Development Control Committee A – 8 July 2020

ITEM NO. 2

WARD: Avonmouth & Lawrence Weston

SITE ADDRESS: Land On The South East Side Of Severn Road Avonmouth Bristol

APPLICATION NO: 20/01270/F Full Planning

DETERMINATION DEADLINE: 7 July 2020

Erection of a single wind turbine, with a tip height of up to 150m, and associated infrastructure including turbine foundations and hardstanding, energy metering substation, site access and internal access track, temporary laydown area and crane hardstanding, energy learning zone, and other associated works including landscaping and ditch diversion.

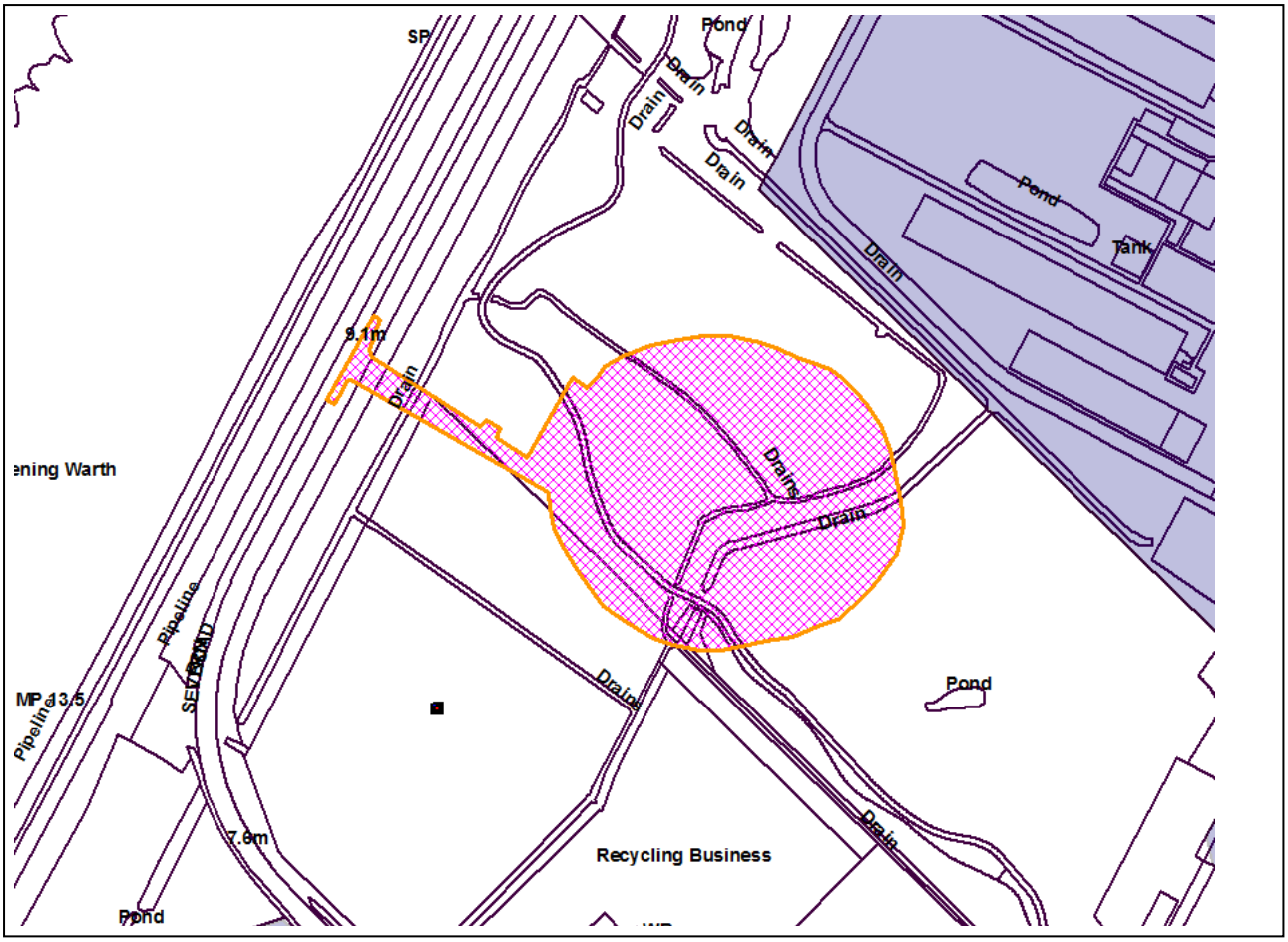
RECOMMENDATION: Refer to the Secretary of State

AGENT: Pegasus Planning Group
Pegasus House
Querns Business Centre
Whitworth Road
Cirencester
GL7 1RT

APPLICANT: Ambition Community Energy C.I.C
c/o Agent

The following plan is for illustrative purposes only, and cannot be guaranteed to be up to date.

LOCATION PLAN:



Development Control Committee A Delegated
Land On The South East Side Of Severn Road Avonmouth Bristol

SUMMARY

The application site concerns a parcel of land situated to the southeast side of Severn Road (A403), and just south of Seabank Power Station. The application has been brought forward by Ambition Community Energy C.I.C, which is a subsidiary of Ambition Lawrence Weston (ALW), a charitable organisation with residents leading its role and direction. Ambition Community Energy are proposing to install a single 150m tall (to blade tip) wind turbine which would generate an energy output of up to 4.2 MW, to be connected to the National Grid. As identified in "The Lawrence Weston Community Plan "Ambition Lawrence Weston aims to develop, inter alia, new community owned energy projects, including the proposed wind turbine, in order to generate significant financial returns for the community and lower energy bills. The applicants state that the proposed turbine will also assist in realising the aim of creating an Energy Learning Zone.

Due to the existence of a Written Ministerial Statement (June 2015), the Local Planning Authority can only grant permission for wind turbines where they are on sites which have been specifically designated for wind farm development, and where they have the support of the local community. In the case of Bristol City Council, there are currently no such allocations, therefore any decision to grant approval for this development could be at risk of legal challenge. The land designation, on which the application falls within, forms part of the Avonmouth & Kingsweston Levels which states that these areas will primarily remain underdeveloped. However forms of development suitable in open areas may be appropriate where they are consistent with other planning policies.

There is one objection to the proposal from Seabank Power Station to the north of the application site on grounds of safety and the unmitigated risks to the power station. This is in the event of catastrophic failure and the collapse of the wind turbine onto part of the power station's infrastructure. Seabank state that in such a scenario this would significantly affect output and they would be unable to provide sufficient energy generation to make up for the loss caused by the damage, with financial costs in terms of lost revenue and penalties.

Given the above issues, the application is being reported to committee in order to give the proposals the required open scrutiny and careful public consideration. It is also noted that the application has generated a significant level of local public interest in support of the plans. Despite the absence of a formal designation, it is considered that there is no reason to withhold planning permission. It is likely that Avonmouth could be considered an appropriate area for wind turbine development, in view of the fact that there are already a number of wind turbines in the locality, as well as the relative lack of sensitive receptors. The applicant's Landscape and Visual Impact Assessment also sets out that there would be no severe impact on key viewpoints including Kings Weston House.

BACKGROUND & SITE DESCRIPTION

The application site comprises of an undeveloped parcel of grass and scrubland located on the south east side of Severn Road (A403) and which is approximately 1.2 hectares in size. Seabank Power Station lies to the north and east of the application site, PR Export; an industrial recycling yard is situated to the south, with Severn Road, railway line and the Severn Estuary to the west. The site is located approximately 3 miles from Junction 18 of the M5 and 9 miles from the M4. The surrounding area is industrial in character comprised of industrial and distribution premises interspersed with green spaces. Within the immediate vicinity of the application site there are a number of energy installations including the adjacent Seabank Power Station and a Viridor energy recycling facility in the process of being constructed to the east. On land to the south of Severn Road and west of Chittening Road there are two wind turbines and a solar farm in operation.

RELEVANT PLANNING HISTORY

Historically, the site has remained in principally agricultural use, with evidence of temporary structures such as a barrage balloon mooring (World War II) in the westernmost corner, an access road to silos (circa 1965) in the south-west of the site - no evidence of either structure remains. Consequentially there are no known consented planning uses which have been identified at this site. However it was previously subject to off-site planting to mitigate against the visual impact of the development of Seabank Power Station. More recent native species tree planting in the northern field appears to be have been undertaken by the Bristol City Council (Tree Pips, Environmental Improvement team) in partnership with the Woodland Trust.

ENVIRONMENTAL IMPACT ASSESSMENT

Planning for the proposed community wind turbine falls under Schedule 2 of Environmental Impact Assessment (EIA) legislation, as an 'Installation for the harnessing of wind power for energy production (wind farms).' As such the LPA is required to screen the proposal to determine whether significant effects on the environment are likely and hence whether an EIA is required. It was therefore assumed by the applicant that EIA will be required to inform the planning application for the proposed development. The applicant formally submitted a request for an EIA Scoping Opinion to the LPA under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment (England and Wales) Regulations 2017) to establish the scope of the Environmental Impact Assessment that would accompany the planning application (19/03774/SCO).

Subsequently in addition to the technical assessments in support of the planning application, an Environmental Statement (ES) has been submitted, which includes the following chapters:

- Introduction, the need for the EIA and the background behind it.
- Need, Site Selection and Design Evolution
- Project Description
- Ornithology Assessment
- Ecological Impact Assessment
- Noise Assessment
- Geo-Environmental Assessment
- Balance of Effects
- Environmental Action Plan

The conclusions under the "technical summary" considered that no significant (i.e. greater than minor) residual impacts have been identified (following application of identified mitigation measures). There is a negative residual impact relating to the local ecology. However, due to the proposed enhancements, over time it would have a residual minor adverse impact and which would be outweighed by the wider environmental benefits that will be generated by delivery of the application scheme.

EQUALITIES IMPACT ASSESSMENT

The public sector equalities duty is a material planning consideration as the duty is engaged through the public body decision making process. "S149 of the Equalities Act 2010 provides that a public authority must in the exercise of its functions have due regard to:

(a) eliminate discrimination, harassment, victimisation and any other conduct prohibited under the Act

(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
(c) foster good relationships between persons who share a relevant characteristic and those who do not share it.

During the determination of this application due regard has been given to the impact of the scheme upon people who share the protected characteristics of age, disability, gender reassignment , marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. In the assessment of this application, officers are satisfied that there would not be any adverse impacts given the location and detailed design of the proposed development.

APPLICATION

Planning consent is sought for the erection of a single wind turbine comprising of a 3-bladed rotor design with a maximum hub height of 92m and a maximum blade tip height of 150m. The rotor diameter will be 115.7m. According to the applicants the proposed wind turbine is expected to have a generating capacity of approximately 4.2 MW, enough low carbon electricity to power 3,850 homes and CO2 savings of 2,162 tonnes every year over the lifetime of the development. The proposed wind turbine once in operation, would export electricity to the Western Power Distribution (WPD) network via a new cable connected from the existing WPD 11kV cable running along Severn Road. The associated infrastructure would include foundations and hardstanding, energy metering substation, site access and internal access track, temporary laydown area and crane hardstanding, and other associated works including landscaping and ditch diversion. There would also be an energy learning zone for visitors, located just west of the turbine (please see plans for details).

The applicant states that the wind turbine will be decommissioned 25 years after the date of the first exportation of electricity from the site. The wind turbine will be removed and the land restored to its pre-development condition. The applicant adds that most of the components of the wind turbine are recyclable, including the steel tower sections and the various metals in the generator.

The application includes the following documentation to enable assessment of the application:

- Environmental Statement - Volume 1
- Environmental Statement - Volume 2
- Environmental Statement - Volume 3
- Environmental Statement Non-Technical Summary
- Arboricultural Impact Assessment Report
- Aviation Risk Assessment
- Design and Access Statement
- Flood Risk Assessment (FRA)
- Heritage Desk-Based Assessment
- Landscape and Visual Impact Assessment
- Shadow Flicker Assessment
- Statement of Pre-Application Community Engagement
- Technical Report & Construction Traffic Management Plan
- Telecommunications Link Study; and
- Television Impact Assessment

PRE APPLICATION COMMUNITY INVOLVEMENT

The size and nature of the proposed development means that the application is required to be accompanied by a Statement of Community Involvement. Guidance and good practice examples

exist to inform the choice of appropriate methods in order to help ensure effective, efficient, transparent and accountable public consultation and involvement. Those responsible for undertaking community involvement are expected to reflect such good practice to ensure inclusive, fair and effective initiatives. Failure to do so may limit the validity and relative credibility of the involvement undertaken.

The application includes a statement of pre-application community engagement. This was also undertaken in the context of the Written Ministerial Statement (see Key issue A). The content of the submitted statement is summarised as follows.

i) Process - which would be NPN's CI summary

The community consultation process was undertaken in two phases with each phase involving public consultation using displays at events and community surveys/ questionnaires as the primary engagement tool to inform our proposal and plans. Phase 1 sought to demonstrate the support for a community led wind turbine project to be cited within the Avonmouth and Lawrence Weston area. This included an assessment of suitable sites. The first event took place at Avonmouth Community Centre on 11th September 2016 - "Avonmouth Make Sunday Special". Those surveyed at the event showed overwhelming support for a community led onshore wind turbine project, with 96.2% of 53 residents responding in favour. The subsequent Lawrence Weston Community Consultation Survey which was carried out between April and June 2017. Further consultation was undertaken at neighbourhood forums in Avonmouth and Lawrence Weston which included participation from two of the three local ward councillors, these where Councillor Jo Sergeant and Councillor Donald Alexander.

Phase 2 identified the suited site location and undertaking pre-planning assessments engaging statutory and non-statutory stakeholders. There were a number of public engagement events held throughout 2019. In light of the Written Ministerial Statement (2015) Ambition Lawrence Weston sought legal advice to how best to proceed with the process. The details of all the pubic consultation are appended to the pre-application community engagement.

ii) Fundamental Outcomes - Community Involvement Statement

The public consultation showed a clear indication from local residents and businesses that they support this application for a community led onshore wind renewable energy scheme. the applicant states that in taking account of specific comments they intend to explore developing the scheme to support the development of new skills and jobs though an energy learning scheme as identified in the Ambition Lawrence Weston Community Plan. Concerns over impact on ecology were raised, however the applicant states that they were reassured that full ecological assessments were being undertaken. Their views considered during the last 3-1/2 years of consultation at community events have shaped the wind turbine proposals currently under consideration. The applicant adds that they will continue to update residents and businesses and provide opportunities to openly review and discuss the proposals with them and their consultant team.

