

APPLICATION NO	PA/2017/696
APPLICANT	Mr Mark Abbott, Egdon Resources UK Ltd
DEVELOPMENT	Planning permission for the retention of the existing 'Wressle-1 Well' well site and access road for long-term production of hydrocarbons (resubmission of MIN/2016/810)
LOCATION	Lodge Farm, Clapp Gate, Appleby, DN15 0DB
PARISH	Broughton
WARD	Broughton and Appleby
CASE OFFICER	Andrew Law
SUMMARY RECOMMENDATION	Grant permission subject to conditions
REASONS FOR REFERENCE TO COMMITTEE	Member 'call in' (Cllr Ivan Glover – significant public interest) Objection by Broughton Town Council

PLANNING POLICY

National Planning Policy Framework: Paragraph 14 explains that a presumption in favour of sustainable development should be seen as a 'golden thread' running through decision-taking. It makes clear, in circumstances where there is no extant adopted plan or relevant plan containing no applicable policies, that planning permission should be granted unless adverse impacts of the development would “*significantly and demonstrably outweigh the benefits*” or where there are policies within the NPPF which indicate such development should be restricted.

Paragraph 17 identifies the core land use planning principles that should underpin decision-taking. Within the context of this planning application, the most relevant principles include those below which state that “*planning should:*”

- *proactively drive and support sustainable economic development to deliver homes, businesses and industrial unity, infrastructure and thriving local places that the country needs;*
- *always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;*
- *take account of the different roles and character of different areas...recognising the intrinsic character and beauty of the countryside and support thriving rural communities within it;*
- *support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy);*

- *contribute to conserving and enhancing the natural environment and reducing pollution;*
- *encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value;*
- *conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations;*
- *actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable; and*
- *take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs”.*

Building a strong, competitive economy

Paragraph 18 states that *“the Government is committed to securing economic growth in order to create jobs and prosperity, building on the country’s inherent strengths, and to meet the twin challenges of global competition and of a low carbon future”.*

Paragraph 19 states that *“the Government is committed to ensuring the planning system does everything it can to support sustainable economic growth”* and *“significant weight should be placed on the need to support economic growth through the planning system”.*

Paragraph 20 states that *“local authorities should plan proactively to meet the development needs of business and support an economy fit for the 21st century”.*

Supporting a prosperous rural economy

Paragraph 28 advocates supporting *“economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development”.*

Promoting sustainable transport

Paragraph 32 directs that decisions should take account of whether *“opportunities for sustainable transport modes have been taken up depending on the nature and location of the site”*; whether *“safe and suitable access to the site can be achieved”* and whether *“improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development”.* It is also made clear that *“development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe”.*

Paragraph 34 states *“decisions should ensure that developments that generate significant movements are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised”*; however, in rural areas this needs to take account of policies set out elsewhere in the NPPF.

Promoting healthy communities

Paragraph 69 states that *“the planning system can play an important role in...creating healthy, inclusive communities”* and that *“local planning authorities should aim to involve all sections of local communities...in planning decisions”*.

Meeting the challenges of climate change, flooding and coastal change

Paragraph 93 explains that *“planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and infrastructure”*.

Paragraph 100 states that *“inappropriate development in areas at risk of flooding should be avoided by directing development away from areas of highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere”*.

Paragraph 103 also requires local planning authorities to ensure that *“flood risk is not increased elsewhere”* and that *“development is appropriately flood resilient and resistant”* and that priority is given to the use of sustainable drainage systems.

Conserving and enhancing the natural environment

Paragraph 109 states that *“the planning system should contribute to and enhance the natural and local environment by:*

- *protecting and enhancing valued landscapes, geological conservation interests and soils;*
- *recognising the wider benefits of ecosystem services;*
- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and*
- *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

Paragraph 118 encourages local planning authorities to consider *“opportunities to incorporate biodiversity in and around developments”*.

Paragraph 120 states that *“to prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account...”*.

Paragraph 121 requires that planning decisions also ensure that *“the site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation”* and that *“adequate site investigation information, prepared by a competent person, is presented”*. It is clear that land, once remediated, should not thereafter be capable of being determined as contaminated land.

Paragraph 122 expressly makes it clear that *“local planning authorities should focus on whether the development itself is an acceptable use of land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes”*. Authorities must *“assume that these regimes will operate effectively”*. It follows that *“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”*.

Paragraph 123 states that *“planning decisions should aim to:*

- *avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;*
- *mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from new development, including through use of conditions;*
- *recognise that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established; and*
- *identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason”.*

Paragraph 125 states that *“decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation”*.

Conserving and enhancing the historic environment

Paragraph 128 requires applicants to *“describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance...”*.

Paragraph 129 requires authorities to *“identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset’s conservation and any aspect of the proposal”*.

Paragraph 132 states *“when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be. Significance*

can be harmed or lost through alteration or destruction of the heritage asset or development within its setting”.

Paragraph 133 states that *“where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits”.*

Paragraph 134 states *“where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal”.*

Paragraph 135 requires the effect of an application upon a non-designated heritage asset’s significance to be taken into account and where applications directly, or indirectly, affect non-designated heritage assets, *“a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset”.*

Paragraph 139 states that *“non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets”.*

Facilitating the sustainable use of minerals

Paragraph 142 states *“minerals are essential to support sustainable economic growth and our quality of life. It is therefore important that there is a sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs. However, since minerals are a finite resource and can only be worked where they are found, it is important to make the best use of them to secure their long-term conservation”.*

Paragraph 144 relates specifically to decision-taking with regard to mineral applications and requires local planning authorities to:

- *“give great weight to the benefits of the mineral extraction, including to the economy;*
- *ensure, in granting planning permission for mineral development, that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality;*
- *ensure that any unavoidable noise, dust and particle emissions...are controlled, mitigated or removed at source and establish appropriate noise limits for extraction in proximity to noise sensitive properties; and*
- *provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards, through the application of appropriate conditions, where necessary. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances”.*

Paragraph 147 states that *“minerals planning authorities should also:*

- *when planning for on-shore oil and gas development, including unconventional hydrocarbons, clearly distinguish between the three phases of development*

(exploration, appraisal and production) and address constraints on production and processing within areas that are licensed for oil and gas exploration or production;

- *encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility; indicate any areas where coal extraction and the disposal of colliery spoil may be acceptable;*
- *encourage capture and use of methane from coal mines in active and abandoned coalfield areas; and*
- *provide for coal producers to extract separately, and if necessary stockpile, fireclay so that it remains available for use”.*

Decision-taking

Paragraph 186 states that *“local planning authorities should approach decision-taking in a positive way to foster the delivery of sustainable development”.*

Paragraph 187 states that authorities should *“look for solutions rather than problems, and...should seek to approve applications for sustainable development where possible”* and *“should work proactively with applicants to secure developments that improve the economic, social and environmental conditions of the area”.*

Determining applications

Paragraph 196 requires that *“applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise”.* It also established that the NPPF is a material consideration in planning decisions.

Planning conditions and obligations

Paragraph 203 requires local planning authorities to *“consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition”.*

Paragraph 204 sets out that planning obligations should only be sought where they are necessary to make the development acceptable in planning terms; directly related to the development and fairly and reasonable related in scale and kind.

North Lincolnshire Local Plan:

Policy M1 (Applications for Mineral Workings)

Supports proposals for mineral extraction provided that acceptable proposals are made to mitigate visual and amenity impacts; the order and method of working is satisfactory; restoration proposals are satisfactory; and the local road network and other transport facilities are adequate.

Policy M3 (Residential Amenity and Protection Zones)

Advises that mineral working will not be allowed directly adjacent to proposed housing or other land uses where unacceptable impacts may arise. The separation required will depend on the nature and scale of the proposed working and the potential to use mitigatory measures.

Policy M4 (Ancient Monuments and Archaeological Sites)

Proposals for minerals development affecting sites of known or potential archaeological importance must be accompanied by an archaeological assessment and where necessary, a field evaluation. Minerals applications affecting Scheduled Ancient Monuments will not be allowed unless the reasons for development clearly outweigh the archaeological value of the site.

Policy M5 (Best and Most Versatile Agricultural Land)

Applications for new mineral working on the best and most versatile agricultural land (grades 1, 2 and 3a) will be allowed only where it can be shown that restoration and after-care will preserve the long-term potential of the land.

Policy M7 (Transportation of Minerals)

Planning permission for new mineral workings will only be granted where the council is satisfied that the level of traffic movements can be accommodated on the local road network, and where impacts on local communities can be reduced to an acceptable level.

Policy M23 (Oil and Gas Production)

Proposals for oil and gas production facilities will be permitted, provided that the proposal incorporates environmental protection measures that are adequate to mitigate the impacts arising from a long-term or permanent site.

Policy RD2 (Development in the Open Countryside)

This policy seeks to strictly control development in the open countryside to certain types. Amongst others, policy RD2 identifies employment-related development appropriate to the open countryside as an acceptable type of development. New development in the open countryside will only be permitted provided that the open countryside is the only appropriate location; it would not be detrimental to the character or appearance of the area; it would not be detrimental to residential amenity or highway safety; and the development is sited to make best use of existing and new landscaping.

Policy DS1 (General Requirements)

This policy seeks a high standard of design in all new developments and states “*proposals for poorly designed development will be refused*”. Policy DS1 sets out criteria against which all new proposals will be considered as set out below:

- Quality of design
 - i) the design and external appearance should reflect or enhance the character, appearance and setting of the immediate area; and

- ii) the design and layout should respect, and where possible retain and/or enhance, the existing landform.
- Amenity
 - iii) no unacceptable loss of amenity to neighbouring land uses should result in terms of noise, smell, fumes, dust or other nuisance, or through the effects of overlooking or overshadowing; and
 - iv) amenity open space in the area should be retained, wherever possible; and
 - v) no pollution of water, air or land should result.
- Conservation
 - vi) there should be no adverse effect on features of acknowledged importance on, or surrounding, the site, including species of plants and animals of nature conservation value; and
 - vii) the development must retain existing features that make an important contribution to the character or amenity of the site or the surrounding area; and
 - viii) development proposals should include results of archaeological assessment, where appropriate, and adequate measures to ensure that there would be no unacceptable impacts on archaeological remains.
- Resources
 - ix) there should be no conflict with an allocated or approved land-use nor should the reasonable potential for development of a neighbouring site be prejudiced; and
 - x) the location and design of developments on urban fringes should take into account the need to minimise the impact of the development on adjoining agricultural land; and
 - xi) measures to conserve energy will be expected in:
 - a) the design, orientation and layout of buildings; and
 - b) the location of development; and
 - c) improvements to the transport network and in the management of traffic.
- Utilities and Services
 - xii) there should be no reliance on public finances being available to provide infrastructure and services; and
 - xiii) suitable on-site drainage should be provided and where there are off-site drainage problems the developer will be expected to overcome them.

Policy DS3 (Planning Out Crime)

New development should take into account personal safety and the security of people and property by making sure that paths, play areas and open spaces are overlooked by inhabited buildings; avoiding the creation of spaces with ill-defined ownership; ensuring the development is well integrated into the existing pattern of pedestrian and vehicular movement; ensuring that dark or secluded areas are not created by landscaping or buildings; and ensuring that streets and paths are adequately lit.

Policy DS11 (Polluting Activities)

Planning permission for development will only be permitted where it can be demonstrated that the levels of potentially polluting emissions do not pose a danger by way of toxic release; result in land contamination; pose a threat to current and future surface or underground water resources; or create adverse environmental conditions likely to affect nearby developments and adjacent areas.

Policy DS12 (Light Pollution)

Planning applications which involve light generating development, including floodlighting, will only be permitted where it can be demonstrated that there would be no adverse impact on local amenities.

Policy DS13 (Groundwater Protection and Land Drainage)

All development proposals must take account of the need to secure effective land drainage measures and ground water protection in order to control the level of water in the land drainage system.

Policy DS14 (Foul Sewage and Surface Water Drainage)

This policy requires satisfactory provision to be made for the disposal of foul and surface water from new development.

Policy DS15 (Water Resources)

Development will not be permitted which would adversely affect the quality and quantity of water resources or adversely affect nature conservation, fisheries and amenity by means of pollution from the development or water abstraction unless the impact is mitigated to an acceptable level.

Policy DS16 (Flood Risk)

Development will not be permitted in floodplains if it would increase the number of people or buildings at risk; impede the flow of flood water; impede access for maintenance of watercourses; reduce the storage capacity of the floodplain; increase the risk of flooding elsewhere; or undermine the integrity of flood defences unless adequate mitigation is undertaken.

Policy T1 (Location of Development)

This policy requires developments that generate significant volumes of traffic to be located in urban areas and where there is good access to transport networks and foot, cycle and public transport provision.

Policy T2 (Access to Development)

This policy requires all new developments to be provided with a satisfactory access and continues to state that larger developments should be served by a range of transport modes.

Policy LC4 (Development Affecting Sites of Local Nature Conservation Importance)

This policy seeks to protect areas of local nature conservation importance and only permits developments that are likely to have an adverse impact on these areas if it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the intrinsic nature conservation value of the site. It also requires any damage to be kept to a minimum.

Policy LC5 (Species Protection)

Planning permission will not be granted for development which would have an adverse impact on protected species. Where development is granted that may impact on protected species, the use of conditions or planning agreements will be considered to mitigate this impact.

Policy LC7 (Landscape Protection)

Where development is permitted within the open countryside, special attention will be given to the protection of the scenic quality and distinctive local character of the landscape. Development which does not respect the character of the local landscape will not be permitted.

North Lincolnshire Core Strategy:

Policy CS1 (Spatial Strategy for North Lincolnshire)

This policy sets out the spatial strategy for future development in North Lincolnshire. It goes on to state that *“All future growth regardless of location should contribute to sustainable development”* and that where development has an environmental impact *“mitigation measures should be used for the development to be acceptable”*.

Policy CS2 (Delivering More Sustainable Development)

Asserts that any development in the open countryside will be restricted and only development essential to the functioning of the countryside will be allowed to take place. This includes, amongst other uses, those *“which require a countryside location”*.

It goes on to state that all future development will be required to contribute towards achieving sustainable development and sets out sustainable development principles which development should comply with. These sustainable development principles include, amongst others, a requirement to:

- contribute to achieving sustainable economic development to support a competitive business and industrial sector; and
- take account of local environmental capacity and to improve air, water and soil quality and minimise the risk and hazards associated with flooding.

This policy also requires environmental impacts of developments to be adequately mitigated.

Policy CS3 (Development Limits)

This policy outlines how development limits will be created and applied. It also states that development outside defined boundaries will be restricted to that which is essential to the functioning of the countryside. This includes uses which require a countryside location.

Policy CS11 (Provision and Distribution of Employment Land)

This policy sets out support for the expansion and improvement of North Lincolnshire's economy and outlines strategic employment sites. It also supports development elsewhere in North Lincolnshire that meets local employment needs and maximises other special locations.

Policy CS17 (Biodiversity)

This policy sets out a number of ways in which the council will seek to promote the effective stewardship of North Lincolnshire's wildlife. Amongst others these include:

- *ensuring development retains, protects and enhances features of biological and geological interest and provides for the appropriate management of these features; and*
- *ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for.*

Policy CS18 (Sustainable Resource Use and Climate Change)

This policy promotes development that utilises natural resources efficiently and sustainability including, amongst others:

- *meeting required national reductions of predicted CO₂ emissions by at least 34% in 2020 and 80% in 2050 by applying the following measures on development proposals; and*
- *ensuring development and land use helps to protect people and the environment from unsafe, unhealthy and polluted environments, by protecting and improving the quality of the air, land and water.*

Policy CS19 (Flood Risk)

This policy sets out that the council will support development proposals that avoid areas of current or future flood risk, and which do not increase the risk of flooding elsewhere. This includes a risk-based sequential approach that uses the principle of locating development, where possible, on land that has a lower flood risk. Development in high flood risk areas will only be allowed where there is a wider sustainable benefit to the area that outweighs

flood risk; it is on previously developed land unless there are no reasonably alternative sites on previously developed land; and a Flood Risk Assessment has demonstrated that it will be safe from flooding, without increasing flood risk elsewhere. *“The council will also seek to reduce the increase in flood risk due to climate change through measures to reduce carbon dioxide emissions.”*

Policy CS20 (Sustainable Waste Management)

Sets out a sequential approach towards waste management facilities and outlines how the council will promote sustainable waste management.

Policy CS21 (Minerals)

This policy explains that the council will safeguard mineral resources in North Lincolnshire from other development that would prejudice future mineral extraction via Mineral Safeguarding Areas in the Minerals and Waste Development Plan Document (not yet published). It also states that the council *“will provide for a steady and adequate supply of mineral to be maintained in accordance with national and regional guidance”*.

Policy CS21 plans for the sustainable extraction of minerals by:

- a) *“reducing the consumption of non-renewable mineral resources by encouraging reuse and recycling of construction and demolition waste, particularly from land reclamation schemes, and the by-products of industrial processes, especially power generation and steel manufacture;*
- b) *requiring phased development and progressive restoration of mineral sites;*
- c) *the use of restoration materials to progressively restore mineral sites;*
- d) *safeguarding natural watercourses;*
- e) *planning applications for mineral extraction to be accompanied by an Environmental Statement where required by guidelines;*
- f) *where appropriate, site restoration will contribute to the attainment of local biodiversity targets”*.

Policy CS25 (Promoting Sustainable Transport)

This policy promotes a sustainable transport system in North Lincolnshire that offers a choice of transport modes and reduces the need to travel through spatial planning and design and by utilising a range of demand and network management tools.

