ITEM SUBJECT OF A SITE VISIT

Application Ref.	23/00801/FUL
Application Type	Full Planning Permission
Site Address	Land At High Marnham Power Station, Power Station Access, Fledborough Road, High Marnham.
Proposal	Proposed Construction and Operation of An 8 MW Electrolytic Green Hydrogen Production Plant, with Associated Infrastructure Including HGV and Multi Cylinder Pack (MCP) Loading Areas, Vehicle Maintenance Unit, Staff Welfare Facilities and Control Room, 11KV Customer Sub-Station, Boundary Fencing, Internal Access Roads, Landscaping, External Lighting and Works.
Case Officer	Clare Cook
Recommendation	Grant Conditonal Consent
Web Link:	Link to Planning Documents

THE APPLICATION

SITE CONTEXT

This site is located within the former High Marnham Power Station site which was decommissioned in 2003. The site lies on the base of one of the former cooling tower to the south east of the site.

The site is bounded by nature trees to the south and east and is bounded to the west by the National Grid sub station.

The site is predominantly previously developed land and lies within flood zone 1.

PROPOSAL

This proposal is for the construction of an 8MW electrolytic green hydrogen production plant with associated infrastructure including HGV and Multi Cylinder Pack loading areas, vehicle maintenance unit, staff welfare facilities and control room, 11KV customer substation, boundary fencing, internal access roads, landscaping, external lighting and works.

Green hydrogen is produced using renewable power sources and in this case the power source would come from the recently approved solar array farm (22/00707/FUL), an alternative power source also could come from the biomass power plant at the Low Marnham Site.

Access to the site is proposed via Fledborough Road which is the existing access site into the former power station.

The proposal includes the following development:

- Hard standing vehicular track, tanker and multi cylinder pack loading areas and HGV parking areas.
- Vessels, pipes, pumps, compressors, tanks, valves and control equipment housed in permanent steel support structures
- A three storey building containing a vehicle maintenance unit, staff welfare facilities and control room

- Step down electricity transformers, electrolysers and compressors
- An 11kV customer substation

It is anticipated that the facility will produce a maximum of 3 tonnes of hydrogen per day which will be transported to customers via HGV loads.

It should be noted that some of the supporting documents do make reference to an ammonia cracker plant on site; however this element of the proposal has been withdrawn by the applicant and a further application is expected in this regard. The documents have not been amended as they represent the worst case scenario.

The applicant has submitted documents later in the application process in order to satisfy any proposed conditions; however it has not been possible to fully consult on these documents and therefore the conditions they relate to are still proposed and if permission is forthcoming they will need to be discharged via the formal condition discharge process.

DEVELOPMENT PLAN AND OTHER MATERIAL CONSIDERATIONS

Section 38(6) of the Planning & Compulsory Purchase Act 2004 requires applications for planning permission to be determined in accordance with the development plan unless material considerations indicate otherwise. Section 70(2) of the Town & Country Planning Act 1990 provides that the local planning authority shall have regard to the provision of the development plan, as far as material to the application, and to any other material considerations.

Other material planning considerations include the National Planning Policy Framework and guidance within the National Planning Policy Guidance.

NATIONAL PLANNING POLICY FRAMEWORK

The National Planning Policy Framework (NPPF) sets out the Government's approach for the planning system and how these are expected to be applied.

Paragraph 8 explains that there are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform an economic, social and environmental role.

Paragraph 11 explains that plans and decisions should apply a presumption in favour of sustainable development. For decision-taking this means approving development proposals that accord with an up to date development plan without delay; and where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, permission shall be granted unless:

i. The application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
ii. Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

The following parts of the Framework are the most applicable to this development:

Section 2 – Achieving Sustainable Development
Section 4 – Decision Making
Section 6 – Building a Strong, Competitive Economy
Section 8 – Promoting Healthy, Safe Communities

Section 9 – Promoting Sustainable Transport
Section 11 – Making Effective Use of Land
Section 12 – Achieving Well Designed Places
Section 14 – Meeting the Challenge of Climate Change, Flooding and Coastal Change
Section 15 – Conserving and Enhancing the Natural Environment
Section 16 – Conserving and Enhancing the Historic Environment

BASSETLAW DISTRICT COUNCIL – LOCAL DEVELOPMENT FRAMEWORK

Core Strategy & Development Management Policies Development Plan Document (Adopted December 2011):

- CS1 - Settlement hierarchy
- CS9 – All Other Settlements
- DM1 – Economic Development in the Countryside
- DM3 – General Development in the Countryside
- DM4 - Design & character
- DM7 – Securing Economic Development
- DM8 – The Historic Environment
- DM9 – Green Infrastructure, Biodiversity, Geodiversity, Landscape, Open Space and Sports Facilities
- DM10 – Renewable and Low Carbon Energy
- DM11 - Developer contributions and infrastructure provision
- DM12 - Flood risk, sewage and drainage
- DM13 - Sustainable transport

NEIGHBOURHOOD PLAN (INCLUDING STATUS AND RELEVANT POLICIES)

There is no neighbourhood plan for this area.

EMERGING LOCAL PLAN – BASSETLAW LOCAL PLAN 2020-2038

Policies in this document are afforded limited weight at this point in time.

RELEVANT PLANNING HISTORY

There is an extensive history associated with the power station. However the most relevant applications relating to this application are as follows:

19/00818/FUL - Erect Storage Building (Class B8) with Associated Weigh Bridge. Granted 5th December 2019.

22/00707/FUL – The Construction and Operation of a Solar Photovoltaic (PV) Farm with other Associated Infrastructure Including Sub Stations, Security Cameras, Fencing, Storage Containers, Access Tracks and Landscaping. Granted 5/1/23
22/01689/FUL - A Gatehouse, Weighbridges, Widened Access Road and Vehicle Parking Area. Granted 16th March 2023

22/01071/FUL - The Erection of Unit A - A Finished Product Despatch Warehouse Building (B8 Use) and Packaging Plant (B2 Use) Including Odour Abatement Plant and Solar PV and

Unit B - Raw Animal By-Product (ABP) Intermediate Storage Building (B8 Use) Incorporating Mechanical Processing Plant for Crushing, Freezing and Reloading (B2 Use) Including Odour Abatement Plant and Solar PV on Land Comprising Part of the Former High Marnham Power Station at High Marnham. Granted 26/5/23

23/00243/SCR - Screening Opinion - An 8 MW Green Hydrogen Production Plant, Storage and Distribution Facility and Green Ammonia Cracker Demonstration Unit on Land Comprising Part of the Former High Marnham Power Station – EIA required primarily due to the ammonia cracker element.

23/00313/FUL - The Erection of a 1.8m High Palisade Fence with Vehicular Gate and 2 no. Bollards (Retain). Granted 1/6/23

23/00748/HAZ - Application for Hazardous Substances Consent for the Proposed Storage of a Maximum of 3 Tonnes of Hydrogen. Pending at the time of writing the report.

23/01135/FUL - Full Planning Application for the Construction and Operation of A Prototype Facility for the Production of Hydrogen from Ammonia, and Associated HGV Loading and Unloading Areas, Staff Welfare Building, Boundary Fencing, Internal Access Roads, External Lighting and Works (EIA Development). Pending consideration

SUMMARY OF CONSULTATION RESPONSES

Nottinghamshire County Council Lead Local Flood Authority

No objection subject to condition

Nottinghamshire County Council Highways

The application is supported by a Transport Assessment. During construction the TA predicts that the development would generate 63 HGV deliveries (126 each way) and that those deliveries will be routed to and from the site via A57 and Main Street passing through Ragnall. There is no assessment of the number of require construction operatives. Nor is there a programme to determine the number of hourly/daily movements. However as the development includes modular buildings and shipping containers, the amount of construction and number of construction workers required on site would likely be less than could be expected if the whole facility was to be built from scratch on site.

