point generate more than 49.9MW peak power output.

Reason: This is the basis on which the application was made and is the basis on which it has been assessed.

8. Landscape Management Plan

Prior to the first operation of the development, a landscape management plan detailing long term design objectives and management responsibilities 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.

9. Landscaping

No works shall take place until full details of all landscape works have been submitted to and agreed, in writing, by the Local Planning Authority and the works shall be carried out prior to the occupation of any part of the development unless an alternative implementation programme is subsequently agreed, in writing, by the Local Planning Authority. The submitted landscape details shall be in full compliance with the Councils Landscape Guidance Note LIS/C and include:

- Finished levels or contours, where notable changes are proposed.
- Means of enclosure.
- Vehicle and pedestrian access and circulation areas.
- Hard surfacing materials.
- Minor artefacts and structures (e.g. furniture, play equipment, refuse or other storage units, signs, lighting etc.).
- Proposed and existing functional services above and below ground and their impact on existing landscape features, clearly identifying these potential impacts by including and plotting existing hedgerows within 20m of the proposed cable route and detail drawings for points of conflict along that route, i.e., points where construction of the route would involve any hedgerow removal. These arboricultural detail drawings will need to include the line of the cable, the working width required, existing hedgerow within the working area, with the length of hedge proposed for removal, these lengths need to be reduced to the minimum, and lengths for retention.

- Retained historic landscape features and any proposals for restoration. Where hedgerows are classified by the Council as 'Important' under the Hedgerows Regulations 1997 these will need to be proposed for retention and alternative non-invasive or minimal-invasive methods of cable routing agreed under or through these 'Important' hedgerows.
- Planting plans, replacement or reinforcement of the missing/gappy hedges that are accessible to the applicant with locally compatible native field hedgerows and hedgerow tree planting.
- Written specifications.
- Schedules of plants, noting species, plant sizes and proposed numbers/densities where appropriate.
- Implementation timetables and monitoring programs.

Reason: To ensure that there is a suitable landscape proposal to be implemented at the site for the enjoyment of future users and also to satisfactorily integrate the development within its surrounding context in the interest of visual amenity.

10. Tree Buffer and Tree Protection

Prior to the installation of any structures on site, drawings showing the precise location and depth of an at least 15 meter deep no-build buffer to afford protection to woodland shall be submitted to and agreed in writing by the Local Planning Authority. This scheme shall also show how all trees that are not shown to be removed on the plans shall be protected by fencing in line with the relevant British Standard during the construction phase. The scheme shall then be carried out in complete accordance with the approved drawings.

Reason: As the submitted application does not contain sufficient details on such matters.

11. Ecology – ACTION REQUIRED IN ACCORDANCE WITH ECOLOGICAL APPRAISAL RECOMMENDATIONS

“All mitigation and enhancement measures and/or works shall be carried out in accordance with the details contained in the Chapter 7 of the Environmental Statement (AECOM, November 2010) as already submitted with the planning application and agreed in principle with the local planning authority prior to determination. This may include the appointment of an appropriately competent person e.g. an ecological clerk of works (ECoW,) to provide on-site ecological expertise during construction. The appointed person shall undertake all activities, and works shall be carried out, in accordance with the approved details.”

Reason: To conserve and enhance Protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and

Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 as amended and s40 of the NERC Act 2006 (Priority habitats & species).

12. Ecology - PRIOR TO COMMENCEMENT: FARMLAND MITIGATION STRATEGY

“A Farmland Mitigation Strategy shall be submitted to and approved by the local planning authority to compensate the loss of any farmland bird territories. This shall include provision of the evidenced number of Skylark nest plots, to be secured by legal agreement or a condition of any consent, in nearby agricultural land, prior to commencement.

The content of the Mitigation Strategy shall include the following:

- a) Purpose and conservation objectives for proposed Skylark nest plots;
- b) detailed methodology for the Skylark nest plots following Agri-Environment Scheme option: ‘AB4 Skylark Plots’;
- c) locations of the Skylark plots by appropriate maps and/or plans;
- d) persons responsible for implementing the compensation measure. The Skylark Mitigation Strategy shall be implemented in accordance with the approved details and all features shall be retained for a minimum period of 10 years.”

Reason: To conserve and enhance Protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 as amended and s40 of the NERC Act 2006 (Priority habitats & species).

13. Ecology - PRIOR TO COMMENCEMENT: CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR BIODIVERSITY

“A construction environmental management plan (CEMP: Biodiversity) shall be submitted to and approved in writing by the local planning authority.

