PLANNING COMMITTEE – 15 FEBRUARY 2022

Application No:	20/02296/FUL						
Proposal:	Erection of 1 single storey fossil-fuel-free dwelling and detached car port						
Location:	Field Reference Number 8024, Wellow Road, Eakring						
Applicant:	Dr Chris Parsons						
Agent:	Mr Jeremy Harrall						
Registered:	04.12.2020 Target Date: 29.01.2021						
	Agreed extension of time: 18 February 2022						
Website Link:	https://publicaccess.newark-sherwooddc.gov.uk/online- applications/applicationDetails.do?activeTab=documents&keyVal=QK95O8LBKLA00						

This application is being referred to the Planning Committee as it is a departure from the local plan and the recommendation is one of approval.

<u>The Site</u>

The application site relates to a broadly rectangular plot of land approximately 0.20 hectares in size to the west of Wellow Road on the northern fringe of Eakring village.

The site comprises an area of mown grass and is separated from the northern part of the field by a farm track. Land levels slope downwards from the south to north of the site. There are existing residential properties approximately 60m south of the site and immediately to the east on the opposite side of Wellow Road. Land to the south is currently in use as a paddock; whilst land immediately to the north and the west is open in nature with mature trees forming a small woodland providing screening along the boundary adjacent to Wellow Road to the east.

Eakring footpath 6 also known as The Robin Hood Way walking route forms part of the application site. This runs along the northern boundary before turning north-westwards and connecting to a track off Bilsthorpe Road. The Robin Hood Way runs for approximately 172km through central Nottinghamshire between Nottingham Castle and Edwinstowe. Further north of the site, the land opens to agricultural fields.



The site is located within the Open Countryside. A section of the proposed site, including the access is within Eakring Conservation area. Within close proximity to the site are a number of heritage assets, both designated and non-designated. Nearby is Eakring Windmill (LEN 1370133), which is grade II listed. Additionally, the site lies within the Mid Nottinghamshire Farmlands Landscape Character Area as identified in the Newark and Sherwood Landscape Character Assessment. According to the Environment Agency Flood maps the site is situated within Flood Zone 1.

Relevant Planning History

20/00729/FUL – Proposed single storey two bedroom Agricultural Workers Dwelling. Application was withdrawn.

PREAPP/00301/19 – Proposed a new single storey 2 bed dwelling – Advice given on 01.08.2019

The Proposal

The proposal seeks full-planning permission for the erection of a fossil fuel free single storey two bedroom dwelling with an associated carport with solar panels flat on its roof.

The dwelling would be positioned towards the southwest corner of the plot. Access would be provided along the public right of way and then entering at the south-western corner, approximately 62m from where it joins Wellow Road as shown on the diagrams below:



The dwelling would measure 12m in width and 9.75m in depth, standing at a maximum height of 3.5m. It would have a green roof, timber walls and is proposed to have grey-framed windows and doors. An open sided carport of timber construction would be positioned southwest of the dwelling,

measuring 5.2m in depth and 7.0m in width, standing at maximum height of 2.4m including solar panels above.



Stock fencing at 1.2m in height is proposed to enclose the proposed site from the adjacent grazing areas. The gate across the driveway, along the public right of way, within the site would be replaced with a five bar field gate.

A proposed Landscape Strategy would see additional planting of different species of hedgerow within the site and adjacent to both sides of Eakring footpath 6. The Strategy includes the planting methodology, hedgerow mix and details of aftercare.

The application has been submitted on the basis of it being innovative due to matters including its energy efficiency, operating beyond zero carbon and SAP rating of 153A. These need to be fully detailed in the report to ensure Members have full information in order to make a sound decision. As these form the discussion of the proposal, the information is provided under 'Dwellings Credentials'.

This application has been assessed against the following plans and documentation:

- Location Plan 1:2500, received on 23 November 2020
- Propose layout, received on 23 November 2020
- Proposed north and south (front and rear) elevations, received on 23 November 2020
- Proposed east and west (sides) elevations, received on 23 November 2020
- Proposed floor Plan, received on 23 November 2020
- Proposed Cross Section, received on 23 November 2020
- Landscape proposal, ref: EAK001A REV A, received on 02 December 2020
- CGI's various views, received on 23 November 2020
- Topographical Survey, received on 23 November 2020
- Heritage Statement, received on 23 November 2020
- Landscape Report and Scheme, received on 23 November 2020
- Design SAP Calculation, received on 23 November 2020
- Paper: Residual Heat Reservoir received on 23 November 2020
- Planning and design statement, received on 23 November 2020
- Copy of Collated Data, received on 1st March 2021
- Public benefits, received on 07 October 2021
- Planning precedents, received on 12 October 2021

Departure/Public Advertisement Procedure

Occupiers of five properties have been individually notified by letter. A site notice was placed near the proposed site on 17 December 2020. A newspaper advert was published on 10 December 2020.

An additional site notice was also posted on 12 November 2021 due to the application being a potential departure.

Planning Policy Framework

Newark and Sherwood District Council Core Strategy DPD (adopted March 2019)

- Spatial Policy 1 Settlement Hierarchy
- Spatial Policy 2 Spatial Distribution of Growth
- Spatial Policy 3 Rural Areas
- Spatial Policy 7 Sustainable Transport
- Core Policy 3 Housing Mix, Type and Density
- Core Policy 9 Sustainable Design
- Core Policy 10 Climate Change
- Core Policy 12 Biodiversity and Green Infrastructure
- Core Policy 13 Landscape Character (Mid-Nottinghamshire Farmlands)
- Core Policy 14 Historic Environment

Allocations and Development Plan Development Plan Document

- DM3 Developer Contributions and Planning Obligations
- DM4 Renewable and Low Carbon Energy Generation
- DM5 Design
- DM7 Biodiversity and Green Infrastructure
- DM8 Development in the Open Countryside
- DM9 Protecting and Enhancing the Historic Environment
- DM12 Presumption in Favour of Sustainable Development

Other Material Considerations

- National Planning Policy Framework (2021)
- National Planning Policy Guidance (on line resource)
- Landscape Character Assessment SPD 2013
- Eakring Conservation Area Appraisal
- Sections 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990
- NSDC Residential cycle and car parking standards & design guide
- Climate Change Act 2008, Part 1.