National Planning Practice Guidance:

Air quality

This section of the guidance provides guiding principles on how planning can take account of the impact of new development on air quality.

Paragraph 001 when referring to why planning should be concerned about air quality explains that *“action to manage and improve air quality is largely driven by EU legislation.*

The 2008 Ambient Air Quality Directive sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂). As well as having direct effects, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems”.

Paragraph 005 sets out that when deciding whether air quality is relevant to a planning application, considerations could include whether the development would (in summary): significantly affect traffic (through congestion, volumes, speed, or traffic composition on local roads); introduce new point sources of air pollution; expose people to existing sources of air pollutants; give rise to potentially unacceptable impact (such as dust) during construction; or affect biodiversity (due to pollutants).

Paragraph 008 states that mitigation measures will be *“locationally specific, will depend on the proposed development and should be proportionate to the likely impact”*. It further sets out that examples of mitigation could include: amendments to a site’s layout to increase distances between pollution sources and receptors; using green infrastructure; means of ventilation; promoting means of transport with low impact on air quality; control of dust and emissions from construction, operation and demolition; and contributing funding to measures designed to offset the impact on air quality.

Paragraph 009 explains, through the means of a flowchart, the considerations in respect of air quality in the development management process.

Climate change

This section of the guidance advises how planning can identify suitable mitigation and adaptation measures in plan-making and the planning application process to address the potential impacts of climate change.

Paragraph 001 requires local authorities to *“ensure that protecting the local environment is properly considered alongside the broader issues of protecting the global environment”*. Addressing climate change is one of the core land use planning principles underpinning both plan-making and decision-taking.

Paragraph 003 cites the consideration of the *“availability of water and water infrastructure for the lifetime of the development and design responses to promote water efficiency and protect water quality”* as an example of the planning system’s means of adapting to a changing climate.

Paragraph 005 states that the impact of climate change *“needs to be taken into account in a realistic way”* such as looking at *“the potential vulnerability of a development to climate change risk over its whole lifetime”*.

Conserving and enhancing the historic environment

This section of the guidance advises on enhancing and conserving the historic environment.

Paragraph 017 states that *“what matters in assessing if a proposal causes substantial harm is the impact on the significance of the heritage asset”* and asserts that *“significance derives not only from a heritage asset’s physical presence, but also from its setting”*.

Whether a proposal causes substantial harm will be a judgement for the decision taker... In general terms, substantial harm is a high test, so it may not arise in many cases”.

Flood risk and coastal change

This section of the guidance advises on how planning can take account of the risks associated with flooding and coastal change in plan-making and the application process.

Paragraph 001 advises that, where development needs to be in locations where there is a risk of flooding that *“development is appropriately flood resilient and resistant, safe for its users for the development’s lifetime, and will not increase flood risk overall”.*

Paragraph 029 states that *“developers and applicants need to consider flood risk to and from the development site”* and that *“the broad approach of assessing, avoiding, managing and mitigating flood risk should be followed”.*

Health and wellbeing

This section of the guidance advises on the role of health and wellbeing in planning.

Paragraph 001 states that local authorities *“should ensure that health and wellbeing, and health infrastructure are considered in...planning decision-making”.*

Paragraph 002 declares the built and natural environments to be *“major determinants of health and wellbeing”* and goes on to list, amongst others, that planning authorities should, in considering new development proposals, ensure that *“potential pollution and other environmental hazards, which might lead to an adverse impact on human health, are accounted for”.*

Land affected by contamination

This section of the guidance provides guiding principles on how planning can deal with land affected by contamination.

Paragraph 001 asserts the need for authorities to adequately deal with contamination and states that failure to do so *“could cause harm to human health, property and the wider environment”.*

Paragraph 009 advises that local planning authorities should work with developers to find acceptable ways forward if there are concerns about land contamination. *“However, local planning authorities should be satisfied that a proposed development will be appropriate for its location and not pose an unacceptable risk”.*

Land stability

This section of the guidance provides advice to local authorities and developers to ensure that development is appropriately suited to its location, and that there are no unacceptable risks caused by unstable land or subsidence.

Paragraph 001 explains that the effects of land instability may result in *“landslides, subsidence or ground heave. Failing to deal with this issue could cause harm to human health, local property and associated infrastructure, and the wider environment”.* Evidence

available to the local planning authority does not suggest that the area within which the application is situated is vulnerable to either landslides, mining hazards or subsidence.

Light pollution

This part of the guidance advises on how to consider light within the planning system.

Paragraph 001 explains that artificial light *“can be a source of annoyance to people, harmful to wildlife, undermine enjoyment of the countryside or detract from enjoyment of the night sky”* and advises that appropriately designed lighting schemes are key.

Paragraph 002 advises local planning authorities, when assessing whether a development proposal might have implications for light pollution, to consider whether they will *“materially alter light levels outside and/or have the potential to adversely affect the use or enjoyment of nearby buildings or open spaces...protected site or species...or protected area of dark sky”*.

Paragraph 003 explains that when light spills onto areas outside the immediate area of a proposed development it *“can impair sleeping, cause annoyance to people, compromise an existing dark landscape and/or affect natural systems (e.g. plants, animals, insects, aquatic life)”*. It goes on to advise that light intrusion can usually be avoided with careful lamp design selection and positioning.

Paragraph 004 advises that *“lighting only when the light is required can have a number of benefits, including minimising light pollution, reducing harm to wildlife and improving people’s ability to enjoy the night sky”*.

Paragraph 005 states that *“the character of the area and the surrounding environment may affect what will be considered an appropriate level of lighting for a development. In particular, lighting schemes for developments in...intrinsically dark landscapes should be carefully assessed as to their necessity and degree”*. Glare should be avoided for safety reasons.

Minerals

This section of the guidance provides guidance on the planning for mineral extraction in plan-making and the application process.

Paragraph 012 sets out the relationship between planning and other regulatory regimes noting that *“the planning system controls development and the use of land in the public interest”* including ensuring that development is appropriate for its location and an acceptable use of land. The guidance reiterates the NPPF’s stated approach that *“the focus of the planning system should be on whether the development itself is an acceptable use of land and the impacts of those uses, rather than any control processes, health and safety issues or emissions themselves where these are subject to approval under regimes. Mineral planning authorities should assume that these non-planning regimes will operate effectively”*.

Paragraph 013 sets out the environmental issues that authorities should address when dealing with applications for mineral-related development including noise, air quality, lighting, visual impact, traffic, risk of contamination to land, geological structure, flood risk, impacts on protected landscapes, surface and, in some cases, ground water issues, and water abstraction.

Paragraph 014 sets out issues which are for other regulatory regimes to address, including, for example, ground and surface water and mining waste permits, for which the Environment Agency is responsible. With specific respect to hydrocarbon extraction, paragraph 014 links to later paragraphs within the online guidance which sets out the key regulators in addition to the Mineral Planning Authority.

Paragraph 015 states that *“minerals operators should look to agree a programme of work with the mineral planning authority which takes into account, as far as practicable, the potential impacts on the local community and local environment (including wildlife), the proximity to occupied properties, and legitimate operational considerations over the expected duration of operations”*.

Paragraph 017 notes that the cumulative impact of mineral development can be a material consideration in determining planning applications.

Paragraph 019 relates to noise and states,

“Those making mineral development proposals...should carry out a noise impact assessment, which should identify all sources of noise and, for each source, take account of the noise emission, its characteristics, the proposed operating locations, procedures, schedules and duration of work for the life of the operation, and its likely impact on the surrounding neighbourhood.

Proposals for the control or mitigation of noise emissions should:

- *consider the main characteristics of the production process and its environs, including the location of noise-sensitive properties and sensitive environmental sites;*
- *assess the existing acoustic environment around the site of the proposed operations, including background noise levels at nearby noise-sensitive properties;*
- *estimate the likely future noise from the development and its impact on the neighbourhood of the proposed operations;*
- *identify proposals to minimise, mitigate or remove noise emissions at source;*
- *monitor the resulting noise to check compliance with any proposed or imposed conditions”*.

Paragraph 020 asks how noise impact should be determined and states,

“Mineral planning authorities should take account of the prevailing acoustic environment and in doing so consider whether or not noise from the proposed operations would:

- *give rise to a significant adverse effect;*
- *give rise to an adverse effect; and*
- *enable a good standard of amenity to be achieved.*

...this would include identifying whether the overall effect of the noise exposure would be above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation...”

Paragraph 021 advises on the appropriate noise standards for mineral operators for normal operations and sets out certain noise limits that mineral planning authorities should seek to establish, through a planning condition. These limits vary depending on the time that the operations take place and there is also guidance with regard to tonal elements of noise. *“Care should be taken, however, to avoid any of these suggested values being implemented as fixed thresholds as specific circumstances may justify some small variation being allowed.”*

Paragraph 022 identifies a number of operations that may give rise to particularly noisy short-term activities. It is suggested that *“increased temporary daytime noise limits for periods of up to eight weeks in a year...should be considered to facilitate essential site preparation and restoration work...where it is clear that this will bring longer-term environmental benefits to the site or its environs”*. Where work is likely to take longer than eight weeks, a lower limit over a longer period is advocated.

Paragraph 039 identifies that proposals for restoration and aftercare of the site should be submitted as part of the planning permission.

Paragraph 040 states that *“the level of detail required on restoration and aftercare will depend on the circumstances of each specific site”* and that *“it must be sufficient to clearly demonstrate that the overall objectives of the scheme are practically achievable”*.

Paragraph 110 states that the *“key regulators for hydrocarbon extraction are:*

- a. **Department of Energy and Climate Change** – issues Petroleum Licenses, gives consent to drill under the License once other permissions and approvals are in place, and have responsibility for assessing risk of and monitoring seismic activity, as well as granting consent for flaring or venting;
- b. **Mineral Planning Authorities** – grant permission for the location of any wells and wellpads, and impose conditions to ensure that the impact on the use of the land is acceptable;
- c. **Environment Agency** – protect water resources (including groundwater aquifers), ensure appropriate treatment and disposal of mining waste, emissions to air, and suitable treatment and manage any naturally occurring radioactive materials; and
- d. **Health and Safety Executive** – regulates the safety aspects of all phases of extraction, in particular responsibility for ensuring the appropriate design and construction of a well casing for any borehole”.

Paragraph 112 provides further detail on the roles and responsibilities of these regulatory bodies stating that *“there exist a number of issues which are covered by other regulatory regimes and mineral planning authorities should assume that these regimes will operate effectively. Whilst these issues may be put before mineral planning authorities, they should not need to carry out their own assessment as they can rely on the assessment of other regulatory bodies. However, before granting planning permission they will need to be satisfied that these issues can or will be adequately addressed by taking the advice from the relevant regulatory body:*

- *Mitigation of seismic risks – the Department of Energy and Climate Change is responsible for controls, usually through the license consent regime, to mitigate seismic*

risks. Seismic assessment of the geology of the area to establish the geological conditions, risk of seismic activity and mitigation measures to put in place is required by the Department of Energy and Climate Change for all hydraulic fracturing processes.

- *Well design and construction – the Health and Safety Executive are responsible for enforcement of legislation concerning well design and construction. Before design and construction operators must assess and take account of the geological strata, and fluids within them, as well as any hazards that the strata may contain.*
- *Well integrity during operation – under health and safety legislation the integrity of the well is subject to examination by independent qualified experts throughout its operation, from design through construction and until final plugging at the end of operation.*
- *Operation of surface equipment on the well pad – whilst planning conditions may be imposed to prevent run-off of any liquid from the pad, and to control any impact on local amenity (such as noise), the actual operation of the site’s equipment should not be of concern to mineral planning authorities as these are controlled by the Environment Agency and the Health and Safety Executive.*
- *Mining waste – the Environment Agency is responsible for ensuring that extractive wastes do not harm human health and the environment. An environmental permit is required for phases of hydrocarbon extraction and this will require the operator to produce and implement a waste management plan.*
- *Chemical content of hydraulic fracturing fluid – this is covered by the environmental permit as operators are obliged to inform the Environment Agency of all chemicals that they may use as part of any hydraulic fracturing process.*
- *Flaring or venting of any gas produced as part of the exploratory phase will be subject to Department of Energy and Climate Change controls and will be regulated by the Environment Agency. Mineral planning authorities will, however, need to consider how issues of noise and visual impact will be addressed.*
- *Final off-site disposal of water – water that comes back to the surface following hydraulic fracturing may contain naturally occurring radioactive materials. Whilst storage on-site and the traffic impact of any movement of water is of clear interest to local authorities, it is the responsibility of the Environment Agency to ensure that the final treatment/disposal at suitable water treatment facilities is acceptable.*
- *Well decommissioning/abandonment – following exploration, the well is likely to be suspended and abandoned for a period of time. Health and Safety Legislation requires its design and construction so that, so far as reasonably practicable, there is no unplanned escape of fluids from it. The mineral planning authority is responsible for ensuring the wells are abandoned and the site is restored.”*

Notwithstanding the above, paragraph 112 highlights where mineral planning authorities are able to have regard to matters which would ordinarily be assumed to fall to others stating “some issues may be covered by other regulatory regimes but may be relevant to mineral planning authorities in specific circumstances. For example, the Environment Agency has responsibility for ensuring that the risk to groundwater is appropriately identified and mitigated...mineral planning authorities can and do play a role in preventing pollution of the water environment from hydrocarbon extraction, principally through

controlling the methods of site construction and operation, robustness of storage facilities, and in tackling surface water drainage issues”.

Paragraph 124 states that account should be taken of national energy policy, making clear *“energy supplies should come from a variety of sources”* including onshore oil and gas, as set out in the Annual Energy Statement (October 2013).

Natural environment

This section of the guidance explains key issues in implementing policy to protect and enhance the natural environment.

Paragraph 001 states that *“planning should recognise the intrinsic character and beauty of the countryside”*.

Paragraph 007 explains the statutory responsibilities of planning authorities in determining applications and, at its core, a duty to *“contribute to conserving and enhancing the natural environment and reducing pollution”*.

Paragraph 008 requires local planning authorities to *“consider the opportunities that individual development proposals may provide to enhance biodiversity and contribute to wildlife and habitat connectivity in the wider area”*.

Paragraph 011 confirms that updated guidance on the law affecting European sites, protected species and Sites of Special Scientific Interest is being prepared by DEFRA. In the absence of this updated advice local authorities are directed to *‘Circular 06/05: Biodiversity and geological conservation’* (published 16 August 2005).

Paragraph 016 advises that where there is *“reasonable likelihood of a protected species being present and affected by development”* then ecological surveys may be warranted and these surveys should be *“proportionate to the nature and scale of development proposed and the likely impact on biodiversity”*. Planning conditions and/or legal agreements may be appropriate for monitoring and/or biodiversity management plans where these are needed. Paragraph 017 seeks to encourage bio-diversity enhancement through planning decisions.

Paragraph 018 explains the *‘mitigation hierarchy’* of information, avoidance, mitigation and compensation to facilitate decision-taking.

Paragraph 020 requires the securing of mitigation and/or compensation measures such as off-setting, in instances where *“significant harm to biodiversity is unavoidable”*.

Paragraph 024 states that the *“planning system should protect and enhance valued soils and prevent the adverse effects of unacceptable levels of pollution. This is because soil is an essential finite resource that provides important ‘ecosystem services’”*.

Paragraph 026 expects local planning authorities to *“take into account the economic and other benefits of the best and most versatile agricultural land...and...should seek to use poorer quality land in preference to that of a higher quality”*.

Noise

This section of the guidance advises on how planning can manage potential noise impacts in new development.

Paragraph 001 states that *“noise needs to be considered when new developments may create additional noise and when new developments would be sensitive to the prevailing acoustic environment”*.

Paragraph 002 advises that whilst noise can override other planning concerns, neither the Noise Policy Statement for England nor the NPPF expects noise to be considered in isolation, separate from the economic, social and other environmental dimensions of the proposed development.

Paragraph 003 advises planning authorities to consider:

- *whether or not a significant adverse effect is occurring or likely to occur;*
- *whether or not an adverse effect is occurring or likely to occur;*
- *whether or not a good standard of amenity can be achieved; and*
- *whether the overall effect of the noise exposure is, or would be, above or below the significant observed adverse effect level”*.

Paragraph 006 identifies a number of factors that are likely to give rise to noise being a concern and these include the following:

- the source of the noise;
- absolute level;
- time of the day;
- number, frequency and pattern of noise events; and
- the duration and/or character of the noise.

Planning authorities are also advised to consider the cumulative impacts of noise that can arise and also their effects upon wildlife and ecosystems, particularly upon designated sites, as well as those living in the vicinity of proposed developments.

Paragraph 008 explores possibilities for mitigation against the adverse noise impacts that can arise from proposed developments.

Open space, sports and recreation facilities, public rights of way and local green space

This section of the guidance gives key advice on open space, sports and recreation facilities, public rights of way and the new Local Greenspace designation.

Paragraph 004 refers to the Rights of Way Circular (1/09) which states that the *“effect of development on a public right of way is a material consideration in the determination of applications for planning permission and local planning authorities should ensure that the potential consequences are taken into account whenever such applications are considered”*.

Planning obligations

This section of the guidance provides advice on the use of planning obligations and the process for changing obligations.

Paragraph 001 of Section 23b asserts that planning obligations only constitute a reason for granting planning permission if they meet the following tests:

- they are necessary to make the development acceptable
- they are directly related to the development, and
- they are fairly and soundly related in scale and kind.

Paragraph 004 makes clear that planning obligations *“must be fully justified and evidenced”*.

Travel plans, transport assessments and statements in decision-taking

This section of the guidance provides advice on when transport assessments and transport statements are required, and what they should contain.

Paragraph 004 explains that transport assessments are ways of assessing the potential transport impacts of developments.