The CEMP (Biodiversity) shall include the following.

- a) Risk assessment of potentially damaging construction activities.
- b) Identification of “biodiversity protection zones”.
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
- d) The location and timing of sensitive works to avoid harm to biodiversity features.
- e) The times during construction when specialist ecologists need to be present on site to oversee works.
- f) Responsible persons and lines of communication.
- g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.

- h) Use of protective fences, exclusion barriers and warning signs.
- i) Containment, control and removal of any Invasive non-native species present on site

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority”

Reason: To conserve protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species).

14. Ecology - PRIOR TO BENEFICIAL USE: BIODIVERSITY ENHANCEMENT STRATEGY

“A Biodiversity Enhancement Strategy for Protected and Priority species shall be submitted to and approved in writing by the local planning authority.

The content of the Biodiversity Enhancement Strategy shall include the following:

- a) Purpose and conservation objectives for the proposed enhancement measures;
- b) detailed designs to achieve stated objectives;
- c) locations of proposed enhancement measures by appropriate maps and plans;
- d) timetable for implementation demonstrating that works are aligned with any proposed phasing of development;
- e) persons responsible for implementing the enhancement measures;
- f) details of initial aftercare and long-term maintenance (where relevant).

The works shall be implemented in accordance with the approved details and shall be retained in that manner thereafter.”

Reason: To enhance Protected and Priority Species/habitats and allow the LPA to discharge its duties under the s40 of the NERC Act 2006 (Priority habitats & species).

15. Ecology - PRIOR TO BENEFICIAL USE: WILDLIFE SENSITIVE LIGHTING DESIGN SCHEME

“A lighting design scheme for biodiversity shall be submitted to and approved in writing by the local planning authority. The scheme shall identify those features on site that are particularly sensitive for bats and that are likely to cause disturbance along important routes used for foraging; and show how and where external lighting will be installed (through the provision of appropriate lighting contour plans, Isolux drawings and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent bats using their territory.

All external lighting shall be installed in accordance with the specifications and locations set out in the scheme and maintained thereafter in accordance

with the scheme. Under no circumstances should any other external lighting be installed without prior consent from the local planning authority.”

Reason: To allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 as amended and s40 of the NERC Act 2006 (Priority habitats & species)

16. Environmental Protection

No works shall take place, including any demolition, until a Construction Method Statement has been submitted to and approved, in writing, by the Local Planning Authority. The approved Statement shall be adhered to throughout the construction period and shall provide details for:

the parking of vehicles of site operatives and visitors;

hours of deliveries and hours of work;

loading and unloading of plant and materials;

storage of plant and materials used in constructing the development;

the erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate;

wheel washing facilities;

measures to control the emission of dust and dirt during construction; and

a scheme for recycling/disposing of waste resulting from demolition and construction works.

Reason: In order to ensure that the construction takes place in a suitable manner and to ensure that amenities of existing residents are protected as far as reasonable.

17. Environmental Protection

No demolition or construction work shall take outside of the following times;

Weekdays: 08:00-17:00

Saturdays: 08:00-13:00

Sundays and Bank Holidays: No working.

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.

18. Environmental Protection

Any lighting of the development (including resultant sky glow, light trespass, source intensity and building luminance) shall fully comply with the figures and advice specified in the CBC External Artificial Lighting Planning Guidance Note for zone EZ2 RURAL, SMALL VILLAGE OR DARK URBAN AREAS.

Reason: In order to safeguard the amenity of the surrounding area by preventing the undesirable, disruptive and disturbing effects of light pollution.

19. Contaminated Land

In the event that unexpected land contamination is found at any time when carrying out works in relation to the development, it must be reported in writing immediately to the Local Planning Authority and all development shall cease immediately. Development shall not re-commence until such times as an investigation and risk assessment has been submitted to and approved in writing by the Local Planning Authority, and where remediation is necessary, a remediation scheme has been submitted to and approved in writing by the Local Planning Authority. Development shall only re-commence thereafter following completion of measures identified in the approved remediation scheme, and the submission to and approval in writing of a verification report. This must be conducted in accordance with all relevant, current, best practice guidance, including the Essex Contaminated Land Consortium's 'Land Affected by Contamination: Technical Guidance for Applicants and Developers'.