Consultations

Eakring Parish Council - No comment received

NCC Rights of Way team – provide advice and state that the Eakring FP6 and FP6A would be affected by the proposal. Seek clarification that the footpath will not be obstructed in any way and that there is sufficient width to allow for vehicles into the property and not impinge on the width of the footpath or the safety of the footpath users.

NCC Highways – consider the development is acceptable subject to a number of conditions. Visibility splays are acceptable. The gate adjoining Wellow Road requires repositioning to be 12 metres back from the highway and hard surfacing of this area.

Ramblers Association – no objection to the proposal.

Robin Hood Way Association -holding objection.

East Midland Building Control Lead Officer – commented that the design energy rating is very high at 129 well above the current minimum standard required in the current building regulations. The building regarding thermal efficiency will be exceptional on the design data received.

NSDC Conservation – Broadly agree with the conclusions of the submitted heritage statement, consider the design of the new dwelling is markedly different from traditional vernacular house types locally, the modest nature of the dwelling, the green sculpted roof and discreet position against a copse of trees ensures that impact on the conservation area (CA) is now very limited. The use of landscaping and new hedges further helps integrate the design into the site. Agree with the materials to be used on the proposed development, consider the design is capable of causing no harm to the setting of the CA or any other heritage asset.

No representations from local residents/interested parties have been received.

Comments of the Business Manager

Principle of development

The starting point for all development-management-decision making is S.38 (6) of the 'Planning and Compulsory Purchase Act 2004,' which states the following: "*The determination of planning applications must be made in accordance with the 'Development Plan,' unless other material considerations indicate otherwise.*"

The Amended Core Strategy (ACS) details the settlement hierarchy which will help deliver sustainable growth and development in the District. The intentions of this hierarchy, in accordance with Spatial Policy 1, are to direct new residential development to the sub-regional centre, service centres and principal villages, which are well served in terms of infrastructure and services. Eakring is not defined as a Principal Village and therefore, in accordance with Spatial Policy 1, the development needs to be considered against Spatial Policy 3 (Rural Areas).

Spatial Policy 3 states that development, which is neither located within villages nor settlements but is found within the 'Open Countryside' - will both be "strictly controlled and restricted to uses that require a rural setting. Policies to deal with such applications are set out in the 'Allocations & Development Management DPD...." The Policy then goes on to direct the decision maker to an Open Countryside policy within the 'Allocations and Development Management DPD' (ADMDPD), being Policy DM8.

Policy DM8 of the ADMDPD reiterates the intentions of SP3. However, Policy DM8 also lists a number of exceptions, including 'New Dwellings.' This states that *"Planning permission will only be granted for new dwellings where they are of exceptional quality or innovative nature of design, reflect the highest standards of architecture, significantly enhance their immediate setting and be sensitive to the defining characteristics of the local area."* [Author's emphasis].

The National Planning Policy Framework (NPPF), paragraph 134, reflects the aim of Policy DM8:

Development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design, taking into account any local design guidance and supplementary planning documents such as design guides and codes. Conversely, **significant weight** should be given to:

- a) development which reflects local design policies and government guidance on design, taking into account any local design guidance and supplementary planning documents such as design guides and codes; and/or
- b) outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings. [Author's emphasis]

Therefore if the development promotes high levels of sustainability, significant weight should be attached. The credentials of the building are detailed and discussed below. However, it is also important to note that the Council has a 5-year housing land supply and therefore paragraph 14 of the NPPF is not triggered.

Dwelling's Credentials

In terms of the construction, this is where the environmental value of the dwelling is delivered. Starting from the ground upwards:

Foundations: there would be no traditional foundations. The base would comprise a ground bearing slab of 200mm consolidated hardcore, 300mm extruded polystyrene, 300mm in-situ concrete slab (cement free concrete) and stone tile, avoiding deep trench and strip foundations.

Walls: there would be no cavity walls. The walls would comprise 140mm 7N dense (cement free) concrete blocks and an internal, sponge float finish render. Externally, different to traditionally designed dwellings, the insulation, 300mm of PIR would be mounted externally. The walls would then be clad with vertical timber cladding. This would most likely be Western Red Cedar (subject to availability) 43mm x 43mm vertical slats on battens with breathable building paper. The timber would be treated to maintain the timber hue to avoid silver-grey weathering and for longevity. The treatment would be environmentally friendly, as all finishes to the building are proposed to be, and the timber FSC and PEFC Certified. The structure creates a building with a high thermal mass.

Windows: would be triple-glazed, proposed to be finished in a grey colour with a U-Value of $0.1W/m^2K$ (to comply with building regulations, it must meet $1.6W/m^2K$ although triple-glazed are reported to go as low as $0.7/Wm^2K$). These would be mounted to the outside of the external wall structure of the block walls with the insulation butting out to the frames. This ensures there is no cold air bridging through the frames. The majority of glazing is designed to face south to benefit from passive solar gain, whilst other elevations have reduced windows in numbers and size in order to minimize heat loss.

Roof: There would be no roof voids. Externally, the roof would be curved and comprise an extensive green roof system with primarily sedums, some mosses and a few grasses. Initial watering would be necessary to help establish the cover and thereafter, the cover is self-maintaining. The dwelling would be passively ventilated i.e. no mechanical ventilation would be required. Passive stack vents

of 150mm diameter, with insulated ducting through the roof space exiting the building and topped with vent pieces, would be provided to the kitchen, utility and bathroom.

Fascias, barges, soffits etc.: would also in a grey colour. The drain pipes would comprise stainless steel chains hanging from the gutter outlets, discharging to a French drain.