Waste

This section of the guidance provides further information in support of the implementation of waste planning policy.

Paragraph 005 directs local authorities to the National Planning Policy for Waste.

Paragraph 10 encourages authorities to promote *“sound management of waste from any proposed development, such as encouraging on-site management of waste where this is appropriate, or including a planning condition to encourage or require the developer to set out how waste arising from the development is to be dealt with”* as well as *“including a planning condition promoting the provision of facilities for the storage and regular collection of waste”*.

Water supply, wastewater and water quality

This section of the guidance advises on how planning can ensure water quality and the delivery of adequate water and wastewater infrastructure.

Paragraph 016 advises that whether water is likely to be a material consideration *“will depend on the proposed development, its location and whether there could be concerns*

about water supply, water quality or both". With regard to water supply it advises that this would normally be addressed through the local plan and is therefore unlikely to be a material consideration for most planning applications. However, it does point out that there might be exceptions to this, for example:

- *"large developments not identified in Local Plans that are likely to require a large amount of water; and/or*
- *where a Local Plan requires enhanced water efficiency in new developments as part of a strategy to manage water demand locally and help deliver new development"*.

With respect to water quality paragraph 016 states that it is *"only likely to be a significant planning concern when a proposal would:*

- *involve physical modifications to a water body such as flood storage areas, channel diversions and dredging, removing natural barriers, construction of new locks, new culverts, major bridges, new barrages/dams, new weirs (including for hydropower) and removal of existing weirs; and/or,*
- *indirectly affect water bodies, for example,*
 - *as a result of new development such as the redevelopment of land that may be affected by contamination, mineral workings, water or wastewater treatment, waste management facilities and transport schemes including culverts and bridges;*
 - *through a lack of adequate infrastructure to deal with wastewater"*.

When assessing the impacts upon water quality, they could include:

- *"the likely impacts of the proposed development (including physical modifications) on water quantity and flow, river continuity and groundwater connectivity, and biological elements (flora and fauna);*
- *how the proposed development will affect measures in the river basin management plan to achieve good status in water bodies;*
- *how it is intended the development will comply with other relevant regulatory requirements relating to the water environment (such as those relating to bathing waters, shellfish waters, freshwater fish and drinking water) bearing in mind compliance will be secured through the Environment Agency's permitting responsibilities"*.

NATIONAL POLICY ON ENERGY

Overarching National Policy Statement for Energy (EN-1): EN-1 was published by the Department of Energy and Climate Change (DECC) in July 2011 with a stated intention to provide national policy for consideration of proposals for energy infrastructure dealt with by the Infrastructure Planning Commission under the provisions of the Planning Act 2008. However, the Statement indicates that it is likely to be a material consideration in decision making on planning applications that fall under the Town and Country Planning Act (as amended). It indicates that whether and to what extent the Statement is a material consideration will be judged on a case by case basis. There are a number of policy objectives within the policy document that are considered to be relevant.

These objectives include, amongst other things, the need to:

- meet legally binding targets to cut greenhouse emissions by at least 80% by 2050, compared to 1990 levels, which will require major changes in the way that energy is generated and used by individuals, industry and the public sector;
- have secure and reliable supplies of energy resources to be achieved by ensuring the existence of reliable supply chains (for example fuel for power stations) to meet demand as it arises;
- to have a diverse mix of technologies and fuels, including the need to source fuels from a wide range of locations;
- to address issues raised by increased imports of oil and gas as North Sea reserves decline in an environment where energy demand is rising and supply is increasingly politicised; and
- to make substantial and timely investment in new infrastructure over the next two decades, including in new fossil fuel generating capacity during the transition to a low carbon economy.

Annual Energy Statement (AES) 2014: Published by DECC on 6 November 2014 sets out the Government's progress against its energy policy priorities, namely:

1. *supporting consumers and keeping energy bills down;*
2. *supporting investment in the UK's energy infrastructure; and*
3. *promoting action in the EU and internationally to maintain energy security and mitigate dangerous climate change as we chart the way towards a global deal on climate change in 2015.*

In summary, the Government's energy policies "seek to meet three primary objectives: ensuring light, power, heat and transport are affordable for households and businesses; providing energy security; and reducing carbon emissions in order to mitigate climate change. In addition, government policy supports the energy sector in its role as a major contributor to the UK economy" and the fundamental aim of the AES is to provide guidance on how the UK can move towards an Energy secure future, ensuring that all energy consumers have access to reliable and secure energy supplies. The AES 2014 remains a material consideration until such a time as it is superseded.

NATIONAL POLICY ON CLIMATE CHANGE

White Paper on energy ("Meeting the Energy Challenge") (2007): Published by the Department of Trade and Industry on 23 May 2007 sets out the Government's intended approach to the two main challenges:

- cutting greenhouse gases to meet climate change objectives and targets, and
- ensuring the availability of secure, clean and affordable energy as imports replace declining North Sea production.

The White Paper identified that these challenges should be addressed in a way that was consistent with energy policy goals including cutting CO₂ emissions, maintaining reliability

of energy supplies, promoting competitive markets and ensuring that every home is adequately and affordably heated.

Climate Change Act 2008: This Act requires that levels of the main greenhouse gases in 2050 emitted by UK households, industry, transport and the energy generation sector are at least 80% lower than 1990 levels.

UK Low Carbon Transition Plan – National strategy for climate and energy (2009): This document published by DECC proposes a move towards a system based on renewables in order to meet climate change objectives, including relevant obligations in the Climate Change Act of 2008. The Plan identifies that there will be a continuing need for energy generation from fossil fuel sources, including gas, as part of this transition together with an emphasis on use of associated carbon capture technologies in order to help meet climate change objectives.

Carbon Plan – Delivering our low carbon future (2011): Published by DECC in 2011 this document outlines the Government's plans for achieving the greenhouse gas emissions reductions it has committed to via the Climate Change Act 2008, including actions and milestones.

Paris Climate Change Agreement: Under the United Nations Framework Convention on Climate Change this Agreement aims to “set a new goal to reach net zero emissions in the second half of the century” “to limit warming below 2°C and strive to keep temperatures at 1.5°C above pre-industrial levels”. This Agreement was agreed on 12 December 2015 and came into force on 4 November 2016.

NATIONAL POLICY ON NOISE

Noise Policy Statement for England: ‘Significant observed adverse effect level’ (SOAEL) is defined as the level above which adverse effects on health and quality of life occur and ‘lowest observed adverse effect level’ (LOAEL) is defined as the level above which adverse effects on health and quality of life can be detected. While taking into account the guiding principles of sustainable development, this policy has three main aims:

- “significant adverse effects on health and quality of life should be avoided
- where the impact lies somewhere between LOAEL and SOAEL, it requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life, and
- where possible, positively to improve health and quality of life through the pro-active management of noise”.

NATIONAL POLICY ON WASTE

National Planning Policy for Waste: States that, when determining waste planning applications, waste planning authorities should amongst other matters “consider the likely impact on the local environment and on amenity against the criteria set out in Appendix B and the locational implications of any advice on health from the relevant health bodies”. The locational criteria in appendix B are:

- a. protection of water quality and resources and flood risk management;

- b. land instability;
- c. landscape and visual impacts;
- d. nature conservation;
- e. conserving the historic environment;
- f. traffic and access;
- g. air emissions, including dust;
- h. odours;
- i. vermin and birds;
- j. noise, light and vibration;
- k. litter; and
- l. potential land use conflict.

This document confirms that local planning authorities should concern themselves with implementing the planning strategy in the local plan and not with the control of processes which are a matter for the pollution control authorities. Waste planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced.

CONSULTATIONS

Highways: No objection subject to conditions.

Environment Team (Ecology): No objection to the application. Request conditions to minimise harm to protected and priority species and habitats and to seek biodiversity enhancements, should permission be granted.

Historic Environment Record (Archaeology): The council's archaeologist has confirmed that there would be less than substantial harm to Thornholme Priory and as such mitigation and/or conditions are not necessary.

Environmental Health: Comments remain the same as issued on the previous application (MIN/2016/810). Raise no objection to the application subject to conditions. Recommend that the Environment Agency is consulted with regard to contamination of water supplies.

Public Rights of Way: No objections to lodge or comments to make in this instance.

Environment Agency: Raise no objection to the planning application. The Environment Agency has also confirmed that it has now issued the necessary variation to the applicants' Environmental Permit to progress the application from exploration to a production phase.

National Grid: Raise no objection to the application. Request that an informative is placed on any approval requiring the developers to contact National Grid to discuss their plans prior to development commencing.

Humberside Fire and Rescue: Raise no objection. Make informative comments relating to the provision of water supplies for fire-fighting.

Natural England: Raise no objection to the application and no conditions are requested. Natural England is satisfied that the proposed development being carried out in strict accordance with the details of the application, as submitted, will not damage or destroy the interest features for which the site has been notified. This application may provide opportunities to incorporate features into the design which are beneficial to wildlife, such as those requested by the council's ecologist.

Natural England made their comments on the assumption that any gas combustion (both gas flare and gas generator combined) will never be at or above an input of 20MW. The local planning authority was requested to check this fact with the applicants and re-consult with Natural England if this cannot be guaranteed. The applicants have confirmed that gas combustion from combined flare and gas generator on site will not exceed, or come close to, the 20MW threshold; this is also confirmed by the issue of the Environmental Permit, which limits gas combustion volumes on site and which requires the applicants to demonstrate this through gas meter readings and calculations. On this basis the comments from Natural England stand.

Lincolnshire Wildlife Trust: Having met with representatives of the applicants, Egdon Resources UK Limited, and their agent, Barton Wilmore, on 8 March 2017 to review the proposed operations and techniques involved, Lincolnshire Wildlife Trust are satisfied that there are sufficient measures in place to prevent any significant impacts on the environment. It is understood that a range of systems will be used to monitor receptors such as air quality, ground and surface water before and during works and that a stringent permitting system is in place to provide an overview of the operations.

The Wildlife Trust support the proposed conditions suggested by the council's ecologist.

TOWN COUNCILS

Broughton Town Council: Object to the proposed development. More research needs to be undertaken into the effects of hydrocarbon extraction before any final decision relating either to the Environmental Permit or the planning application is made.

The Town Council consider the proposal to be an unusual form of high pressure hydrological fracking. The conclusion of the Risk Assessment that harmful consequences are "unlikely on balance" gives the council no confidence in the safety of the scheme, not least in view of the ESIOS Science Plan.

The council also object to their area being used as a "guinea pig". Hydrofluoric acid is a particularly nasty fluid and there appears to be no evidence of it ever being used by the UK oil and gas industry, for good reason.

Moreover, if the appeal were to be upheld, a bond to cover "waste only" as proposed by the applicants would be grossly inadequate. No bond could make up for the range of devastation that might occur.

Finally, the employment of many within this area is tied up directly or indirectly with the steel industry. The council is aware of British Steel's objection to the application and believe it is well justified.

Brigg Town Council: The Town Council would like to reiterate its comments that were submitted for the original application, MIN/2016/810. The majority of members were in support of the application and did not wish to amend their previous comments. However, concerns were again expressed regarding the comments of British Steel in respect of possible pollution of the water source supplying the steelworks.

Appleby Parish Council: The parish council have discussed the proposals and have decided that there are no grounds for objections to the planning application as set out in the recent planning application.

PUBLICITY

Under the provisions of the Town and Country Planning (Development Management Procedure) Order 2015, this application has been advertised by means of a site notice being posted close to the site and a notice being published in the Scunthorpe Evening Telegraph.

At the time of writing this report more than 100 letters of objection have been received. Of these representations, multiple responses have been received from certain individuals and a significant proportion of the letters/emails made use of templates. There is a vast spatial distribution to the representations, with the majority being received from addresses outside of North Lincolnshire. Furthermore, whilst some representations have been received citing objections to this specific proposal, the vast majority are more general responses that object to fracking and/or the production of fossil fuels in North Lincolnshire or, indeed, the rest of the country.

The letters of representation received include letters from action/campaign groups including *'Frack Free Lincolnshire'* and Friends of the Earth (FoTE).

A response has been submitted on behalf of British Steel, who objected to the previous application on the site. This response confirms that representatives of British Steel have met with the applicants and their technical consultants to understand the planned activities and how they interact with British Steel's groundwater abstraction boreholes in the area. Based on the information provided at the meeting, and further written clarifications received, British Steel has confirmed that it considers that the proposed activities should not impact on their boreholes or pumping station. On this basis British Steel raise no objection to the current planning application.

The representations received in opposition to the application raise the following concerns/issues:

Policy issues

- Policy M23 of the local plan (2003) states: *"Proposals for oil and gas production facilities will be permitted, provided that the proposal incorporates environmental protection measures that are adequate to mitigate the impacts arising from a long-term or permanent site"*. This is not directly consistent with NPPF paragraphs 93 and 94 which specifically state that *"Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development"*. The applicants have

failed to acknowledge that contributing to carbon emissions through production of hydrocarbons is the opposite of sustainable development.

- The proposal would be contrary to policy CS18 of the North Lincolnshire Core Strategy which states that *“The council will actively promote development that utilises natural resources as efficiently and sustainably as possible”*.
- The proposed development does not meet the requirements of the Sustainability Appraisal linked to the North Lincolnshire Core Strategy and as such is considered to be unsustainable development.

Operational issues

- The applicants seek to mislead by disassociating their proposal from fracking.
- The key features defining fracking include fluid and proppant being injected at very high pressure to open and keep open fractures in target rock. This is exactly what proppant squeeze is designed to do and so this application is for fracking.
- This is a fracking application.
- Fracking is extremely dangerous and is categorised by the HSE as ‘high risk’.
- The majority of fracking wells become uneconomical after 1-3 years.
- Due to the production from fracking wells declining rapidly, it is likely that the well will need to be re-fracked and/or extensions or other wells drilled.
- This development will result in further wells.
- It is likely that repeated well stimulation will be required.
- Only a third of recoverable oil will be extracted via Wressle-1, so at least two more wells will be needed here.
- Any future applications for additional wells will be considered in isolation and will result in an accumulation of chemicals and polluted water. How will this be monitored and who will decide when there is a problem and how it will be dealt with?
- The development will result in radioactive and carcinogenic waste. How will this be disposed of?
- The proposal includes the injection of toxic chemicals into the earth.
- The toxic chemicals proposed cannot be safely stored on site, or transported to the site.
- The proposal includes a range of industrial chemicals (hydrocarbon fuels, lubricants, acids, solvents and proppants). The applicants cannot guarantee 100% failsafe handling at the Wressle site.
- Potential impacts of acidisation are not fully understood and the potential for chemicals to remain in the ground is concerning.

- The technology to be used in the development has not been properly tested.
- The Environment Agency has no experience of the use of hydrofluoric acid in the onshore oil industry.
- Hydrofluoric acid is extremely hazardous and even eats through metal and as such cannot be stored or transported safely.
- Effective monitoring of the process is not possible.
- There are no effective regulations in place for this type of development.
- The Environment Agency has neither the manpower nor expertise to monitor the works and relies on self-regulation. This has failed in other instances.
- Despite the licensing regimes operated by the Environment Agency, other government bodies have raised concerns regarding the general ability of regulators to assess impacts so deep underground.
- The effectiveness of a 50 metre deep borehole to ascertain impacts over 1,750 metres deeper underground should be noted.

Climate change

- The application does not present evidence or assessment of the impact of the activity on climate change mitigation despite being an application for the production of 100,000 cubic metres of oil and gas.
- It was made clear by the agreement of the Secretary of State with the Inspector on the Chat Moss Peat Works appeal that planning decision-makers must take account of the need to reduce greenhouse gas emissions.
- The proposed development will increase dependence on fossil fuels and thereby delay the switch to clean, renewable energy.
- We should leave hydrocarbons in the ground and focus on clean, renewable energies.
- Known fossil fuel reserves currently in production are approximately five times what can be extracted and still meet with the climate change commitments made by the UK government in Paris last in December 2015.
- There are sufficient oil reserves in the North Sea.
- The development will result in the release of methane into the atmosphere.
- The volumes of gas in the planning statement are unclear.
- The flaring of methane on the site will result in an increase in global warming.
- The development will result in the release of greenhouse gases.
- Methane is much more potent than CO₂ as a greenhouse gas.

Hydrology and hydrogeology

- The site is located in an area of hydrogeological sensitivity.
- This is a Groundwater Vulnerability Zone close to several aquifers and Ella Beck. There is no guarantee that these water sources will not be contaminated via spills and leaks.
- The site is located in Flood Zone 1. FoTE raise concerns that the risk of flooding must be based on the most recent best available knowledge in terms of risk, particularly given the long-term nature of the site. It is unclear whether the correct timeframes have been used in terms of analysing the level of risk and therefore adequate mitigation measures over the lifetime of the site, including decommissioning.
- How can the Environment Agency guarantee that the development will not prejudice the UK's fresh water supply?
- Where will the water to be used for the proppant squeeze come from? Does the company have its own abstraction licenses?
- The proposed development may result in contamination of Ella Beck.
- Surface water is to be discharged to Ella Beck, following cleaning. What happens if there is a failure of the lining of the beck or a spillage on site?
- The proposed proppant squeeze process will turn clean water into polluted water that cannot be used again. Where will this water go?
- The proposal involves drilling through an aquifer and there is no guarantee that the casings will not crack.
- The well casings will leak at some point. The oil and gas industry has a bad record for this.
- The proposal will impact on boreholes which provide water to the British Steel site, potentially contaminating and/or lowering water yields from these boreholes.
- Any spillages or contamination of the site would affect adjacent farmland which is used for crop growing.
- There is no guarantee that pollution of groundwater will not occur following decommissioning of the site as monitoring is only required for five years.
- The additional information submitted with this application fails to allay previous concerns regarding ground contamination.
- The overall risk of contamination remains ambiguous.
- Groundwater protection seems to be overly reliant on best practice drilling techniques and based on risk management rather than the provision of tangible mitigation.