During operation the TA anticipates that there will be 4 members of staff on site at any one time, but presumably would double for a short period during a shift change over. The facility would require 1 HGV ammonia delivery per week presumably to feed the ammonia cracker and the electrolyser would generate 10 tanker loads of hydrogen per day (20 two way). The TA suggests that there will be 1 HGV per day removing wastewater. The planning statement suggests that wastewater would be discharged into the River Trent. There is no assessment of the number of HGVs required to transport hydrogen from the ammonia cracker. However it is assumed that the number would be nominal.

The development would be accessed via the former power station access on Fledborough Road both construction and when in operation. The actual facility would be located some distance to the east towards the River Trent. It is therefore unlikely that the internal layout or level on site parking provision would affect the public highway.

Conditions are recommended.

Nottinghamshire County Council Planning Policy

Minerals – No objections from a minerals perspective

Waste – No objections, a waste audit is recommended if the proposal generates significant amount of waste.

Travel and Transport – If there is a requirement for a Travel plan a Sustainable Transport Statement should be provided. For public transport access the only consideration is in terms of number employees at construction.

Bassetlaw District Council Environmental Health

Extraction/ventilation – to comply with current building regulations

Noise – It is unlikely that the development will cause an issue in terms of noise. Conditions recommended for the construction process

Lighting – the submitted details illustrate low level lighting, care should be taken to avoid sky glow. Any light nuisance can be dealt with under the Environmental Protection Act

Contaminated land – recommends planning condition

Bassetlaw District Council Tree Officer

No comments received

Lincolnshire County Council Archaeological Advisor

Archaeological conditions are recommended

Anglian Water

No comment to make

Environment Agency

No objections to the phase 1 desk based assessment in principle and advises that planning permission could be granted subject to conditions.

An informative is suggested in terms of drainage and permits

Regulated Industry – no objections, give advice regarding permits and COMAH

Trent Valley Internal Drainage Board

It is outside the Boards District but within the catchment area. Marnham drain exists to the east of the site which are covered by byelaws and the land drainage act 1991.
The Boards consent may be required. The drainage system and maintenance should be agreed with the local lead flood authority.

BDC Conservation

No objections

Newark and Sherwood District Council

No comments to make

West Lindsey District Council

No observations to make

Nottinghamshire Wildlife Trust

No objections subject to conditions and mitigation being achieved.

Health and Safety Executive

No comments received in respect of this application but state in application 23/00748/HAZ that they will be assessing the hazardous substances application in November

EDF Energy

No comments received

Cadent

No objections as the intermediate and high pressure gas pipelines. Not aware that any future pipelines will be affected

National Grid Electricity Transmission

No objections. Safe working guidance given for the applicants attention.

West Burton Energy

No comments received

Sports England

No comment to make

NCC Public Rights of Way

No comments received at the time of writing the report

Marnham Parish Council

No comments received at the time of writing the report

Fire Officer

Following advice given. Has also commented on 23/00748/HAZ and given advice.

1) Any or all relevant Buildings would be covered by the appropriate guidance documents for example and not limited to Approved Document B
2) Approved Document B should be considered for (and not restricted to) Fire Service Access to the site.
3) Consideration given for the need for a true alternative access for Fire Service vehicles in the event of an emergency.

4) Any relevant buildings will fall under the scope of the Regulatory Reform (Fire Safety) Order 2005
5) Fire Service would encourage an Emergency Plan (including Response) from the site and its operators and offers to contribute to its content including fire-fighting actions, specialist advice, fire fighting water and its availability.
6) Consideration given to an incident occurring at the site and adversely affecting the existing National Infrastructure located in close proximity to the proposed development

National Gas Transmission

There are no National Gas Transmission assets affected in this area

National Grid Electricity Distribution

No comments received at the time of writing the report

Dunham Parish Council

The proposal is not supported on the following grounds (in summary):

- There is no masterplan for the site, it is being developed in a piecemeal way with J G Pears existing activities extending from Low Marnham to High Marnham.

  Transport concerns.
- All the traffic will access the site to and from A57 via Ragnall and Fledborough – this is a concern. Both are rural villages with dwellings sitting on the roadside and the noise and pollution that will be generated will be detrimental to peoples amenity. The application is for green energy but the noise pollution and general road safety is not green for residents. Its creating a nuisance.
- Alternative transport links have not been considered. Figures in the assessment are from 2022 when the site was not operational.
- There are many factors that affect the efficiency of the junction known as Dunham Crossroads such as school times, staffing at the toll bridge and holiday times.
- Recently the Parish has collected figures of traffic leaving the entrance both north and south and the results have been submitted.
- The use of the River Trent should be explored for alterative transport or the train line to the west. There are also alternative routes they could use, there is a height restriction at Tuxford, if any vehicles are below this then this should be considered rather than just opting for the most direct route through the villages.

  Major hazards and accident concerns.
- Notts Fire and Rescue need to be consulted to sees how they would respond to an incident at the site and for them to raise any concerns about the roads passing through built up areas particularly villages.
- The site is not at risk of flooding but there needs to be an assessment of the risks of extreme rainfall.
- The development should follow the suggestion of storing ammonia in two tanks and reduce the incoming ammonia tankers to a volume of 9 tonnes.
- The risk of the loss of potassium hydroxide from the electrolyser due to fault or accident, including on the highway has not been assessed.
- There is a need to address the potential impact of fugitive emissions of ammonia during maintenance to avoid nuisance and odours.
- Are there provisions for ammonia detectors to be placed at locations further from the plant such as the site boundary or nearby villages?
- The Parish Council wants further clarification on the intention to only run the ammonia cracker for 3 years

Suggest that a decision is not made on this application until the government review of the site is finalised and J G Pears Group has submitted a masterplan of the whole site.

This planning application is a further application for J G Pears operation in the locality and has aims for additional development proposals such as battery storage. It is considered that this will be a further nuisance site which will affect a large number of people and this is why the application cannot be supported.

SUMMARY OF PUBLICITY

This application was advertised by neighbour letter, site notice and press notice and 0 household letters of objection have been received at the time of writing the report.

CONSIDERATION OF PLANNING ISSUES

The main issues in this application are as follows:

- Environmental Impact Assessment
- The Principle of Development
- Sustainability of development
- Highway considerations
- Landscape and visual amenity including layout and design
- Residential Amenity
- Biodiversity
- Heritage
- Flood Risk and Drainage
- Contamination
- Other issues
- Conclusion

ENVIRONMENTAL IMPACT ASSESSMENT

The proposal has been screened by officers for an Environmental Impact Assessment and it was concluded that the proposal is not EIA development.

PRINCIPLE OF THE DEVELOPMENT

The starting point for assessing development is the adopted development plan which currently comprises of the Bassetlaw Core Strategy 2011.

The site lies outside of a development boundary and therefore is within the open countryside; however the application site per se lies within a much wider brownfield site which used to house High Marnham Power Station.