The estimated thermal mass of the dwelling and SAP predictions are shown in the table below. This table provides comparison with another building designed by the architect with the proposal (Tork Lane Cottage (TLC)) and thus provides detail of its credentials:

COMPARISON OF 43 RESERVOIR ROAD (2021/22) & TORK LANE COTTAGE PERFORMANCE									
PROJECTS	Average U-Value	Thermal Mass	CO₂t/yr	SAP Predicted Energy Consumption KWhrs/yr	SAP Predicted Energy Costs £/yr	SAP	Photovoltaics KWpeak		
(43RR)	0.3W/m²K	0.2MJ/K	+1.53	3,178	124	86(B)	0		
Tork Lane Cottage (TLC)	0.1W/m²K	1.29MJ/K	-5.08	-1,973	-1,372	153(A)	14		
SUMMARY 43RR's rate of heat loss (0.3W/m ² K) is three times that of TLC (0.1W/m ² K) 43RR's capacity to store heat energy (0.2MJ/K) is 20% of TLC's (1.29MJ/K) 43RR's predicted annual energy consumption (3,178KWhrs) is five times that predicted by SAP for TLC. (-1,372KWhrs/yr) 43RR's SAP predicted running costs (£124) are twelve times that of TLC (-£1,372) According to SAP, TLC (153A) is 44% more energy efficient than 43RR (86B) atypical 2022 dwelling									

The thermal mass of the dwelling is created by providing the insulation on the outside of the building fabric, which enables the block walls to have direct contact with the internal air. The thermal mass of the building absorbs heat from within the building – people, electronic goods as well as warmth from the sun touching the wall surfaces. The dwelling has been designed so that principal rooms have a southerly view which optimises solar gain for heating the dwelling. The design provides for a transfer of heat ebbing and flowing between the environment (air) within the dwelling and the fabric (walls and ceiling). This warmth is then sustained throughout the year at an average of 23°C, with a fluctuation shown within studies reported of 4.5 °C (refer endnotes). This means that whilst underfloor space heating is proposed for the dwelling, it will be a back-up system when required and is dependent upon the amount of insulation used and the junctions of the walls, floors and roofs. No radiators are proposed and thus no boiler further minimising the amount of materials within the building, noting all materials have a cradle to grave (life cycle) impact upon the environment.

This requirement for an alternative heating source (i.e. the ground floor heating) is most likely to be during the first 1 or 2 years of occupation, if it is required. The applicant proposes to install battery storage, thus enabling energy sourced from the solar panels on the car port roof to be utilised in the evenings and longer nights during winter-time, particularly during December. There is a public access tool to understand how much energy a specified PV array will generate at a specific post-code across a 12-month period. This tool shows the proposed solar panels (14KW array) will generate the least amount of energy in December (300KW). The proposal is to install a solid state battery which is able to store ten times the amount of energy compared to current Lithium-ion batteries. One example of such a battery is Tesla's 3rd generation Powerwall which has a 28KW rating. The date for release of the Tesla battery (as well as other solid state batteries) is uncertain, having been delayed for a number of reasons including 'chip' availability. It is anticipated they will come on the market later this year/early 2023 which would enable the dwelling to be completely off-grid whilst also being a provider of renewable energy for those times when a surplus is

generated. The applicant advances that this will result in this dwelling being one of the first truly off-grid, fossil-fuel dwellings in the country. Other dwellings which claim to be off-grid, for example, may be supplemented by a domestic gas cylinder supply. Compared to other properties, including eco-dwellings, it will be fossil-fuel-free with exceptional energy efficiency which is not achieved by other dwellings demonstrated by its SAP rating of 153A (in the top 0.001% certificates in the UK). The SAP calculation has been referred to East Midlands Building Control who confirm it is very high and "...building regarding thermal efficiency will be exceptional on the design data received...".

SAP ratings are not normally considered as part of planning applications. However, they demonstrate the 'green' credentials of a dwelling, the higher the number the more positive (or neutral effect) a building has upon the environment. As well as the SAP rating of 153A meaning the dwelling would achieve the highest energy standards (a carbon neutral dwelling has a SAP rating of 100), it also has an environmental rating of 141A meaning the dwelling, as designed, would in SAP assessment terms mitigate carbon (also at an exceptional rate) of (minus) -5.08 tonnes/year of CO₂ emissions. It would therefore significantly exceed the Government's 2050 Zero Carbon standard. It would also meet Code for Sustainable Homes highest level - 6.

The applicant has reviewed and compared past case studies to evaluate the energy requirements for TLC based upon the innovative construction methods proposed with this application. This evaluation is detailed within their supporting information (refer Copy of Collated Data). In summary, the dwelling's heating load will be zero and with the provision of a battery for storage, no energy from the grid would be required.

Water: There would be very limited hot water storage provided for within the dwelling, thus preventing wasted energy heating water that is not used. Showers and sinks would have a point source below each device to provide hot water 'on tap', also limiting heat loss. Other measures such as no mixer taps, temperature restrictors and a secondary water meter display within the dwelling would all assist in encouraging positive behavioural patterns.

A 5,000 litre subterranean rain-water harvesting tank is proposed collecting water from the roof which will be used in the utility, sink, washing machine and WC cisterns. In addition, if planning permission is granted, it is proposed a British Geological Society Borehole Prognosis report will be commissioned which, if it is proven to be viable, would enable the applicant to consider a borehole for domestic water supply, furthering the off-grid agenda.

Information has also been provided detailing the dwelling has been designed to Lifetime Homes Standard (16 point checklist). Full information is provided but in summary, there would be level access to and within the dwelling. Doorways are wide enough for wheelchair users and there is space within bedrooms and bathrooms to provide hoists and turning areas.

Beyond the dwelling, a carport/pergola of open sided timber construction would be positioned southwest of the dwelling. The applicant's agent has confirmed an EV Charge Point would be provided.