- There is no absolute scientific proof that groundwater contamination will not occur. The council would be sensible to again invoke the precautionary principle linked to the EU Water Framework Directive.
- Whilst considered to be unlikely, has there been consideration for flooding if it does occur? What would be the implications of this for waste water stored on site and the capacity of the impermeable membrane to hold such water?

Ecology

- Wildlife in adjacent woodland, Far Wood SSSI and Clapgate Pit Nature Reserve may be disturbed by lighting, noise, vibration and increased HGV traffic.
- There is a nature reserve and ancient woodland around the site.
- The light, noise and air quality impacts of the development could impact on protected species in the locality.
- This is a water vole sensitive area.

Landscape

- The proposed development constitutes industrialisation of the countryside.
- This development would destroy a beautiful part of the countryside.
- Industrial operations and structures would have an adverse visual impact on the open countryside.
- This development would result in other well sites in the countryside which would have a cumulatively degrading impact on the local landscape.
- A landscaping scheme should be required. It was stated in the determination of the exploratory drilling application that the reason no additional landscaping was required was due to the short-term nature of any impacts.

Noise

- The proposal will result in noise from 24 hour/day drilling over several weeks, and further noise from compressors, pumps and HGVs.
- Traffic noise from the development needs to be taken into account.
- Noise from the development will destroy the tranquillity of the area.
- Noise during the evening can adversely affect health and wellbeing.

Air Quality

- How will air quality be monitored? Will there be alarms on site?

- The development will result in methane and other pollutants being released into the atmosphere.
- Will fine silica dust get into the air?
- There will be air pollution as a result of traffic movements to and from the site.
- There will be pollution of the air from the flaring of gases on site.

Health and wellbeing

- Concerns over the impacts of water and air pollution, and noise and sleep disturbance, on public health.
- More information is needed in relation to health implications.

Highways

- The development will result in significant traffic generation on rural roads.
- The entrance to the site is on a sharp bend with limited visibility.
- The B1208/A18 junction is unsuitable for a large increase in HGV traffic.
- The local roads are unsuitable for large numbers of HGVs.
- No detail on how waste water will be disposed of. If this needs taking off site to an Environment Agency facility then it would put additional pressure on the local highway network.
- If the HGVs are carrying chemicals to the site then this will be extremely dangerous.
- The development will pose a risk to pedestrian, cyclist and horse riders' safety in the area.

Lighting

- The development will introduce artificial lighting into a predominantly dark rural area.
- Light pollution from night-time working.
- The development could adversely affect local residents with sensory impairment.

Seismicity and/or vibration

- The development site is located on a prominent fault line.
- The proposed development may cause earthquakes in the area.
- There are already subsidence problems in the area due to ore mining.
- Increased seismic activity and vibrations from drilling could affect the foundations of houses in the area.

- The Government's ESIOS Service Plan makes it clear that the geology is far more complex in the UK than in the USA and Australia and that current technology cannot effectively monitor what the impact of such process will be.

Socio-economic

- The development would have little or no benefit to the local community.
- The proposed development is economically high risk in a time of geopolitical uncertainty.
- The development will only employ a small number of people.
- The proposal results in the loss of agricultural land which could be used for the growing of crops.

Restoration

- Concerns have been raised with regard to the restoration of the site and how it will be monitored to ensure that it is safe and not contaminated.
- Concerns relating to the length of time (five years) that monitoring is required on the site following restoration, that this is not long enough and that there could be contamination that arises after this time.
- The company could be long gone before the full effects of the development are felt.
- The operator is a Ltd company. Who will pay for restoration of the site or remediation of any damage if they go bankrupt?
- There is no insurance provision for homes and businesses which may be damaged by the development.
- The site should be restored to agriculture.

Miscellaneous issues

- If approved, the development would set a precedent for future well sites in the area.
- There are no regulations in place which satisfactorily control developments of this type.
- There is no guarantee that oil produced from the well will be for our own use and it could be sold to the highest bidder.
- Objection to the Government's policy/approach towards fracking.
- Devaluation of local house prices.
- Fracking has caused severe problems in America and Australia and has been banned in many countries.
- This development has been refused by the local planning authority once and the current application is almost identical to the previous application.

- The exploratory application was only granted planning permission due to the short-term nature of any impacts. Therefore the proposed development should be refused on the basis that any impacts would be long-term.

At the time of writing this report the local planning authority has also received four letters in support of the application. Comments made in support include:

- The country needs a selection of energy sources going into the future. As long as the development is as safe as possible then permission should be granted.
- The country needs its own oil supply.
- This is conventional extraction, not fracking, and can only be good for Lincolnshire and the UK.
- Previously objected as thought the proposal was for fracking. Now understand that the proposal is not for fracking and support the application. If conventional drills are not allowed this will increase the number of sites dedicated to fracking.

It is important to note that there are matters that have been raised in objection to the proposed development to which regard cannot be had in the determination of this planning application. These include:

- negative impact on property prices;
- lack of regulations;
- lack of resources on the part of regulatory bodies;
- would set a precedent;
- unproven technology; and
- other matters controlled under other non-planning legislation.

STATEMENT OF COMMUNITY INVOLVEMENT

A Statement of Community Involvement (SCI) has been submitted in support of the planning application. This document outlines the activity undertaken to engage local communities and stakeholders and to inform them of plans for the site. This document encompasses activity undertaken to support the 2016 planning application, and this subsequent application. The applicants employed a range of strategies to engage the local community as outlined below:

- leaflet distribution – 2,175 letters distributed to local businesses and residential addresses inviting attendance at a drop-in-event
- liaison with council clerks – liaison with clerks at both Appleby and Broughton to brief them and invite councillors to a drop-in-event
- councillor briefing session – a briefing session and Q&A for all Broughton and Appleby councillors a week and a half prior to the drop-in-event

- emails – emails to key stakeholders, ward councillors, portfolio holders and the leader of the council inviting them to the drop-in-event
- email – a briefing note was emailed to Andrew Percy MP and a follow-up meeting arranged to brief him
- event – a drop-in session was held at the Broughton community centre with plans on display and members of the project team on hand to answer questions
- project web page – immediately following the drop-in-event the exhibition panels were posted to a dedicated web page where people were directed for further information
- follow-up press release – a press release was distributed to local media following the drop-in-event to drive awareness of the plans and direct those unable to attend to the website
- dedicated email and phone number – a dedicated email address and phone number was put in place to enable local people and key stakeholders to make contact
- follow up email – sent to all attendees of the drop-in-event to allow for further feedback
- follow up with officers and councillors – all officers and councillors invited to the drop-in-event were sent copies of the exhibition boards and a summary of the event
- Environment Agency – the Environment Agency were invited to the drop-in-event and were sent a follow up email with a summary.

The SCI confirms that feedback at the drop-in-event was largely positive; however a number of recurring themes were raised. These were:

- the nature of the operations at Wressle (in relation to unconventional processes and fracking);
- the potential impact on traffic and HGV movements;
- the management and prevention of pollution;
- the impact of noise and light generated by the site; and
- potential employment opportunities/local benefits.

The SCI also noted that a number of attendees were not aware of the site prior to receiving their invitation letter, concluding that previous (exploratory and appraisal) activities undertaken in 2014 and 2015 have not had an impact on the local community.

Following the refusal of planning permission by North Lincolnshire Council on 11 January 2017, a number of meetings have been held with certain representatives of the local community and other key stakeholders. These meetings are outlined below:

- **British Steel:** A meeting was held with senior members of British Steel to discuss their concerns with regard to potential impacts on their water abstraction boreholes,

environmental protection and how the site will be made safe and secure once operations are complete.

- **Proppant Squeeze Wressle, Facebook authors:** A meeting was held with two residents of Broughton who manage the Proppant Squeeze Wressle Facebook page. This meeting addressed some questions that had arisen from local people and established a process going forward to respond to queries and engage with the community. They were left with a package of information relating to the application and follow-up emails have been sent to this group to advise them of developments relating to the site and the environmental mitigation and protection measures which will be applied.
- **Lincolnshire Wildlife Trust:** Representatives of Egdon met with representatives of Lincolnshire Wildlife Trust to provide further information on the context of the site in relation to local environmental sensitivities. A follow-up email was sent to ascertain whether they had further questions.

The applicants have updated the clerks of Broughton Town Council and Appleby Parish Council about the appeal and this new application following the refusal of the original application in January.

Egdon's managing director has also undertaken a number of interviews with radio and television programmes to address questions and give details of the proposed development. A press statement was also released about the planning appeal and subsequent application process.

ASSESSMENT

Site

The application site is a piece of land which measures approximately 1.85 hectares in area and lies within a flat, rectilinear field located approximately 1.6 kilometres to the north of Wressle and approximately 1.7 kilometres north-east of Broughton. The site is outside of any defined development boundary and as such is located with the open countryside.

The site currently comprises an existing temporary, exploratory well site which was granted planning permission by North Lincolnshire Council on 18 June 2013 (MIN/2013/0281). The wellsite pad and earth bund is contained by a 2 metre high fence. Following the drilling of the well in 2014, and subsequent flow testing operations during 2015, there is currently only a limited amount of equipment and facilities on site. The development on site at present comprises:

- a production tree (a system of valves to manage hydrocarbon flow and well entry) over the wellhead;
- four storage tanks situated within a temporary bund;
- a site office/cabin; and
- three storage containers.

The site is partially screened along its northern and western boundaries by existing earth bunds.

The surrounding landscape is characterised by a mix of flat agricultural land and areas of woodland. There are blocks of woodland located to the south, east and west of the application site. With regard to existing structures within the surrounding landscape, there are agricultural buildings to the north of the site and a sub-station to the north-east. Additionally, a network of pylons and electricity lines cross the agricultural fields to the north and east of the site.

The closest residential property to the application site is North Cottage, located approximately 530 metres to the east. This dwelling forms part of a small residential development at Lodge Farm, to the west, which is centred around the original farmhouse. Decoy Cottage, located to the south, is approximately 580 metres away from the site.

Access to the site is currently obtained via an existing agricultural track. This track passes in a westerly direction from the B1208, through Lodge Farm courtyard and runs partly parallel to Ella Beck before crossing over an existing bridge into the existing arable field (in which the site lies). There are no public footpaths within the immediate vicinity of the site, with the nearest footpath 215 lying approximately 0.8 kilometres away.

Constraints

The application site is not designated as a national or local wildlife site. The closest statutory designated site, Broughton Far Wood SSSI, lies to the north-west, approximately 700 metres away. This designated site is part of an extensive block of commercial woodland and includes, in the north-east corner, Claygate Pits, a former quarry with rich limestone flora. Broughton Alder Wood, another SSSI, is located approximately 1.3 kilometres to the west of the application site. Broughton Alder Wood lies in a shallow valley, fed by springs that arise in adjacent pastures and forestry plantations. The nearest non-statutory site is Rowland Plantation, a Local Wildlife Site which is approximately 270 metres to the north of the application site.

The application site is not designated as an area of national or local archaeological importance. The closest designated heritage asset is a Scheduled Ancient Monument and Protected Wreck Site located approximately 1.5 kilometres to the north, known as Thornholme Augustinian Priory. This monument includes the earthwork remains of Thornholme Priory, including the church, cloister and other inner court buildings as well as the service buildings of the outer court. The nearest listed building to the site is Broughton Grange Farmhouse, which is grade II listed and is located approximately 600 metres to the south. Approximately 10 metres to the east of Broughton Grange Farmhouse is the coach house and stables which are also grade II listed.

The site is located in an area which was previously designated as being of 'high landscape value' in the North Lincolnshire Local Plan (2003). However policy LC8 of the local plan is not a saved policy and as such this policy and the aforementioned landscape designation no longer applies. Therefore the site is not designated as being of special landscape importance.

The application site is located in flood zone 1 of the Environment Agency flood maps and the Environment Agency has confirmed that the site is not considered to be in an area of high flood risk. The eastern edge of the site abuts flood zone 2/3a (fluvial) of the Strategic

Flood Risk Assessment, with the access to the site being located in this flood zone and the rest of the site being within flood zone 1 (low risk).

Water abstraction wells are located within 100 metres of the site but are separated by Ella Beck, a 'main river' (as defined by the Environment Agency), which has a flow monitoring station adjacent to the site. There are also identified secondary aquifers lying beneath the site.

Planning history

On 18 June 2013 planning permission was granted by North Lincolnshire Council for the construction of a temporary wellsite for the drilling of an exploratory borehole with associated structures and works. The consented exploratory borehole was drilled in 2014 and flow testing operations undertaken in 2015. Since these previous operations were undertaken the site has been largely cleared, with a limited amount of equipment and structures remaining.

On 11 January 2017 North Lincolnshire Council Planning Committee refused planning permission (MIN/2016/810) for the retention of the existing wellsite and access road and for the long-term production of hydrocarbons from the site. This decision was contrary to the recommendation of officers. The reason for refusal was as follows:

“Insufficient information has been submitted in support of the planning application to allay the concerns of the local planning authority with regard to ground contamination from both water run-off and the infiltration of water used in the development into water courses. The proposal would therefore have an unacceptable impact on local residents, the community and the local economy. The proposed development is therefore considered to be contrary to saved policies M23, DS13 and DS15 of the North Lincolnshire Local Plan (2003) and policy CS18 of the North Lincolnshire Core Strategy (2011)”.

The applicants have submitted an appeal to the Planning Inspectorate against this refusal of planning permission. This appeal is currently pending.

The applicants have also submitted an application (PA/2017/268) which seeks to extend the life of the original 2013 planning permission (MIN/2013/0281), referenced above, by varying condition 24 of that permission. Condition 24 states that the site should be restored to its former condition within three years of development commencing. Development commenced on 29 April 2014 and as such the site should have been restored by 29 April 2017. The intention was that this application would be determined prior to 29 April 2017 to avoid a breach of this condition; however the decision was made that both pending applications relating to the site should be presented to the planning committee at the same meeting.

Proposed development

This application is a resubmission of the previous planning application (MIN/2016/810) which seeks to address the reason for refusal. Both the application site boundary and the proposed development for which planning permission is sought remains the same. Since the previous refusal of planning permission the Environment Agency has granted an amended Environmental Permit for the site which covers the proposed development. A copy of the permit is included with the application as part of the submitted Environmental

Management and Mitigation document, which is an additional document that has been produced to accompany the application following the previous refusal.

The application seeks planning permission for the retention of the existing wellsite and access road and for the long-term production of hydrocarbons. The long-term production of hydrocarbons would consist of the following elements:

- removal of existing temporary storage tank containment bund
- extension of the current wellsite area by 0.12 hectares to manage site access
- site construction/civil works to provide:
 - a purpose-built masonry containment bund area to facilitate storage tanks;
 - a tanker loading plinth;
 - the installation of an oil/surface water interceptor; and
 - the installation of a slotted drainage pipe within the existing containment ditch, which will be backfilled with stone to the surface
- installation of production facilities and equipment, including a workover to facilitate the removal of the existing completion (tubing and associated subsurface wellbore equipment) and replacement with a new completion
- the production of oil and gas
- the utilisation of gas, should sufficient volumes materialise, to generate electricity and export to the distribution network.

In terms of equipment which will need to be brought onto site to undertake the site works, it is anticipated that the following will be required:

- 1 x welfare unit
- 1 x 13 ton 360 excavator
- 1 x wagon
- 1 x dumper
- 1 x small roller.

It is anticipated that site works will take approximately three weeks to complete, working Monday to Friday during daytime hours only. There will be no removal of vegetation necessary during this phase, as the site itself is already built.

In addition to the works identified above, the applicants have confirmed that there may be a requirement for security to be provided on site due to increased risk of protestor activity at onshore oilfield sites. If needed the security facilities would consist of:

- 2 x offices

- 1 x canteen
- 2 x welfare units
- 1 x toilet block
- 1 x generator.

The indicative positioning of these facilities is identified on the submitted site layout plans. However, it should be noted that these are “worst case” scenarios and it is not anticipated by the applicants that the security facilities will be required for most phases of the development, or needed on site for any significant length of time. They will only be deployed if the security threat is sufficient and credible.

In addition to the above site works it is proposed that one or more productions operations will be employed to increase the flow of oil and gas at the site. These operations include:

- **Side track drilling:** This includes the mobilisation and assembly of a drill rig (maximum 40 metres height), leading to the drilling of a short side-track borehole of approximately 25 metres in length from the existing casing, aiming to intersect the hydrocarbon bearing reservoir that may have formation damage. This overall operation is expected to last three to four weeks with the drilling itself forming a small element of this.
- **Proppant squeeze:** This process involves a slurry of sand and gelled water being injected through the existing perforations in the well casing into the formation to reinstate and enhance channels of communication through near-wellbore formation, which has become blocked with drilling muds during the initial drilling operation. The fluid is pumped under pressure to create small fractures in the near well-bore, and the injected particles then acts as the “proppant” to “prop open” the fractures and enable enhanced oil recovery. The proppant squeeze operation involves pumping for approximately one hour to measure rock properties and then again for approximately one to two hours the following day to create a fracture and inject the proppant. This operation will be carried out once only. It would involve around 20-30 tons of sand (1-2 lorry loads) with 150 cubic metres (150,000 litres) of gelled liquid. The additional equipment required for this operation would comprise:
 - 3 x pump units complete with diesel engines
 - 1 x blender
 - 1 x hydration unit
 - 1 x coiled tubing unit
 - 1 x data unit
 - 1 x proppant silo
 - 1 x welfare unit
 - 1 x toilet block
 - 1 x generator.