It is accepted that the CS policies of the adopted development plan are out of date and are to a degree silent in respect of this type of development. However, the most important policy for the determination of this application is Policy DM10 which considers renewable and low carbon energy. Given the fact that this policy is consistent with the aims and objectives of the National Planning Policy Framework it is given full weight. This policy is supportive of such developments providing they demonstrate the following:

i) are compatible with policies to safeguard the built and natural environment, including heritage assets and their setting, landscape character and features of recognised importance for biodiversity;
ii) will not lead to the loss of or damage to high-grade agricultural land (Grades 1 & 2);
iii) are compatible with tourism and recreational facilities;
iv) will not result in unacceptable impacts in terms of visual appearance; noise; shadow flicker; watercourse engineering and hydrological impacts; pollution; or traffic generation; and
v) will not result in an unacceptable cumulative impact in relation to the factors above

In terms of material considerations in respect of the principle of the development the NPPF is clear that the planning system should support renewable energy development, paragraph 152 states:

*"**The planning system should support the transition to a low carbon future in a changing climate**, taking account flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and **support renewable and low carbon energy and associated infrastructure"*** (report writer's emphasis)

Paragraph 158 states:

"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."

Further material considerations relate to the National Policy Statements which are normally used for national infrastructure development; however they provide a good reference point demonstrating the Government's stance to this type of proposal.

Policy Statement EN-1 National Policy Statement for Energy, Draft National Policy Statement EN-1 – Overarching Energy and Draft National Policy Statement EN-3 Renewable Energy Infrastructure are of particular importance in respect of this application. All of these documents demonstrate the Government's commitment to meeting the climate change commitment of net zero by 2050.

It is clear from these National policy documents that there is Government support for this type of development subject to an assessment of material considerations which are discussed below.

A further material consideration relates to the location of this site. Whilst it is accepted that it is within the open countryside it forms part of a wider brownfield site which housed High Marnham Power Station; this is a prime location for a development of this nature.

It is therefore considered that the principle of the development is acceptable subject to the material considerations which are discussed below.

SUSTAINABILITY OF THE DEVELOPMENT

Paragraph 8 of the NPPF sets out three dimensions for sustainable development, economic, social and environmental:

> *"***an economic objective** – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
>
> **a social objective** – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
>
> **an environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

In reaching a decision on this case, the NPPF at paragraph 9 makes it clear that the objectives referred to above should play an active role in guiding development towards sustainable solutions and are not criteria against which every planning application should be judged against.

When taken in the context of the relevant policies and material considerations outlined in the rest of this report, it is considered that the proposal constitutes sustainable development as required by the policies above. This is also in the context of the benefits provided by renewable energy and carbon reduction as a result of the proposed development.

Paragraph 158 of the NPPF does not currently require applicants to demonstrate a need for new renewable energy development, recognising that even small additions are invaluable to reducing carbon emissions. Renewable energy as a whole still makes up a minority of the UK's energy mix and at the present time, relevant local and national policy is strongly in support of substantial increases in the provision of renewable energy.

HIGHWAY CONSIDERATIONS

Paragraph 110 of the NPPF states that schemes can be supported where they provide safe and suitable access for all. This requirement is also contained in policy DM4 of the Council's Core Strategy. Paragraph 111 of the NPPF makes it clear that development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Paragraph 92 of the NPPF states that all development should aim to achieve healthy, inclusive and safe places which encourage social interaction, are safe and accessible and enable and support healthy lifestyles. Paragraph 110 of the NPPF requires schemes to provide safe and

suitable access for all users as well as looking at appropriate opportunities to promote sustainable transport modes.

Paragraph 112e of the NPPF requires schemes to be designed to enable charging of plug-in electric vehicles (EV) and other ultra-low emission vehicles (ULEV) in safe, accessible and convenient locations.

Policy DM13 of the Bassetlaw Core Strategy seeks to provide sustainable transport.

The site is accessed off Fledborough Road, which was the access into the former power station site. This access also serve other developments on the wider site.

A Transport Assessment has been submitted with the application. It should be noted that this transport assessment also includes an ammonia cracker plant; however the ammonia cracker plant has been excluded from this application. It has not been considered necessary to revise the Transport Assessment as the submitted document is in effect a worse case scenario compared to the proposal.

The proposed plant will be located on one of the former cooling towers bases and has an existing access track leading to it from Fledborough Road. There is proposed parking for the hydrogen production plant which comprises of 8 spaces, including 1 disabled space.

During construction, the following deliveries are expected:
Concrete – 25 deliveries
Building Materials – 10 deliveries
Balance of Plant – 10 deliveries
Electrolysers (44 tonne) – 16 deliveries
Compressors (44 tonne) – 2 deliveries

It is expected that the construction vehicles will take the following route:

- A1 (northbound and southbound) at Markham Moor on to A57.
- A57 then turning right on to Main Street through Ragnall to site
- The reverse journey will be taken when departing the site.

During operation it is expected that there will be 4 members of maintenance staff on shift at any one time with shift patterns running 24 hours, 7 days a week. As a result of the proposed development it is expected that on average there will be approximately 2 additional vehicle movements per hour which will be added to the highway network.

The Transport Assessment has also considered other developments on the site which have attained planning permission in order to assess the cumulative impact on the highway network. Other developments considered include the solar farm, the meal store and Units A and B. The report concludes that none of the junctions assessed will be operating near to capacity even in the future year of 2029.

It has been questioned who the end suppliers would be and the applicant provided the following information:

"…*green hydrogen will be used as a fuel for sectors that are difficult to electrify (e.g. construction sites, long-term infrastructure projects, events, film and TV production, transport). There is an existing hydrogen power unit providing power to the thermal odour abatement plant at JG Pears' Low Marnham site. Essentially, green hydrogen replaces diesel generators".*

The Transport Assessment has been assessed and analysed by the Highway Authority who is the statutory consultee in this regard. Whilst the Highway Authority state that there is no analysis of the number of required operatives or a programme to determine the number of hourly/daily movements, the officer states that as the development includes modular buildings and shipping containers the amount of construction and the number of construction workers on site is likely to be less than could be expected if the whole facility was to be built from scratch on site.

In terms of operation the Highway Authority has analysed the details and states that whilst there is no assessment of the number of HGVs required to transport hydrogen from the plant it is expected that the number would be nominal; Conditions are recommended.

Nottinghamshire County Council Travel and Transport questioned the need for a travel plan; however the Highway Authority has confirmed that this is not necessary for this proposal.

Dunham Parish Council has objected to this application on the grounds of highway safety and their objection has been sent to NCC Highways for comment.

The Highway Authority maintain that they have no objection to the application even though it is accepted that there are gaps in the transport assessment such as the number of construction operative movements, and the number of HGVs required to transport hydrogen from the ammonia cracker. However, it is unlikely that junction improvements to deal with temporary construction traffic could be justified. The Highway Authority state that there is no assessment in accordance with the Guidelines for the Environmental Assessment of Road Traffic (IoEA 1993) in any event, but it is suspected that the operational development wouldn't generate sufficient traffic to warrant one. The traffic impact on highway network capacity is likely to be minimal.

Comments have been made that the applicant should consider alternative transport links; however the local planning authority has a duty to determine applications that are submitted and in this case the statutory consultee – the Highway Authority consider the proposal to be acceptable in highway terms.

The Highway Authority has been asked whether a revised transport assessed is required to 'fill in the gaps'; however this is not considered to be necessary. It states that the number of vehicle movements that are known did not really warrant a TA at all.
It is unlikely that capacity improvements would be sought to deal with queues that may occur temporarily during construction. We would only need to know the number of hydrogen deliveries if the intention was to cap the total number HGVs. There is not a highway network capacity issue to justify a cap unless the figures that are quoted are a substantial underestimate of actual movements.