RESPONSE TO PUBLICITY AND CONSULTATION

The application was advertised by letters sent to neighbouring properties. Public notification was also by way of a site and press notice. There have been a total of 65 letters received in support of the proposals.

One letter of objection has been received from neighbouring Seabank Power Station for reasons summarised as follows. Whilst not opposed to the principle, Seabank would be supportive of the development if it could be demonstrated that the design has taken into account (i.e. by reducing its

height) the impact on Seabank's asset in the event of catastrophic failure of the proposed development; and/or sufficient contingencies are in place to ensure that any such failure would mitigate the impact - financially or otherwise.

From Seabank's perspective, it is not the case that a wind turbine is not suitable in this location, however it is that it must be shorter than proposed or located further away from the power station. Consequentially Seabank respectfully request that planning permission should only be granted for a turbine of reduced height which would result in a smaller topple and buffer zone obviating the risk to the Power Station. Failing that, Seabank request that the application is refused in order to protect the Power Station (please see key issue B for full details of the objection and the planning context).

Ward Members

Councillor Jo Sergeant (Avonmouth & Lawrence Weston) fully supports the application for the erection of a wind turbine to benefit the residents of Lawrence Weston. This is an excellent way to serve a local community, as well as being a substantial contribution towards the city's aspiration of carbon neutrality.

Councillor Matt Melias (Avonmouth & Lawrence Weston) fully supports the application, not only is it a great community initiative that will bring financial gain to the community, but it is also a good step towards the council's green targets.

OTHER COMMENTS

Arboricultural Team has commented as follows:-

Following clarification I am satisfied that no significant trees will be impacted by the proposals and I am happy with the proposed landscaping plan. Approve subject to condition for the development to be implemented fully in accordance with the landscape plan.

Landscape has commented as follows:-

The extent to which the existing primarily undeveloped status of the levels is affected by the proposal is to a significant extent a visual one - hence the requirement for verified views. The analysis of landscape effects indicates that the proposals do not in a significant way change the primarily underdeveloped status of the Avonmouth and Kingsweston Levels and neither are the other sensitivities - impact on users of National Cycle Network Route 41 and viewers of the Kingsweston House panorama – would be unduly affected. Therefore whilst it is considered that the harm would be minor at most and therefore outweigh by the wider public benefit (with reference to paragraph 196 of the NPPF 2019), it is advised that a discussion with the Friends of Kingsweston House regarding proportional compensatory mitigation for minor harm caused to the historic view would be appropriate.

Finally, the detailed proposals relating to landscape treatment and mitigation are acceptable subject to confirmation that tree losses to facilitate the scheme are replaced in accordance with the Bristol Tree Replacement Standard.

Health and Safety Executive - has commented as follows:-

Do Not Advise Against, consequently, HSE does not advise, on safety grounds, against the granting of planning permission in this case.

Flood Risk Manager has commented as follows:-

We raise no objections to the proposals as the Lower Severn Internal Drainage Board have been consulted by the applicant, with the drainage strategy being approved by the IDB.

The site Flood Risk Assessment only has a high level flood evacuation plan. However, the proposed development comprises a low-occupancy site. Therefore, if the LPA is minded to consent the application, we would recommend that planning consent is subject to a condition for the submission of a flood evacuation plan.

Avon Fire & Rescue Service has commented as follows:-

Do not wish to comment.

Sustainable Cities Team has commented as follows:-

The Written Ministerial Statement 2015 and the amendments to the NPPF essentially state that applications for 1 or more wind turbines should only be granted where the site is in an area identified as suitable in a local plan, the relevant planning impacts are addressed, and which has the backing of the community.

Policy BCS4 of the Core Strategy clearly identifies Avonmouth as a location with opportunities suitable for the development of energy from further large scale wind turbines - subject to the protection of the area's environmental assets and acknowledging development constraints. This designation is continued in the City Council's Draft Local Plan (currently at consultation stage) review Policy E5 (Avonmouth Industrial Area and Bristol Port), which can only be given minimal weight but clearly shows potential direction of travel.

Core Strategy Policy BCS14 states that proposals for the 'utilisation, distribution and development of renewable and low carbon sources of energy, including large-scale freestanding installations, will be encouraged. In assessing such proposals the environmental and economic benefits of the proposed development will be afforded significant weight, alongside considerations of public health and safety and impacts on biodiversity, landscape character, the historic environment and the residential amenity of the surrounding area'.

As such, in light of the policy context, the Sustainability team would be supportive of the proposal for a further wind turbine in principle in this location, as contribution to local renewable energy supply.

Transport Development Management has commented as follows:-

A Technical Report & Construction Traffic Management Plan has been submitted with the application which details the transport impacts of the construction and maintenance of the proposal.

Once in operation the site will generate only very infrequent visits. The turbine is set well back from Severn Road. The area has a large number of wind turbines which are not considered to cause any particular concern in terms of driver distraction, particularly given that the site is visible a long way back on the approaches and so will not surprise drivers. For this reason we have no objection to the principle of this development.

Access to the site will be via a newly formed access from Severn Road to the west of the site. Some additional widening of the access will be necessary for a temporary period during the construction phase, whereupon it will revert to its final layout on completion. Following the

submission of further information on how the access arrangements would be managed, maintained and secured, we have no objection to the proposed access providing it is secured via an appropriate highway condition.

It should be noted that the access crosses a gas pipeline and a rhine and so appropriate constructions will be required. It is assumed that the public will be able to view information at the Energy Learning Zone. A turning head will be provided to ensure vehicles can enter and leave the site in forward gear.

National Cycle Network (NCN) Route 41 runs through the site. During construction it is expected that a small element of diversion of the route will be required. However it is understood that the NCN will continue to run along its existing route following completion of the development although this should be confirmed in particular where NCN crosses the access track. Thought should also be given to whether cyclists and pedestrians will be able to use the access road to reach Severn Road in future.

Details of interim and final proposals for NCN should be agreed by condition prior to commencement.

The proposal would have no impact on the nearby private right of way (PROW).

Network Management are satisfied with the proposed methodology for construction. Agreement of a Construction Management Plan should be secured by condition.

Bristol Waste Company has commented as follows:-

This is a non-residential development therefore Bristol Waste does not have any comments on this application.

Contaminated Land Environmental Protection has commented as follows:-

Overall the reports submitted are acceptable. There were two things that were not included within the report that should be considered and would happily accept this in an email to avoid the need for a full condition.

- Gas generation from the peat deposits that were identified in the site soils and is a common issue in this area was overlooked
- This can be further impacted by the tidal groundwater fluctuation which was also not discussed. The deeper groundwater is known to be tidally influenced and in continuity with the estuary.

We do accept that there won't be any occupied structures as part of the scheme but we just need it to be acknowledged that potential risks have been considered.

Given the history of the local area we do recommend approval subject of a condition for the reporting of unexpected contamination.

Environment Agency (Sustainable Places) has commented as follows:-

We have no objections to the development, subject to the inclusion of planning conditions in any grant of planning consent for:

- The development to accord with the measures in the submitted FRA
- The reporting of any contamination not previously identified

Archaeology Team has commented as follows:-

As the submitted heritage statement for this application has demonstrated, this proposed development site lies in an area of archaeological interest relating to previous land use of this important wetland environment.

The proposed new wind turbine will have a limited archaeological impact, however, as the statement suggests archaeological monitoring of geotechnical works or associated ground works will be able mitigate these impacts through recording any disturbed archaeological deposits.

Consequently, archaeological conditions to secure the appointment of an archaeological contractor and completion of an archaeological watching brief should be attached to any consent.

Civil Aviation Authority

No comments received

Crime Reduction Unit has commented as follows:-

Having reviewed the available documentation, I do not have any specific concerns or recommendations around this application other than to suggest that, during the construction phase (should this application be granted consent), temporary surveillance cameras are used to mitigate the opportunity for theft at this stage, in what is, a relatively isolated location.

Historic England has commented as follows:-

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

Natural England has commented as follows:-

The application site is in close proximity to the Severn Estuary Special Protection Area (SPA) and Special Area of Conservation (SAC), which are European sites. The Severn Estuary is also listed as a Ramsar site and also notified at a national level as a Site of Special Scientific Interest (SSSI).

There is no objection to the proposals. Natural England notes that the Habitats Regulations Assessment (HRA) has not been produced by your authority, but by the applicant. We provide the following advice on the assumption that your authority intends to adopt this HRA to fulfil your duty as competent authority.

Natural England advises that we concur with the HRA conclusions that the proposed turbine will not result in any adverse effects on integrity on the Severn Estuary or on any other internationally designated sites, providing all mitigation measures are appropriately secured.

In principle, we would expect the ecological enhancement measures to result in long term ecological gains that will strengthen the contribution of the wider site to the local wildlife network.

Natural England recommends that a re-evaluation is made of the local feeding, roosting and breeding waterbird population before decommissioning of the turbine occurs.

Highways England has commented as follows:-

Raise no objection to the proposal.

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Lawrence Weston Neighbourhood Planning Forum has commented as follows:-

The Lawrence Weston Planning Forum fully support this planning application. This planning application has come about by many residents supporting this project for many years. This application fits well and meets the policies in the Lawrence Weston Neighbourhood Development Plan, and is listed as an objective for local residents in their own Community Development Plan.

This also sits in line with recent Local Authority statements regarding the climate emergency, and the post covid 19 economic growth strategy. We urge the planning officer to approve this well supported by residents application.

Nature Conservation Officer has commented as follows:-

The Ornithological Assessment is well written and the survey methods and data analysis generally follow UK standard guidance in relation to birds and wind turbines, although the latter guidance note on bird survey methods to inform impact assessment of onshore wind farms was updated in 2017. Further Information is therefore required on cumulative effects and this information should not be conditioned. Mitigation proposed for ornithological impacts should all be secured through planning conditions.

With regard to the ecological surveys, no specific surveys for invasive non-native species (INNS) were conducted so a precautionary approach pre-construction should be taken. Further information is required which can be secured through condition.

Surveys for fish were not considered within the wet rhines, which is acceptable for the site, however there is a potential for European eel and juvenile lamprey species (ammocoetes) to be present within the rhine network. Further information is therefore required on the protection of fish during works which can be secured through condition.

Further information is required on pre-construction surveys for otter and water vole to ensure legal compliance and which can be secured by condition.

Further information is required on protected species (bat roosts). Further surveys for legally protected and priority species and habitats are a material planning consideration. Further information is required on bat collision mitigation and changes to landscape plan. Further information is required on the impacts on Bristol Wildlife Network with potential changes to the landscape plan.

The cumulative effects for bats in relation to the type of proposed development (turbine) have not been adequately considered. Therefore further information is required prior to determination.

Further information is required in regards to the shadow HRA in relation to site fish species, bats at screening, and in-combination affects in regards to SPA and Ramsar site bird species. This should be provided prior to determination.

On submission of the outstanding information, any approval of the application should be subject to ecological planning conditions and advices.

Network Rail has commented as follows:-

Network Rail has no objection in principle to the above proposal. But due to the proposal being next to Network Rail land and our infrastructure and to ensure that no part of the development adversely impacts the safety, operation and integrity of the operational railway, we have included

asset protection comments which the applicant is strongly recommended to action should the proposal be granted planning permission.

The local authority should include these requirements as planning conditions if these matters have not been addressed in the supporting documentation submitted with this application.

Whilst there are no objections in principle to this proposal, the applicant will need to engage with Network Rail Asset Protection, to determine if a Basic Asset Protection Agreement is required to manage the potential interfaces these works have on Network Rail assets and operations.

As with any structure to be erected adjacent to our property, Network Rail is keen to ensure that promoters of such schemes consider the constructability, structural integrity and maintainability of the proposed turbine installations when planning the scheme. A wind turbine mast is considered to be a fixed structure which, however, the wind turbine blades are clearly not fixed structures and their placement and operation needs to be considered as a specific issue.

Pollution Control has commented as follows:-

No objection. the Environmental Statement (ES) predicts that due to the nearest residential properties being 2 km away noise from construction, operation and decommissioning should not be an issue. However, I would ask that a condition on noise levels and an advice with regard to construction and decommissioning be placed on any approval.

National Grid has commented as follows:-

The Project Team have reviewed the proposed development, and are content that it would not affect any of the DCO work planned to be undertaken by National Grid.

The Port Authority has commented as follows:-

No comments received.

Lower Severn Internal Drainage Board

No comments received.

Ancient Monuments Society

No comments received.

South Gloucestershire Council has commented as follows:-

No comments received.

RELEVANT POLICIES

National Planning Policy Framework – February 2019
Bristol Local Plan comprising Core Strategy (Adopted June 2011), Site Allocations and Development Management Policies (Adopted July 2014) and (as appropriate) the Bristol Central Area Plan (Adopted March 2015) and (as appropriate) the Old Market Quarter Neighbourhood Development Plan 2016 and Lawrence Weston Neighbourhood Development Plan 2017 and the Hengrove and Whitchurch Park Neighbourhood Development Plan 2019.

In determining this application, the Local Planning Authority has had regard to all relevant policies of the Bristol Local Plan and relevant guidance.

KEY ISSUES

(A) IS THE PRINCIPLE OF DEVELOPMENT ACCEPTABLE IN THIS LOCATION?

Notwithstanding the policy context of the development as set out in key issue B onwards, the suitability of the site must be assessed against the potential use. National policies such as the National Planning Policy Framework (NPPF) and the associated National Planning Policy Guidance (NPPG), encourages the promotion of renewable energy technology. The national policy in relation to wind energy development is written in such a manner as to guide the formulation of plan policies and site allocations, rather than for assessing individual applications for such developments that have been submitted without the benefit of such policy designations.

Paragraph 154 of the NPPF (2019) states that when determining planning applications for renewable and low carbon development, local planning authorities 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.

The NPPF at footnote 49 states – “Except for applications for the repowering of existing wind turbines, a proposed wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan; and, following consultation, it can be demonstrated that the planning impacts identified by the affected local community have been fully addressed and the proposal has their backing.”

The NPPG calls for a criteria-based approach when creating local plan policies for renewable energy. Local topography and the need to protect the setting of heritage assets, as well as local amenity are seen as key considerations. The NPPG acknowledges that community initiatives are likely to play an increasingly important role and should be encouraged as a way of providing positive local benefit from renewable energy development. Further information for communities interested in developing their own initiatives is provided by the Department of Energy and Climate Change. Local planning authorities may wish to establish policies which give positive weight to renewable and low carbon energy initiatives which have clear evidence of local community involvement and leadership (Paragraph: 004 Reference ID: 5-004-20140306).