- **Acidisation:** A low concentration of acid solutions would be injected through the existing perforations in the casing in order to improve the permeability of the Ashover Grit sandstone to enable flow from the formation to reach its full potential. It is stated that at Wressle, the sandstone rock is made up of different grain types and so a combination of acid types is needed to target quartz, clays and carbonates within the sandstone. This would include approximately 50 cubic metres (50,000 litres) of dilute hydrochloric acid, ammonium bifluoride and ammonium chloride, together with corrosion inhibitors and surface tension reducing additives being injected. The applicants have confirmed that approximately 85% of this fluid mix would be water. The acid mix is intended to treat the near-wellbore area only, extending to a radius of approximately 4-6 metres from the wellbore. The acid mix that is injected creates hydrofluoric acid deep underground near the wellbore area, and this reaction dissolves the fine particles and solids that are blocking the natural pores of the rock and the perforations in the casing. The applicants have confirmed that there will be no transportation of hydrofluoric acid to or from the site. As soon as the acid treatment enters the sandstone reservoir, the chemical reaction starts and very quickly the acids are “spent” through the dissolution of the particles and solids blocking the rock pores and casing perforations. The fluids are then flowed back to the surface and any residual acidic properties are treated with soda ash. It is anticipated that this entire process would be completed within three days, with no additional equipment being required.

As part of the previous planning application (MIN/2016/810) four potential production operations were proposed. The additional production operation was Radial Drilling. The applicants have removed this element from the current application and consent is now only being sought for the remaining three potentially necessary production operations: side track drilling, proppant squeeze and acidisation.

It is not known at this stage which combination of the operations listed above will be needed. It is likely that the acidisation treatment would be undertaken first to unblock the pores within the rock and perforations in the steel wellbore casing. This should enable oil to flow more freely through the sandstone. Following this, if flow rates indicate that it is required, the proppant squeeze will be undertaken. If a proppant squeeze operation is required, this would be undertaken once, and only once. It is considered unlikely that a side track drilling operation will take place in the near future. If a side track drill is planned this would be a 20-30 metre section from the existing wellbore.

For production operations, fluids will be recovered from the well either by free-flowing naturally, or with the aid of a surface pump facility that artificially lifts fluids to the surface. The choice/type of pump mechanism has not been confirmed but it would likely comprise a ‘nodding donkey’ or similar surface pumping system, with a maximum height of 10 metres.

Separated fluids would be stored within storage tanks on site. Oil would then be collected by road tanker and sent off site for processing, and water would be collected by a licensed waste contractor and managed via a licensed facility.

It is planned to connect to the mains or farm water supply for site water use. If this is not possible then water would have to be brought to site via road tankers.

It is expected that site energy requirements will be provided via electricity from the main electricity distribution network, by running either underground or overhead cables to the site from a local connection point. It is not expected that the grid connection will be completed

prior to production starting, which is why a diesel generator is shown as part of the indicative facilities and equipment.

There will be low level lighting used during the initial few weeks of production to ensure safety. During normal production operations the site would be manned during the daytime with lighting only required during the winter months or if there is an unforeseen operational requirement or emergency. If a side track drilling operation (as described above) is undertaken, drilling operations would progress on a 24 hour basis for up to four weeks (drilling operations likely considerably shorter) and as such site and rig lighting would be required.

If gas is evident in sufficient volume during the oil production process, it is planned to use the gas to generate electricity on site via a gas engine and export electricity to the electricity network. The gas engine will be housed in a noise deadening container on site. If this option is proven to not be technically or commercially viable due to low volumes of gas, then the proposal would be to manage gas via an enclosed flare on site, should volumes be sufficient to maintain combustion. For any scenario where gas is evident there would need to be a relief flare on site in the event of equipment failure.

All of the proposed oil and gas production operations outlined above would be subject to an Environmental Permit Application which is required by the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2010, as amended.

Once production has ceased, the well would be abandoned by plugging the wellbore in accordance with Department of Energy and Climate Change (DECC) procedures and the site will be restored to agricultural use.

“Fracking”

The applicants have stated in their submission that this application is for ‘conventional’ oil and gas production and that it is not a ‘fracking’ application. However numerous responses received in opposition to the application make reference to the proposed “proppant squeeze” process and assert the opinion that this application should be considered as a proposal for ‘unconventional’ oil and gas production and that it constitutes a proposal for ‘fracking’.

In response to these concerns the applicants have issued the following additional comments:

“A proppant squeeze is where a slurry of sand and gelled water (water and natural gum mixture) is injected through the existing perforations in the casing into the surrounding rock to enhance flow through the near-wellbore sandstone formation. The fluid mix is pumped under pressure to clear any blockage in the perforations and to create very small fractures in the near wellbore area to allow the well to flow efficiently. The process affects an area of a few metres to a few tens of metres around the well.

This is a small-scale conventional oil field operation which historically has taken place extensively throughout the UK, including Lincolnshire (e.g. nearby Crosby Warren well some 5 miles from Wressle). The fluid is injected for a total of 1–2 hours, with the overall operation taking two days and involving small volumes of up to 20–30 tons of sand (one skip load) with a maximum volume of around 100–150 cubic metres of gelled liquid.

The proppant squeeze has also been referred to by others as a “mini-frac” and there is a common misconception that this is the same as High Volume Fracturing of shale rocks for gas or oil, commonly referred to as “fracking”. Fracking is defined in the Infrastructure Act 2015 as the injection of more than 1,000 cubic metres of fluid at each stage of hydraulic fracturing or more than 10,000 cubic metres of fluid in total.

Fracking is the process generally used to produce oil and gas from shale or strata encased in shale. This process of fracking would be used where there are shale rocks deep underground where gas and oil are trapped within the shale itself. Gas and oil will not flow unless these rocks are “opened up” by fracturing them, using large volumes of water and solids/particles pumped down the steel casing within the borehole. The fluids are pumped under high pressure to generate fractures many hundreds of metres in length within the shale rocks.

In summary, the proppant squeeze should not be confused with High Volume Hydraulic Fracturing (“fracking”). The production operations at Wressle will not, either now, or in the future, involve the process of fracking for shale gas or oil. This area of Lincolnshire does not have the specific rock formations that contain shale gas or oil. The proposed oil field development at Wressle and associated operations are all related to conventional oil and gas”.

On this basis, it is considered that the proposed development does not constitute an application for “fracking”, but relates to conventional oil and gas production.

In addition to the above, the Environment Agency have confirmed that they consider the proposed development to be for conventional oil and gas production and they have dealt with their Environmental Permit application on this basis. They have also confirmed that the proppant squeeze proposed as part of the development is considered to be a conventional hydraulic fracture technique to clear the near wellbore of damage as a result of initial drilling and testing activity. The environmental permit confirms that only one proppant squeeze operation may take place on site and that repeated hydraulic fracturing is neither proposed, nor consented.

The principal issues to consider in the determination of this application are assessed below and comprise the following:

- **the principle of development**
- **impact on the landscape**
- **impact on hydrology/hydrogeology**
- **impact on ecology**
- **heritage impact**
- **impact on air quality**
- **noise impact**
- **highway safety**

- lighting
- waste
- seismicity.

Principle

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan, unless material considerations indicate otherwise. Such other important considerations include other relevant policy and guidance, particularly national planning policy in the National Planning Policy Framework (NPPF) and other relevant Government policy statements, as well as that which is provided within the National Planning Practice Guidance (NPPG).

Amongst the aims of the North Lincolnshire Local Plan are those ensuring the adequate and steady supply of minerals, preventing the unnecessary sterilisation of mineral resources and sustaining the contribution of mineral-related employment to the rural economy whilst simultaneously ensuring the sustainable use of resources in a way which protects the local environment, both natural and historic as well as safeguarding the amenities of those living and working in local communities (Chapter 15 of the NLLP and Chapter 13 of the Core Strategy relate).

As there is no requirement for specific landbank provision for energy minerals such as oil and gas, and thereby no specific allocations of land for such purposes, each application seeking permission for energy mineral-related development must be considered on its individual merits and with due regard to the relevant development plan policies at the time of the determination of the application.

Without exception the planning policies contained in chapter 15 relating to minerals development within the North Lincolnshire Local Plan have been ‘saved’ by Direction of the Secretary of State and remain extant in the determination of planning applications. Text within chapter 15 explains that *“An important aspect of mineral planning, which is different to other types of land use planning is that mineral resources can only be worked where they are found”*. This text goes on to state that *“The working of minerals is a fundamentally unsustainable activity. However, while accepting society’s unavoidable need for minerals, there is considerable scope for minimising the negative effect of mineral working and conserving resources through proper planning”*. The development of hydrocarbon resources is seen as a national need and prospective developers are not expected to argue need by justifying proposals in terms of their economic credentials.

Saved policy M23 is the most relevant development plan policy in the determination of this application in that it sets out the council’s approach to proposals for oil and gas production within North Lincolnshire. Policy M23 states that *“Proposals for oil and gas production facilities will be permitted, provided that the proposal incorporates environmental protection measures that are adequate to mitigate the impacts arising from a long-term or permanent site”*. It is considered that the proposed development complies with the development plan policies, including ‘saved’ NLLP policy M23 in that the protection of the natural environment (including air, land and water) have been taken into account. The proposal is also considered to comply with NLLP policy M1 in that proposals to minimise visual and other amenity impacts as well as proposals for restoration to a beneficial after-use are considered. Furthermore, the proposal does not give rise to any material conflict with

locational policy within the development plan, including policy RD2 of the NLLP which seeks to restrict development in the open countryside, when it is acknowledged (chapter 15 of the NLLP) that “*mineral resources can only be worked where they are found*”. In this regard consideration also has to be given to the existence of infrastructure already in place from the exploratory/appraisal phase.

An important part of the applicants’ assessment of the likely significant effects of the proposed development is the question of whether the development could take place elsewhere other than the application site. Chapter 3 of the Planning and Sustainability Statement submitted with the original application for an exploratory well (MIN/2013/0281) at the application site addresses the issue of site selection and alternative sites. In assessing alternative locations, consideration was given to geological and seismic data. With regard to environmental and social considerations in the assessment of alternative sites, the applicants have also considered the distance to residential properties and the distance to areas protected by dint of their ecological designation and access to the public highway. The application site was chosen as the preferential site due to natural visual and acoustic screening provided by surrounding woodland, flat topography of the field, good access to the local highway network via the B1208 and the distance to residential properties. The proposed development seeks to retain and make use of the existing infrastructure installed on site to establish the exploratory wellsite.

With regard to other material considerations, paragraphs 17 to 20 of the NPPF are supportive in encouraging economic development, amongst others, through the delivery of infrastructure that the country needs and sustaining jobs within the local community and contributing to the economic wealth of the local economy and wider to the county’s energy industry. Paragraphs 142 and 144 of the NPPF are similarly supportive of the development of the county’s oil and gas resources and this is mirrored in the national policy statements discussed within the Policy section of this report. Guidance set out in the Minerals section of the NPPG (paragraph 124) gives emphasis to the Government’s view that, nationally, energy should come from a variety of sources, including oil and gas, and states that when making decisions; authorities should have regard to national energy policy. The Government’s Annual Energy Statement (October 2013) referred to in that same paragraph explains that national energy policy has two key drivers: the need for energy security and carbon emission reduction. Whilst acknowledging that renewable energy will have a part to play, the Government’s view is that oil and gas, especially indigenous oil and gas, will remain key to energy security and, at the same time, facilitate the reduction in greenhouse gas emissions.

For the reasons outlined in the paragraphs above, it is considered that the proposed development is generally in accord with the relevant development plan policy and is, therefore, acceptable ‘in principle’.

Landscape and visual impact

The relevant extant development plan policies against which to assess the proposed development’s effect upon landscape and visual impact are ‘saved’ policy M1 of the NLLP, which requires mineral extraction proposals to mitigate visual and amenity impacts; ‘saved’ policy RD2 of the NLLP, which seeks to protect the character and appearance of the countryside; ‘saved’ policy DS1 of the NLLP, which requires all new development to respect and where possible retain and/or enhance the existing landform; and ‘saved’ policy LC7,

which requires special attention to be given to the protection of the scenic quality and distinctive local character of the landscape.

The application site is not located in any area designated either nationally or locally for its landscape importance. The surrounding area is predominantly flat, arable farmland broken up by blocks of deciduous and coniferous woodland. In the immediate vicinity around the site there are numerous man-made features within the landscape, including large electricity pylons which run through the adjacent field to the north and east of the site, there are also large agricultural buildings to the north and a sub-station to the north-east. Furthermore, there are no public rights of way running through or adjacent to the site.

The well pad and fenced compound is already in place and has been since the exploratory borehole was drilled in 2014. The production of oil and gas from the site will necessitate additional structures to be brought onto site, including storage tanks, welfare facilities and a gas engine; however, these structures are all relatively small in scale. The submitted sections of the site during the production phase show that all structures on the site will be well below the level of the adjacent agricultural buildings to the north. Given the relatively flat topography of the local landscape and the natural screening of the site afforded by the existing woodland blocks surrounding it, any adverse impact on the surrounding landscape will be extremely localised and would not be considered significant.

The proposed drilling operations which may potentially be used on the site to enhance the flow of oil and gas, and specifically the side-track drilling, would have the highest impact on the landscape as it would necessitate the use of equipment (drill rig) which is much larger and more visible than the equipment necessary for the production phase. However, this operation is very limited in duration and the drill rig would be removed from site once it is no longer in use. This drill rig would be similar in size to the rig used for the drilling of the exploratory borehole in 2014. It is considered, due to the temporary nature of this element of the proposed development, that the impact on the character and appearance of the area will not be significant.

In addition to the above, it should be noted that it is proposed that the application site will be restored to its former condition upon completion of the mineral extraction operation and that it will be returned to agricultural use. Therefore any residual visual impacts of the development will not be permanent.

Some of the responses received in opposition to the application make reference to the proposed artificial lighting which will be used on site and that this will alter what is essentially a dark area. There will be low-level lighting used during the initial few weeks of production to ensure safety. During normal production operations the site would be manned during the daytime with lighting only required during the winter months or if there is an unforeseen operational requirement or emergency. If a side track drilling operation is undertaken, drilling operations would progress on a 24-hour basis for up to four weeks (drilling operations likely considerably shorter) and as such site and rig lighting would be required during this time. Therefore the use of artificial lighting throughout the night will be a short-term measure only and will not be in use for the majority of the development. Furthermore, it is proposed to use lighting which is selected and designed to avoid unnecessary light spillage. For these reasons it is considered that the potential effects of the temporary external lighting upon the local landscape and in terms of visual impact are not significant.

Taking into account the absence of any significant impacts upon the local landscape and the fact that the acknowledged visual impacts that would arise from specific changes in view, by way of the introduction of a temporary drill rig, as well as the 'glow' from artificial lights, would be temporary and of negligible significance, it is considered that the proposed development would not result in adverse visual impacts or impacts upon the local landscape.

Notwithstanding representations made objecting to the development which are acknowledged and understood to be material concerns, the proposed development as set out in the submitted details is considered to accord with policies M1, DS1, RD2 and LC7 of the NLLP with regard to its effect on landscape and visual impact.

Hydrology/hydrogeology

The relevant extant development plan policies against which to assess the proposed development's effect upon the water environment are 'saved' NLLP policy DS13 which requires all development proposals to take account of the need to secure effective land drainage measures and groundwater protection, and 'saved' NLLP policy DS14 which states that developments will not be permitted if they *"adversely affect the quality and quantity of water resources...unless the impact is mitigated to an acceptable level"*. 'Saved' policy M23 of the NLLP also requires all proposals for oil and gas production to incorporate protection measures adequate to mitigate their impacts.

The assessment of the effects of the proposed development in respect of the water environment, including potential adverse impacts upon both ground and surface waters, is provided within the submitted *"Assessment of Flood Risk, Hydrology, and Pollution Control"* document produced by consultants R Elliott Associates Ltd on behalf of the applicants. The purpose of this document is to assess the effect of the proposal on the existing hydrology of the area; the hydrogeology of the area; the flood risk potential of the site upon the surrounding land; the flood risk of the site; and the control of pollution, including the types and quantities of liquids that will require control and propose methods by which the fluids can be removed. This document comprises a desk-top study that draws on the experience gained in the construction of the site and subsequent drilling of the borehole at the exploratory stage and is augmented by information from the British Geological Society and the Environment Agency. It identifies that the potential sources of effects on groundwater include the loss of foul or contaminated water from site; leakage from perimeter drainage; loss of chemicals or fuel due to insufficient storage capacity in bunded area; loss of drilling fluids into bedrock; and leakage from the cellar.

The application is also supported by an *"Environmental Management and Mitigation"* document which has been prepared in order to explain the measures and mechanisms that are currently in place at the Wressle site and which continue to be applied in order to ensure high levels of environmental protection. Appended to the Environmental Management and Mitigation document is a *"Hydrogeological Risk Assessment and Scheme of Monitoring"* document produced by consultants Envireau Water, which has been submitted to the Environment Agency as part of the environmental permitting procedure.

The purpose of the hydrogeological risk assessment (HRA) is to consider the potential risks of the development to the water environment and what mitigation measures may be necessary to reduce risks to an acceptable level. The HRA report includes:

1. a review of the baseline hydrology, geology and hydrogeology around the wellsite;
2. identification of surface water and groundwater features in close proximity to the wellsite;
3. a conceptual hydrogeological model;
4. the proposed outline development plan and proposals for how water will be managed at the site during all phases of the development;
5. a risk assessment and proposals to mitigate hydrogeological risk; and
6. details of the scheme for groundwater and surface water monitoring agreed with the Environment Agency as part of the environmental permitting process.