The Highway Authority accept that the site is being developed in a piecemeal fashion but equally accept that the applications have to be considered on their own merits. The Authority also accepts that the impact on the highway network would be lesser if water and rail transport was utilised.

The agent for the application has responded to the rail and water transport query as follows:

"…..there is no rail connection at High Marnham. Network Rail use the section of railway to the west of High Marnham as a test track and is therefore not used (nor could it be used in the future) for commercial rail traffic. There is further information available online if you search 'High Marnham Test Track' and 'Tuxford Rail Innovation and Development Centre.'

As to river transport, transporting the hydrogen via the River Trent would require substantial engineering to create a loading dock. This would have significant ecological and hydrological implications in replacing a soft banked river verge with a large concrete loading station.

Fundamentally, the green hydrogen will be delivered directly to JG Pears' existing Hydrogen Power Unit (HPU) at Low Marnham and to a local transport company in Sutton-on-Trent. GeoPura Energy will deliver the remaining hydrogen to sectors that are difficult to electrify (e.g. construction sites, long-term infrastructure projects, events, film and TV production) which are inherently remote locations/not connected to the Grid (the green hydrogen will replace diesel generators). This will be delivered directly to customers in multiple small units. There will be no advantage to the proposed operation (and delivery to remote locations nationwide) in using rail or road transport." (e-mail dated 28/9/23)

This explanation is accepted.

It is acknowledged that the Parish Council has submitted some traffic data; however this only relates to 1 hour on 3 separate days. It is not considered that this is sufficient to question to the analysis that has been undertaken by the Highway Authority who remains confident that the proposal is acceptable in highway terms.

The advice from the Highway Authority is accepted and it is concluded that there will not be a severe impact on the highway network.

LANDSCAPE AND VISUAL AMENITY (INCLUDING DESIGN AND LAYOUT)

Section 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 that decisions should aim to ensure that development will function well and add to the overall quality of the area, establish a strong sense of place, create attractive and comfortable places to live, work and visit, optimise the potential of the site to accommodate development, create and sustain an appropriate mix of uses and support local facilities and transport networks. Furthermore it provides that development should respond to local character and history, and reflect the identity of local surroundings and materials, while not preventing or discouraging appropriate innovation. The NPPF goes on to state that permission should be refused for development of poor design

Policy DM4 of the Bassetlaw Core Strategy provides general design principles which should be applied to all schemes. The policy states that all development proposals will need to be in keeping with the character and appearance of the wider area and when they are in historic locations, they should respect existing development patterns. All schemes must respect their context and not create a pastiche development which would be incorrect in their context.

The site straddles the Mid Nottinghamshire and Trent Washlands Character Areas and there is high landscape sensitivity here due to the flat nature of the landscape; however it does have to be remembered that the wider site did used to accommodate a power station which was

extremely prominent in the wider landscape although the landscape does have to be assessed on how it is today for the purposes of this application.

There are remnants of the former use on the site and on the wider site and this does somewhat reduce the landscape sensitivity and there is fairly good screening around the wider site which will reduce the impact of the development. It should also be remembered that permission has been granted for an employment building on part of the wider site which again will impact on the landscape character.

The applicant has submitted a Landscape and Visual Assessment with the application. This assessment concludes that given the previous land use the proposals would not result in any long term significant adverse harm to the landscape and wold result in neutral effects and no change in the majority of views due to the established boundary treatment and the presence of industrial components in the immediate and surrounding landscape.

A cumulative analysis has also been undertaken in respect of other developments which have been granted on the wider site. It states that given the previous industrial use there will be a negligible neutral cumulative long term impact on the sites immediate setting. The short and long term cumulative impacts on the localised landscape is likely to result in negligible adverse impact and this is mainly due to the proposed solar farm which extends beyond the industrial area.

In visual terms whilst the proposed development would be barely perceived in the localised and wider setting the cumulative development will be perceived in the context of an area that is already characterised by industrial development such as the sub station and pylons. Long term negligible adverse impacts are anticipated on the localised visual environment to the south and west given the cumulative development and in the wider setting this would reduce to negligible / non adverse.

The results of the Landscape and Visual Assessment are accepted. The development per se will have little impact on the wider landscape character. It is accepted that cumulatively with the approved development the proposals will have a slightly adverse impact on the wider character area; however given the previous use on the site and the current uses and pylons it is considered that this would not be so detrimental as to warrant refusal of permission.

In terms of the design and layout of the development the site is located on the previous most south eastern cooling tower.
The western half of the cooling tower would be occupied by the hydrogen plant and will measure approx 3,452m2; the north eastern corner is reserved for future development and the south eastern part will occupy two shipping containers for storage and a semi permanent canopy between for a covered shelter for maintenance and storage. A 2m silver mesh fence is proposed around the perimeter of the site.

The proposed hydrogen production plant comprises of the following:
8 x electrolysers housed in shipping containers. The electrolysers will have plant located on top with 4 x pipes/flues on each measuring 7.55m from ground level
4 x switchgear units and 4 x compressors in GRP buildings. The compressors will occupy plant on the roof space which include x vent, this equipment measures 4.8m from the ground and the switchgear unit measures 4m from the ground.

There is a series of supporting equipment located between the electrolysers along with equipment such as vessels, pipes, pumps, compressors, tanks, valves and control equipment.

In addition to the plant there will be a maintenance unit and a welfare building located to the south west of the plant which measures 664m2.

A sub station is also proposed which would be located in its own secure compound. It consists of a raised cabin located to the south east which would be 50m2 in footprint. This cabin would have a switchgear and control room with a height of 5.1m.

The design and layout of the development is typical of this type of industrial development and reflects the character of surrounding buildings.

It is considered that the development is acceptable in terms of design and layout.

RESIDENTIAL AMENITY

Paragraph 185 of the NPPF states that new development should be appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health and living conditions. Its states that decisions should mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development, identify and protect tranquil areas and limit the impact of light pollution from artificial light on local amenity, dark landscapes and nature conservation.

Paragraph 183 of the NPPF requires that in making decisions on schemes consideration is taken account of the ground conditions and any risks arising from contamination.

Policy DM4 of the Core Strategy requires that development does not materially or detrimentally affect the amenities of the occupiers of neighbouring properties. This requirement also forms part of paragraph 130 of the NPPF.

The site is fairly remote from any residential dwellings. A noise assessment has been submitted with the application which considers the potential noise generation from the plant associated with the proposed development.

The report concludes that the proposed development will not give rise to rating sound levels that do not exceed the measured background sound level at all Noise Sensitive Receptors during the day this giving rise to low impact.

The report identifies that the proposed development might give rise to rating sound levels that are 1dB above the measured background sound level at Noise Sensitive Receptor 3 (as shown on figure 3 of the noise report) during the night and 5dB above the measured background sound level at Noise Sensitive Receptors 1 and 2 (as shown on figure 3 of the noise report) during the night. The report considers the context in which the sound occurs and identifies that there is no significant change in ambient sound level at the closest receptor and accordingly these locations will not be endangered as a result of the development. Thus the amenity of residential receptors and operational use of the nearest non residential receptor will not be compromised.

The Environmental Health Section has assessed this report and is satisfied that the proposed development is unlikely to cause an issue in terms of noise.