Overarching National Policy Statement for Energy (2011) (EN-1): Sets out the Government's policy for delivery of major energy infrastructure, decisions which are largely determined by the Infrastructure Planning Commission. This is within the context of its aim to cut greenhouse gas emissions by at least 80% by 2050. Paragraph 3.4.1 of EN-1 sets out the UK's commitment to sourcing 15% of its total energy (across the sectors of transport, electricity and heat) from renewable sources by the end of 2020 and new projects need to continue to come forward urgently to ensure that this target is met. It also includes a list of assessment principles common to all types of infrastructure (including health, wildlife, safety, aviation, historic environment, flood risk, noise etc.). Whilst this policy document is primarily used by the Planning Inspectorate to assess

major infrastructure projects of over 50MW, the information nonetheless provides useful guidance for smaller scale development.

The National Policy Statement (NPS) for renewable energy Infrastructure (EN-3) must be read alongside EN-1 as it provides specific policies in regard to electricity generation from renewable sources of energy including Onshore Wind, and is written in a manner which is aimed to guide LPAs in plan-making. The document also sets out that information and supporting documents for planning applications must be consistent with the instructions and guidance in the NPS and EN-1.

Written ministerial statement (HCWS42)

The Government issued a Written Ministerial Statement (WMS) on 18 June 2015, which sets out revised considerations to be applied to planning decisions for wind energy development. It says that in determining planning applications for wind energy development, LPAs should only grant planning permission if:

- The development site is in an area identified as suitable for wind energy development in a Local or Neighbourhood Plan; and

- Following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.

The WMS contains advice on what an LPA should do if a valid application for a wind energy development has already been submitted to an LPA, and the development plan does not identify suitable sites. In this situation, it states that the LPA can only find the proposal acceptable if, following consultation, they are satisfied it has addressed the planning impacts identified by affected communities and therefore has their backing. The WMS is given significant weight in this assessment, in the policy context below.

The subsequent amendment to the NPPF follows the Written Ministerial Statement of 18 June 2015 which altered the Government's policy position with regard to wind turbines.

Bristol local plan policy

Whilst Bristol does not have any specific site allocations for wind energy development, either through the Local Plan or through Neighbourhood Plans, the Core Strategy includes reference to the Avonmouth and Bristol Port area being suitable for wind energy. Policy BCS4 (Avonmouth and Bristol Port) states that; "Avonmouth is identified by the Bristol Citywide Sustainable Energy Study as having significant potential for renewable and low carbon energy installations - for example, wind, biomass and waste to energy. Whilst this strategy encourages these types of environmental technologies, proposals will be expected to demonstrate how they protect the area's environmental assets and, specifically, comply with the Habitats Regulations to avoid significant adverse effect on the Severn Estuary."

Policy DM18 of the Site Allocations and Development Management Policies states that the levels will remain primarily undeveloped. However it adds that development proposals consistent with the area's undeveloped status may be acceptable where they would be in accordance with all other relevant development plan policies. With regard to the NPPF, policy DM18 and the resulting land designation has determined that this parcel of land is not of the highest quality or economic benefit, therefore its loss to development may be acceptable to the aforementioned criterion.

Lawrence Weston Neighbourhood Development Plan (March 2017)

The Neighbourhood Plan addresses land use and planning related issues of the Lawrence Weston Community Plan. In terms of renewable and low carbon energy and in particular wind turbines, Section 5 (in setting out the challenges and opportunities derived from the evidence base) identifies 'Opportunities for renewable energy, particularly close-community CCHP / DH, and support for renewables in the immediately adjacent neighbourhoods' (Paragraph 5.3).

The applicant's justification in response to the policies

The Planning Statement explains that the nature of the proposal is such that it is required to be sited in an open area and that the merits of the proposed development are consistent with other planning policies in the Development Plan to ensure compliance with Policy DM18. Paragraphs 2.38 to 2.49 of the Environmental Statement (volume 1) set out the rationale behind why Ambition Community Energy considered this to be the most appropriate site and why a number of alternative sites and layouts were discounted. To summarise, the applicant explained that the selection of renewable energy technology was driven by the aim to maximise delivery of local community financial benefits and hence economic factors such as the cost of energy prevailed. It was also decided that only a utility scale energy project could justify the likely effort to develop and deliver the project. The cost of energy required subsidies to be economical and these subsidies were declining in value. It was therefore decided to investigate the feasibility of a utility scale wind power project.

With regards to the choice of site, Ambition Energy took over a project funded by the Department of Energy Climate Change (DECC) which had created a database of 252 Bristol City Council owned properties / land and screened them for potential to install a medium scale (approximately 100 to 500 kW) wind turbine. Preliminary estimates of wind speed at the probable hub height of a turbine were considered vital and this ruled out a number of sites as unviable. Wind speed contour maps were derived covering some 75sq km which indicated wind speeds meeting the criterion may occur close to the Severn Estuary. Inland only hilly locations showed acceptable wind speeds, and these areas were generally rejected according to other criteria. Further technical work decreased the choice of site down to six locations in the Avonmouth area. Out of those the land adjacent to Seabank Power Station was the most viable given the highest wind speed, space available likely to be suitable for a wind turbine, good access, and wind turbines in the locality.

The Planning Statement adds that the proposed development will located alongside existing commercial and industrial developments in the area and will be seen in that context and in terms of built form it will take up relatively little space within the site given its vertical form. As mentioned, for the proposal to be acceptable in detail it needs to be demonstrated that it can satisfactorily address the requirements of local planning policy in relation to the open space, biodiversity/wildlife and flood risk, as well as further planning matters. Any harm which is found as a result of development on the Levels must be suitably mitigated. This is set out in more details in the following key issues below.

The Planning Statement also makes reference to the emerging planning policy, citing draft policy E5 (Avonmouth Industrial Area and Bristol Port). This states that the area will also continue to provide a suitable location in principle for the development of large scale wind turbines. It identifies around 60 hectares of greenfield land adjacent to existing industrial areas that could provide allocations for such development. This includes land to the south of Seabank Power Station of which the application site falls within. Whilst only limited weight can currently be given due to the current stage of the local plan review, it nevertheless gives a clear direction of travel and the council’s intention to allocate sites such as this for the purposes of wind power renewable energy.

The council's legal advice is that the current local plan polices do not hold the same weight as a specific allocation. In the context of the WMS, the absence of allocated sites for wind energy means that any planning permission granted for such development would not fully align with

national policy and therefore there is a risk of challenge. Because of this, it is therefore necessary to set out that the planning impacts have been fully addressed. However the proposed development does have strong local support and represents a sustainable development.

The consultation response has clearly indicated that there is much local support for the proposed development, with one objection regarding concerns relating the risk of turbine collapse and the any potential damage that may be inflicted on the infrastructure of the neighbouring Seabank power Station. This is assessed further in the key issues below.

Policy BCS4 does indicate that Avonmouth is viewed as an appropriate location for wind turbines due to its open-ness and relative absence of nearby sensitive uses, and the area has seen the most significant development of these facilities for recent years. Consideration also needs to be given, however, to the impact on wildlife, as well as other material planning implications.

(B) IS THE INSTALLATION OF THE WIND TURBINE AS A FLEXIBLE GENERATION FACILITY ACCEPTABLE IN TERMS OF SUSTAINABILITY AND CLIMATE CHANGE?

As discussed, the National Planning Policy Framework (NPPF) says that Local Planning Authorities 'should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning' (paragraph 152).

It is noted that the national carbon reduction target - that 'the net UK carbon account for the year 2050' is at least 100% below the 1990 baseline' - is provided by the Climate Change Act 2008 (as amended). The Reducing UK emissions - 2019 Progress Report to Parliament, published in July 2019, highlights that UK greenhouse gases emissions fell by 2.3% in 2018 and have fallen 40% since 1990. In terms of priorities and milestones to prepare for a net-zero target, a long-term milestone is to provide 320 TWh of low-carbon energy generation by 2030 and 99-100% low-carbon generation by 2050.

According to the Planning Statement, the publications above outline the immediate and pressing need for the deployment of renewable energy generation in the UK, which is derived from the legally binding obligation in relation to the generation of 15% of energy consumption from renewable sources by 2020 initially and thereafter to meet more challenging targets by 2030 and 2050. As such the applicant adds that these are all significant material considerations in favour of this application.

Policy BCS13 of the Core Strategy requires development to contribute to both mitigating and adapting to climate change, and to meeting targets to reduce carbon dioxide emissions. The various measures by which development can do this include the use of decentralised, renewable and low-carbon energy supply systems. New development should demonstrate through Sustainability Statements how it would contribute to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions through the use of such measures.

Policy BCS14 states that proposals for the 'utilisation, distribution and development of renewable and low carbon sources of energy, including large-scale freestanding installations, will be encouraged. In assessing such proposals the environmental and economic benefits of the proposed development will be afforded significant weight, alongside considerations of public health and safety and impacts on biodiversity, landscape character, the historic environment and the residential amenity of the surrounding area'.

In November 2018, full Council passed a motion which called upon the Mayor to declare a Climate Emergency and pledge to make the city of Bristol carbon neutral by 2030. The Mayor confirmed

the climate emergency and formally adopted this goal in July 2019. This declaration provides further context for the emerging local plan which is currently going through the review. Following this Bristol's One City Climate Strategy was launched by the One City Environmental Sustainability Board on 26 February 2020, which describes a pathway for Bristol to become carbon neutral and climate resilient by 2030. Part of the strategy includes making the city's electricity use as smart and flexible as possible (to support electricity decarbonisation nationally), maximise local renewable energy generation and increase system resilience (One City Climate Strategy).

On considering the detail of the application and in light of the above policy context the Sustainability Team are supportive of the proposal for a wind turbine in this location, as contribution to local renewable energy supply.

Officers recommend that the acceptability of the proposed development should therefore be determined on the basis of its wider environmental impact in the proposed location, in accordance with other policies of the Local Plan and national planning policy.

(C) DOES THE PROPOSAL RAISE ANY CONCERNS IN REAGRDS TO HEALTH AND SAFETY ISSUES?

EN-1 acknowledges that energy production has the potential to impact on the health and well-being of the population. EN-1 also recognises that that access to energy is also beneficial to society and to health as a whole. However, EN-1 does state that where the proposed project has an effect on human beings, the ES should assess these effects for each element of the project identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate.

According to the companion guide to PPS22 there have been no reported examples of injury to members of the public from wind turbines. The most likely source of danger to human or animal life from a wind turbine would be the loss of a piece of the blade or, in most exceptional circumstances, of the whole blade. The blades are however composite structures with no bolts or other separate
components and failure is therefore most unlikely.

Wind Turbine collapse/safety

The minimum desirable distance between wind turbines and occupied buildings calculated on the basis of expected noise levels and visual impact will often be greater than that necessary to meet safety requirements. Nonetheless the NPPG states that "fall over distance (i.e. the height of the turbine to the tip of the blade) plus 10% is often used as a safe separation distance" (Paragraph: 016 Reference ID: 5-016-20140306), which in this case equates to 165 metres. There are no residential dwellings within the vicinity and therefore the threat of turbine collapse is not an issue in respect of the wider public.

However, Seabank Power Station has lodged an objection on the grounds that that the turbine as proposed in the application will not achieve the safe separation distance specified in NPPG, and therefore in the event of catastrophic failure of the turbine (i.e. collapse), there is a risk that the turbine would damage the power station and therefore lead to substantial financial loss. Specifically Seabank have identified one of their cooling towers that would fall within the topple-over distance. Whilst Seabank do not specify the distance between their cooling tower and the proposed wind turbine, officers put this distance at approximately 160 metres. The cooling tower in question stands some 12m in height and would sustain significant damage should a toppling turbine of 150m in height fall in a north-easterly direction. Seabank consider that given that the prevailing winds off the Severn come from a south-westerly direction (as indicated by the general orientation of the turbines further south), this is more likely that it toppling over into on assets than

in any other direction. The potential catastrophic failure of the proposed wind turbine could severely damage the cooling tower and cause injury to staff.

Seabank state that this asset is part of critical national infrastructure, producing 769MW at full output. They advise that it would likely take at least 9 months to recover from such a scenario. This would result in a substantial commercial loss to Seabank from being able to fulfil energy contacts to both their customer and under the Capacity Market commitments to the National Grid. Seabank Power Station has been in operation for 20 years and is connected to the National Grid providing electricity for over 1 million homes.

Seabank advise that during the pre-application discussions in 2019, the applicant provided them with the aerial photograph that showed, through a series of blue concentric circles, the indicative location of the turbine, the notional topple zone plus a 10% buffer zone. Seabank state that the epicentre of the proposed turbine was located further south on the aerial photograph than the application site location plan (and thus further away) from the boundary of the power station. The application draws the inner circle closer to the boundary of the power station and thus the topple zone encroaches further into the Power Station site. Seabank Power Station add that an equivalent plan is conspicuously absent from the application.

With regard to the existing wind turbines, Seabank state the comparable turbines listed in the Design & Access Statement (DAS) and Planning Statement (PS) are no taller than a tip height of 131m. The proposal therefore is variously between 19m and 83m taller than the comparable installations. Seabank add that The DAS and PS both largely ignore the Power Station whilst being more specific in terms of the proposed height of the turbine than the development description. In particular, the DAS ignores the Power Station in terms of consideration of layout and scale.

In reference to the Written Ministerial Statement (WMS) and with reference to footnote 49 of the NPPF, Seabank Power Station argue that they are very much part of the local community and the planning impacts identified in their letter have not been fully addressed or mitigated. As such, the proposal does not have Seabank's backing. They add that whilst the LPA may consider flexibility in respect of the consideration of the topple and buffer zones, it is necessary to exercise a rigid approach to the safety of the Power Station for the reasons stated. Reference is made to policy BCS4 which according to Seabank clearly sets out that whilst opportunities for the development of wind turbines may arise, they will have to take into account physical constraints – the power station being one. As such Seabank Power Station consider that the material considerations of the proposal do not outweigh the safety aspect associated with the scale of the turbine and its proximity to the active power station should it catastrophically fail and damage or destroy parts of the power station.

In response the applicant has provided details of the turbine specification as part of their technical response and a risk assessment. The findings based on technical calculations conclude that the probability of the wind turbine structure collapsing is put at once in every 100,000 years. Whilst the probability of structure topple directly impacting on the Seabank's cooling plant is calculated to have a probability of occurrence of once in every 500,000 years. The applicant adds that wind turbines are now highly reliable devices which are designed and built using exacting and internationally recognised standards. There have been no known incidents of turbine collapse anywhere in the United Kingdom. Existing set-back guidance is based on work and standards of some 26 years ago when wind turbines were in their very early stage of development and deployment. Guidance therefore must be applied with this in mind.