Sewage: Within the curtilage a reed bed is proposed. This is not shown on the plans but would be situated at the outfall of the sewage treatment plant pipe as part of a pond. The reeds would remove nitrogen from the water discharge, resulting in increased biodiversity.

Assessment of Innovative Design Promoting High Levels of Sustainability

As well as the comments from East Midlands Building Control referred to earlier, an independent assessment of the environmental credentials has been sought from Ecospheric Limited. In addition to their comments, the case officer's Environmental Management knowledge has been used to appraise this scheme.

Ecospheric raise some concerns regarding the design which the applicant's agent has responded to. These relate to ventilation, overheating potential, massive embodied energy and little biodiversity enhancement. Biodiversity is discussed in detail under the landscaping section.

The proposed method of ventilation for this dwelling would be different to that provided within the homes Ecospheric design in that it would be natural as opposed to mechanically ventilated. Ecospheric raise concerns regarding its operation and effectiveness in terms of keeping the environment cool, preventing overheating. The agent cites he has designed other dwellings that are naturally ventilated and has monitored nine of these. In summary, he asserts the use of natural ventilation is not harmful to occupants. A review of studies to support this assertion has been undertaken in the context of high thermal mass buildings and natural ventilation, which support the agent's case:

"Thermal mass..., is essential to stabilize indoor temperatures, however its potential is maximized when coupled with natural ventilation strategies, as alone it is not sufficient to keep the indoor environment within comfort thresholds defined by the norm"

"While the use of high thermal mass solutions coupled with night ventilation almost completely eliminated exceedances of the absolute maximum temperature, in the lightweight rooms, with night ventilation on, hours with a temperature higher than its absolute maximum value occurred every day of the study."ⁱⁱ

In relation to its high thermal mass and overloading potential (i.e. too much heat), this is partly addressed within the above discussion. However, there are other studies also supporting the case:

"... thermal insulation of roof-structure played a significant role as a risk-reduction factor [of overheating]" (p.19),

whilst another study referenced within this journal found a combined approach –high thermal mass, night cooling with natural ventilation, solar shading and a reduction in the internal gainsⁱⁱⁱ, and

"Thermal mass, a material's capacity to absorb, store and release heat, has been identified as one of the most effective passive measures to help regulate internal temperature, reduce temperature variations and mitigate overheating...concrete has the ability to store more heat which can be absorbed and released easier... the maximum temperature observed in each zone was reduced when the levels of thermal mass were increased. Concrete, ... appears to be more effective ... in reducing the peak temperature".^{iv}

Notwithstanding Ecospheric's criticism, they conclude the current design for the proposed new dwelling would result in a very low energy building. Their analysis states that the design is well considered for passive principles and conservation of energy in all ways bar the ventilation selection. However, they advise that if the dwelling is to be considered as innovative, in accordance with the NPPF (and Policy DM8), then the "...off grid element needs to be designed in ...then coupled with a high thermal mass building and post occupancy monitoring of air quality and thermal comfort, we believe this building may be considered innovative. On the matter of whether this building will consume little energy there is no doubt."

The agent has detailed within the application that it is their intention to monitor the dwelling as part of a 4-year research project as the combination of elements of the construction are innovative with much that can be learnt from the usage and experience of future occupiers. This will include in-use building performance data which can be placed on a public access website. Sharing the information will enable dissemination of knowledge of low-tech building solutions to all. However, it is also critical to the consideration of this application to ensure that the details submitted as part of this application – materials, methodology of construction etc. are implemented. Detailed conditions would therefore be required to secure the measures proposed including the provision, in relation to Ecosphere's response the provision of battery storage, which the applicant's agent is supportive of. They identify that Tesla's Powerwall 3 (their preferred storage) is likely to be available in 2023 which, if this is the case, would be likely to have further benefits.

In conclusion, the proposed new dwelling would be able to provide a very low energy building, consuming no energy from the grid, as agreed by the independent assessment, subject to the provision of battery storage. Furthermore, the East Midland Building Control Lead Officer confirmed that the design energy rating is very high at 153A SAP rating. In conclusion, it is considered the dwelling would be of innovative design promoting high levels of sustainability complying with the NPPF and Policy DM8 in this regard.

Both of these policies also require new dwellings to also 'fit in with the overall form and layout of their surroundings'. Additionally, with reference to paragraph 80 of the NPPF (dealing with isolated homes in the countryside) and exemptions for new homes, the proposal would also need to comply with (e):

"the design is of exceptional quality, in that it: - is truly outstanding, reflecting the highest standards in architecture, and would help to raise standards of design more generally in rural areas; and - would significantly enhance its immediate setting, and be sensitive to the defining characteristics of the local area.

These aspects are addressed below.

Impact upon Character of Area and Design

Policy CP9 requires development proposals to demonstrate a high standard of sustainable design that protects and enhances the natural environment and contributes to and sustains the rich local distinctiveness of the District. Policy DM5 expands upon this, requiring local distinctiveness to be reflected in the scale, form, mass, layout, design, materials and detailing of proposals, together with requirements under Policy DM8.

Part 12 of the NPPF refers to achieving well designed places. Specifically, paragraph 126 states that good design is a key aspect of sustainable development; it creates better places in which to live and work in and helps make development acceptable to local communities. Paragraph 130 states it is *"proper to seek to promote or reinforce local distinctiveness"* and, paragraph 134, permission should be *"refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions"*. Additionally, paragraph 80 also applies.

The proposed site lies beyond the existing settlement of Eakring. Immediately to the east on the opposite side of Wellow Road is the first dwelling to the entrance to the village from a northerly direction. On the western side of Wellow Road this site is somewhat isolated, surrounded by fields. The site is in a relatively discreet position against the existing copse of trees, not readily visible from the vehicular highway, immediately to its east. However, due to the topography of the land it would be glimpsed travelling southwards towards Eakring along Wellow Road as well as more visible from the public footpath.