In terms of construction, it is accepted that noise and disturbance will be increased; however Environmental Health has recommended a series of conditions to ensure that this temporary increase in noise is controlled so as not to have a significant impact on residential amenity.

As this is the statutory consultee in this regard their advice is accepted and it is not considered that the proposal will have a detrimental effect on residential amenity in terms of noise.

In terms of lighting this indicates that the majority of lighting will be low level flood lighting. Environmental Health advises that care should be given to installing the lighting as to reduce sky glow; however states that any light nuisance can be dealt with under the provisions of the Environmental Protection Act 1990.

In terms of odours this has been checked with the Environmental Health Officer who confirms that if the proposal is for hydrogen only then odours are unlikely to be an issue.

It is acknowledges that the Parish Council has objected to this planning application on the grounds of the impact on residential amenity from the proposed traffic generated in terms of noise and pollution. However it must be remembered that the site is a former power station and would have generated traffic. Traffic will be increased more during construction and conditions can be imposed to lower the impact on residential amenity. It is accepted that traffic from this site will be increased during operation; however it is not considered that noise and disturbance from the traffic would be a sustainable reason for refusal in this circumstance. It must also be remembered that planning decisions have to be taken in the public interest and not in terms of private interests.

Further concerns have been raised in terms of health and safety of the development. If permitted this development would require further permits to be obtained along with and assessment by the competent authority under the Control of Major Accident Hazards Regulations 2015. These items will control the health and safety of the development. It should be remembered that whilst some of the reports discuss ammonia the amended proposals does not include the ammonia cracker plant.

The applicant has addressed health and safety in the submission and an assessment of major accidents and disasters has been submitted. Industry recognised methodologies have been used to identify the hazards associated with the plant. This means minimising the risk by design where appropriate and implementing control measures to reduce risks to tolerable levels.

The applicant has confirmed that the hazardous substance application has been submitted and this will need to be consented by both the Local Planning Authority and the Health and Safety Executive. This will control how the site is controlled, operated and monitored.

Furthermore, the applicant acknowledges that the proposal will require an environmental permit from the Environment Agency and confirms that this has been submitted to the Agency.

The Fire Authority has given general advice on this application and has commented the same advice on the hazardous substance application. A condition is recommended for the applicant to submit an emergency plan for approval.

The health and safety of this proposal will be controlled primarily via other mechanisms and controlling bodies. It would therefore not be reasonable to withhold planning permission on these grounds.

On this basis even though concerns have been raised in respect of major accidents ad hazards it is considered that there are adequate controls in place, albeit some of these will be controlled via separate legislation. It must be remembered that planning should not attempt to control issues that can be controlled via separate legislations:

"The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities." (para 188 of the NPPF)

Based on the above analysis, given the location of this site it is not considered that the proposal would give rise to a significant impact upon residential amenity that would warrant refusal of permission.

BIODIVERSITY

The content of paragraph 180 of the NPPF is applicable as it states that in dealing with planning applications, councils must consider the harm of a scheme on biodiversity. It states that significant harm should be avoided, adequate mitigation should be provided or if this is not possible, the loss should be compensated for. If none of the above is possible, then permission should be refused.

The site is not subject to any statutory or non statutory ecological designations. Spalford Warren SSSI lies approx 3.1km to the south east of the site and Marnham Railway Yard Local Wildlife Site is located approx 0.1km to the north of the site.

The applicant has submitted an ecological appraisal with the application which concludes that the proposals have sought to minimise impacts on biodiversity and subject to the implementation of appropriate avoidance, mitigation and compensation measures it is unlikely that the proposals will result in significant ecological harm.

The following mitigation measures are proposed:

- Tree protection measures
- Pollution prevention to watercourses
- Sensitive lighting
- Mammal construction safeguards
- Badger update survey

- Great Crested Newt Survey
- Destructive search
- Restriction on timings of works to avoid bird breeding season, if this cannot be avoided measures should be put into place.

Nottinghamshire Wildlife Trust has been consulted on this application and has not raised any objections subject to conditions.

A Biodiversity Net Gain Assessment has been submitted with the application and it confirms that the proposals with the proposed enhancements will result in a net gain of 11.07% for habitats. A landscape strategy plan has been submitted as part of this assessment with the enhancements consisting of the following:

- 900m2 of mixed scrub
- 18 medium sized trees

It is considered that the impact on biodiversity is acceptable and the provision of 11% net gain is consistent with planning policy. Conditions are recommended for a Landscape Ecological Management Plan and a Biodiversity Management Plan.

HERITAGE

The Council has a duty under section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 to have special regard to the desirability of preserving their setting, character and appearance. The House of Lords in the South Lakeland DC vs the SOS case in 1992 decided that a Conservation Area would be preserved, even if it was altered by development, if the character or appearance (its significance in other words) was not harmed. Conservation' is defined in the NPPF as the process of maintaining and managing change to a heritage asset in a way that sustains and where appropriate enhances its significance.

Therefore case law has ascertained that both 'conservation' and 'preservation' are concerned with the management of change in a way that sustains the interest or values in a place – its special interest or significance. However, 'conservation' has the added dimension of taking opportunities to enhance significance where opportunities arise and where appropriate.

Para 194 of the NPPF requires Councils to identify the significance of any heritage asset that may be affected by a proposal to ensure that harm to the asset is avoided or is minimised. Policy DM8 of the Council's Core Strategy requires schemes that affect heritage assets to be of a scale, design, materials and siting and not have a negative effect on views towards the heritage asset. Paragraph 199 of the NPPF states that in considering the impact of development on the significance of heritage assets, great weight should be given to the assets conservation. Policy DM8 of the Council's Core Strategy requires schemes that affect heritage assets to be of a scale, design, materials and siting and not have a negative effect on views towards the heritage asset.

Para 203 of the NPPF advises that Councils should consider the impact of a proposal on the significance of a non-designated heritage asset when making a decision. Paragraph 205 of the NPPF is also particularly applicable where archaeology has been identified as a potential issue

on site. This paragraph requires that applicants record to provide documentary evidence to advance the understanding of the significance of the heritage asset. Policy DM8 of the Bassetlaw Core Strategy states that there will be a presumption against development that detrimentally affects the significance of a heritage asset.

The applicant has submitted a heritage impact assessment with the application which undertakes an assessment based on a 1.5km study area. Within this area there are 5 Listed Buildings, one of which is Grade I (Church of St Wilfrid). Outside of the 1.5km area there are a number of Listed Buildings, two Conservation Areas (South Clifton and Normanton) and a structure of industrial archaeological interest (Fledborough Viaduct).

The assessment concludes that when viewed individually the visual effects of the proposed development on setting of heritage asset will be nil and also when viewed collectively will also be nil. On this basis paragraph 202 of the NPPF (less than substantial harm) is not engaged. The report concludes that paragraph 203 of the NPPF (non designated heritage assets) may be engaged but there are no unacceptable changes or impacts on setting or significance. Furthermore the assessment concludes that there are no effects on Listed Buildings that would give rise to the Council's duty under section 66 (1) of the Act.

The proposal site is within the setting of a range of designated heritage assets including Listed Buildings and non designated heritage assets.

The key consideration is the scheme's impact upon the setting of the designated heritage assets that are located within the surrounding settlements. The scheme's impact upon the setting of nearby non-designated heritage assets, is also due consideration.