Reason: To ensure compliance with submitted report: *'Birch Solar Farm, Phase 1 Geo-Environmental Report, Ref A2731-1, Issue 1, dated June 2022'*.

20. Fire Safety

Prior to the commencement of construction of the Battery ESS, a Battery Safety Management Plan (BSMP) will be submitted to and approved in writing by the Local Planning Authority. The proposal shall not be built except in complete accordance with the approved BSMP.

Reason: In the interests of fire safety.

13. SuDS

No works shall take place unless in complete accordance with the submitted FRA Issue 2.1 by PFA consulting including:

Limit the discharge from the site to 88.7l/s

Provide attenuation storage for all store events up to and including the 1:100 year storm event.

In the event that the final layout requires changes to the findings of the FRA, a final drainage and storage plan that details exceedance and conveyance routes FFL and ground levels location and sizing of any drainage features, to be certified by an appropriately qualified engineer and the plan and certificate submitted to the LPA for approval in writing.

In the event that the final layout requires changes to the findings of the FRA, a written report summarising the final strategy and highlighting any minor changes to the approved strategy to be certified by an appropriately qualified engineer and the plan and certificate submitted to the LPA for approval in writing.

The mitigation measures shall be installed prior to the solar farm becoming operational and shall be maintained in perpetuity.

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 provide mitigation of any environmental harm which may be caused to the local water environment.

14. SuDS

No works shall take place until a scheme to minimise the risk of offsite flooding caused by surface water run-off and groundwater during construction works and prevent pollution has been submitted to, and approved in writing by, the local planning authority. The scheme shall subsequently be implemented as approved.

Reason: The National Planning Policy Framework states that local planning authorities should ensure development does not increase flood risk elsewhere and does not contribute to water pollution. Construction may lead to excess water being discharged from the site. If dewatering takes place to allow for construction to take place below groundwater level, this will cause additional water to be discharged. Furthermore the removal of topsoils during construction may limit the ability of the site to intercept rainfall and may lead to increased runoff rates. To mitigate increased flood risk to the surrounding area during construction there needs to be satisfactory storage of/disposal of surface water and groundwater which needs to be agreed before commencement of the development. Construction may also lead to

polluted water being allowed to leave the site. Methods for preventing or mitigating this should be proposed.

15. SuDS

Prior to occupation a maintenance plan detailing the maintenance arrangements including who is responsible for different elements of the surface water drainage system and the maintenance activities/frequencies, has been submitted to and agreed, in writing, by the Local Planning Authority. It should be noted that all crushed aggregate roads will have to be suitable maintained to avoid compaction throughout their lifetime. Should any part be maintainable by a maintenance company, details of long term funding arrangements should be provided.

Reason: To ensure appropriate maintenance arrangements are put in place to enable the surface water drainage system to function as intended to ensure mitigation against flood risk. Failure to provide the above required information prior to occupation may result in the installation of a system that is not properly maintained and may increase flood risk or pollution hazard from the site.

16. SuDS

The applicant or any successor in title must maintain yearly logs of maintenance which should be carried out in accordance with any approved Maintenance Plan. These must be available for inspection upon a request by the Local Planning Authority.

Reason: To ensure the SuDS are maintained for the lifetime of the development as outlined in any approved Maintenance Plan so that they continue to function as intended to ensure mitigation against flood risk.

17. Soil Management

The development hereby permitted shall not be commenced until such time as a soil management plan has been submitted to, and approved in writing by, the local planning authority. The scheme shall be implemented as approved.

Reason: Soil compaction can cause increased run-off from the site. Therefore a soil management plan should show how this will be mitigated against. This condition is also needed to demonstrate how the soil quality will be preserved and increased throughout the life of the project and will be returned to its existing or better soil classification once decommissioning has occurred.

18. Highways

No development shall take place, including any ground works, until a Construction Traffic Management Plan (CTMP) has been submitted as a scaled drawing to and approved in writing by the local planning authority. The approved Plans shall be adhered to throughout the construction and decommissioning period. The Plan shall provide for:

- (i) The routing of large or abnormal loads
- (ii) Timings for the delivery of large or abnormal loads to the site
- (iii) Details and location of temporary directional signage for large or abnormal load vehicles
- (iv) Details and location of temporary advance warning signs
- (v) The method(s) of convoy working and escort
- (vi) The action to be taken in the event of a vehicle breakdown or emergency
- (vii) The location of any layover or rest areas

Reason: To ensure the continued safe passage of all highway users, in the interests of highway safety.