The applicant has stated that in the event of a direct hit that only the outer portion of the blade would make contact with the structure. There would be no impact of the turbine tower or the nacelle on the Cooling Plant. As such the applicants assert that the loss could be made up by the

undamaged part of the plant. Following considerations of the applicant's response and following a further meeting between Seabank and the applicant, Seabank Power Station have upheld their objection.

It is noted that both Ambition Community Energy and Seabank Power Station are in agreement that the facility would fall within the topple zone. Seabank have not appeared to dispute that the risk of catastrophic failure of the turbine (i.e. collapse) would be extremely low (1:500,000 years). Both Ambition and Seabank agree that there is a risk in the event of turbine collapse, and that it would fall on one of the cooling towers and potentially disable it (SB1), with SB2 remaining operational.

However Seabank do not concur with Ambition's view that the NPPG should not be given significant weight and it in fact remains current guidance and it therefore material in refusing the application. There is disagreement over how likely the wind turbine would hit Seabank and if it did, as to the extent of physical damage that would result. There is disagreement between Ambition and Seabank over the financial consequences that would be incurred on Seabank in the event of damage with Ambition quoting a significant lower figure (£4m) compared to Seabank (£15m). Seabank assert that the applicants do not understand how the market capacity works and therefore their figures should be discounted on the grounds that they are factually incorrect. Ambition argue that that consent for their proposed wind turbine would be consistent with the LPA's decision to approve other turbines in the locality, and that consistency in decision making requires a grant of approval in this case. However it is considered that these earlier examples are different from the present proposal, and crucially the comparable decisions can be distinguished materially from the present application, which involves "nationally critical infrastructure". None of the existing wind turbines would have the potential of catastrophic failure to damage a power station.

Safety – the planning balance

On considering the above, officers agree that the NPPF and the NPPG (which informs through the further explanation, the objectives of the NPPF), remains current and should be given significant weight in the consideration of the application in regards to safety. It is noted that the NPPG sets out the topple height plus 10% buffer that should be considered. However the guidance is not mandatory and that this requirement can in appropriate circumstances be set aside with reference to other material factors. Officers note the NPPG adds that "Local planning authorities should not rule out otherwise acceptable renewable energy developments through inflexible rules on buffer zones or separation distances. Other than when dealing with setback distances for safety, distance of itself does not necessarily determine whether the impact of a proposal is unacceptable. Distance plays a part, but so does the local context including factors such as topography, the local environment and near-by land uses. This is why it is important to think about in what circumstances proposals are likely to be acceptable and plan on this basis" (Paragraph: 008 Reference ID: 5-008-20140306).

Given the wording of the NPPG above, there is a difference opinion between the Council's legal opinion and that of the objector (Seabank) as to whether or not distance is a determinate factor when considering safety. Given the legal advice this report has been written on the basis that the Local Planning Authority are able to take into account other material considerations when determining the application. However, Officers are seeking further advice on this specific point, and Members will be updated in the update report.

Officers note that the potential collapse of the wind turbine would pose a safety risk to staff at Seabank Power Station in terms of injury. Furthermore this could incur severe financial cost on them at much higher cost that Ambition Community Energy has argued. The figure in the region of £15m in addition to the forfeiture of Capacity Market income, and regardless of the Capacity

Market clearing price. Seabank suggest a compensation arrangement which as they acknowledge could not be reasonable secured through the planning process. Notwithstanding this, Seabank also acknowledge that this mechanism would not be economically viable or desirable for Ambition. Both Ambition and Seabank Power Station could negotiate the matter of potential damage and the associated financial costs with their respective energy insurers, although again that is outside the scope of planning jurisdiction.

Notwithstanding these considerations, the information from the applicant's technical response and risk assessment have concluded that the risk of turbine collapse would be extremely low, a conclusion which is not disputed by Seabank Power Station. Officers note that there is urgency for renewable energy projects to be bought forward to ensure that the UK can meet the Climate Change Act 2008 (2050 Target Amendment) Order 2019. This amendment, which came into force on the 27 June 2019, introduced a target for 100% reduction in greenhouse gas emissions (against 1990 levels) in the UK by 2050 (net zero). The above very much needs to be taken into consideration as "material factors" in assessing the safety aspects in accordance with the NPPG.

In conclusion on this issue, it is clear that, due the height of the turbine, the design of the proposal does not fully mitigate the potential risks associated with the proposed development. However, officers are of the view based on the policy, that this in and of itself is not the determining factor, and the Local Planning Authority can take into account the other material considerations, including the significant public benefits. However, in coming to that decision the Local Planning Authority has to demonstrate that the risks associated with the development have been properly assessed. Risk is a product of the likelihood of an event and the consequences of that event. Whilst all parties are agreed that the likelihood of the event is very low, there is disagreement regarding the potential consequences, and it appears to be the case that the applicant has underestimated the potential consequences. Notwithstanding this, given the likelihood of the event and the significant benefits offered by the development, officers consider that the proposal can be supported.

Health and Safety Executive (HSE)

The Health and Safety Executive (HSE) has confirmed that it does not wish to be consulted on wind turbines and wind farm developments in the vicinity of other major hazard sites and major hazard pipelines, as they are not a relevant development under the Town and Country Planning (Development Management Procedure) (England) Order 2015, and will not lead to a material increase in the number of people in the vicinity of the major hazard.

(D) DOES THE PROPOSED DEVELOPMENT ADEQUATELY ASSESS THE ECOLOGICAL IMPACTS?

A core planning principle of the NPPF (para 17, bullet point 7) is that the planning system should contribute to conserving and enhancing the natural environment. The NPPF states, inter alia, that minimising impacts on biodiversity and providing net gains in biodiversity where possible, contribute to the Government's commitment to halt the overall decline in biodiversity (para 109 bullet point 3). The NPPF also states that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying a number of principles (para 118).

Core Strategy policy BCS4 describes the environmental assets within the Avonmouth area. The Severn Estuary has internationally important habitats which support important populations of waterfowl, waders invertebrates and fish. The site is located next to the Severn Estuary Special Protection Area (SPA); the Severn Estuary Ramsar Site; the Severn Estuary Special Area of Conservation (SAC); and the Severn Estuary Site of Special Scientific Interest (SSSI). Consequently Policy DM19 of the Site Allocations and Development Management Policies applies.

It states that Development which would have a harmful impact on the connectivity and function of sites in Wildlife Corridors will only be permitted where the loss in connectivity, or function, of an existing Wildlife Corridor is mitigated in line with the following hierarchy:
a. Creation of a new wildlife corridor within the development site;
b. Enhancement of an existing corridor or creation of a new corridor off-site to maintain the connectivity of the Bristol Wildlife Network.'

It adds that Development should integrate existing wildlife corridors. Where this is not practicable it should provide suitable mitigation in the form of on-site, functional Wildlife Corridor(s). Development should also provide mitigation for any habitats, species or features of value associated with the Wildlife Corridors, where they are harmed or lost. This should take place on the development site wherever possible.'

The applicant states that the site is located in an area of poor semi-improved grassland with substantial areas of bramble scrub and ruderal vegetation. Hedgerows with associated wet and dry ditches bound the land parcels within which the proposed development lies. Nonetheless the application site is located within the Bristol Wildlife Network, which is designated under the above planning policies. Due to the proximity of the proposed development to the Severn Estuary, it has potential to affect the designated national and international features of nature conservation interest. In particular the development has the potential to adversely affect populations of bird species associated with the Severn Estuary national and European protected site in terms of potential collision risk and/or displacement effects. Furthermore, the turbine is located in an area of significant ornithological interest, with the Severn Estuary European Marine Site being located approximately 60 m to the west.

These locations provide supporting habitat that are protected under the Conservation of Habitats and Species Regulations 2010 (Habitats Regulations) as amended. The Habitats Regulations Assessment (HRA) in respect of the planning application needs to address the potential for the disturbance of qualifying interest feature birds from collisions with the turbine including an analysis of bird flight-lines and noisy activities such as percussive piling during its construction. Bristol City Council is the ‘competent authority’ under the Habitats Regulations and must consider the protection afforded to the European sites when determining planning applications. Some of the sites in question are also Ramsar sites and, as a matter of national planning policy, these must be treated by the competent authority in the same way as European sites. It was established as part of pre-applications discussions that a shadow Habitats Regulations Assessment (HRA) report will need to be provided by the applicant.

The submitted Environment Statement (ES) included surveys that found habitats present within the application site such as the hedgerows, trees and scrub have the potential to support protected species such reptiles and foraging bats. Seven species of bat were recorded foraging and commuting within the site but overall bat activity levels were low across the surveyed area with the greatest activity noted along the boundary features to the south. Although no badger setts were located within the site, there was evidence of badger activity in the wider area. No evidence of water voles or great crested newt was found. Surveys spanning a two year period were undertaken to inform the assessment of potential impacts on birds. The surveys identified both patterns of waterbirds' use of the adjacent estuary foreshore and flight paths across the application site.

The surveys found that the airspace above the proposed wind turbine is not subject to high levels of flight activity and does not form a regular route for waterbird species. The results of the flight activity survey were used to inform a Collision Risk Model, which concluded that the proposed wind turbine is very unlikely to affect the waterbird interest of the Severn Estuary with no significant impact predicted.

In view of the risk of bats colliding with the wind turbine, which would affect the population at a county level, the applicant states that features that could be used by bats will be removed from the vicinity of the turbine and reinstated elsewhere in the wider project area. The measures proposed would include the removal of hedgerow, tree lines, broad-leaved woodland and scrub. It would also include diverting the wet ditch currently approximately 12 m to the south of the turbine location. Therefore mitigation to discourage bats from using area around 25m of the turbine has been incorporated within the landscape plan and which can be secured by condition as part of any planning consent. The turbine will be rigorously monitored to identify any impacts on bats in accordance with a strategy to be agreed with Bristol City Council and Natural England.

The statement concludes that no residual cumulative ecological effects with other developments are anticipated. The development will offer positive opportunities for ecological enhancement of the site and the Bristol Wildlife Network. Whilst a strict Monitoring Strategy will be prepared and implemented to monitor any collision or disturbance effects and to provide information to inform future wind energy projects.

On reviewing the supporting documentation, the Council's Ecology Consultant was broadly supportive of the findings. However it was considered that that further survey information was requested in relation to the bat survey and associated documentation, amendments to the findings of the submitted ornithological Assessment, Ecological Assessment and Shadow HRA.

In response to this, the applicant has provided a comprehensive response to the request for further clarification and information. The applicant has also submitted an updated Shadow HRA and an addendum to ES Ecology chapter to address the outstanding queries from the Council's Ecology Consultant.

Following further consideration the Council’s ecological consultant welcomed the additional information and clarification with the cumulative impact assessment (EIA) and in-combination effects (shadow HRA), also the additional text in the main text of the Shadow HRA. Officers also agreed with conclusions drawn from this additional in-combination assessment, along with the addendum to the ES ecology chapter for completeness. Officers also welcomed the consideration of Eels and fish protection, this has been included in the shadow HRA mitigation. Given this officers are satisfied with the applicant’s HRA. The additional bat report and findings were also welcome, and consultation with natural England should be sought if the final findings for the emergence/re-entry surveys on the dead monolith with high potential conclude that to be a roost. However the Council’s ecological consultant is satisfied that this can be secured as part of the applicant’s bat monitoring strategy which will be secured by condition.

It is noted that both the Council's Ecology Consultant, and Natural England, raised no objections in principle on ecological grounds. It is recommended that a number of ecological conditions should be attached as part of any planning approval, including the requirement to submit an ecological monitoring strategy to monitor the continued impact of the turbine on birds in the area. A further condition shall be imposed requiring the turbine to be removed and decommissioned at the end of its working life. This is commensurate with aspirations within the submission - the turbine is proposed to be removed after 25 years. At the time of this report the exact wording of the required conditions are still to be agreed and finalised, and therefore will be reported under the amendment sheet.

(E) WOULD THE APPLICATION MAKE AN ADEQUATE DESIGN AND CONSERVATION RESPONSE, INCLUDING IMPACT ON KEY VIEWS?

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 states that in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority shall have special regard to the desirability of preserving

the building or its setting or any features of special architectural or historic interest which it possesses. The Authority is also required (under Section 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990) to pay special attention to the desirability of preserving or enhancing the character or appearance of the conservation area.

This is relevant here because the development would affect the setting of the nearby Grade I listed Kings Weston House and its surrounding historic landscape, including the Kingsweston and Trym Valley Conservation Area. Section 12 of the national guidance within the National Planning Policy Framework (NPPF) 2012 states that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation, with any harm or loss requiring clear and convincing justification. BCS22 requires developments to safeguard or enhance heritage assets.

The application site itself falls within designated area of the Avonmouth and Kingsweston Levels, currently protected under policy DM18. This policy is intended to preserve the undeveloped status of the levels by use of the term "primarily underdeveloped" and the rider that development consistent with the areas undeveloped status may be acceptable. Requiring good design is at the heart of National and Bristol planning policy, and policy BCS21 expects a high quality design in all developments, which contributes positively to an area's character and identity, creating or reinforcing local distinctiveness.

The application is accompanied by a comprehensive Landscape and Visual Impact Assessment (LVIA), which contains existing photos with comparison CGI images of the development in place. The range of viewpoints was established during the scoping opinion that was carried out for the site. The submitted LVIA considers the effect that the turbines will have on the local landscape and the people who regularly view it. The assessment is a comprehensive study that establishes a baseline for the landscape character of the area and the visual environment and projects the impact that the proposal will have on these 'receptors'.

Viewpoints were taken from 16 different locations (receptors) which were selected to provide a representative sample and spread of typical views towards the site, in locations including Kingsweston House and Avonmouth. Close range views within the site are afforded from National Cycle Route 41. Local views beyond the site were taken from roads and footpaths/ cycle ways and the Severn Way in the context of the existing industrial infrastructure and wind turbines. Medium distance views, from low-lying farmland, villages and lanes to the east and northeast are frequently curtailed by the network of hedgerows and trees together with structures associated with the railway and motorway network. Elevated views were taken to the south and east from long distance trails on Spaniorum Hill and the Kings Weston Ridge. Other elevated views were taken from the M5 flyover and higher parts of Lawrence Weston. Distant views were taken from South Wales, across the Severn Estuary to the north and north-west, and elevated areas of Portishead to the south-west.