The Conservation Section has no concerns with the principle of development. The remediation, reclamation and redevelopment of the former High Marnham industrial site is seen as a priority, as such a scheme would see this large plot of redundant brownfield land positively regenerated to the benefit of the local economy, communities and environment.

Conservation has previously made comments in relation to the redevelopment of the High Marnham site, stating that: "Notwithstanding [the impact that any forthcoming scheme may have upon] the historic setting [of the surrounding built heritage],
this is a former power station which was demolished several years ago and has remained brownfield land since that time. Previously there were several large buildings on the site together with 5 cooling towers, so the precedent for large scale development has already been established. Development here could also help to enhance the setting of those nearby heritage asset".

Conservation would reiterate this stance with regards to the current development, given that the current proposal is of a similar industrial character to that of the former power station. The current scheme is also substantially smaller in scale in comparison to the former power station. Furthermore, the scale and character of the current scheme is similar to that of the already extant applications/schemes which have sought to redevelopment the former High Marnham Power Station site. These include applications which have either subsequently been granted, or applications to which Conservation have provided no objections.

On the basis of the above, it is considered that the proposal would at least preserve the setting of the surrounding built heritage.

In terms of archaeology, the site lies in an area of archaeological potential associated with pre-historic, Roman, medieval and post-medieval activity. The application is accompanied by a

desk-based assessment (DBA) which summarises the known archaeology currently recorded on the HER and recent mapping.

Extensive pre-historic and Roman settlement lies along the Trent valley the closest of which lies just to the south and south-east of the site. These are noted as undated in the DBA due to a lack of evaluation, however the cropmarks are consistent with known dated settlement activity along the river valley and elsewhere in the region. A single undated cropmark enclosure is also noted just to the west of the proposed site and has not been discussed in the DBA.

The site lies within the former High Marnham Power Station adjacent to the cooling towers and to the east of the main power station buildings. There has been significant disturbance/truncation in the vicinity of the cooling towers and buildings due to construction and decommissioning activity, however much of the area proposed for the new Hydrogen Production Plant remained as agricultural land during the operational life of the power plant. Aerial photography also suggests it was not impacted significantly during the decommissioning phase and consequently retains a potential for surviving archaeological remains.

The associated groundworks for the proposal will have an impact on any surviving archaeological remains present and further archaeological investigation to inform a programme of mitigation work is recommended. Geophysical survey is unlikely to be helpful at this location; conditions are recommended.

It is considered that subject to conditions the impact on the historic environment is acceptable.

FLOOD RISK AND DRAINAGE

The NPPF at paragraph 159 and policy DM12 of the Core Strategy makes it clear that development in areas at risk of flooding should be avoided by directing development away from the areas at the highest risk.

Paragraph 167 of the NPPF requires that proposals do not increase flood risk elsewhere and should be developed in line with a site specific flood risk assessment which incorporates a Sustainable Urban Drainage solution.

The proposed surface water system will be a gravity system taking run off from the new roofs and paved areas. The new paved areas will use a combination of linear drainage and gullies to collect surface water run off. Surface water from impermeable areas will drain by gravity to the proposed basin located to the north west of the site. The outlet from the proposed flow control chamber will connect to an existing surface water drainage system which is located in the access road. The existing surface water drainage system has an outfall to a drainage ditch at the north east corner of the ownership boundary which I turn discharges into the River Trent.

Foul drainage will adopt a similar strategy as to other developments in the same ownership boundary and proposes to use an on plot foul water treatment plant.

The submitted reports indicate that there will be no discharge to ground from either surface water drainage or foul drainage.

The reports indicate that environmental permits will be sought for foul and trade effluent discharge into the environment; these permits are controlled via separate legislation. The Environment Agency also advise of the need to notify the competent authority under the Control of Major Accident Hazards Regulations 2015.

The Environment Agency and Notts County Council Local Lead Flood Authority have been consulted on the application in respect of surface water and raise no objections. Their advice is accepted and concurred with; conditions are proposed. In terms of foul drainage the Environment Agency has stated that it is not generally recommended that foul water treated effluent is discharged into a balancing pond, instead it would be preferable to make the discharge to the drainage network after the balancing pond. It is recommended that foul water disposal is dealt with by way of planning condition.

CONTAMINATION

Paragraph 183 of the NPPF requires that in making decisions on schemes consideration is taken account of the ground conditions and any risks arising from contamination.

The Council's Environmental Health Officer has considered this application and states that the site may have been previously used for potentially contaminative uses, and there is a presence of a sensitive receptor. Accordingly conditions are recommended.

The Environment Agency has also undertaken an assessment of the application. It acknowledges that the submitted report identifies potentially complete contaminant linkages and has assessed the risk that these linkages pose. For linkages posing a risk to controlled waters, the risks have been assessed as being low. The Environment Agency has no objections to the report in principle; however it is noted that the conclusions may not be applicable to other parts of the wider site where other sources of contamination may be present and where conceptual models and contaminant linkages may be different.

Planning conditions have been recommended along with a recommendation to consult with the Council's own Environmental Health Officer in respect of human health.

OTHER ISSUES

Comment has been made that the overall site is being developed in a piecemeal way without a masterplan. Given the current planning policy it is not possible to request a masterplan for this site. Instead each planning application has to be assessed on its own merits. Cumulative impact has been assessed in the supporting documentation and officer do take into account what has been constructed / has consent on the site.

Comment has also been made that the application should be left undetermined pending the outcome of the local plan examination. This is not possible as the Local Planning Authority has a duty to determine applications that have been submitted based on current planning policy at that point in time.

There has been a discussion with the applicant regarding the proposed conditions and comment is made as follows:
The need for a Construction Programme, Construction Management Plan and Delivery Traffic Management Plan – documents have been submitted but there has not been sufficient time to allow for reconsultations. The condition should still be imposed.

In terms of the foul water drainage the applicant has requested that the trigger for this is prior to commencement of use. This is not accepted the trigger for drainage should be prior to the commencement of development as the local planning authority needs to be satisfied that adequate foul drainage can be achieved before the development starts.

The need for a Great Crested Newt Survey – the assessments has been submitted but there has not been not been sufficient time to allow for re-consultations. The condition should still be imposed.

The need for destructive search condition – the applicant states that this condition is no longer required due to the fact that the grass is cut down; however this is not what the submitted ecological report states, it recommends that such a search should be undertaken and this has been endorsed by Nottinghamshire Wildlife Trust. The condition should still stand.

The applicant has requested that the Landscape and Ecological Management Plan and the Biodiversity Net Gain conditions are combined. These are not considered to be the same entity. Biodiversity Net Gain requires different requirements to general landscaping/ biodiversity of the site and therefore two conditions should be imposed to reflect this fact, e.g. bat boxes are not included in the biodiversity metric:

"BNG does not change existing protections, so current legal and policy provisions relating to development impacts on the natural environment, including protected sites and species, and priority species and habitats, all need to be considered in relation to habitat loss. A development cannot avoid this requirement by virtue of delivering a net gain.
If there are protected species on-site then these should be approached and managed in the same way as they are currently. BNG and the Biodiversity Metric calculations would then be additional to this.

The Biodiversity Metric is a habitat-based approach, using habitat as a proxy for biodiversity. Species-based features such as bird and bat boxes are not included within the metric, instead it focuses on the habitats such species need to forage and complete their life cycles. The provision of such species features within developments should still be encouraged and LPAs can promote their usage through design guides and codes." Planning Advisory Group website.