The submitted information identifies that the area is overlain by Blown Sand Drift Deposits. The drift deposits are permeable and provide a source of surface water abstracted from the drains and becks, and ground water, as indicated by the numerous water wells and abstraction points within the vicinity of the site. The Drift Deposits are designated as 'Secondary A' by the Environment Agency, defining them as providing water supplies at a local scale. With regard to solid deposits, these vary in permeability with the uppermost formation, the Kellaway Formation comprising rocks with essentially no groundwater as they are clays that confine underlying aquifers. The Kellaways Sands near the base of the sequence yields small quantities of water that is often brackish. This sequence effectively caps the Lincolnshire Limestones below and, consequently, there is no drainage path from the superficial sand deposits down to the confined groundwater in the Lincolnshire Limestone. The Snitterby Limestone is a moderately productive aquifer that ranks as a significant aquifer producing high yields. The lower Lincolnshire Limestones and Hibaldstow Limestones produce significant supplies of water. Environment Agency maps provided as part of the report show that the 'Secondary A' aquifer under the site location is part of the Cornbrash Formation. The aquifers in the Hibaldstow Limestones will be encountered at greater depth. The presence of these aquifers and their importance is confirmed by the Environment Agency's designation of the area as a Groundwater Vulnerability Zone for Minor Aquifers of either high or intermediate importance, with the area confirmed as being at risk.

When the initial borehole on site was drilled, artesian water was encountered at a depth of about 80 metres below site level confirming the presence of an aquifer in the bedrock. This aquifer has been isolated from the borehole by the subsequent installation of borehole casings in at least three concentric sizes. There are no proposals as part of this application to drill another borehole from surface, through the aquifer, but instead to use the existing borehole and retain intact the casing passing through the aquifer. The works that are the subject of this application will not require any disturbance of the upper borehole, but there is still a requirement for the drilling program to be submitted to the Environment Agency as part of the information provided when completing permitting requirements under the Water Resources Act 1991.

The report identifies 56 groundwater and surface water abstractions within the catchment area. The application site is shown to be located outside of the Source Protection Zones for all of the identified abstractions. It goes on to state that *"the capping layer above the Lincolnshire Limestones safeguards the water source and the artesian nature of the groundwater aquifer ensures that pollution of the aquifer will not occur because any*

fracture will allow the rising water to displace any contaminant". The groundwater in the higher Blown Sands Deposits will be vulnerable to pollutants, but the site has already been constructed with waterproof membranes isolating the site hydraulically from the sands. This membrane is continuous into the ditches and up the perimeter bunds. Surface water is currently captured by this waterproof lining to the site and runs off into the perimeter drains, where it is retained before being taken away by tanker. In addition, the storage tanks will be isolated from the main site drainage by an additional concrete storage bund. The area outside the bunded area is unconfined and surface water can flow off any surfaces and soak into the ground.

The site has previously been constructed with a water-tight membrane under the stone surface, comprising a Bentofix Geo-synthetic Clay Liner (GCL). This is a bentonite-filled composite membrane that is normally used to provide containment in landfill sites. It is stated that GCL has been chosen for the membrane because of the following benefits:

- it has a proven track record, being the preferred product for use on landfill sites, installed to prevent leakage of leachates
- when laid and wetted, the inner core hydrates and swells
- if the liner is pierced by a stone or sharp object, the inner core expands, seals the rupture and maintains membrane integrity
- natural ground moisture maintains the integrity of the GCL, avoiding dehydration and shrinkage, and
- where sites using Bentofix have been restored, there have been no recorded incidents of leakage through the GCL where it has been kept covered.

The Bentofix GCL membrane at the application site was subject to a permeation (leakage) test in 2016, by exposing and testing the GCL when dry and when completely saturated. The results of testing demonstrated no leakage through the membrane in either case. As part of the applicants' proposed Environmental Management System, the membrane will be subject to repeat tests throughout the life of the site to ensure that the system retains its integrity.

The capacity of the water-tight membrane is designed to contain a hypothetical situation where oil to flow uncontrolled from the wellhead at the rate of 50 barrels/day for thirty days (57,000 gallons). The revised production forecast for the site projects that 500 barrels of oil per day could be produced from the well; at this rate the site area has the capacity to retain fluid produced from the well for over eight days. Given that the well is completed before flow is started, with production flowlines connected to the storage tanks, this provides a closed containment mechanism from the oil-bearing reservoir to the surface. In addition, there are isolation valves that can "shut the well in" and close off the flow of fluids from the production tubing within the wellbore. Therefore the theoretical scenario of uncontrolled flow from the well would require the simultaneous failure of multiple barriers, including the emergency shut down systems and installed pipelines, which is extremely unlikely.

Prior to the commencement of production, the drainage around the site will be overhauled. This will involve installing a new membrane and large diameter pipes in the ditches and then backfilled with stone to surface to protect the GCL liner. The drainage will be connected to an Environment Agency approved surface water interceptor, to ensure that

only clean uncontaminated surface water discharges from the site. All process equipment, ie storage tanks, will be contained within a constructed bund, so any leaks from the equipment would be contained and prevented from flowing onto the site. As an extra measure, surface production pipework will have welded connections wherever possible.

Any on-site operations requiring fuel would utilise double-skinned fuel tanks and in the unlikely event that one of the tanks ruptured, the fuel would be contained on site through emergency response procedures and would involve small volumes that would not impact on site containment capacities. In the unlikely scenario involving the rupture or catastrophic failure of a fully-laden oil tanker, released oil volumes would be approximately 30 cubic metres (30,000 litres), which would not breach the site containment system capacity. The site surface area above the piped ditch containment equates to 690 cubic metres (690,000 litres), excluding the storage tank bund area. If the entire contents of an oil tanker did escape, the resultant oil would be less than 1 centimetre deep across the surface of the site and would absorb into the 30 centimetre depth of stone surface which has been laid on top of the site membrane.

The design of the site is such that the perimeter bunds are 20 centimetres in height above the finished site level and any surface contaminants will migrate into the containment ditch system, which will have a capacity of 16 cubic metres (16,000 litres) in addition to the surface containment. The entire site has been designed to accommodate the rainwater run-off from the site equivalent to that from a 1 in 100 year storm, calculated to be 433 cubic metres (433,000 litres). This would result in a depth of water across the site of 12.5 centimetres (not accounting for water soaking into the 30 centimetres of stone surfacing), which would be 7.5 centimetres below the top of the perimeter bund. The water thus accumulated is currently taken off site in a sealed tanker, but during the production phase would discharge through the surface-water interceptor into Ella Beck.

With regard to flood risk to the site, the submitted *Assessment of Flood Risk, Hydrology, and Pollution Control* identifies that the site is located in flood zone 1 and as such is not considered to be at high risk of flooding. The site is located at a height of 5 metres above Ordnance Datum and flooding by encroaching sea is not considered a realistic risk. The nearest reservoirs are more than 1 kilometre distant and their size is sufficiently small that they do not present a risk of flooding to the site. The risk of flooding due to rising groundwater is *“considered to be unlikely because the extent of the flood is downslope from the site and even if water rose above ground level to the east the EA do not consider that the flooding will extend into the area occupied by the site”*. Even if groundwater were to rise it would not be able to flood the site due to the permeable membrane. Therefore the report concludes that the risk to the site from rising groundwater is negligible.

Considering the risk of the development increasing flood risk elsewhere, the report concludes that this *“is not considered to be possible because the site does not impede or restrict the flow of flood waters and will not, by its presence, contribute to the most likely source of flooding – that due to rainwater run-off”*. It is concluded that the impact of the site on flood risk in the area is negligible.

The mitigation measures proposed by the applicants and referred to above would include the installation of a full-retention class I oil interceptor to enable the discharge of surface water from the site only when there are no drilling or associated activities taking place. A cut-off valve will be located at the discharge point from the site perimeter ditch, upstream from the oil interceptor, and another isolation valve located downstream from the

interceptor to provide an additional means of control. A sampling chamber between the interceptor and the downstream valve will allow the quality of discharged water to be checked. The interceptor would be isolated during pre-production operations and for any future drilling phase, with the valves closed to prevent discharge. Following completion of well treatments and any drilling activities, and after the site has been cleaned of all drilling muds and other chemicals, the water in the ditches would be checked for contaminants and, if satisfactory, the valves would be opened to allow rainwater to flow through the oil interceptor into Ella Beck. Access to the sampling chamber will be independent from the site and will be maintained at all times to allow for water sampling. Water from Ella Beck will be subject to continued sampling and analysis, in accordance with the agreed parameters specified within the environmental permit.

Flow of any water discharged into Ella Beck would be restricted by the use of valves fitted into the pipework to achieve a nominal flow rate of 5 litres per second in order to avoid increased flood risk. In addition, a permanent ramp made out of stone will be in place to avoid the need (as at present) for sandbags at the site entrance, to prevent the escape of surface water and potential contaminants.

Spent and neutralised returned chemicals will be stored in dedicated storage tanks and removed from site by licensed hauliers to appropriately permitted treatment and disposal facilities and any surplus, unused chemicals will be collected by the supplier and returned. Any produced water separated from oil will be temporarily stored within the on-site storage tank system, pending transfer off site to either a licensed treatment and disposal facility or an Environment Agency permitted injection facility. If a future side-track drill progresses, drilling muds would be removed by licensed operators and disposed of at authorised locations. Oil-based mud would be removed by its supply company for recycling. Skips for dry waste will be provided on site and foul drainage from the cabins would be collected in under-cabin waste tanks (cess tanks) and emptied by a registered contractor at an approved treatment works.

All fuel tanks will be double skinned and any refuelling of machines during the drilling and subsequent phases will be carried out in a contained area to avoid the spillage of fuel onto the ground. Pollution control barriers will be positioned alongside, or in the stream downstream from the site to provide additional safeguards against contaminants. Mitigation will also be provided by the existence of the existing impermeable membrane, which prevents surface fluids from infiltrating to the underlying soils and bedrock, thereby isolating the wellsite from watercourses and wetlands. Mitigation would also be provided by the control of the development through Environmental Permits, the containment of surface water prior to off-site disposal, groundwater quality monitoring and the temporary duration of the activities that could give rise to effects upon the water environment. It is concluded that if the aforementioned measures for control of pollution are implemented “*there will not be any risk of pollution to the surrounding area*”.

It should be noted that a separate planning application (PA/2016/808) has recently been approved on the site. This separate application is directly linked to the proposed development the subject of this application and sought consent for the installation of four groundwater monitoring boreholes which will record existing groundwater data as a baseline against which data recorded during the various proposed stages can be compared. The consented boreholes were installed in February 2017. These boreholes are required as part of the Environmental Permitting Regulations and will be used to test water quality of near-surface groundwater and to confirm that there are no leakages from site.

Sampling and analysis will be undertaken for at least three months, before site operations start, to establish baseline water quality data. Sampling and analysis will continue during site operations and throughout the production phase to ensure that there is no change in water quality. Notwithstanding the requirement to monitor groundwater for potential impacts, the submitted Hydrogeological Risk Assessment confirms that protection of shallower groundwater is achieved through the construction of the well and rock layers that provide a combined vertical barrier of approximately 1300 metres in thickness separating the oil producing zone in the Ashover Grit from groundwater.

Furthermore, it is stated that water samples taken from Ella Beck before, during and after drilling and testing throughout 2014 and 2015 showed no measurable impact on water quality. It is proposed that water from Ella Beck will be sampled and analysed at least once prior to any further site operations to re-establish the baseline data profile; weekly during pre-production treatment operations; and monthly during production throughout the life of the site. All analysis will be conducted by an independent and accredited laboratory, results monitored against baseline data to ensure no impact on water quality, and reported to the Environment Agency. The environmental permit stipulates where and how surface water monitoring should be undertaken. Regular monitoring will demonstrate the effectiveness of the proposed mitigation measures, ensuring that there is minimal chance of any adverse impact on Ella Beck.

British Steel raised an objection to the previous application on the site due to concerns that the proposed development could impact on the quality and volume of water from their nearby abstraction boreholes that supply significant amounts of water to the Scunthorpe Steelworks demineralisation plant. The submitted Hydrogeological Risk Assessment concludes that the risk of impact on groundwater is very unlikely and the Environment Agency is satisfied that the groundwater body supplying the abstraction boreholes is adequately isolated and protected so as not to be affected by the development. The Wressle-1 well will produce fluids from far deeper formations than the groundwater aquifers that supply the British Steel boreholes and has a negligible potential to impact on groundwater abstraction yields or quality. The applicants have met with representatives of British Steel to explain the proposed operation in detail and how the risks of contamination will be mitigated. Following this meeting British Steel confirmed that their concerns had been addressed and it is noted that no objection has been received from British Steel with regard to the current application.

Paragraph 100 of the Minerals section of the NPPG sets out the key regulators with regard to hydrocarbon extraction. The Environment Agency is identified as the key regulator with regard to the protection of water resources (including groundwater aquifers). Further advice is set out in paragraph 112 which states that *“there exist a number of issues which are covered by other regulatory regimes and mineral planning authorities should assume that these regimes will operate effectively. Whilst these issues may be put before mineral planning authorities, they should not need to carry out their own assessment as they can rely on the assessment of other regulatory bodies”*. It should be noted that the Environment Agency recently approved an Environmental Permit for the proposed development and that this permit imposes controls with regard to the protection of water resources. As part of the Environmental Permitting regime, all fluids used for production activities (including proppant squeeze) have to be assessed by the Environment Agency for suitability and use.

The Environment Agency has been consulted on this application and has reviewed the evidence submitted in support of the proposed development, including the *Assessment of*

Flood Risk, Hydrology, and Pollution Control the Environmental Management and Mitigation document and the *Hydrogeological Risk Assessment*. The Environment Agency has raised no objection to the application with regard to the potential impact on water resources. Responses have also been received from the council's Drainage and Environmental Health officers, raising no objections to the proposed development subject to conditions. Having reviewed the submissions of the expert consultants appointed in support of the application, the responses received objecting to the application and taking into account the consultation responses from the Environment Agency and the council's own internal departments, it is considered that the risks of an adverse impact upon groundwater is very low and that there would be appropriate measures in place to ensure the protection of ground and surface water and nearby watercourses.

Notwithstanding representations made objecting to the development which are acknowledged and understood as being material concerns, the proposed development, appropriately mitigated as proposed by the applicants in their submitted details, and weighed in the planning balance, is considered to accord with the requirements of policies DS13, DS14 and M23 of the North Lincolnshire Local Plan with regard to the protection of the water environment.

Ecology

The relevant extant development plan policies against which to assess the proposed development's effect upon the natural environment, including protected species, are 'saved' policy LC4 of the NLLP, which seeks to protect areas of local nature conservation importance; 'saved' policy LC5 of the NLLP, which requires development proposals to have no adverse impact on protected species; 'saved' policy M23 of the NLLP, which requires environmental protection measures adequate to mitigate the impacts of oil and gas production sites; 'saved' policy DS1 of the NLLP, which requires developments to have no adverse effect on features of acknowledged importance, including species of nature conservation importance; and policy CS17 of the Core Strategy for North Lincolnshire, which seeks to retain, protect and enhance features of biological interest and secure biodiversity gains from developments.

The assessment of the effects of the proposed development in respect of the natural environment, protected species and designated habitats, is set out within the submitted *Updated Ecological Appraisal Report* prepared by consultants AECOM on behalf of the applicants. This report follows on from the original ecological appraisal submitted by the applicants in support of the previous application for exploratory drilling on site and includes an updated desk study, updated phase 1 habitat survey, updated ecological appraisal, a consideration of any additional ecological mitigation/compensation requirements and updated restoration requirements. No further updated desk study surveys have been undertaken since the previous planning application (MIN/2016/810) was determined in January 2017. This is because less than two years has elapsed since the last ecology field survey was undertaken and there are no grounds to expect a material change from the previously established baseline over the intervening period; as such the previous assessment remains valid.

Species assessed as part of this appraisal include bats, breeding birds, barn owls, kingfishers, woodlark, badgers, reptiles, great crested newt, water vole, otter and brown hare. It is explained that the baseline habitat and species conditions associated with the site remain broadly as previously described and assessed in the 2013 report, "*but the site*

itself has reduced in biodiversity value following construction of the consented well site in 2014". There are no habitats within the site boundary that are suitable to support any protected or notable species and the nature conservation value of the site is assessed as being negligible.

The assessment identifies that possible effects could arise from the proposed development as a result of dust, odour or other emissions affecting air quality, noise and visual impacts and possible adverse impacts on surface and/or groundwater through accidental spills, leaks or loss of well integrity. Because the wellpad from which oil and gas is proposed to be produced already exists, the potential for any additional pathways for impacts on protected or notable habitats and species is considered to be negligible. This is because the application does not include the drilling of a different well (the proposed side track drilling will use the existing well). The main change identified in potential source-receptor pathways is the installation of an outfall to Ella Beck to discharge clean surface-water run-off; the current drainage arrangement stores surface water run-off on site prior to removal via tanker. Any potential for significant adverse effects upon protected species and/or designated habitats by virtue of dust deposition, possible sources of contamination of surface or ground water, process contributions to air quality parameters, noise emissions (including traffic movements) and the emission of artificial light from the site is predicted to be negligible. The residual effects assessment concludes that *"no additional residual adverse effects on ecology are predicted for the production phase"*.