The applicant asserts that the assessment identified that the landscape surrounding the application site is dominated by the industrial area of Severnside, a large-scale landscape comprising expansive lowland dominated by industrial sites which often contain large-scale structures such as chimneys, tanks, silo, warehouses and manufacturing plants, together with existing wind turbines.

On reviewing the assessment including the viewpoints, the rural character of the Avonmouth and Kingsweston Levels is evident in the closest and most sensitive viewpoint. The turbine would be the dominant structure within the view. However officers consider that the degree of harm arising from the proposal is highly debateable; the sensitivity of the site - value and receptor - is high and the magnitude of the development is also high, suggesting a high overall impact.

At 150m in height to the blade tip the proposed wind turbine would be at least 18m higher than any of the surrounding wind turbines within the vicinity. However it is considered that the proposed turbine lacks mass within the view, and therefore does not significantly change the open rural character of the landscape context. Consequentially officers conclude that the above analysis of landscape effects indicates that the proposal does not in a significant way change the primarily underdeveloped status of the Avonmouth and Kingsweston Levels and neither are the other sensitivities - impact on users of National Cycle Network Route 41 and viewers of the Kingsweston House panorama unduly affected. The Landscape Officer is of the opinion however that a discussion with the Friends of Kingsweston House regarding proportional compensatory mitigation for minor harm caused to the historic view would be appropriate.

The findings of the LVIA inform that at the longer viewpoints the proposed turbine would be readily apparent and difficult not to notice, but would not dominate the field of view even given the height in comparison to the established wind turbines. This, as stated above, is against the backdrop of the industrial landscape which is tolerant to change and already influenced by the industrial landscape that dominates at Avonmouth Docks. It is therefore considered that there would be minimal harm inflicted on the setting of Kings Weston House or the Kingsweston and Trym Valley Conservation Area, but that the wider public benefits of introducing a renewable energy resource would outweigh this less than substantial harm. This would fully accord with paragraphs 193 and 196 of the NPPF (2019).

The planning application is accompanied by a Heritage Desk-Based Assessment, which covers archaeological and heritage considerations. The closest Scheduled Monument is a heavy anti-aircraft battery, situated at Hallen Marsh, approximately 1.5km south-west from the site and the closest Listed Building is the Grade II Listed Hallen War Memorial, approximately 2.7km south-east from the site. The Heritage Assessment also considers potential non-physical effects upon the significance of susceptible heritage assets within the site environs. Non-physical effects are those that derive from changes to the setting of heritage assets as a result of the proposal. The assessment identifies that the site itself lies within the developed industrial zone, adjacent to Seabank Power Station and existing wind turbines. Accordingly, it is concluded that the proposed development will not have any non-physical impact on designated heritage assets within the wider landscape or their significance as a result of a change to their settings.

The detailed proposals relating to landscape treatment and mitigation are considered to be acceptable subject to confirmation that tree losses to facilitate the scheme are replaced in accordance with the Bristol Tree Replacement Standard. With regard to this the Council's Arboriculture Officer is satisfied that no significant trees will be impacted by the proposals and that the proposed landscaping plan in terms of mitigation would be acceptable.

Given the above considerations it is concluded that the visual impact of the proposed wind turbine would be acceptable in its context.

(F) WOULD THE PROPSOED DEVELOPMENT HAVE ANY ADVERSE IMPACTS ON THE AMENITY OF ADJOINING OCCUPIERS?

Policy BCS23 of the Core Strategy requires development to be sited and designed in a way as to avoid adversely impacting upon the amenity of areas by virtue of noise, vibration, smells and light. The erection of a wind turbine has the potential to have a negative impact from noise and shadow flicker. EN-3 makes specific reference to shadow flicker in respect of on-shore wind and states that where wind turbines are proposed within a distance equating to 10 x the rotor diameter from an occupied building a shadow flicker assessment should be carried out.

Noise

The applicant has undertaken a noise assessment for the construction, operational and decommissioning phases of the proposed development. The details of this are set out under chapter 6 of the Environmental Statement submitted with the planning application. This confirms that construction noise will be limited in duration and confined to working hours to be agreed with the LPA. The effect of operational noise has been assessed and the noise limits have been calculated for the relevant noise-sensitive receptors, and predictions made based on the turbine type. The predicted noise levels are calculated to be below the cumulative noise limits and therefore the effect of operational noise is not significant. In terms of noise during decommissioning, the applicant states that it will be managed to ensure compliance with best practice, legislation and guidelines current at the time in order to ensure that effects are not significant.

On considering the application the Council's Pollution Control Officers are satisfied with the information and considered that noise from the development would not harm amenity of sensitive receptors. A condition will be attached to the decision to ensure that the noise levels stated in the report will be complied and would not exceed the acceptable limits.

Shadow flicker

A Shadow Flicker Impact Assessment and Mitigation Protocol have been prepared by the applicant and the details from part of the ES. the shadow flicker analysis concludes that no dwelling houses would be impacted from the blades of the turbines. The report advises that shadow flicker effects are only possible if there is an unobstructed path from the turbine to a window. There is no requirement to assess the impact of shadow flicker upon any of the nearby industrial or commercial properties.

(G) DOES THE PROPOSAL ADEQUATELY ADDRESS ISSUES OF FLOOD RISK?

The proposal site is located within an area at risk of flooding - Flood Risk Zone 3a - as identified by the Environment Agency. The main flood risk to the proposed development is the tidal flood risk from the Severn Estuary that is located to the west of the site. The NPPF advises development to be directed away from areas of high flood risk. In accordance with the NPPF, the Bristol Core Strategy policy BCS16 requires a sequential, risk-based approach to the location of development to avoid flood risk and to manage any residual risk.

The applicant states that the sequential test has been covered in their other documents that were submitted as part of the planning application, notably in volume 1 of their Environmental Statement (ES). Of the 5 alternative sites to this one that were identified all had a number of operations deficiencies with regard to required wind speed, proximity of other structures, the proximity of the M49 and poor accessibility.

Paragraph 159 of the NNP states that if it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance. The NPPF sets out a matrix indicating the types of development that are acceptable in different Flood Zones. The proposed development is a wind turbine which is classified within the NPPF as being ‘essential infrastructure’. The site is located in Flood Zone 3a which is appropriate for essential infrastructure and the Exception Test is required. For the exception test to be passed it should be demonstrated that:

(a) the development would provide wider sustainability benefits to the community that

outweigh the flood risk; and

(b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.
The Flood Risk Assessment (FRA) and content of the supporting technical documents demonstrates that the proposed wind turbine satisfy part b of the test. The issue of the wider sustainability benefits of the proposal are set out in the applicant's planning statement.

The accompanied Flood Risk Assessment (FRA) states that flood defences are also proposed to be installed by the ASEA Flood Defence project, which will protect the site. The FRA states that flood resistance measures would be utilised, with all sensitive electronic equipment protected up to the 0.5% AEP coastal flood level, plus an allowance for climate change and a sufficient freeboard. In terms of risk from all other flood sources, the FRA explains that the level of risk is considered to be low to negligible.

With regard to drainage surface it is proposed that a dry rhine reach will be filled in and another Rhine onsite will be diverted. These proposals would be subject to the consent of the lower Severn Internal Drainage Board (IDB). A culvert is also proposed for the Rhine located below the access road, which has been approved by the IDB. Surface water runoff will be managed sustainably by using a grass filter strip around the wind turbine platform. A full drainage maintenance regime will be implemented.

Neither the Environment Agency nor the Council's Flood Team has raised objections to the proposal subject to condition as part of any grant to approve the application.

Given the above it is concluded that the proposal would address issues of flood risk.

(H) WOULD THE PROPOSAL SATISFACTORILY ADDRESS ISSUES OF MOVEMENT AND TRANSPORT?

Fundamental transport and movement objectives of the local plan include promoting means of travel other than the car, such as cycling, walking and public transport, and also reducing dependence on the private car. Policies BCS10 is particularly relevant in achieving this objective.

The planning application is accompanied by a Construction Traffic Management Plan (CTMP). It explains that access to the site will be via a new access to be constructed off of the A403 Severn Road. The applicant states that the access junction has been suitably designed with appropriate visibility splays provided. An access track will be provided within the site and will allow vehicles to leave the site in a forward gear. The route which construction traffic will take is set out in detail in the CTMP and it confirms that there are no major issues along the proposed route from the Port of Bristol to the proposed site access. it is concluded that the construction phase of the development would therefore be acceptable in the context of highway safety and geometry.

Following clarification over how the access would be altered operated and maintained during the construction process, Transport Development Management Officers raise no objections to the proposal provided the access can be secured via an appropriate highway condition for highway works and a general arrangement plan. There is no issue in regards to the long term operation of the proposed turbine as this would generate few vehicular movements.

The cycle path will require diversion through the application site during the construction phase, with full reinstatement post construction. The route of a public footpath to the north-west of the development would remain unaffected by the proposed development. Transport Development

Management Officer notes this requirement and raises no objection to it on highway safety grounds.

With the above in place, the proposal would not compromise highway safety or conflict with transport policies.

(I) DOES THE PROPOSAL RIASE ANY ARCHAEOLOGICAL ISSUES?

The planning application is accompanied by a Heritage Desk-Based Assessment prepared by Cotswold Archaeology. The assessment identifies that several investigations have previously been undertaken within the study area, comprising nonintrusive desktop studies, archaeological monitoring of groundworks, trial trench evaluation and archaeological excavation. It was established that that no designated archaeological remains are located within the application site. Known and potential non-designated archaeological remains identified with the application site comprised of Prehistoric palaeo-environmental remains, Roman field systems, Medieval/post-medieval ridge and furrow, field boundaries and agricultural building remains.

On reviewing the application the Council's Archaeology Officer concurred with the findings and advised that archaeological conditions to secure the appointment of an archaeological contractor and completion of an archaeological watching brief, should be attached to any consent.

(J) WOULD THE PROPOSAL HAVE AN IMPACT ON TELECOMMUNICATIONS AND AVIATION IN THE VICINITY OF THE SITE?

Wind turbines can block, deflect or disperse electromagnetic transmissions. Developers are required to address any potential impacts, taking account of Civil Aviation Authority, Ministry of Defence and Department of Transport Guidance in relation to radar and aviation. LPAs should satisfy themselves that such issues have been addressed before considering planning applications.

An Aviation Risk Assessment has been prepared as part of the application submission and the analysis undertaken shows that the impact upon aviation of the proposed development is low. A Telecommunications Link Study also formed part of the supporting documents with the planning application. It concluded that the proposed development is not constrained by wireless communication links. The analysis undertaken as part of the study shows that, based on the responses received, mitigation will not be required for the proposed turbine. It is noted that no comments were received from either the Civil Aviation Authority or MOD in regards to the proposal.

As such it is considered that the proposal would be acceptable in this regard and complies with the guidance set out in the NPPG.

(K) DOES THE PROPOSAL ADEQUATELY ADDRESS THE ENVIRONMENTAL ISSUES RELATING TO CONTAMINATED LAND?

The applicant states that the proposed development has been subject of a Phase I Desk Study and a subsequent intrusive Phase II investigation. The ground investigation works did not indicate the presence of any significant concentrations of contaminants. As such, no specific contamination remediation is required.

The Council's Land Contamination Officer noted the above and raised no objection to the proposals subject to a condition for the reporting of any previously unexpected contamination.

Development Control Committee A Delegated
Land On The South East Side Of Severn Road Avonmouth Bristol

CONCLUSION

Significant weight has been given to the Written Ministerial Statement of June 2015. Whilst there are no sites allocated for wind turbine developments within the current Bristol Local Plan, the planning merits of this scheme as well as the fact that there is significant local support, mean that there is no reason to withhold planning consent. The potential adverse impacts of the development are considered to be less than substantial (such as ecological and visual impact) and which can be mitigated through use of planning conditions. The design of the proposal does not fully mitigate the potential safety risks associated with the proposed development given its proximity to Seabank Power Station. However, officers consider that the risks in terms of tower collapse and consequential damage to the assets of the power station would be considerably low and the proposal should not be refused on grounds of safety. The development would introduce renewable energy infrastructure in an area where such installations are deemed appropriate in the Local Plan, which would in turn assist Bristol in achieving an 80% reduction in CO2 emissions by 2050, as required by the Climate Change Act 2008 and the Core Strategy.

Officers therefore recommend that planning permission is granted subject to conditions and refer the application to the Secretary of State.

COMMUNITY INFRASTRUCTURE LEVY
How much Community Infrastructure Levy (CIL) will this development be required to pay?

Development of less than 100 square metres of new build that does not result in the creation of a new dwelling; development of buildings that people do not normally go into, and conversions of buildings in lawful use, are exempt from CIL. This application falls into one of these categories and therefore no CIL is payable.

RECOMMENDED Refer to the Secretary of State

(A) That the application together with responses to the publicity and consultations, the committee report and members comments be referred to the Secretary of State for Communities and Local Government.

If the Secretary of State makes no comment within the 21 day period from receipt of notification, then planning permission is granted subject to the following conditions, plus additional conditions relating to mitigating the ecological impact of the development (to follow):

Condition(s)

Time limit for commencement of development

1. Full Planning Permission

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

Reason: As required by Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2. Wind turbine - Lifetime of the development

The wind turbine hereby approved shall be completely removed from the site and the site restored to its former state no later than 25 years from the grant of this permission, in

accordance with chapters 4 to 7 of the Technical Report & Construction Traffic Management Plan (Calibro Consultants), dated 13th March 2020, unless otherwise agreed with the Local Planning Authority.

Reason: The turbine has a lifespan of 25 years. Removal at the end of its lifetime or before would safeguard the appearance of the area.

Pre commencement condition(s)

3. Highway works - General arrangement plan

No development shall take place until general arrangement plan(s) to a scale of 1:200 showing the following works to the adopted highway has been submitted to and approved in writing by the Local Planning Authority.

Where applicable indicating proposals for:

- Existing levels of the finished highway tying into building threshold levels
- Alterations to waiting restrictions or other Traffic Regulation Orders to enable the works
- Signing, street furniture, street trees and pits
- Structures on or adjacent to the highway
- Extent of any stopping up, diversion or dedication of new highway (including all public rights of way shown on the definitive map and statement)

No development shall take place over the route of any public right of way prior to the confirmation of a Town & Country Planning Act 1990 path diversion/stopping up order.

Prior to occupation these works shall be completed to the satisfaction of the Highway Authority and approved in writing by the Local Planning Authority.

Reason: In the interests of public safety and to ensure that all road works associated with the proposed development are: planned; approved in good time (including any statutory processes); undertaken to a standard approved by the Local Planning Authority and are completed before occupation.