19. Highways

No development shall take place, including any site clearance, ground works or works of demolition, until a Construction Management Plan (CMP) has been submitted as a scaled drawing to and approved in writing by the local planning authority. The approved plans shall be adhered to throughout the construction period. The plans shall provide for:

- (i) the parking of vehicles of site operatives and visitors
- (ii) loading and unloading of plant and materials
- (iii) storage of plant and materials used in constructing the development
- (iv) wheel and under body washing facilities

Reason: To ensure that on-street parking of these vehicles in the adjoining streets does not occur, in the interests of highway safety.

20. Highways

There shall be no proposed development (excluding the cable run) within a minimum clear margin of 10m of any PRoW (footpath or bridleway) within the site, excluding their Definitive Widths.

Reason: To ensure the continued safe passage of pedestrians and equestrians on the definitive right of way in accordance.

21. Highways

There shall be no new boundary treatments, tree screenings or hedgerows planted within a minimum clear margin of 10m of any PRow (footpath or bridleway) within the site, excluding their Definitive Widths.

Reason: To ensure the continued safe passage of pedestrians and equestrians on the definitive right of way.

22. Highways

No development shall take place including any ground works until “slow” and “pedestrians in the carriageway ahead” temporary signs have been erected and maintained prominently and in clear view on both sides of the carriageway of Birch Road 10m along and before the Public Footpath No 5 (Birch) joins the carriageway alerting construction vehicle drivers to potential pedestrians in the vicinity of the development sites Primary Vehicular Access (PVA) and additionally “construction works, plant and machinery ahead” temporary signs 15m along the footpath of where footpath 5 (Birch) joins the carriageway alerting pedestrians on the footpath of construction activities ahead which shall remain in situ until all vehicles and plant and machinery has vacated the development site and all construction and fitting out phases are complete.

Reason: To ensure the continued safe passage of pedestrians on the definitive right of way.

23. Highways

No development shall take place, including any ground works, until temporary construction site warning signs have been erected back to back prominently and in clear view on both sides of the footpath No 24 (Copford) at 50m intervals or alongside and facing the footpath at and from connection to the carriageway of Easthorpe Road to the southern most end of Seller Wood which shall remain in situ until all vehicles and plant and machinery has vacated the development site and all construction and fitting out phases are complete.

Reason: To ensure the continued safe passage of pedestrians on the definitive right of way.

24. Highways

There shall be no vehicular access for any construction or associated vehicles whatsoever from any PRow within, abutting or adjacent the site.

Reason: To ensure the continued safe passage of pedestrians and equestrians on the definitive right of way.

25. Glint and Glare Mitigation

No solar panels shall be erected on site until such time as a scheme for the mitigation of both road and ground based glint and glare has been submitted to and approved in writing by the Local Planning Authority including the timescale for its installation and maintenance. The scheme shall be carried out in complete accordance with this approved mitigation strategy and shall be managed and retained in perpetuity.

Reason: This condition is required to ensure the mitigation suggested by the submitted glint and glare report is approved and installed in the interests of highway safety and residential amenity.

26. Archaeological Mitigation

Prior to installation of any solar panels or other infrastructure, drawings showing the area of no-dig to prevent harm to below ground heritage assets and the panel support/footing system that will be used in this area shall be submitted to and agreed in writing by the Local Planning Authority. The scheme shall not be carried out except in complete accordance with the approved drawings. Should any changes to the Archaeological Mitigation be proposed, these shall only be carried out in agreement with the Local Planning Authority, should any of the changes warrant further investigation of the site, this shall require the submission and agreement of a further Written Scheme of Investigation.

Reason: This approach has been indicated in the amended ES and agreed with the Council in-house Archaeologist in principle. This condition is therefore required to ensure the Council can approve the specifics of this approach.

19.0 Informatives

19.1 The following informatives are also recommended:

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. 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 and be investigated by our enforcement team. Please pay particular attention to these requirements. To discharge the conditions and lawfully comply with your conditions you should make an application online via www.colchester.gov.uk/planning or by using the application form entitled 'Application for approval of details reserved by a condition following full permission or listed building consent' (currently form 12 on the planning application forms section of our website). A fee is also payable, with the relevant fees set out on our website.

3. ZTB - Informative on Any Application With a Site Notice

PLEASE NOTE that a site notice was erected in a publicly visible location at the site. Colchester City Council would appreciate your co-operation in taking the site notice down and disposing of it properly, in the interests of the environment.