The Landscape Character Assessment SPD which underpins Policy CP13 identifies this area as being within Policy Zone Mid-Nottinghamshire Farmlands. The Landscape Action recommendation for this area is to conserve, due to the very good condition of the landscape (comprising a coherent pattern of elements, with few detracting features, good cultural integrity and visually unified) and its moderate sensitivity to change. Although the recommendations support use of vernacular styles, scale and materials for development, this is prefaced by the recommendation to *'limit any development in this area due to the likelihood of a high impact on the character of the Policy Zone'*.

The proposal scale, due to its single storey nature, would minimize its overall impact to views. This would be further assisted by virtue of the green roof to the dwelling. However, with reference to the public footpath and views from beyond the access track to the north and west of the site, the landscape opens up to expansive views across open countryside as well as into the site. All new development, however will have some impact, even if the development comprises an underground dwelling and policy, at both a national and local level, clearly allows new development subject to complying with a number of criteria. By virtue of the sloping green roof curving towards the northern elevation resulting in the walls to the northern elevation having only 1.9 metres visible, its impact is reduced assisting in the dwelling being able to assimilate into its countryside context. The dwelling is considered to be sensitive to its location, fitting in with the overall form and layout of its surroundings and enhance its setting.

In relation to the carport, this is of a simple design similar to an open cart shed and therefore comparable with many buildings that might be provided within fields by farmers to assist their agricultural operations. It is therefore considered the proposed development would preserve the character and appearance of the LCA as well as comply with national and local plan polices in relation to new dwellings in the open countryside.

Heritage

Only a small element of the site is designated as being within the Eakring Conservation Area (CA) – the first few metres of the access road and the tree'd area alongside Wellow Road as can be seen below. Although a limited area, the designation is important to consider.



Policies CP14 and DM9 of the Council's LDF DPDs, amongst other things, seek to protect the historic environment and ensure that heritage assets are managed in a way that best sustains their significance. The importance of considering the impact of new development on the significance of designated heritage assets, furthermore, is expressed in section 16 of the National Planning Policy Framework (NPPF). This advises that the significance of designated heritage assets can be harmed or lost through alterations or development within their setting. Such harm or loss to significance requires clear and convincing justification.

The setting of heritage assets is defined in the Glossary of the NPPF which advises that 'setting' is the surroundings in which an asset is experienced. Paragraph 013 (Reference ID: 18a-013-20190723) of the Historic Environment section within the Planning Practice Guidance (PPG) advises that a thorough assessment of the impact on setting needs to take into account, and be proportionate to, the significance of the heritage asset under consideration and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.

Additional advice on considering development within the historic environment is contained within the Historic England Good Practice Advice Notes (notably GPA2 and GPA3). In addition, *'Historic England Advice Note 2: making changes to heritage assets'* advises that it would not normally be good practice for new work to dominate the original asset or its setting in either scale, material or as a result of its siting. Assessment of an asset's significance and its relationship to its setting will usually suggest the forms of development that might be appropriate. The junction between new development and the historic environment needs particular attention, both for its impact on the significance of the existing asset and the impact on the contribution of its setting.

The applicant as part of their submission has provided a Heritage Impact Assessment. This assessment is broadly agreed with by the Conservation team. They advise that whilst the design of the new dwelling is markedly different from traditional vernacular house types locally, the modest nature of the dwelling, the green sculpted roof and discreet position against a copse of trees ensures

that impact on the CA is now very limited. The use of landscaping and new hedges further helps integrate the design into the site. A query was initially raised regarding the materials proposed recommending a timber finish, as opposed to render that had originally been proposed, which has been integrated into the proposal.

In heritage terms, they conclude the proposed design is capable of causing no harm to the setting of the CA or any other heritage asset. The landscaping strategy is an important aspect of the proposal, and potentially ensures that the important rural setting to the CA is not impeded by the new dwelling. Consideration and special attention has been given to the desirability of preserving the distinctive character and appearance of the CA and setting of nearby listed buildings, including the mill tower and has been found to be complied with and thus the proposal complies with national and local plan policies as well as national guidance.

Housing Need and Mix

The site area is approximately 0.2 hectares meaning the density of development is 5 dwellings per hectare falling below the aspirations of Core Policy 3 which seek for densities of no lower than 30 dwellings per hectare. However, as Eakring is not a village identified for development, a low density is considered appropriate and if granted, would provide a development that would fit in with the character of the area.

In terms of the Council's housing needs assessment, the 2020 Housing Needs Study shows that, for the Sherwood Sub-Area, the main overall size requirement is for 3 bedroom houses (45.2%) followed by 4 or more bedroom houses (27.9%). However, in relation to bungalows which this is, the greatest demand (15.3%) is for 2-bedroom bungalows. Whilst the proposal does not strictly accord with wider Housing Needs Assessment, Members will be aware from recent planning decisions that there has been a strong skew towards 2-storey dwellings as opposed to bungalows. This proposal would therefore go a small way to meeting overall demand and has the potential of meeting demand for housing for older persons in particular, but disabled persons as well.

Impact on Residential Amenity

The NPPF seeks to ensure a high standard of amenity for all existing and future occupants of both land and buildings. Policy DM5 of the ADMDPD states that the layout of development within sites, along with each of their respective-separation distances from neighbouring development should be sufficient, to ensure that neither suffers from an unacceptable reduction in their overall-respective-private amenities (including, overbearing impacts, loss of light and privacy).

In terms of the relationship with the neighbouring properties, the proposed property would be positioned relatively centrally within the site, with Rhodwyn and Jesmond Dene situated approximately 45m to the east across the other side of Wellow Road. The mature hedges and trees at the boundary adjacent to Wellow Road would provide screening from any potential views into the garden space of the proposed dwelling.

Clover Close, sited south of the proposed site would have a separation distance of 75m approximately.