4. Construction Management Plan - Major Developments

No development shall take place, including any demolition works, until a construction management plan or construction method statement has been submitted to and approved in writing by the Local Planning Authority. The approved plan/statement shall be adhered to throughout the demolition/construction period. The plan/statement shall provide for:

- A construction programme including phasing of works;
- 24 hour emergency contact number;
- Hours of operation;
- Expected number and type of vehicles accessing the site:
- Deliveries, waste, cranes, equipment, plant, works, visitors;
- Size of construction vehicles;
- The use of a consolidation operation or scheme for the delivery of materials and goods;
- Phasing of works;
- Means by which a reduction in the number of movements and parking on nearby streets can be achieved (including measures taken to ensure satisfactory access and movement for existing occupiers of neighbouring properties during construction):

- Programming;
- Waste management;
- Construction methodology;
- Shared deliveries;
- Car sharing;
- Travel planning;
- Local workforce;
- Parking facilities for staff and visitors;
- On-site facilities;
- A scheme to encourage the use of public transport and cycling;
-Routes for construction traffic, avoiding weight and size restrictions to reduce unsuitable traffic on residential roads;
- Locations for loading/unloading, waiting/holding areas and means of communication for delivery vehicles if space is unavailable within or near the site;
- Locations for storage of plant/waste/construction materials;
- Arrangements for the turning of vehicles, to be within the site unless completely unavoidable;
- Arrangements to receive abnormal loads or unusually large vehicles;
- Swept paths showing access for the largest vehicles regularly accessing the site and measures to ensure adequate space is available;
- Any necessary temporary traffic management measures;
- Measures to protect vulnerable road users (cyclists and pedestrians);
- Arrangements for temporary facilities for any bus stops or routes;
- Method of preventing mud being carried onto the highway;
- Methods of communicating the Construction Management Plan to staff, visitors and neighbouring residents and businesses.

Reason: In the interests of safe operation of the adopted highway in the lead into development both during the demolition and construction phase of the development.

5. Construction Environmental Management Plan (CEMP)

The development hereby approved shall not commence until a Construction Environmental Management Plan (CEMP) which will set out measures to be followed by contractors during construction to safeguard interest features on the site and its environs, is submitted to the Local Planning Authority. This must include a Pollution Prevention Plan (PPP) to set out measures to minimise risk of pollution incidents during construction and a Precautionary Working Method Statement (PWMS) to detail the best practice site measures to be implemented during construction to avoid damage to retained habitat within the application site, adjacent habitat and the wider Wildlife Corridor. The PWMS must also detail (but not exclusively):

a. working hours and any requirements to avoid disturbance (works be undertaken during spring/summer (i.e. April to September)),
b. construction lighting if required to ensure no light spill greater than 0.5 Lux on sensitive bat habitat features,
c. arboricultural method statement in accordance with BS5837:2012 and Tree Protection Plan
d. INNS Management Plan
e. Reptile Mitigation Strategy
f. Breeding Bird Protection Plan

Pre-construction surveys for terrestrial and aquatic invasive non-native species (INNS) within the construction areas and within appropriate buffers to works should be undertaken.

These surveys should inform an INNS Management Plan as part of the CEMP. Pre-construction surveys for badger, otter and water vole within the construction areas and within appropriate buffers to works should be undertaken within 3 months prior to the start of construction. These surveys will inform the requirements for any protected species licences from Natural England and appropriate mitigation strategies to be secured through the licencing process and/or through the CEMP.

An Ecological Clerk of Work should be employed to conduct watching briefs during vegetation clearance with regard to potential protected species such as breeding birds, reptiles and amphibians. Where instream (rhine) works require dewatering, rhines should be drained down under the supervision of an ECoW with a background in freshwater ecology and fisheries. The ECoW role should oversee the dewatering process and fish translocation to move fish from impacted rhines to suitable habitat elsewhere. As water levels decrease dewatering should be slowed to allow any fish or amphibians to be removed to suitable receptor location agreed in advance with the local EA fisheries/biodiversity officer. The fish translocation (including European eel and lamprey species ammocoetes) must take place prior to
complete dewatering in order to move fish from impacted rhines to suitable habitat outside the construction footprint. Netting and/or electric fishing techniques should be used requiring a Salmon and Freshwater Fisheries Act (SaFFA) Section 27 exception to "use fishing instruments (other than rod and line) and/or remove fish from inland waters" from the EA.

Clearance of the application site for development should be informed by a Reptile Mitigation Strategy to be included within the CEMP. This should detail the methods of clearance required to ensure legal compliance and minimise the risk of harm to individual reptiles (whilst also taking into account other protected species such as nesting birds), and should include measures such as installation of reptile exclusion fencing and translocation methods to move reptiles to alternative suitable habitat within the surrounding area of land ownership.

Five reptile/amphibian hibernacula should be created to assist in maximising biodiversity value within the land ownership, as shown in Landscape Plan Figure 3.8. A Landscape and Ecology Management Plan and Landscape Plan should be agreed in consultation with the Bristol City Council Nature Conservation Officer, and be governed by a formal management agreement.

Reason: In the interests of nature conservation

6. Bat Monitoring Strategy

No development shall commence unit a Bat Monitoring Strategy to cover the first 5 years of operation of the wind turbine has been submitted. This is to ascertain whether the habitat manipulation has been successful in discouraging bats from utilising the immediate habitat surrounding the turbine and inform recommendations for remedial measures if the mitigation is not performing as expected. The details of the Bat Monitoring Strategy will be agreed in consultation with the Bristol City Council Nature Conservation Officer.

Reason: To help conserve legally protected bats.

7. Ornithological Monitoring Strategy

No development shall commence until a construction phase Ornithological Monitoring Strategy is submitted and agreed in writing to the Local Planning Authority. The operational

phase Ornithological Monitoring Strategy should also be prepared and implemented to cover the 25-year predicted lifetime of the proposed wind turbine. The monitoring strategy should also include surveys to monitor avian collision mortality as well as monitoring of foreshore estuarine birds. Responsibility for implementing the monitoring strategy will be held by the owner/operator of the wind turbine. This strategy should also be agreed with the Bristol City Council Nature Conservation Officer in advance

Reason: To help conserve legally protected birds which include priority species.

8. To ensure implementation of a programme of archaeological works

No development shall take place within the area indicated on plan number SK002 Rev H until the applicant/developer has secured the implementation of a programme of archaeological work, in accordance with a Written Scheme of Investigation which has been submitted by the developer and approved in writing by the Local Planning Authority.

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

1. The programme and methodology of site investigation and recording
2. The programme for post investigation assessment
3. Provision to be made for analysis of the site investigation and recording
4. Provision to be made for publication and dissemination of the analysis and records of the site investigation
5. Provision to be made for archive deposition of the analysis and records of the site investigation
6. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.

Reason: To ensure that archaeological remains and features are recorded prior to their destruction.

Pre occupation condition(s)

9. Land affected by contamination - Reporting of Unexpected Contamination

In the event that contamination is found at any time that had not previously been identified when carrying out the approved development, it must be reported immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken in accordance with the Environment Agency's 'Land Contamination: risk management' guidance and BS 10175:2011 + A2:2017: Investigation of Potentially Contaminated Sites - Code of Practice. Where remediation is necessary a remediation scheme must be prepared which ensures the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority. The Local Planning Authority must be given two weeks written notification of commencement of the remediation scheme works.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without

unacceptable risks to workers, neighbours and other offsite receptors. This is in line with paragraph 170 of the National Planning Policy Framework.

10. To secure the conduct of a watching brief during development groundworks

The applicant/developer shall ensure that all groundworks, including geotechnical works, are monitored and recorded by an archaeologist or an archaeological organisation to be approved by the council and in accordance with the Written Scheme of Investigation approved under condition 8.

Reason: To record remains of archaeological interest before destruction.

11. Flood resilience

The development shall be carried out in accordance with the submitted flood risk assessment by Calibro dated 18 February 2020 (ref BR-640-0001 revision 2) and the following mitigation measures it details.

- All resilience measures detailed within section 6.2 of the FRA to a level of 9.60mAOD.

These mitigation measures shall be fully implemented prior to first operation. The measures shall be retained and maintained thereafter throughout the lifetime of the development.

Reason: To reduce the risk of flooding to the proposed development and future users.

12. C26 Flood Evacuation Plan - Commercial Property

No building or use herby permitted shall be occupied or the use commenced until the applicant has submitted to and had approved in writing by the Local Planning Authority a Flood Warning and Evacuation Plan (FEP). This Plan shall include the following information:

* command & control (decision making process and communications to ensure activation of FEP);
* training and exercising of personnel on site (H& S records of to whom and when);
* flood warning procedures (in terms of receipt and transmission of information and to whom);
* site evacuation procedures and routes; and
* provision for identified safe refuges (who goes there and resources to sustain them).

The FEP shall be reviewed at intervals not exceeding 3 years, and will form part of the Health & Safety at Work Register maintained by the applicant.

Reason: To limit the risk of flooding by ensuring the provision of a satisfactory means of flood management on the site

13. To avoid direct impacts on nesting birds, site clearance work should be undertaken outside of the nesting bird season (i.e. nesting bird season is between March & August inclusive). This vegetation removal period therefore overlaps with the core wintering bird months, so works during this period have the potential to lead to disturbance impacts on estuarine birds. To mitigate this, vegetation clearance during the period September - February should

be undertaken in a sensitive manner using hand operated tools (i.e. chainsaws and brushcutters).

Reason: To ensure that wild birds, building or using their nests are protected.

14. The occurrence of breeding Cetti's warbler should be monitored during the months of April - July (where these months coincide with the construction period) to identify any active territories. These should be surrounded by a suitably sized buffer zone determined by an ornithologist within which no construction work would take place, to ensure no disturbance impacts on this Schedule 1 species.

Reason: In the interests of nature conservation.

15. The potential effect of disturbance to wintering waterbirds during construction and decommissioning could be avoided by timing of construction and decommissioning works to avoid the winter months. Avoidance of the months November to February should occur, with construction works being permitted during the early and late wintering waterbird season (September/October & March), subject to an ornithological watching brief to monitor of arrival/dispersal of wintering waterbirds within the 800 m disturbance zone. Works over summer months are acceptable, other than vegetation clearance (under condition 13).

Reason: To help conserve legally protected birds which include priority species

16. Monitoring during construction between November and February should take place on a weekly basis and cover the high tide period. Should >1% of the EMS population of any species (or assemblage of species) be recorded within the 800 m zone, birds should be monitored for any signs of disturbance by an ornithologist. Should birds be showing signs of disturbance (e.g. regularly taking flight, moving to other locations), development works should cease and only recommence on the advice of the ornithologist.

Reason: To help conserve legally protected birds which include priority species

17. Landscape (Soft and Hard)

The site shall be landscaped strictly in accordance with the approved Landscape Plan (Figure 3.8 Landscape Masterplan dated 13 Mar 2020) in the first planting season after completion or first occupation of the development, whichever is the sooner. Details shall include:

a. a scaled plan showing vegetation to be retained and trees and plants to be planted:
b. proposed hardstanding and boundary treatment:
c. a schedule detailing sizes and numbers of all proposed trees/plants
d. Maintenance schedule to ensure successful establishment and survival of new planting, including watering quantities and schedule.

There shall be no excavation or raising or lowering of levels within the prescribed root protection area of retained trees unless agreed in writing by the Local Planning Authority. Any tree(s) that die(s), are/is removed, become(s) severely damaged or diseased shall be replaced and any new planting (other than trees) which dies, is removed, becomes severely damaged or diseased within five years of completion shall be replaced. Replacement planting shall be in accordance with the approved details (unless the Local Planning Authority gives its written consent to any variation).

Reason: Required to safeguard and enhance the character and amenity of the area, to provide ecological, environmental and bio-diversity benefits and to maximise the quality and usability of open spaces within the development, and to enhance its setting within the immediate locality in accordance with DM15 and DM17.

Post occupation management

18. Noise levels

The level of any noise generated by reason of this development shall not exceed to an LA90, 10 min of 35dB up to wind speeds of 10 m/s at 10m height at any residential premises.

Reason: To safeguard the amenity of nearby premises and the area generally.

List of approved plans

19. List of approved plans and drawings

The development shall conform in all aspects with the plans and details shown in the application as listed below, unless variations are agreed by the Local Planning Authority in order to discharge other conditions attached to this decision.

SK001 REV E Site location plan, received 17 March 2020
SK002 REV H Proposed site plan, received 17 March 2020
EP3.00.156-1 Turbine elevation and plan views general arrangement, received 17 March 2020
SK003 Metering substation elevations and plans, received 17 March 2020
Flood risk assessment, received 17 March 2020
Traffic management plan, received 17 March 2020
3.8 Landscape masterplan, received 17 March 2020

Reason: For the avoidance of doubt.

Advices

1. BS Standard - tree work: Any works should be completed in accordance with British Standard 3998: Recommendations for tree work, you are advised that the work should be undertaken by a competent and suitably qualified tree contractor.

2. Tree Protection: You are advised to refer to BS5837 : 2012 Trees in relation to construction for detailed information on types of tree protection, protection zones and other relevant matters.

3. Nesting birds: Anyone who takes, damages or destroys the nest of any wild bird whilst that nest is in use or being built is guilty of an offence under the Wildlife and Countryside Act 1981 and prior to commencing work you should ensure that no nesting birds will be affected.

4. Bats and bat roosts: Anyone who kills, injures or disturbs bats, obstructs access to bat roosts or damages or disturbs bat roosts, even when unoccupied by bats, is guilty of an offence under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation (Natural Habitats, &c.) Regulations Act. Prior to

commencing work you should ensure that no bats or bat roosts would be affected. If it is suspected that a bat or bat roost is likely to be affected by the proposed works, you should consult English Nature (Taunton office 01823 283211).

5. Tree works

The following British Standards should be referred to:

a. BS: 3882:2015 Specification for topsoil
b. BS: 3936-1:1992 Nursery Stock - Part 1: Specification for trees and shrubs
c. BS: 3998:2010 Tree work - Recommendations
d. BS: 4428:1989 Code of practice for general landscaping operations (excluding hard surfaces)
e. BS: 4043:1989 Recommendations for Transplanting root-balled trees
f. BS: 5837 (2012) Trees in relation to demolition, design and construction - Recommendations
g. BS: 7370-4:1993 Grounds maintenance part 4. Recommendations for maintenance of soft landscape (other than amenity turf).
h. BS: 8545:2014 Trees: from nursery to independence in the landscape - Recommendations
i. BS: 8601:2013 Specification for subsoil and requirements for use

6. Security

You are advised to refer to the comments of the Avon and Somerset Crime Reduction Unit (CRU) and consider the installation of temporary surveillance cameras are used to mitigate the opportunity for theft at this stage, in what is, a relatively isolated location.