With regard to mitigation, the ecological appraisal identifies that well integrity is adequately mitigated through Environmental Permitting regulations and best practice construction methodology, as well as monitoring and maintenance of the well in accordance with the permit. It also identified that there is embedded mitigation in the drainage design, which includes an inspection chamber for water quality inspections and valves to control flow rate, the requirements for which will be controlled by the Environmental Permit. A Noise Management Plan will be prepared and agreed to ensure noise is minimised during works. The selection and design (i.e. downward and directional) of external artificial lighting will minimise obtrusive light spillage. The updated impact assessment has identified the need for one additional mitigation measure in respect of water voles, to address the low residual risk that this species is present in Ella Beck. This would include a pre-construction check for water voles prior to the installation of the new drainage outfall. Given the minor and temporary nature of the works to install the outfall, it is considered that the risks to water vole burrows (if present) can be adequately addressed through a precautionary working method statement. No other mitigation measures specific to habitats or protected species are considered necessary, as no significant effects on ecological receptors have been identified. Restoration phase habitat enhancement from the 2014 Biodiversity Management Plan will be implemented following the completion of production at the site and the site will revert back to arable use. However, the installation of bird and bat boxes will be brought forward to maximise opportunities for uptake of the boxes before the production phase is completed.

Consultations have been received from Natural England and the council's own ecologist following assessment of the submitted information. No objections have been raised with regard to the proposal's impact on protected or priority species or habitats. The council's ecologist does, however, recommend a condition to secure the works and biodiversity enhancements set out in the submitted ecological appraisal. This will ensure that biodiversity enhancements will be provided in accordance with local and national policy.

Having reviewed the submissions of the expert consultants appointed in support of the application, the responses received in objection to the application and taking into account the consultation responses from the Natural England and the council's own internal ecologist it is considered that the proposed development is unlikely to have any adverse impact on protected or notable species or habitats and that mitigation of the effects of the development with regard to the natural environment, including the proposed biodiversity enhancements, are both appropriate and proportionate. Notwithstanding representations received in opposition to the proposed development, which are acknowledged and understood to be material concerns, the proposed development, appropriately mitigated as put forward by the applicants within the submitted details is considered to accord with policies DS1, LC4, LC5 and M23 of the NLLP and policy CS17 of the Core Strategy.

Heritage

The most relevant extant development plan policies against which to assess the proposed development's effect upon heritage assets are 'saved' policy M4 of the NLLP, which restricts minerals proposals that affect Scheduled Ancient Monuments unless the reasons for development clearly outweigh the archaeological value of the site; and 'saved' policy DS1, which requires adequate measures to ensure no unacceptable impacts on archaeological remains in all new development.

The assessment of the effects of the proposed development in respect of the historic environment are set out in the submitted "*Heritage Impact Assessment: Proposed Hydrocarbon Production at Lodge Farm, Wressle, Broughton, North Lincolnshire*" prepared by Paul Cope-Faulkner on behalf of the applicants. This report assesses the potential impact of the proposed development on the nearby Thornholme Priory Scheduled Ancient Monument. The assessment indicated that there may be a visual and setting impact on the Scheduled Monument, due largely to the height of the proposed drilling rig. The views from the Priory towards the south are already impacted upon by electricity pylons. However, views are not constant and woodland belts mask or partially hide these existing vertical elements. It is concluded that the setting of the priory will be slightly impaired by the proposed development; however, any perceived impact will be of temporary duration lasting approximately 3-4 weeks (duration of siting of drill rig on site for side-track drilling operation) after which the site will have no significant impact on the heritage asset.

The council's Historic Environment Record (HER) has considered the content and findings of the submitted Heritage Impact Assessment and considers that this report provides sufficient information with which to assess the impact on Thornholme Priory and its setting. The council's HER conclude that the proposed drilling rig will be visible in a number of views from within the monument, but concur with the findings of the report, that "*any visual impact on the monument setting would be of slight/moderate scale and for a short, temporary period only*". The HER are satisfied that any harm to the designated heritage asset will be less than substantial (NPPF para 134) and as such raise no objection to the application. Furthermore, mitigation is not considered necessary in this instance and no archaeological conditions are recommended.

Having given due regard to the expert information submitted in support of the application and the consultation response from the council's HER, it is considered that the risks of an adverse impact being caused to heritage asset's historic importance or heritage value, arising from the proposed development is very low. Notwithstanding the representations

received in opposition to the application, it is considered that the proposal accords with policies M4 and DS1 with regard to its impact on heritage assets.

Air quality

The most relevant extant development plan policies against which to assess the proposed development's effect upon air quality are 'saved' policy DS1 of the NLLP, which requires that development proposals do not result in pollution of air, water or land; 'saved' policy DS11 of the NLLP, which seeks to prevent development that would result in dangerous levels of polluting emissions; and 'saved' policy M23 of the NLLP, which requires environmental protection measures to adequately mitigate impacts of oil and gas production.

An air quality assessment that includes dispersion modelling has been undertaken by AECOM on behalf of the applicants in relation to the proposed development and is presented as part of the Environmental Management and Mitigation document. This report assesses the impact on the amenity and health of nearby human receptors and the health of ecologically sensitive habitats in relation to particulate matter emissions during construction works and operational emissions associated with combustion of gas through the proposed flare. Data from 2014-2015 informed the baseline for the 2017 assessment, which has included dispersion modelling. The report concludes that neither construction dust nor flare emissions will have a significant impact or effect on local air quality.

Impacts upon air quality that may result from the proposed development are likely to arise from vehicle emissions, emissions from equipment on site, fugitive emissions and dust. However the most polluting events are short-term events arising from the use of stationary and mobile equipment on site. These operations are limited to a relatively short overall period of operation.

The council's Environmental Health department has been consulted on the application and has confirmed that environmental effects of the long term production operations will be managed under the Environmental Permitting system and that the Environment Agency is responsible for regulating emissions from the site; this is further clarified by paragraph 110 of the Minerals sections of the NPPG which identifies the Environment Agency as the key regulator for emissions to the air. The Environment Agency has raised no objection to the proposed development with regard to its impact on air quality, nor has it requested additional information in this regard. A copy of the environmental permit for the site has been submitted as part of the Environmental Management and Mitigation document and this details the controls and monitoring requirements under the environmental permitting regime in relation to emissions to air. The environmental permit also controls odorous emissions from the site.

Taking into account the responses to consultation from experts within the Environment Agency and the council's Environmental Health department, it is considered that the risks of an adverse impact upon air quality, either in respect of local residents or sensitive habitats, is very low and that there would be appropriate measures to ensure the protection of air quality. Notwithstanding the responses received in opposition to the application with regard to air quality, which are acknowledged and understood to be material concerns, the proposed development, appropriately mitigated, is considered to accord with policies DS1, DS11 and M23 of the NLLP with regard to air quality.

Noise

The most relevant extant development plan policies against which to assess the proposed development's effect upon noise are 'saved' policy M1 which requires acceptable proposals to mitigate amenity impacts of mineral extraction proposals; 'saved' policy M3 which seeks to prevent mineral working directly adjacent to housing sites or other land uses where unacceptable impacts may arise; 'saved' policy M23, which requires adequate environmental protection measures to mitigate the impact of oil and gas sites; 'saved' policy RD2, which seeks to prevent development in the open countryside that would be detrimental to residential amenity; 'saved' policy DS1, which requires that new developments do not result in unacceptable loss of amenity to neighbouring land uses; and 'saved' policy DS11, which requires that developments do not create environmental conditions likely to affect nearby developments and adjacent areas.

The assessment of the effects of the proposed development in respect of noise is set out in the "*Assessment of Environmental Noise Emissions*" document prepared by consultants ACIA Engineering Acoustics on behalf of the applicants. This report presents an assessment of the effects on ambient noise levels in the locality likely to result from the construction and operation of oil and gas production facilities, and from other potential activities related to the production of oil and gas. These include the drilling of a side-track well, oil recovery enhancement by a proppant squeeze, and well acidisation, some or all of which may be required before or during hydrocarbon production.

Studies of environmental noise levels in the vicinity of the site show that a noise limit at the previously applied level (during the exploratory drilling phase) of 42dB LA_{eq, 5min} is appropriate and should be controlled via a planning condition for the side-track drilling operation. It is stated that "*such a limit can readily be met by the drilling techniques likely to be appropriate*". If a proppant squeeze is used it may be necessary to consider noise mitigation measures appropriate to the equipment used, but this is considered unlikely given that the operation will be conducted and completed within one day and within normal working hours. The acidisation operation would have no impact on environmental noise. The report also proposes noise limits and operational hours restrictions for construction operations in line with those imposed on the previous permission for the drilling of the exploratory borehole. Furthermore, it is concluded that noise from the production phase will be inaudible at any noise-sensitive property. Planning conditions for the production phase will be set according to the typical minimum background sound levels determined by a survey conducted in accordance with BS.4142:2014.

The council's Environmental Health officer has reviewed the submitted noise impact assessment and has confirmed that, if unregulated, the development would have the potential to cause a noise nuisance to neighbouring residential properties. On this basis the Environmental Health officer recommends conditions to mitigate the noise impact of the development to acceptable levels; these conditions include specific limits on the noise that can be emitted by operations on the site and are in line with noise conditions that were imposed on the previously consented exploratory drilling operation and those suggested in the noise impact assessment. It should be noted that the applicants were able to comply with these previously imposed noise conditions and that the exploratory borehole was drilled without objections being received by the local authority from neighbouring residential properties. On this basis it is considered that the applicants would be able to comply with the proposed conditions and that they would not place an unacceptable burden on their operations. The Environmental Health officer also advises that noise emissions will be

regulated by the Environment Agency under the Environmental Permitting system. The Environment Agency has raised no objection to the application with regard to potential noise impacts.

Having due regard to the submission of expert consultants appointed in support of the application and the responses of the council's Environmental Health officer it is considered that the mitigation, via the use of planning conditions, of the effects of the development with regard to the adverse effects of noise are appropriate and proportionate and will adequately protect the amenity of neighbouring residential properties. Notwithstanding the representations received in opposition to the application, it is considered that, subject to the recommended conditions, the proposed development accords with policies M1, M3, M23, DS1, DS11 and RD2 of the NLLP with regard to protecting the amenity of surrounding land uses.

Highways

The most relevant extant development plan policies against which to assess the proposed development's effect upon highway safety are 'saved' policy M1 of the NLLP, which requires that the local road network and other transport facilities are adequate for proposed mineral workings; 'saved' policy M7 of the NLLP, which requires new mineral workings to be located where the council is satisfied that the level of traffic movements can be accommodated on the local road network; 'saved' policy RD2 of the NLLP, which requires that new development in the open countryside is not detrimental to highway safety; 'saved' policy T1, which requires developments that generate significant vehicle movements to be located in urban areas or where there is good access to transport networks; and 'saved' policy T2 of the NLLP, which requires all new developments to be served by a satisfactory access.

The assessment of the effects of the proposed development in respect of traffic and transport is set out in the "*Assessment of Traffic & Transport*" document prepared by R Elliott Associates Ltd on behalf of the applicants. This document states that "*The existing farm access forms a minor leg of a junction with the B1208 on the outside of a fairly sharp left hand turn where the highway heads to the left. The sight lines from the access are good and the necessary 2.5 x 215m clearances are achievable*". The report considers the highway network in the area to be good, with the M180 located 4 km to the south of the site and having a junction (4) with the A18 immediately south of Broughton. Northbound HGV traffic is barred from using the B1207 through Broughton, so HGV traffic for areas north of Broughton is routed eastwards along the A18 to the minor junction with the B1208. HGV traffic then travels along the B1208 north through Castlethorpe and Wressle up to the road junction of the B1208 with the B1207, it can then continue northward along the B1207. The B1208 is signposted as a designated lorry route for Winterton and South Ferriby. The B1208 has a dog-leg just north of Castlethorpe with two 90 degree bends; this has the effect of calming the traffic, although the rest of the route is mainly open with good visibility. It is concluded that "*The road is wide enough along its length to carry high volumes of traffic, including two-way HGV traffic, and the vehicle movements generated by this development will not be significant in terms of overall road capacity*".

Site construction works, including the creation of the concrete bunded areas and HGV hardstanding, are anticipated to take approximately 3 weeks. Site preparation plant is likely to consist of 4 articulated low loaders bringing a 360 degree excavator, a dumper and other equipment to site. Aggregates necessary to complete site construction works will generate

approximately 40 HGV loads. Deliveries of materials such as reinforcement will generate another 5 HGV loads. In addition to the HGV movements there will be a requirement during this stage for a small number of other deliveries to the site by truck. An additional 6 visits per day by car or light van would be generated by personnel employed on the site.

To establish the production facilities and equipment on site, approximately 20 HGV loads will be required, together with a number of smaller ancillary loads.

Should the proppant squeeze operation be undertaken on site it is anticipated that HGV movements for equipment delivery will amount to 40 movements (20 incoming and 20 outgoing) over the 3 days anticipated during mobilisation. Another 40 movements will be generated during the 3 days anticipated for the demobilisation of equipment.

Should the side-track drilling operation be undertaken then vehicle movements will be similar to those that were experienced during the exploratory drilling operation in 2014. This equates to 80 HGV movements (40 deliveries) associated with the 3 day mobilisation period. The same number of movements is anticipated for the 3 day demobilisation period. During the one week period that drilling would take place there would be approximately 10 HGV movements per day (5 trips). Personnel movements to and from the site will generate an additional 10 to 20 movements per day by car or light van.

The acidisation process, if it takes place, will generate up to 8 HGV movements bringing chemicals to the site. An additional 4 movements would be generated by personnel movements in cars or light vans. In response to concerns raised with regard to the transport to and storage of hydrofluoric acid on site, the applicants have confirmed that *“The acid mix that is injected creates hydrofluoric acid deep underground within the Ashover Grit in the near wellbore area...There will not be any transport of hydrofluoric acid to and from the site”*.

Movements to and from the site during the production phase will depend on production quantities, but anticipated numbers are given as 2-6 HGV movements per day associated with exporting oil. An additional 1-3 non-HGV movements per day will be generated by personnel and ancillary loads.

From the anticipated vehicle movements set out in the submitted transport assessment it is obvious that the most movement intensive phases of the proposed development are the site construction phase and optimisation processes (side-track drilling, proppant squeeze and acidisation) which are all relatively short-lived operations, with no long-term impact. The number of movements, particularly of HGVs, anticipated throughout the production phase, which will make up the vast majority of the lifespan of the development, are relatively small in comparison. The transport assessment concludes that the overall impact of the development on the local highway network will be negligible/low and as such no other mitigation measures are proposed.

The applicants propose that the development is capable of implementation over a relatively short period of time, would ensure the protection of residential amenity through the operational hours proposed and would utilise the routes used by operational vehicles associated with the exploratory works at the site in 2014. These parameters have not given rise to any objections from the expert advisers within the council's Highways department. The council's Highways officer has, however, recommended that a Construction Phase

Traffic Management Plan is secured by condition to mitigate/minimise the impact of the development on the local highway network.

Having given due regard to the submission of the expert consultants appointed in support of the application, the representations received in opposition to the application and the response from the council's expert Highways officer, it is considered that the impacts of the vehicle movements associated with the proposed development are limited in their duration and extent and thereby, taking account of the proposed mitigation of those effects (e.g. timings of HGV movements etc.) to safeguard the amenity of local residents, the proposals are considered acceptable insofar as their effects on traffic and highway safety. Notwithstanding the representations received in opposition to the application, which are acknowledged and understood to be material concerns, it is considered that the proposal accords with policies M1, M7, RD2, T1 and T2 of the NLLP with regard to its impact on the local highway network.

Lighting

The impact of the proposed development with regard to artificial lighting has been considered above in relation to the impact on visual amenity. However the introduction of artificial lighting on site also has the potential to impact upon the amenity of neighbouring residential properties as a result of light spillage and glare. The most relevant development plan policies against which to assess the proposed development's effect with regard to artificial lighting are 'saved' policy M1 of the NLLP, which requires that visual and amenity impacts are mitigated; 'saved' policy M23 of the NLLP, which requires adequate environmental protection measures to mitigate impacts of oil and gas proposals; 'saved' policy RD2 of the NLLP, which requires that new developments in the open countryside are not detrimental to residential amenity; 'saved' policy DS1 of the NLLP, which requires no unacceptable loss of amenity to neighbouring land uses from all new developments; and 'saved' policy DS11 of the NLLP, which requires that new developments do not create environmental conditions likely to affect nearby developments and adjacent areas.

Whilst it is acknowledged that artificial lighting of the site will take place for only short periods of time and that it is proposed to design the lighting to avoid unnecessary light spillage from the site, the council's Environmental Health officer recommends that a condition is necessary to mitigate the potential impact of artificial lighting on the site on the amenity of neighbouring properties is adequately mitigated. This condition requires a detailed lighting scheme to be submitted and agreed prior to installation to ensure that the proposed mitigation measures are implemented.

Having given due regard to the expert advice of the council's Environmental Health officer, it is considered that the risks of an adverse impact arising from the use of external/artificial lighting is very low and that these impacts are capable of being controlled by the suggested planning conditions. Therefore, notwithstanding the representations received in opposition to the application, which are acknowledged, it is considered that the proposed development accords with policies M1, M23, RD2, DS1 and DS11 of the NLLP with regard to the impact on residential amenity as a result of artificial lighting.

Waste

The most relevant development plan policies against which to assess the proposed development's effect with regard to waste are 'saved' policy M23 of the NLLP, which

requires that environmental protection measures are adequate to mitigate the impacts of oil and gas production; and 'saved' policy DS11 of the NLLP, which requires that new developments do not create environmental conditions likely to affect nearby developments or adjacent areas.