In terms of amenity for future occupiers of the proposed dwelling, there would be ample private amenity space within the site. There is no concern about the likelihood of adverse residential

amenity impacts arising and it is considered that the proposal is in conformity with the relevant policies in this regard and thus the proposal complies with both Policy DM5 and the NPPF.

Impacts on Highway Safety, Rights of Way and Parking Provision

Paragraph 110 of the NPPF states that schemes can be supported where they provide safe and suitable access for all, which is echoed within Policy DM5. Spatial Policy 7 encourages proposals which place an emphasis on non-car modes as a means of access to services and facilities.

Right of Way:

Vehicular access to the proposed property would be achieved off Wellow Road via an existing track, which, in part, forms a public Right of Way (RoW) (Eakring footpath 6). Nottinghamshire County Council ROW Section have responded with a number of requirements including ensuring vehicles/materials/landscaping do not restrict the RoW. During construction, temporary closure of the footpath may be granted. No disturbance of the surface is permitted without the authorisation of NCC ROW. An informative can be attached to any permission which would make the developer aware of their responsibilities in this regard.

Highways:

While the new development would have some impact on local infrastructure and is likely to increase car-borne traffic to some degree, this would likely be minimal. NCC Highways are satisfied the development can provide the required 2.4m x 65m visibility splays. A number of conditions are recommended relating to the position of the access gate, hardsurfacing and surface water discharge, all of which are reasonable and meet the tests for imposing conditions.

Parking Provision

The proposal would provide for 2 parking spaces within the open cart building as well as hard surfacing to the front of this building which could easily accommodate a further 3 vehicles. The number meets adopted standards. The applicant's agent has agreed to a condition requiring provision for electric vehicles in compliance with the parking and cycle parking SPD.

Impact upon Trees, Hedgerows and Ecology

Core Policy 12 (Biodiversity and Green Infrastructure) of the ACS seeks to secure development that maximises the opportunities to conserve, enhance and restore biodiversity. Policy DM5 states that natural features of importance, which are either within or adjacent to development sites should, wherever possible, be both protected and enhanced.

The site comprises an area of grass, separated from surrounding fields by fencing. A Landscape Strategy (LS) has been submitted with the application; this detail includes planting methodology, types of species, aftercare and long-term hedgerow maintenance, as well as driveway grassed cellular paving and grassland management. The LS, responding to Ecospheric's comments regarding biodiversity as well as Conservation's observations regarding the importance of landscaping includes, for example, details for the hedge which would comprise the following trees - crab Apple, Field Maple and Common Oak. Shrubs shown would comprise Blackthorn, Guilder Rose, Hawthorn, Hazel and Holly. Other information is provided in relation to grass verges and the access road. However, the landscaping of the residential garden itself is not provided, nor the details of the reed bed. It is therefore considered reasonable to require the LS to be implemented but also for additional information in relation to these other matters.

There would also be a requirement for the building to be cut into the ground due to the topographical differences between the north and south of the site. Limited information has been provided to inform the impact the development would have upon the landscape but detailed information is required prior to the development commencing via condition, which has been agreed with the applicant's agent. Additionally, whilst works would not appear to be within the root protection areas of any of the existing trees, a condition to control this would be required.

Given the siting of the proposal and its relationship with the existing built form and natural environment, with the use of landscaping and new hedges to integrate the design into the site, it is considered the proposal would have a positive impact upon the existing biodiversity and green infrastructure of the site. The proposal therefore complies with the NPPF, Core Policy 12 as well as Policy DM7.

Other Considerations

The Robin Hood Way Association has submitted a holding objection to the proposal. The Town and Country Act 1990 specifies that only responses to consultations that **must** be undertaken need to be taken into account. There is no statutory requirement for the Association to be consulted and therefore no power for them to issue such a response as they are not a statutory consultee as defined within the Town and Country Planning (Development Management Procedure)(England) Order 2015. The Association have been contacted to advise of this and to ask if they wish to make representation on the application. No response has been received.

Planning Balance and Conclusion

The site is located within the 'Open Countryside,' where the principle of a new dwelling at the site would be considered acceptable subject to compliance with the criteria as set out within Policy DM8 and in particular, the National Planning Policy Framework paragraph 80 (being more up-to-date than Policy DM8) as well as meeting the criteria of paragraph 134 – that the new dwelling is of exceptional quality (is truly outstanding reflecting the highest standards in architecture and help to raise standards of design more generally) or innovative nature of design, reflect the highest standards of architecture, significantly enhance their immediate setting and be sensitive to the defining characteristics of the local area.

The proposed dwelling by virtue of all of the detailed elements to be provided as part of its construction would provide a dwelling of innovative design (confirmed by an independent assessor, subject to battery storage being provided), one that would be carbon neutral, completely off-grid and accordingly an incredibly high SAP rating for both energy and the environment. The design of the dwelling by virtue of its scale, proposed materials and landscaping will respond positively and sensitively to its immediate rural setting and also cause no harm to the setting of the Conservation Area or any other heritage asset. The proposed landscape strategy including the planting of new hedges together with additional landscaping details of the reed bed will increase the biodiversity of the site.

Subject to conditions, the development would not have harm upon the highway or public right of way.

Subject to conditions requiring the development to be constructed as detailed within the application form, supporting documents and information provided during the course of the application's

consideration, the proposal would comply with national and local plan policies as well as comply with the Government's strategy to dealing with climate change.