7. Network Rail

The applicant will need to engage with Network Rail Asset Protection, AssetProtectionWestern@networkrail.co.uk, to determine if a Basic Asset Protection Agreement is required to manage the potential interfaces these works have on Network Rail assets and operations. This will be determined by the methodology employed, essentially the crane position. Contact will be required a minimum of 3months prior to works planned to commence.

8. Construction & Decommissioning

Due to the potential for disturbance arising from contractors' operations, the developers' attention is drawn to Section 60 and 61 of the Control of Pollution Act 1974, to BS 5528: Parts 1 and 2: 2009 Code of practice for noise and vibration control on construction and open sites and the code of practice adopted by Bristol City Council with regard to "Construction Noise Control". The hours that are usually allowed for construction or demolition works that are audible at any residential property to be carried out are 8.00 to 18.00 Monday to Friday and 8.00 to 13.00 Saturdays. Further information can be obtained from Pollution Control, Bristol City Council pollution@bristol.gov.uk

9. You are advised that the planting season is normally November to February.

10. A felling licence may be required for the felling of over 5 cubic metres of wood. Exemptions from the requirement to obtain a felling licence are set out in Section 9 of the Forestry Act

1967. For more information please go to www.gov.uk/guidance/apply-online-for-a-felling-licence.

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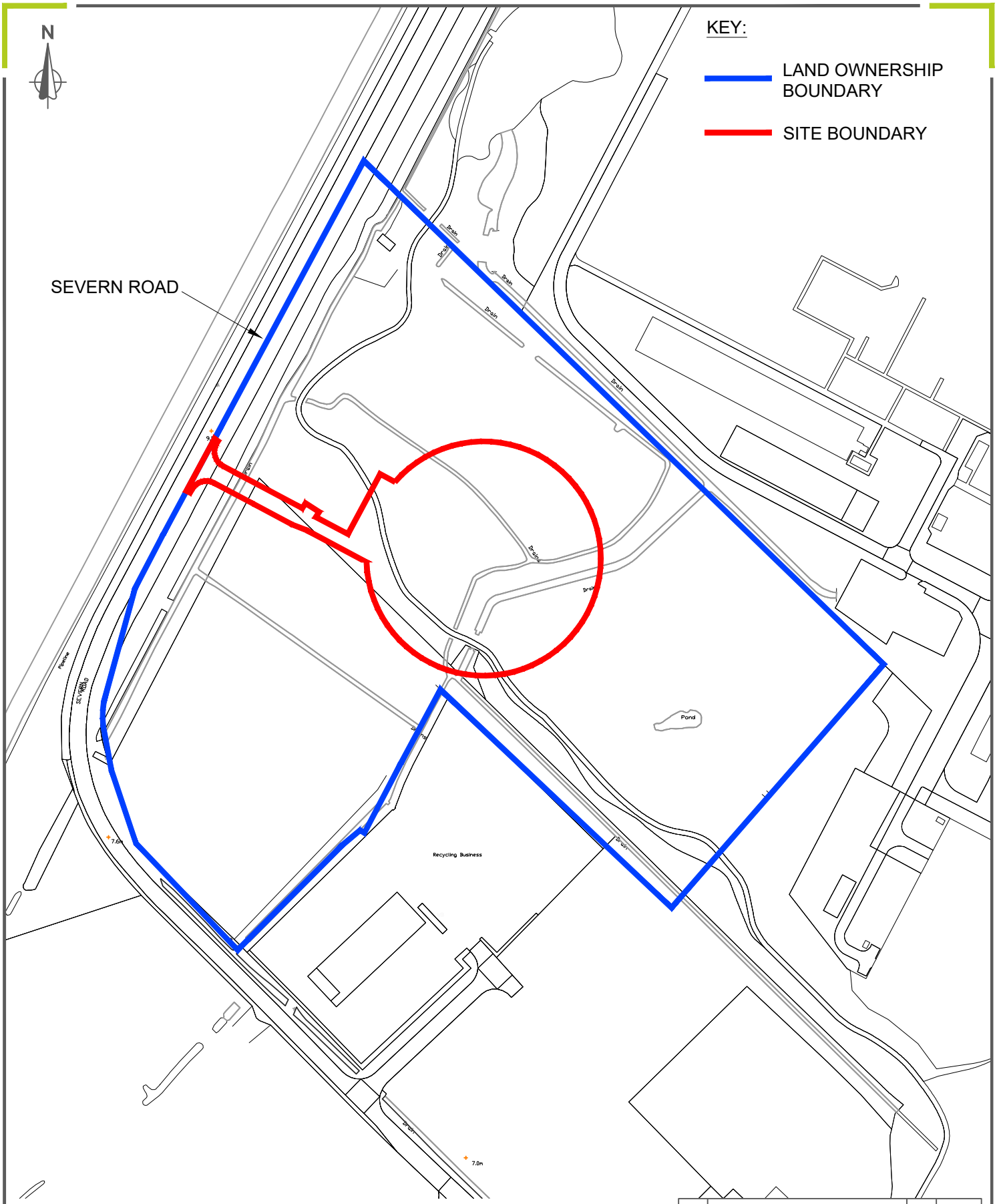
Supporting Documents

2. Land on the South East Side of Severn Road Avonmouth.

1. Site location plan
2. View of site from Severn Road
3. Proposed site plan
4. Turbine plan and elevations
5. Visual representations – before and after



REV:	DESCRIPTION:	BY:	DATE:
E	REDLINE BOUNDARY REVISED	NT	18/02/20

AMENDMENTS:

SITE:
SEABANK, AVONMOUTH, BRISTOL

TITLE:
SITE LOCATION PLAN

SCALE AT A4:	DRAWN:	CHECKED:	REVISION:
1:2500 @ A4	NT	KT	E

PROJECT NO:	DRAWING NO:	DATE:
BR-640-0001	SK001	09/12/19

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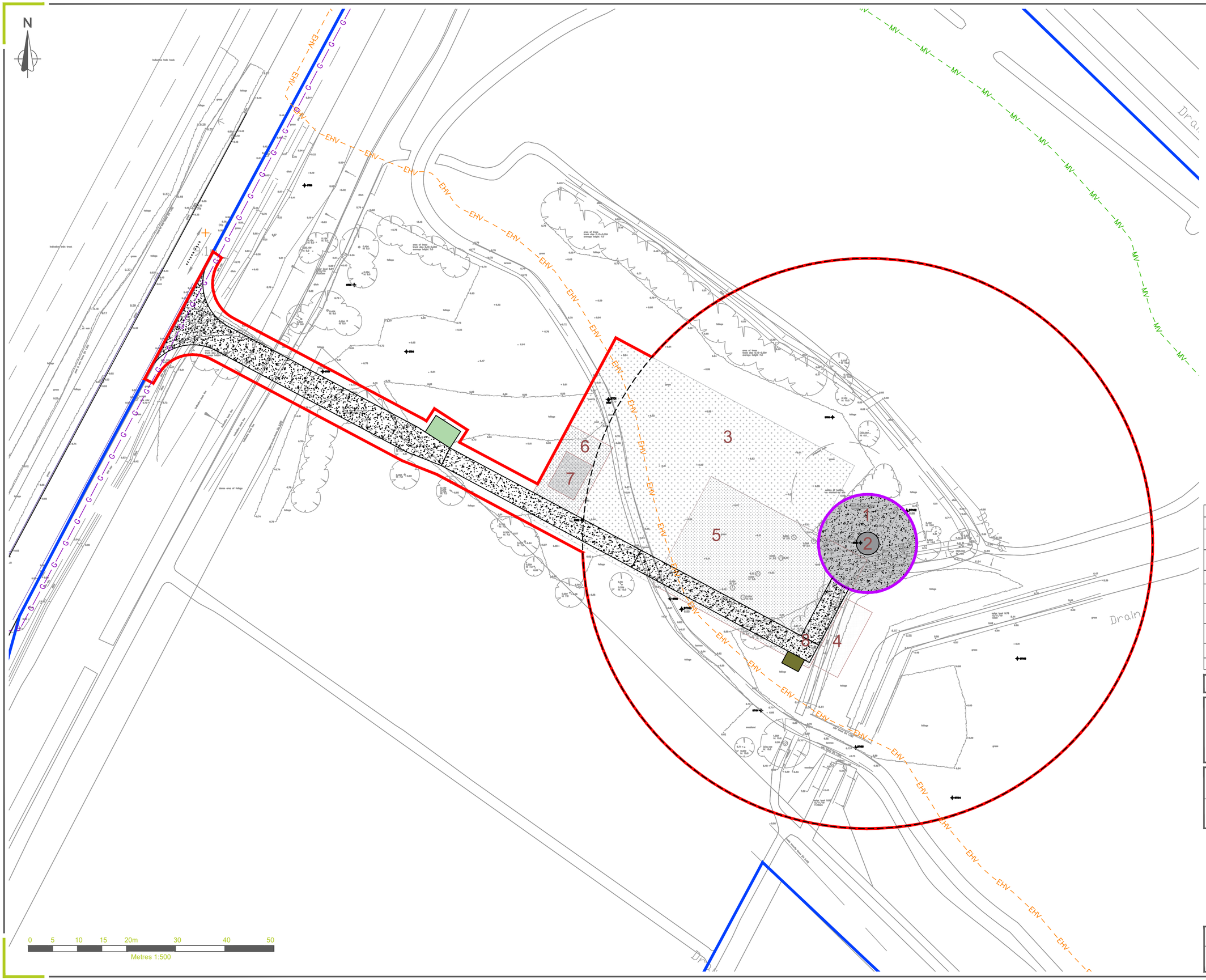

REV:	DESCRIPTION:	BY:	DATE:
H	RED LINE BOUNDARY AMENDED.	NT	18/02/20
G	RED LINE BOUNDARY AMENDED.	NT	14/02/20
F	UNDERGROUND GAS AND ELECTRIC CABLES INCLUDED.	NT	14/02/20
E	AREAS 6 & 7 REVISED. KEY UPDATED	NT	12/02/20
D	LAYDOWN AREAS INCLUDED	NT	05/02/20
C	LAND OWNERSHIP AND REDLINE BOUNDARY REVISED.	NT	14/01/20
B	LAND OWNERSHIP BOUNDARY REVISED.	NT	16/12/19
A	RED LINE REVISED. TEMPORARY WORKS AREAS REMOVED	NT	12/12/19
-	FIRST ISSUE	NT	09/12/19

STATUS: PRELIMINARY

CLIENT: AMBITON LAWRENCE WESTON

SITE: SEABANK, AVONMOUTH BRISTOL

TITLE: PROPOSED SITE PLAN

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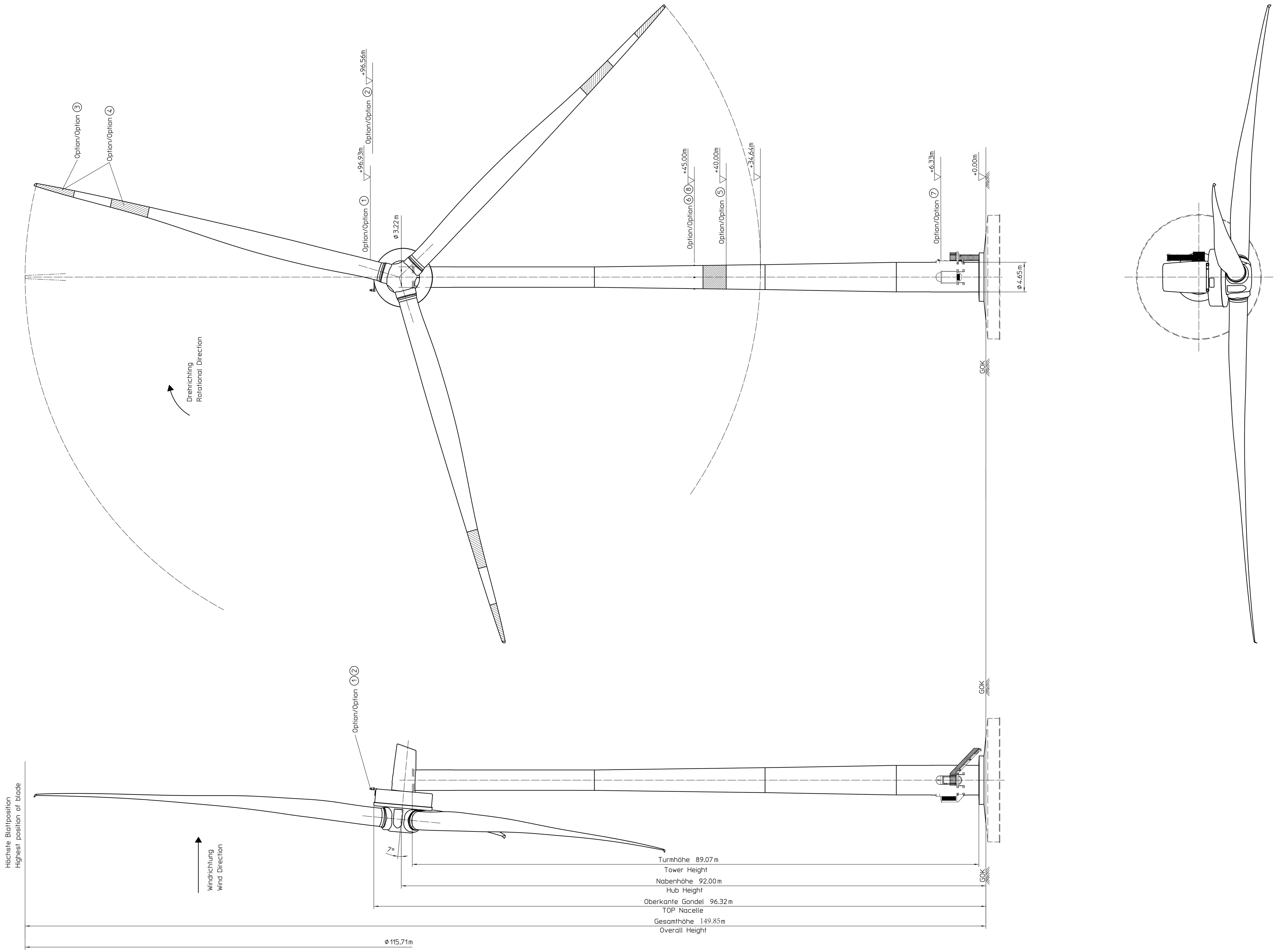
SCALE AT A2:	DATE:	DRAWN:	CHECKED:
1:500 @ A2	09/12/19	NT	KT
PROJECT NO:		DRAWING NO:	REVISION:
BR-640-0001		SK002	H