CONCLUSION

In conclusion this proposal is for an 8 MW Electrolytic Green Hydrogen Production Plant, with Associated Infrastructure Including HGV and Multi Cylinder Pack (MCP) Loading Areas, Vehicle Maintenance Unit, Staff Welfare Facilities and Control Room, 11KV Customer Sub-Station, Boundary Fencing, Internal Access Roads, Landscaping, External Lighting and Works. The principal policy for determining this application is Policy DM10 of the Bassetlaw Core Strategy.

All of the material considerations relating to the application have been fully analysed in the report, including National Policy which seeks to support this type of development.

It is considered that the proposal is consistent with planning policy and that there are no adverse impacts of the development that would outweigh the benefits. The recommendation is therefore to grant planning permission subject to conditions.

RECOMMENDATION:

Grant subject to conditions

CONDITIONS/REASONS:

1. The development must be begun not later than the expiration of three years beginning with the date of this permission.

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

2. The development hereby permitted shall be in accordance with the following approved plans:

- Site location plan. Drawing number 6050 received on 31st July 2023
- Proposed site plan. Drawing number 6060 received on 31st July 2023
- Proposed vehicle tracking plan. Drawing number 6061 received on 31st July 2023
- Proposed fence and bollard plan. Drawing number 6062 received on 31st July 2023
- Typical shipping container. Drawing number 6063 received on 31st July 2023
- Proposed GRP unit key and elevation plan. Drawing number 6064 received on 31st July 2023
- Proposed indicative lighting plan. Drawing number 6065 received on 31st July 2023
- Proposed substation and elevation plan. Drawing number 6066 received on 31st July 2023
- Proposed legato blocks and elevation plan. Drawing number 6068 received on 31st July 2023
- Proposed site sections. Drawing number 6070 received on 31st July 2023
- Proposed hydrogen plant sections. Drawing number 6071 received on 31st July 2023
- Maintenance and welfare unit. Drawing number 6150 received on 31st July 2023
- Maintenance and Welfare Unit. Drawing number 6250 received on 31st July 2023
- Ecological Appraisal dated June 2023 received on 31st July 2023
- Biodiversity Net Gain Assessment and calculator dated June 2023 received on 31st July 2023
- Flood risk and drainage strategy (excluding ammonia cracker and foul water treated effluent discharge) dated 16th May 2023, received on 31st July 2023.
- Noise impact assessment dated 21st June 2023, received on 31st July 2023.
- Transport assessment dated June 2023, received on 31st July 2023.
- Phase 1 Desk-Based Assessment Addendum report produced by RSK, dated May 2023 (ref: 30255-R01(00)) received on 31st July 2023
- Landscape and Visual Impact Assessment dated June 2003 received on 31st July 2023
- Phase II Geo-environmental Assessment produced by RSK, dated July 2023 (ref. 302535 R02(00) received on 21st August 2023

Reason: For the avoidance of doubt

3. Notwithstanding the submitted information this permission does not relate to the ammonia cracker unit. It permits hydrogen production only.

   Reason: For the avoidance of doubt.

4. Prior to any construction commencing on the site the Applicant shall submit to the Local Planning Authority a Construction Programme and a Construction Traffic Management Plan for the routing of vehicles exceeding 3.5 tonnes gross vehicle weight to and from the site. The Plan shall thereafter be implemented as approved and make provision for:

- Monitoring of the approved arrangements during the construction of the development.
- Ensuring that all drivers of vehicles under the control of the Applicant are made aware of the approved arrangements.
- The disciplinary steps that will be exercised in the event of a default.
- Appropriate signage, details to be approved by the Local Highway Authority and erected advising drivers of the vehicle routes agreed with the Local Highway Authority.
- Wheel cleaning facilities and their use/retention.
- Construction Programme

   Reason: To minimise the possibility of heavy construction traffic using inappropriate routes to and from the site in the interests of maintaining highway efficiency and safety.

5. Prior to the development being first brought into use the Applicant shall submit to the Local Planning Authority a Delivery Traffic Management Plan for the routing of delivery vehicles exceeding 3.5 tonnes gross vehicle weight to and from the site. The Plan shall thereafter be implemented as approved and make provision for:

- Monitoring of the approved arrangements during the operation of the development.
- Ensuring that all drivers of vehicles under the control of the Applicant are made aware of the approved arrangements.
- The disciplinary steps that will be exercised in the event of a default.
- Appropriate signage to be erected to advise drivers of the vehicle routes.
- The approved arrangements shall limit vehicle movements above 3.5 tonnes to the north Via Main Street and the A57, to the South via Hemplands Lane and Great North Road, and to the West via Polly Turners Lane and vice-versa and to no other routes.

   Reason: To minimise the possibility of heavy traffic using inappropriate routes to and from the site in the interests of maintaining highway efficiency and safety

6. All construction vehicles transporting materials to and from the site shall be fully covered with sheeting or otherwise sealed prior to them leaving the application site and entering the public highway for the lifetime of the development.

   Reason: To minimise the potential for debris to be deposited on the highway

7. If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to, and approved in writing by, the local planning authority. The remediation strategy shall be implemented as approved.

Reason: To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution from previously unidentified contamination sources at the development site. This is in line with paragraph 183 of the National Planning Policy Framework.

8. Prior to the commencement of development full details of the foul water treated effluent disposal will be submitted to and approved in writing by the Local Planning Authority. The development shall be undertaken in accordance with the approved details.

   Reason: To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution from previously unidentified contamination sources at the development site. This is in line with paragraph 183 of the National Planning Policy Framework.

9. Except in case of emergency, construction operations should not take place on site other than between the hours of 08:00 - 18:00 Monday to Friday and between 09:00 - 13:00 on Saturdays. There should be no working on Sundays or Public Holidays. At times when operations are not permitted work shall be limited to maintenance and servicing of plant or other work of an essential or emergency nature. The Local Planning Authority should be notified at the earliest opportunity of the occurrence of any such emergency and a schedule of essential work shall be provided.

   Reason: In the interest of residential amenity

10. During construction heavy goods vehicles should only enter or leave the site between the hours of 08:00 - 18:00 on weekdays and 09:00 - Neighbourhood EHO (SH) 13:00 Saturdays and no such movements should take place on or off the site on Sundays or Public Holidays (this excludes the movement of private vehicles for personal transport).

    Reason: In the interest of residential amenity

11. Prior to the commencement of development a Construction Environmental Management Plan shall be submitted to and approved in writing by the Local planning Authority. The plan shall include the following details:

    - Dust suppression methods
    - Lighting details
    - Details of tree / hedgerow protection
    - Details of pollution prevention into watercourses.
    - Mammal construction safeguards

    Reason: in the interests of amenity and biodiversity

12. Notwithstanding the submitted details, an operational lighting plan shall be submitted to and approved in writing by the Local Planning Authority. The development shall be undertaken in accordance with the approved details.

    Reason: To prevent sky glow and in the interests of biodiversity

13. Prior to commencement of the hereby approved use an Emergency Plan (including response) shall be submitted to and approved in writing by the Local Planning Authority. The plan shall remain in place for the lifetime of the development.

    Reason: To ensure that there are adequate measures in plan in the case of an emergency in the interests of health and safety.

14. Prior to the commencement of development a great crested newt survey (eDNA) shall be undertaken and the results and any proposed mitigation shall be submitted to and approved in writing by the Local Planning Authority. The development shall be undertake in accordance with the approved details.