Recommendation

That planning permission is approved subject to the completion of a planning obligation securing the following measures and conditions shown below

- Research project At the end of each of years 1, 2 and 3, a research paper shall be submitted to the Local Planning Authority detailing the in use building performance data including but not limited to the energy efficiency, usage and output; water usage; internal conditions e.g. temperature relative to outside temperatures; use of any additional heating including the underfloor heating. This paper shall also be made publically available.
- Research project all information shall be made publically available. The dwelling, until the end of the 4th year of occupation shall be made available for viewing by public, students and academics on 2 occasions each year. Dates to be agreed with the Local Planning Authority.
- Construction materials
 - a) foundations ground bearing slab of 200mm consolidated hardcore, 300mm extruded polystyrene, 300mm in-situ concrete slab (cement free concrete)
 - b) walls 140mm 7N dense (cement free) concrete blocks and an internal, sponge float finish render with, 300mm of PIR insulation mounted externally
 - c) windows triple-glazed with a maximum U-Value of $0.1W/m^2K$
- Minimum SAP rating achievement of 153A energy and 141A environmental.
- A British Geological Society Borehole Prognosis report shall be commissioned to establish whether potable water for the development can be provided. In the event it can, this shall be implemented within a timescale to be agreed
- Provision and retention of for the development's lifetime:
 - a) a battery for the storage of renewable energy provided by the solar panels
 - b) a minimum of 5000 litre subterranean rainwater harvesting tank
 - c) solar panels minimum 14KW array.

01

The development hereby permitted shall not begin later than three years from the date of this permission.

Reason: To comply with the requirements of Section 51 of the Planning and Compulsory Purchase Act 2004.

02

The development hereby permitted shall not be carried except in complete accordance with the following approved plans and documents, reference:

• Location Plan 1:2500, received on 26 November 2020

- North and South Elevations, received on 23 November 2020
- West and East Elevations, received on 23 November 2020
- Proposed Floor Plan, received on 23 November 2020
- Topographical Survey (2005-EFL-WELLOWRD, EAKRING) received on 23 November 2020
- Landscape Proposals EAK001a Rev A (with the exception of the location of the gate adjoining Wellow Road), received on 23 November 2020
- Landscape Strategy (DB Landscape Consultancy), received on 23 November 2020

Reason: So as to define this permission

03

The development hereby permitted shall be externally constructed and retained for the lifetime of the development with timber walls (treated Red Cedar), sedum/green roof which shall be maintained to ensure its retention, aluminum powder coated triple glazed windows and doors and stainless steel chains as drain pipes.

Reason: In the interests of visual amenity and the sustainability of the development permitted.

04

No part of the development hereby permitted shall be brought into use until the drive is surfaced in a hard-bound material (not loose gravel) from behind the highway boundary to the gate. The surfaced drive shall then be maintained in such hard-bound material for the life of the development.

Reason: To reduce the possibility of deleterious material being deposited on the public highway (loose stones etc.).

05

No part of the development hereby permitted shall be brought into use until the visibility splays are agreed in writing with the Local Planning Authority and the approved splays provided. The area within the visibility splays shall thereafter be kept free of all obstructions, structures or erections.

Reason: In the interest of general highway safety. To afford adequate visibility at the access to cater for the expected volume of traffic joining the existing highway network and in the interests of general highway safety.

06

No part of the development hereby permitted shall be occupied until the access driveway is constructed with provision to prevent the discharge of surface water from the driveway area to the public highway. The provision to prevent the discharge of surface water to the public highway shall then be retained for the life of the development.

Reason: To ensure surface water from the site is not deposited on the public highway causing dangers to road users.

07

Any gate to be provided as part of this development shall be a field gate as detailed within the Landscape Strategy by DB Landscaping Consultancy, November 2020. No gate shall exceed the height specified within this Strategy. The field gate at the access point adjoining Wellow Road shall open inwards only, be set back 12 metres from the edge of the carriageway and be constructed in accordance with the approved details. The approved gates shall then be retained for the life of the development.

Reason: In the interests of highway safety and landscape and historic character of the area.

08

Soft landscape works shall be carried out in accordance with the approved Landscape Strategy by DB Landscape Consultancy, November 2020. The planting shall be carried out in accordance with the programme where details are provided, or where they are not before any part of the development is occupied.

Reason: To ensure the work is carried out within a reasonable period and thereafter properly maintained, in the interests of visual amenity and biodiversity.

09

In addition to the landscaping proposals detailed within the approved Landscape Strategy (LS), prior to first occupation of the development hereby approved full details of both hard and soft landscape works shall be submitted to and approved in writing by the Local Planning Authority and these works shall be carried out as approved. The details to be submitted as part of this condition do not need to duplicate the details provided within the LS. These details shall include:

- a) full details of every tree, shrub, hedge to be planted (including its proposed location, species, size and approximate date of planting) and details of tree planting pits including associated irrigation measures, tree staking and guards, and structural cells. The scheme shall be designed so as to enhance the nature conservation value of the site, including the use of locally native plant species;
- b) car parking and driveway materials which shall be of a permeable material;
- c) any other hard surfacing materials;
- d) minor artefacts and structures for example, furniture, play equipment, refuse or other storage units etc.

Reason: In the interests of visual amenity and biodiversity.

10

No works or development shall take place until an arboricultural method statement and scheme for protection of the retained trees/hedgerows has been agreed in writing with the Local Planning Authority. This scheme shall include:

- a) A plan showing details and positions of the ground protection areas.
- b) Details and position of protection barriers.

- c) Details and position of underground service runs and working methods employed should these runs be within the designated root protection area of any retained tree/hedgerow on or adjacent to the application site.
- d) Details of any special engineering required to accommodate the protection of retained trees/hedgerows (e.g. in connection with foundations, bridging, water features, hard surfacing).
- e) Details of construction and working methods to be employed for the installation of drives and paths within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.
- f) Details of any scaffolding erection and associated ground protection within the root protection areas
- g) Details of timing for the various phases of works or development in the context of the tree/hedgerow protection measures.

All works/development shall be carried out in full accordance with the approved tree/hedgerow protection scheme. The protection measures shall be retained during the development of the site.

Reason: To ensure that existing trees and hedges to be retained are protected, in the interests of visual amenity and nature conservation.