Projektbezogene Angaben / *Project-specific data*

Projekt / *Project:*

Geländehöhe über NHN / *Ground elevation above sea level:*

Gesamthöhe über NHN / *Total elevation above sea level:*

Optionen / *Options:*

FOK: Fundamentoberkante / *Top foundation*
GOK: Geländeoberkante / *Top ground*

① Nachtkennzeichnung / *Nighttime marking:* W - Rot / *W - Red*

② Tageskennzeichnung / *Daytime marking:* weißes Blitzlicht mit Sichtweitenreduzierung *white strobe lights with visibility reduction*

③ Tageskennzeichnung / *Daytime marking:* 6m rot (RAL 3020) / graues Rotorblatt (RAL 7038) / *6m red (RAL 3020) grey rotor blade (RAL 7038)*

④ Tageskennzeichnung / *Daytime marking:* rot/grau/rot (RAL 3020 / RAL 7038 / RAL 3020) je 6m lang / *red/grey/red (RAL 3020 / RAL 7038 / RAL 3020) each 6m long*

⑤ Tageskennzeichnung / *Daytime marking:* 3,64m Farbfeld RAL 3020 / *3,64m colour field RAL 3020*

⑥ Nachtkennzeichnung / *Nighttime marking:* Hindernisfeuer auf jeder Turmachse / *Obstruction beacon on every tower axis*

⑦ Schattenabschaltung standard: *Shadow shutdown standard:* 3 Sensoren im Winkel von 120° / *3 sensors at an angle of 120°*

⑧ Schattenabschaltung Waldstandort: *Shadow shutdown at forest sites:* 3 Sensoren im Winkel von 120° / *3 sensors at an angle of 120°*

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ENERCON GmbH
Dreekamp 5
26605 Aurich
Germany

Allgemeintoleranzen / General tolerances	
Oberfläche / Surface	DIN EN ISO 1302
Maßstab / Scale	1:200
Gewicht / Weight	KG

	Dat.	Name
Erstellt / Creat. by	22.11.2018	Berta
Freigegeben / Approved	05.12.2018	A.Albers
Standard		
Release language		

Ansichtszeichnung Stahlturm
Elevation drawing steel tower
E-115 EP3 E3-ST-92-FB-C-01

Rev.	Änderung / Change	Freig. Dat.	Name	
1	Überarbeitet	16.05.19	SJA	ASA

WRD Turm

No guarantee can be given in respect of this translation.

EP3.00.156 - 1

Sprache / Language	Blatt/Bl. / Sheet/qty
DE	1/1

ID Nr.: KM1377163

DIN A0

Technische Änderungen vorbehalten
Subject to technical change without prior notice

THE Landmark PRACTICE

PROPOSED WIND TURBINE, LAND ON THE SOUTH EAST SIDE OF SEVERN ROAD (A403), AVONMOUTH

ACCURATE VISUAL REPRESENTATIONS

ON BEHALF OF AMBITION COMMUNITY ENERGY C.I.C

MAY 2020

LANDMARK REF: 3022

Project: Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth

Prepared by: The Landmark Practice
Hope Chapel House
Hope Chapel Hill
Hotwells, Bristol
BS8 4ND

Tel: 0117 923 0455

Landmark Ref: 3022

Client: Ambition Community Energy C.I.C

The information which we have prepared and provided is true, in accordance with Landscape Institute Technical Guidance Notes 06/19 Visual Representation of Development Proposals and were current at the time of the original set of views (May 2020).

The following AVRs are based on proposed site plan (drwg BR-640-0001), turbine elevations (drwg EP3.00.156-1) and landscape masterplan (drwg 3022_L_SW_P)

Version	Prepared by	Checked by	Approved by	Issued on
D1	GS	LF	GM	14/05/20
V1	GS	LF	GM	15/05/20

*D denotes a Draft version

S:\PROJECTS\3000 - 3049\3022 - ALW Community Wind, Seabank\GRAPHICS (WORKING)\InDesign\3022_Seabank_AVRs.indd

02

01 Turbine location

03

N

View	Location	Visualisation type
01	National Cycle Route 41	Rendered
02	Severn Way (Long Distance Path)	Rendered
03	Kings Weston House	Rendered

THE Landmark PRACTICE

Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

0 0.5 1 km

Revision:	-	Sheet Size:	A3
Drawn:	GS	Checked:	LF
Date:	15/05/20	Authorised:	GM

Project: Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth

Client: Ambition Community Energy C.I.C

Drawing title: Viewpoint Location Plan

Fig: 1

S:\PROJECTS\3000 - 3049\3022 - ALW Community Wind, Seabank\GRAPHICS (WORKING)\InDesign\3022_Seabank_AVRs.indd

40° 30° 20° 10° 10° 20° 30° 40°

20 cm

10 cm

0

THE Landmark PRACTICE

Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

Distance to turbine:	102 m
Bearing to:	118.8° from north
Viewpoint grid reference:	E: 353269.5 N: 182388.7
Viewpoint ground height:	6.8m AOD
Date & time of photo:	06/05/2020 12:41
Camera:	Nikon D750
Lens, FL, max aperture:	18-55mm, 35mm Pano (Portrait), F11

Revision:	-	Sheet Size:	A3
Drawn:	GS	Checked:	LF
Date:	15/05/20	Authorised:	GM
Recommended viewing distance:		200 mm	
Weather:		Clear, sunny	
Visibility:		Good	

Project:	Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth
Client:	Ambition Community Energy C.I.C
Drawing title:	Viewpoint 01 - National Cycle Route 41 Existing view

Fig: 2.1

S:\PROJECTS\3000 - 3049\3022 - ALW Community Wind, Seabank\GRAPHICS (WORKING)\InDesign\3022_Seabank_AVRs.indd

40° 30° 20° 10° 10° 20° 30° 40°

20 cm
10 cm
0

THE Landmark PRACTICE

Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

Distance to turbine:	102 m
Bearing to:	118.8° from north
Viewpoint grid reference:	E: 353269.5 N: 182388.7
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Date & time of photo:	06/05/2020 12:41
Camera:	Nikon D750
Lens, FL, max aperture:	18-55mm, 35mm Pano (Portrait), F11

Revision:	-	Sheet Size:	A3
Drawn:	GS	Checked:	LF
Date:	15/05/20	Authorised:	GM
Recommended viewing distance:		200 mm	
Weather:		Clear, sunny	
Visibility:		Good	

Project:	Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth
Client:	Ambition Community Energy C.I.C
Drawing title:	Viewpoint 01 - National Cycle Route 41 Rendered (15 years after completion)

Fig: 2.2

S:\PROJECTS\3000 - 3049\3022 - ALW Community Wind, Seabank\GRAPHICS (WORKING)\InDesign\3022_Seabank_AVRs.indd

15° 10° 5° 5° 10° 15°

20 cm
10 cm
0

THE Landmark PRACTICE

Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

Distance to turbine:	2.1 km
Bearing to:	192.9° from north
Viewpoint grid reference:	E: 353914.1 N: 184434.1
Viewpoint ground height:	9.5m AOD
Date & time of photo:	06/05/2020 13:00
Camera:	Nikon D750
Lens, FL, max aperture:	50mm fixed lens, F11

Revision:	-	Sheet Size:	A3
Drawn:	GS	Checked:	LF
Date:	15/05/20	Authorised:	GM
Recommended viewing distance:		450 mm	
Weather:		Clear, sunny	
Visibility:		Good	

Project:	Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth
Client:	Ambition Community Energy C.I.C
Drawing title:	Viewpoint 02 - Severn Way Existing view

Fig: 2.3

S:\PROJECTS\3000 - 3049\3022 - ALW Community Wind, Seabank\GRAPHICS (WORKING)\InDesign\3022_Seabank_AVRs.indd

15° 10° 5° 5° 10° 15°

20 cm
10 cm
0

THE Landmark PRACTICE

Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

Distance to turbine:	2.1 km
Bearing to:	192.9° from north
Viewpoint grid reference:	E: 353914.1 N: 184434.1
Viewpoint ground height:	9.5m AOD
Date & time of photo:	06/05/2020 13:00
Camera:	Nikon D750
Lens, FL, max aperture:	50mm fixed lens, F11

Revision:	-	Sheet Size:	A3
Drawn:	GS	Checked:	LF
Date:	15/05/20	Authorised:	GM
Recommended viewing distance:		450 mm	
Weather:		Clear, sunny	
Visibility:		Good	

Project:	Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth
Client:	Ambition Community Energy C.I.C
Drawing title:	Viewpoint 02 - Severn Way Rendered

Fig: 2.4

S:\PROJECTS\3000 - 3049\3022 - ALW Community Wind, Seabank\GRAPHICS (WORKING)\InDesign\3022_Seabank_ AVRs.indd

15° 10° 5° 5° 10° 15°

20 cm

10 cm

0

THE Landmark PRACTICE

Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

Distance to turbine:	4.9 km
Bearing to:	350.2° from north
Viewpoint grid reference:	E: 354109.7 N: 177431.1
Viewpoint ground height:	60.7m AOD
Date & time of photo:	06/05/2020 13:39
Camera:	Nikon D750
Lens, FL, max aperture:	50mm fixed lens, F11

Revision:	-	Sheet Size:	A3
Drawn:	GS	Checked:	LF
Date:	15/05/20	Authorised:	GM
Recommended viewing distance:		450 mm	
Weather:		Clear, sunny	
Visibility:		Good	

Project:	Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth
Client:	Ambition Community Energy C.I.C
Drawing title:	Viewpoint 03 - Kings Weston House Existing view

Fig: 2.5

S:\PROJECTS\3000 - 3049\3022 - ALW Community Wind, Seabank\GRAPHICS (WORKING)\InDesign\3022_Seabank_ AVRs.indd

15° 10° 5° 5° 10° 15°

20 cm
10 cm
0

THE Landmark PRACTICE

Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

Distance to turbine:	4.9 km
Bearing to:	350.2° from north
Viewpoint grid reference:	E: 354109.7 N: 177431.1
Viewpoint ground height:	60.7m AOD
Date & time of photo:	06/05/2020 13:39
Camera:	Nikon D750
Lens, FL, max aperture:	50mm fixed lens, F11

Revision:	-	Sheet Size:	A3
Drawn:	GS	Checked:	LF
Date:	15/05/20	Authorised:	GM
Recommended viewing distance:		450 mm	
Weather:		Clear, sunny	
Visibility:		Good	

Project:	Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth
Client:	Ambition Community Energy C.I.C
Drawing title:	Viewpoint 03 - Kings Weston House Rendered

Fig: 2.6

THE Landmark PRACTICE

PROPOSED WIND TURBINE LAND ON THE SOUTH EAST SIDE OF SEVERN ROAD (A403), AVONMOUTH

APPENDIX A

15/05/20

LANDMARK REF: 3022

Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth

Technical Methodology

15/05/20

1.0	For all photography	Responses
1.1	Make and model of camera, and its sensor format (assumed 35mm FFS)	Nikon D750, Full Frame Sensor (35.9 x 24.0 mm)
1.2	If panoramas used: make and type of panoramic head and equipment used to level head	Tubular and bulls-eye spirit level mounted on tripod
1.3	Method to establish the camera location (eg handheld GPS/GNSS, GPS/RTK GPS, survey point, visual reference)	Topo survey and visual reference on high quality aerial photograph
1.4	Likely level of accuracy of location (#m, #cm etc)	≤ 1m
1.5	If working outside the UK, geographic co-ordinate system (GCS) used (e.g. WGS-84)	Inside the UK (British National Grid OSGB_1936)
2.0	For the 3D Model	
2.1	3D Modelling and Rendering Software	SketchUp Pro 2018, Autodesk 3Ds Max 2017, Photoshop CC 2020
2.2	Source of topographic height data and its resolution	Topographical survey and LiDAR Digital Surface Modelling (DSM) 1m resolution
2.3	How have the model and the camera locations been placed in the soft-ware?	Point coordinates added to geo-referenced dwg file containing topo survey and proposed layout. Points loaded into 3D program and camera added to points.
3.0	Generally	
3.1	Any limitations in the overall methodology for preparation of the photomontage and visualisations?	Faster CPU and improved graphics card will speed up AVR process

Technical methodology template extracted and adopted from Landscape Institute's Photography and Photomontage public consultation draft, June 2018

4.0	Photographic equipment	Responses
4.2	Date and Time of captured photography	06/05/2020, times vary (see AVR pack figure 2)
4.3	A photograph of the tripod location, to allow the viewer to understand where the camera/tripod was located.	Yes- See Appendix B tripod photograph location
4.4	Make, maximum aperture and focal length of the camera lens(es) used.	Nikon D750, F11, 18-55mm lens and 50 mm fixed lens,
4.5	If lenses other than 50mm have been used, explain why a different lens is appropriate (e.g. wide-angle view required to capture the width or height of the development)	35mm focal used on View 01 to capture context within view due to close proximity and scale of proposal. 35mm used in accordance with current LI guidlines see 'TGN 06/19 Visusal Representation of development proposals'
4.6	Camera location grid coordinates: eastings & northings to 1m accuracy; height of ground in mAOD	See AVR pack figures 1 & 2 for each viewpoint
4.7	Height of the camera lens above ground level. If above 1.65m or below 1.5m, why?	1.5m-1.65m (average eye level)
4.8	Distance (in m) to the nearest boundary or key feature(s) of site, as most appropriate.	See AVR pack figures 1 & 2 for each viewpoint
5.0	3D Model	
5.1	What elements in the view have been used as target points to check the horizontal alignment?	Multiple existing features in photograph/view matched to topo plan, used a reference points/markers, camera automatically set to level horizontally
5.2	What elements in the view have been used to check the vertical alignment of the model in the view?	Multiple existing features in photograph/view are matched to topo plan, used a reference points/markers, camera automatically set to level vertical alignment

PROPOSED WIND TURBINE LAND ON THE SOUTH EAST SIDE OF SEVERN ROAD (A403), AVONMOUTH

APPENDIX B

15/05/20

LANDMARK REF: 3022

Proposed Wind Turbine, Land on the East Side of Severn Road (A403), Avonmouth

Accurate Visual Representations - Camera Tripod Location

15/05/20

Viewpoint 01 tripod location

Viewpoint 02 tripod location

Viewpoint 03 tripod location