    Reason: In the interests of biodiversity

15. A destructive search as outlined in the approved ecological appraisal shall be undertaken prior to the commencement of development. The Local Planning Authority shall be notified of the commencement date and details of the ecologist two weeks prior to the commencement of the proposed destructive search as outlined in paragraph 6.1.8 of the approved Ecological Appraisal.

    Reason: In the interests of biodiversity

16. Prior to the commencement of development a Landscape and Ecology Management Plan shall be submitted to and approved in writing by the Local Planning Authority. The Plan shall include a full landscaping scheme and specification along with a maintenance strategy. It should include the mitigation measures outlined in section 6 of the approved ecological appraisal. The development shall be undertaken in accordance with the approved details.

    Reason: In the interests of biodiversity

17. Any trees, hedges or shrubs that are removed, are dying, being severely damaged or become seriously diseased within the lifetime of the development shall be replaced in the following planting season by trees or shrubs of a size and species similar to those originally required to be planted.

    Reason: To ensure that the landscaped areas are provided for the lifetime of the development to secure the mitigation proposed by the application

18. No development shall commence unless and until a Biodiversity Management Plan to ensure that there is at least 11% Biodiversity Net Gain as a result of the development has been submitted to and agreed in writing by the Local Planning Authority. The net biodiversity impact of the development shall be measured in accordance with the DEFRA biodiversity metric as applied in the area in which the site is situated at the relevant time and the Biodiversity Management Plan shall include a management and monitoring plan for a period of 30 years.

    Reason: To ensure that the optimal benefits of biodiversity are achieved

19. No part of the development hereby approved shall commence until a detailed surface water drainage scheme based on the principles set forward by the approved Flood Risk Assessment (FRA) and Drainage Strategy *HIMA2-BED-00-XX-RP-C-2720, 16th May 2023, BE Design*., has been submitted to and approved in writing by the Local Planning Authority in consultation with the Lead Local Flood Authority. The scheme shall be implemented in accordance with the approved details prior to completion of the development. The scheme to be submitted shall:

    ● Demonstrate that the development will use SuDS throughout the site as a primary means of surface water management and that design is in accordance with CIRIA C753 and NPPF Paragraph 169.

    ● Limit the discharge generated by all rainfall events up to the 100 year plus 40% (climate change) critical rain storm to QBar rates for the developable area.

● Provide detailed design (plans, network details, calculations and supporting summary documentation) in support of any surface water drainage scheme, including details on any attenuation system, the outfall arrangements and any private drainage assets.

Calculations should demonstrate the performance of the designed system for a range of return periods and storm durations inclusive of the 1 in 1 year, 1 in 30 year and 1 in 100 year plus climate change return periods.

- oNo surcharge shown in a 1 in 1 year.
- o No flooding shown in a 1 in 30 year.
- o For all exceedance to be contained within the site boundary without flooding properties in a 100 year plus 40% storm

● Evidence to demonstrate the viability (e.g Condition, Capacity and positive onward connection) of any receiving watercourse to accept and convey all surface water from the site.

● Details of STW approval for connections to existing network and any adoption of site drainage infrastructure.

● Evidence of approval for drainage infrastructure crossing third party land where applicable.

● Provide a surface water management plan demonstrating how surface water flows will be managed during construction to ensure no increase in flood risk off site.

● Evidence of how the on-site surface water drainage systems shall be maintained and managed after completion and for the lifetime of the development to ensure long term effectiveness.

Reason: A detailed surface water management plan is required to ensure that the development is in accordance with NPPF and local planning policies. It should be ensured that all major developments have sufficient surface water management, are not at increased risk of flooding and do not increase flood risk off-site

20. No development or demolition shall take place until an Archaeological Mitigation Strategy for the protection of archaeological remains is submitted to and approved by the Local Planning Authority. The Mitigation Strategy will include appropriate Written Schemes of Investigation for a trial trench evaluation and provision for further mitigation work as necessary. These schemes shall include the following:

    1. An assessment of significance and proposed mitigation strategy (i.e. preservation by record, preservation in situ or a mix of these elements).
    2. A methodology and timetable of site investigation and recording
    3. Provision for site analysis
    4. Provision for publication and dissemination of analysis and records
    5. Provision for archive deposition
    6. Nomination of a competent person/organisation to undertake the work

    The scheme of archaeological investigation must only be undertaken in accordance with the approved details.

    Reason: To ensure the preparation and implementation of an appropriate scheme of archaeological mitigation in accordance with the National Planning Policy Framework

21. The archaeological site work must be undertaken only in full accordance with the approved written schemes referred to in the above Condition. The applicant will notify the Local Planning Authority of the intention to commence at least fourteen days before the start of archaeological work in order to facilitate adequate monitoring arrangements. No variation shall take place without prior consent of the Local Planning Authority.

    Reason: To ensure satisfactory arrangements are made for the recording of possible archaeological remains in accordance with the National Planning Policy Framework.

22. A report of the archaeologist's findings shall be submitted to the Local Planning Authority and the Historic Environment Record Officer at Nottinghamshire County Council within 3 months of the archaeological works hereby approved being commenced, unless otherwise agreed in writing by the Local Planning Authority. The post-investigation assessment must be completed in accordance with the programme set out in the approved Written Scheme of Investigation and shall include provision for analysis, publication and dissemination of results and deposition of the archive being secured.

    Reason: In order to ensure that satisfactory arrangements are made for the investigation, retrieval and recording of any possible archaeological remains on the site in accordance with the National Planning Policy Framework.

Informatives

1. CIL
2. The report has indicated that environmental permits will be sought for foul and trade effluent discharge into the environment. Please note that the granting of planning permission does not guarantee the granting of an Environmental Permit. Upon receipt of a correctly filled in application form The Environment Agency will carry out an assessment. It can take up to 4 months before we are in a position to decide whether to grant a permit or not.
3. In respect of condition 10 the drainage schematics submitted by the applicant indicate that the foul water treated effluent would be discharged into the balancing pond on site. This is generally not recommended and should be avoided if possible. The applicant should be advised it would be preferable to make the discharge to the drainage network after the balancing pond.
4. It is noted that the proposed operations will likely require an environmental permit or permits. In particular the Environment Agency would highlight the listed activity under the Environmental Permitting (England and Wales) Regulations 2016, Schedule 1, Part 2: Section 4.2 Part A(1) (a) Producing inorganic chemicals such as— 1. gases (for example ammonia, hydrogen chloride, hydrogen fluoride, hydrogen cyanide, hydrogen sulphide, oxides of carbon, sulphur compounds, oxides of nitrogen, hydrogen, oxides of sulphur, phosgene); In this case the Agency would strongly recommend that the operator utilises our advanced pre application advice service prior to submitting application for the required environmental permits.

    It is also noted that the proposed operations, and corresponding inventories of hazardous substances will likely require notification to the competent authority under The Control of Major Accident Hazards Regulations 2015.

    If the establishment has yet to be constructed and, when operational, will become subject to COMAH, the operator must send their notification within a reasonable time prior to start of construction. Similarly, should the scope of operations require the submission of a Safety Report under COMAH regulations, the safety report should be submitted a reasonable period of time before construction begins. This approach

requires the operator to submit parts of a safety report at a point before conceptual design decisions are finalised.

5. Comments from Trent Valley Drainage Board are attached for the applicant's attention.
6. National Grid's Third Party Guidance for working near National Grid Electricity Transmission equipment Note is attached for the applicant's attention.
7. Advice from the Fire Officer is attached for the applicant's attention.