11

The approved soft landscaping shall be completed during the first planting season following the first occupation/use of the development, or such longer period as may be agreed in writing by the Local Planning Authority. Any trees/shrubs which, within a period of five years of being planted die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species. All tree, shrub and hedge planting shall be carried out in accordance with BS 3936 -1992 Part 1-Nursery Stock-Specifications for Trees and Shrubs and Part 4 1984-Specifications for Forestry Trees ; BS4043-1989 Transplanting Root-balled Trees; BS4428-1989 Code of Practice for General Landscape Operations. The approved hard landscaping scheme shall be completed prior to first occupation.

Reason: To ensure the work is carried out within a reasonable period and thereafter properly maintained, in the interests of visual amenity and biodiversity.

12

Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) (England) Order 2015 (and any order revoking, re-enacting or modifying that Order), other than development expressly authorised by this permission, there shall be no development under Schedule 2, Part 1 of the Order in respect of:

- Class A: The enlargement, improvement or other alteration of a dwellinghouse.
- Class C: Any other alteration to the roof of a dwellinghouse.
- Class D: The erection or construction of a porch outside any external door of a dwellinghouse.
- Class E: Buildings etc. incidental to the enjoyment of a dwellinghouse.
- Class G: Chimneys, flues etc. on a dwellinghouse.

• Class A: The erection, construction, maintenance, improvement or alteration of a gate, fence, wall or other means of enclosure.

Reason: To ensure that the Local Planning Authority retains control over the specified classes of development normally permitted under the Town and Country Planning (General Permitted Development) (England) Order 2015 (or any amending legislation). In addition, in order to ensure that any proposed further alterations, extensions or new buildings are sympathetic to the original design, layout and considerations accounted for in the consideration of this proposal in this sensitive location.

13

Prior to the occupation of the dwelling hereby permitted, a minimum of one Electric Vehicle Charging Point shall be provided and operational on site. The EVC Point or any replacement shall be retained and in operation for the lifetime of the development.

Reason: In order to provide for more sustainable methods of transportation in accordance with local and national policies.

14

No part of the development shall be commenced until details of the existing and proposed ground and finished floor levels of the site and approved buildings have been submitted on a single plan/or document and approved in writing by the Local Planning Authority. The development shall be carried out thereafter in accordance with the approved details.

Reason: In the interests of residential and visual amenity.

Informative Notes:

01

This application has been the subject of discussions during the application process to ensure that the proposal is acceptable. The District Planning Authority has accordingly worked positively and pro-actively, seeking solutions to problems arising in coming to its decision. This is fully in accord Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended).

02

The applicant is advised that all planning permissions granted on or after the 1st December 2011 may be subject to the Community Infrastructure Levy (CIL). Full details of CIL are available on the Council's website at www.newark-sherwooddc.gov.uk

The proposed development has been assessed and it is the Council's view that CIL IS PAYABLE on the development hereby approved as is detailed below. Full details about the CIL Charge including, amount and process for payment will be set out in the Regulation 65 Liability Notice which will be sent to you as soon as possible after this decision notice has been issued. If the development hereby approved is for a self-build dwelling, residential extension or residential annex you may be able to apply for relief from CIL. Further details about CIL are available on the Council's website: www.newark-sherwooddc.gov.uk/cil/ or from the Planning Portal: www.planningportal.gov.uk/planning/applications/howtoapply/whattosubmit/cil

Please note that the District Council no longer provides wheeled bins for residential developments free of charge. Wheeled bins can be purchased from the District Council or any other source provided they conform to appropriate standards and requirements of the Council. If you wish to purchase wheeled bins or discuss this matter further please contact the 01636 650000 or email: waste.management@nsdc.info.

04

The Nottinghamshire County Council Right of Ways team advise the following in regards to Eakring Footpath 6:

- The footpath shall remain open, unobstructed and be kept on its legal alignment at all times. Vehicles should not be parked on the Right of Way or materials unloaded or stored on the Right of Way so as to obstruct the path.
- There should be no disturbance to the surface of the footpath without prior authorisation by the Rights of Way team.
- The safety of the public using the path should be observed at all times. A Temporary Closure of the Footpath may be granted to facilitate public safety during the construction phase subject to certain conditions. Further information and costs may be obtained by contacting the Rights of Way section. At least 5 weeks' notice is required to process the closure and an alternative route should be provided if possible.
- If a structure is to be built adjacent to the public footpath, the width of the right of way is not to be encroached upon.
- If a skip is required and is sited on a highway, which includes a Right of Way then the company supplying the skip must apply for a permit. http://www.nottinghamshire.gov.uk/transport/licences-and-permits/skip-permit and also ensure that the Right of Way can still be accessed appropriately by the users permitted by its status i.e. equestrians if a on bridleway, motorised vehicles if on a byway open to all traffic "

BACKGROUND PAPERS

Application case file.

For further information, please contact Lisa Hughes on ext 5565

All submission documents relating to this planning application can be found on the following website <u>www.newark-sherwooddc.gov.uk</u>.

Lisa Hughes Business Manager – Planning Development

ⁱ Brambilla, A.; Bonvin, J.; Flourentzou, F. and Jusselme, T (2018) On the Influence of Thermal Mass and Natural Ventilation on Overheating Risk in Offices, <u>Buildings Vol. 8 (4)</u>

ⁱⁱ Kuczynski, T.; Staszczuk, A.; Gortych, M. and Stryjski, R. (2021) Effect of thermal mass, night ventilation and window shading on summer thermal comfort of buildings in a temperate climate, <u>Building and</u> <u>Environment</u> Vol. 204

^{III} Ridrigues, L.; Sougkakis, V. and Gillot, M (2016) Investigating the potential of adding thermal mass to mitigate overheating in a super-insulated low-energy timber house <u>International Journal of Low-Carbon</u> <u>Technologies</u> Vol. 11, Issue 3, September

03

^{iv} Kuczynski, T. and Staszczuk, A (2020) Experimental study of the influence of the thermal mass on thermal comfort and colling energy demand in residential buildings <u>Energy</u> Vol. 195



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