Paragraph 110 of the Minerals section of the NPPG identifies that the key regulator with regard to waste from minerals sites is the Environment Agency. Further advice is set out in paragraph 112 of this section of the guidance which advises that the Environment Agency is responsible for ensuring that extractive wastes do not harm human health or the environment; it goes on to identify that an Environmental Permit is required for hydrocarbon extraction and that the operator is required, as part of the Environmental Permitting regime, to produce and implement a Waste Management Plan. Paragraph 112 also advises that water that comes back to the surface following hydraulic fracturing may contain normally occurring radioactive materials (NORM's) and that it is the responsibility of the Environment Agency to ensure that the final treatment/disposal at water treatment facilities is acceptable, whilst identifying that local authorities will want to consider on-site storage of contaminated water and the impact of vehicle movements associated with taking it off-site for treatment. This paragraph also makes it clear that it is the Environment Agency's responsibility to monitor the chemicals used in the hydraulic fracturing process and that operators are obliged to agree all chemicals as part of their Environmental Permit. The Environment Agency has granted an environmental permit for the proposed development and a copy of this permit has been provided with the planning application.

The applicants have confirmed that for production operations, fluids will be recovered from the well either by free-flowing naturally, or with the aid of a surface pump facility which artificially lifts fluids to the surface (e.g. nodding donkey). The maximum 150 cubic metres of proppant squeeze fluid, once returned to the surface will equate to 5-6 tanker loads in total that would need to be transferred off site to a licensed waste treatment or disposal facility. Separated fluids would be stored within storage tanks; waste water would be collected by a licensed waste contractor and managed via a licensed facility. It has also been confirmed that all equipment that has the potential to contaminate the surface of the wellsite is contained within the bunded area which is underlain by an impermeable membrane. Surface water within the bunds is contained, with outflow into the drainage ditched controlled by an interceptor.

The Environment Agency as the key regulator with regard to the treatment/disposal of waste from minerals sites has been consulted on the application and has raised no objection to the proposed development with regard to the design of the site and the proposals for the containment and final discharge of waste. Nor have the council's Environmental Health officers raised concerns or objections with regard to waste storage or disposal. This is something that will be controlled under the Environmental Permitting regime by way of a Waste Management Plan, which will be monitored by the Environment Agency. All waste will be temporarily stored on site, sampled and tested to determine the appropriate licensed waste treatment facility; the presence of NORM's within returned fluids following the proppant squeeze operation would not necessitate any additional activities above and beyond these.

Having given due regard to the fact that the site will be subject to a Waste Management Plan as part of its Environmental Permit, which will be agreed with and monitored by the Environment Agency, the mitigation proposals put forward by the applicants (bundling of the site, impermeable membrane etc.) and given the fact that the Environment Agency, who

are the key regulator with regard to waste from hydrocarbon extraction sites, have raised no objection to the planning application, it is considered that the proposed development poses no unacceptable risk with regard to the production, storage and/or disposal of waste. Notwithstanding the responses received in opposition to the application in this regard, it is considered that the proposal complies with the relevant requirements of policies M23 and DS11 of the NLLP.

Seismicity

Numerous representations have been received raising concerns that the proposed hydraulic fracturing operation proposed (proppant squeeze) could result in induced seismicity which could result in an earthquake or vibrations which could damage local property.

Paragraph 110 of the Minerals section of the NPPG makes it clear that the key regulator responsible for assessing the risk of and monitoring of seismic activity is the Department of Energy and Climate Change (DECC). Paragraph 112 of this section of the guidance goes on to explain that DECC are responsible for controls, usually through the licence consent regime, to mitigate seismic risks and that *“Seismic assessment of the geology of the area to establish the geological conditions, risk of seismic activity and mitigation measures to put in place is required by the Department of Energy and Climate Change for all hydraulic fracturing processes”*. In 2012, DECC introduced measures to control seismic risk from hydraulic fracturing operations, with operators now required to assess the location of any relevant faults before operations take place.

Notwithstanding the fact that no high volume hydraulic fracturing is proposed and that seismicity is regulated by DECC, the applicants have confirmed that they will *“undertake, in accordance with Oil and Gas Authority guidance, a programme to monitor seismicity”*. They have also confirmed that, whilst they consider *“the potential for the proppant squeeze to induce a seismic event leading to vibration at surface is extremely remote (the operation being of small scale and short duration). Egdon is proposing to install a number of monitors at surface during the operation”*. Therefore, there is a clear mechanism proposed to monitor the proppant squeeze process with regard to seismicity and this will be secured via other regulatory regimes (DECC).

As the jurisdictional control over seismicity and/or induced seismicity lies with DECC, there are no development plan policies against which to assess the proposed development in this regard. Indeed paragraph 122 of the NPPF makes it expressly clear that the authority’s focus should not be upon *“the control of processes or emissions themselves where these are subject to approval under pollution control regimes”* and that it must assume that *“these regimes will operate effectively”*. As referred to above, regulatory control over seismicity/induced seismicity lies with DECC, and there are no development plan policies that are relevant in this regard.

Provided that best practice is followed and appropriately enforced (responsibility lies with DECC) then there is no reason to believe that the impact of seismicity or induced seismicity as a result of the proposed development would be significant or adverse to such a degree that would warrant the refusal of planning permission on this ground.

It should be noted that, whilst the National Planning Practice Guidance still refers to DECC being the key regulator responsible for assessing the risk of and monitoring of seismic

activity, this government department no longer exists. DECC has been abolished and it is understood that this department and its responsibilities have been merged into the newly established Department for Business, Energy and Industrial Strategy (BEIS). Therefore, notwithstanding the above, the Department for Business, Energy and Industrial Strategy is now the key regulator with regard to seismicity.

Other material considerations

Climate change

The relevant development plan policy with regard to climate change is policy CS18 of the Core Strategy for North Lincolnshire. This policy promotes development that utilises natural resources efficiently and sustainability, specifically with regard to climate change by *“meeting required national reductions of predicted CO₂ emissions by at least 34% in 2020 and 80% in 2050”*. It aims to achieve this aim by requiring all industrial and commercial premises greater than 1000 square metres to provide 20% of their expected energy demands from on-site renewable energy until the code for such buildings is applied nationally.

Numerous responses received in opposition to the application raise concerns with the government’s national energy policy and that supporting a scheme for hydrocarbon production will promote the use of hydrocarbons which should be left in the ground in favour of developing clean, renewable energy sources.

Paragraph 124 of the NPPG emphasises the Government’s view that, nationally, energy should come from a variety of sources, including oil and gas, and states that when making decisions, authorities should have regard to national energy policy. The Government’s Annual Energy Statement (October 2013) referred to in paragraph 124 asserts that national energy policy has two key drivers: the need for energy security and carbon emission reduction. Whilst acknowledging that renewable energy will have a role to play, the Government’s view is that oil and gas, especially indigenous oil and gas, will remain key to energy security and, at the same time, facilitate the reduction in greenhouse gas emissions.

Natural gas will be extracted as part of the proposed operation and it is proposed that this gas will be separated from the oil produced and used to generate electricity by way of a gas engine and connection to the electricity network. This would have a much lower impact in terms of emissions than imported Liquefied Natural Gas, which it could replace. Should the volume of gas exceed the capacity of the gas engine, and the capacity of the local electricity network, the residual gas will be incinerated by way of an enclosed ground flare. The flare will be specified to physically limit the volume of gas that can be combusted on site so that it does not exceed the thresholds set out in the Emissions Directive (2010/75)(IED). The applicants have confirmed that there is certainty that gas combustion at the site will be at far lower volumes than the capacity of the flare and it is forecasted that these volumes will decline relatively quickly.

There will also be some emissions to the atmosphere from the proposed oil storage tanks which will be equipped with vents. However, as the extracted natural gas will be separated from the oil and used to generate electricity, with residual gas being incinerated, there are anticipated to be very limited emissions from the tanks.

Other sources of greenhouse gas emissions from the site are likely to include exhaust emissions from vehicles and equipment on site, as well as fugitive emissions (due to leaks etc). Exhaust emissions are likely to be highest during the short-term site construction phase and during the employment of production processes (radial and side-track drilling and proppant squeeze) and will reduce rapidly during the production phase which comprises the majority of the lifespan of the development and generates relatively low levels of vehicle movements. Fugitive emissions will be monitored by the Environment Agency as part of the Environmental Permitting regime and the flaring of methane on site will also be monitored and controlled under this regime. Therefore it is considered that the emissions produced as a result of the development are unlikely to have a significant and adverse impact on climate change to such a degree that would warrant the refusal of planning permission in this regard.

The applicants have stated that *“If Wressle remains undeveloped, it will just mean that an equivalent volume of oil and gas is imported at greater environmental impact because of the energy requirement to transport the hydrocarbons from overseas. In 2015, around 45% of UK gas supply was made up of net imports. Similarly, net imports of oil comprise around 40% of the oil we use. Projections suggest net imports could increase to 73% by 2030. With reserves in the North Sea declining together with the increasing security issues and increasing cost of importing energy, it is critical that the UK provides its own reliable sources of energy whilst maintaining the highest safety and environmental standards.”*

It is very difficult to assess the overall impact of the development in the wider context of climate change and national climate change policy/commitments as it is impossible to know how the oil and gas produced will be used and whether or not it will replace existing foreign imports. However, it is considered that the development does accord with national policy in that the Government wishes to see energy supplies from a variety of sources, and that indigenous oil and gas remain key to energy security (Annual Energy Statement, October 2013).

Furthermore, it is considered that the issues raised as to how the proposed development relates to the obligations such as those set out in the Paris Agreement are a matter for future national policy. It is considered that, the analysis should be limited to a consideration of the project emissions during construction, operation and decommissioning, together with cumulative impacts as set out above.

Long-term impact

Objectors have raised concerns that there are insufficient safeguards should there be an accident or incident on site and that there should be a bond in place to cover restoration of the site should the operator cease trading. Concerns are also raised that the requirements for monitoring of the site following the cessation of the production operation are insufficient and that the development could result in longer-term contamination and issues.

Paragraph 048 of section 27 of the NPPG explains the circumstances when a financial agreement may be justified and states *“a financial guarantee to cover restoration and aftercare costs will normally only be justified in exceptional cases”*. In this instance it is considered that the proposed development does not meet any of the criteria set out in paragraph 048 as constituting an exceptional case. Reliance in this regard falls to other regulatory controls.

In order for the operator to carry out the extraction of minerals they require an Environmental Permit which is issued and monitored by the Environment Agency. This permit is not time limited and is valid (must be complied with) until the operator elects to surrender it. The surrender of the Environmental Permit will only be allowed once the Environment Agency is satisfied that necessary measures have been taken to avoid any ongoing pollution risk and to return the site to its previous condition. Furthermore, as part of the petroleum licensing process, and prior to awarding a licence, the Oil and Gas Authority assesses whether a company has adequate financial capacity for its planned operations both in its ability to remain solvent and in its ability to meet known and specific costs (Oil and Gas Authority – UK Petroleum Licensing: Financial Guidance).

Conclusion

As stated earlier in this report, Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan, unless material considerations indicate otherwise. As discussed within the Assessment section of the report, above, the proposed development is considered to accord with the development plan policies that are deemed relevant to the determination of this application. This includes those policies relating to minerals development and specifically policy M23 of the NLLP which relates to oil and gas production. Furthermore, it is considered that the development does not conflict with those policies seeking to prevent unacceptable harm from being caused to residential amenity, highway safety, ecology, archaeology water resources or flooding.

As discussed previously, the proposed development also receives support at the national policy level in the contribution that the development could make towards the nation's energy security through the production of indigenous oil and gas reserves.

Having assessed the proposed development with respect to both development plan policy and other material considerations to which the authority must have due regard, whilst the objector expressed concerns about the potential adverse impacts of the development are both acknowledged and understood, it is considered that there are no material adverse impacts of the development that would significantly and demonstrably outweigh the benefits and therefore, in accordance with paragraph 14 of the NPPF, it is recommended that planning permission is merited.

RECOMMENDATION Grant permission subject to the following conditions:

1.

The development must be begun before the expiration of three years from the date of this permission.

Reason

To comply with section 91 of the Town and Country Planning Act 1990.

2.

The development hereby permitted shall be carried out in accordance with the following approved plans: 3334 (2) P 01, 3334 (2) P 02, 3334 (2) P 03, 3334 (2) P 04, 3334 (2) P 05, 3334 (2) P 06, 3334 (2) P 07, 3334 (2) P 08, 3334 (2) P 09, 3334 (2) P 10, 3334 (2) P 11, 3334 (2) P 12 and 3334 (2) P 13.

Reason

For the avoidance of doubt and in the interests of proper planning.

3.

No development shall take place until a construction phase traffic management plan showing details of all associated traffic movements, including delivery vehicles and staff/construction movements, any abnormal load movements, contractor parking and welfare facilities, storage of materials and traffic management requirements on the adjacent highway, has been submitted to and approved in writing by the local planning authority. Once approved the plan shall be implemented, reviewed and updated as necessary throughout the construction period.

Reason

In the interests of highway safety and to comply with policy T19 of the North Lincolnshire Local Plan.

4.

Any oils, fuels, lubricants or other liquid materials shall be located on an impervious base and/or within an impervious bunded area or purpose-made self-bunding tanks so as to prevent any discharge or spillage into any watercourse, land or underground strata. Spill kits shall also be located in appropriate locations around the site and utilised in the event of any accidental discharge/spillages.

Reason

To prevent pollution of surrounding land and water resources in accordance with policies DS1, DS11, DS13 and DS15 of the North Lincolnshire Local Plan.

5.

No ground or surface water contaminated by oil, grease or other pollutants used on or in connection with the site operations shall be discharged into any ditch or watercourse.

Reason

To prevent pollution of the water environment in accordance with policies DS13 and DS15 of the North Lincolnshire Local Plan.

6.

Prior to the commencement of development, a noise management plan (NMP) shall be submitted for written approval to the local planning authority. The NMP shall clearly set out all potential sources of noise and techniques to be used to prevent and mitigate noise which shall demonstrate compliance with noise conditions 10, 11, 12 and 13 below. The NMP shall also include methods to deal with noise complaints from the general public. The approved NMP shall be implemented in full for the duration of works and demobilisation.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

7.

Prior to the commencement of drilling operations or well stimulation on site, the name, make, model and technical noise specification for the drilling rig shall be submitted for approval to the local planning authority. Where noise predictions demonstrate potential

non-compliance with night-time noise limits specified in condition 10 and 11 below, details of proposed noise mitigation measures and their expected reduction over the frequency spectrum shall be provided. The approved rig shall not be substituted without the prior written approval of the local planning authority and all approved noise mitigation measures shall be implemented in full throughout the duration of drilling.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

8.

Assembly and demobilisation of drilling rig equipment at the approved production well site shall only take place during the hours of 7am and 7pm Monday to Saturday.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

9.

Site preparation, earthworks, site construction and HGV deliveries for construction and pre-production activities shall only take place during the hours of 7am and 7pm Monday to Saturday, unless there is an operational need which has been agreed in writing in advance with the local planning authority.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

10.

Noise from the approved production well site shall not exceed 42dB LAeq5min when measured at any noise sensitive dwelling between 7pm and 7am Monday to Sunday inclusive.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

11.

Noise from the approved production well site shall not exceed 60dB LAmax when measured at any noise sensitive dwelling between 7pm and 7am Monday to Sunday inclusive.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

12.

Noise from the approved production well site shall not exceed 55 LAeq, 1h when measured at any noise sensitive dwelling between 7am and 7pm Monday to Sunday inclusive.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

13.

Noise from the approved production well site shall not exceed 70dB L_{Amax} when measured at any noise sensitive dwelling between 7am and 7pm Monday to Sunday inclusive.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

14.

All plant and machinery shall be adequately maintained and silenced in accordance with the manufacturer's recommendations at all times.

Reason

To protect the amenities of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

15.

No development shall commence until an assessment of the potential for light impact has been undertaken, submitted to and approved in writing by the local planning authority. The assessment shall include:

- identification of sensitive receptors likely to be impacted upon by light nuisance, with a determination of the proposed scheme's compliance with the design guidance in the Institution of Lighting Professionals Document: Guidance Notes for the Reduction of Obtrusive Light: <https://www.theilp.org.uk/documents/obtrusive-light/>;
- a lighting scheme which proposes methods of mitigation against potential light nuisance, including potential glare and light spill, on sensitive receptors.

Once approved the agreed lighting scheme shall be implemented and permanently retained. Any deviation from the agreed lighting scheme shall require approval in writing by the local planning authority.

Reason

To protect the amenity of neighbouring properties in accordance with policies DS1, DS11, M1 and M23 of the North Lincolnshire Local Plan.

16.

Works and biodiversity enhancements shall be carried out strictly in accordance with the submitted document, "Wressle Well Site – Updated Ecological Appraisal" dated May 2017. The management prescriptions set out in sections 5.2.1 and 7 (7.1 to 7.3) of the management plan shall be carried out in their entirety in accordance with the timescales set out in the work programme in Table 7.1. The applicants or their successor in title shall submit photographs of the installed bat roosting and bird nesting features, within two weeks of installation, as evidence of compliance with this condition. All biodiversity features shall be retained thereafter.

Reason

To conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy.

17.

Within three months of the date of this permission a detailed restoration and year aftercare scheme shall be submitted for the written approval of the local planning authority. The scheme shall include details of the following:

- (a) treatment of the borehole
- (b) soil remediation and reinstatement measures, along with details of proposed grass seed mixes;
- (c) the removal of all building, plant, equipment, machinery, fencing, temporary surfacing materials from the site and access track not required for the purpose of restoration and aftercare;
- (d) a five-year aftercare programme.

The site shall be restored in accordance with the approved restoration scheme and the site thereafter managed in accordance with the approved five-year aftercare programme. The aftercare period shall commence from the date the local planning authority confirms that the restoration works have been carried out and fully implemented in accordance with approved details.

Reason

To ensure proper restoration of the site and to protect the local environment in accordance with policy M1 of the North Lincolnshire Local Plan.

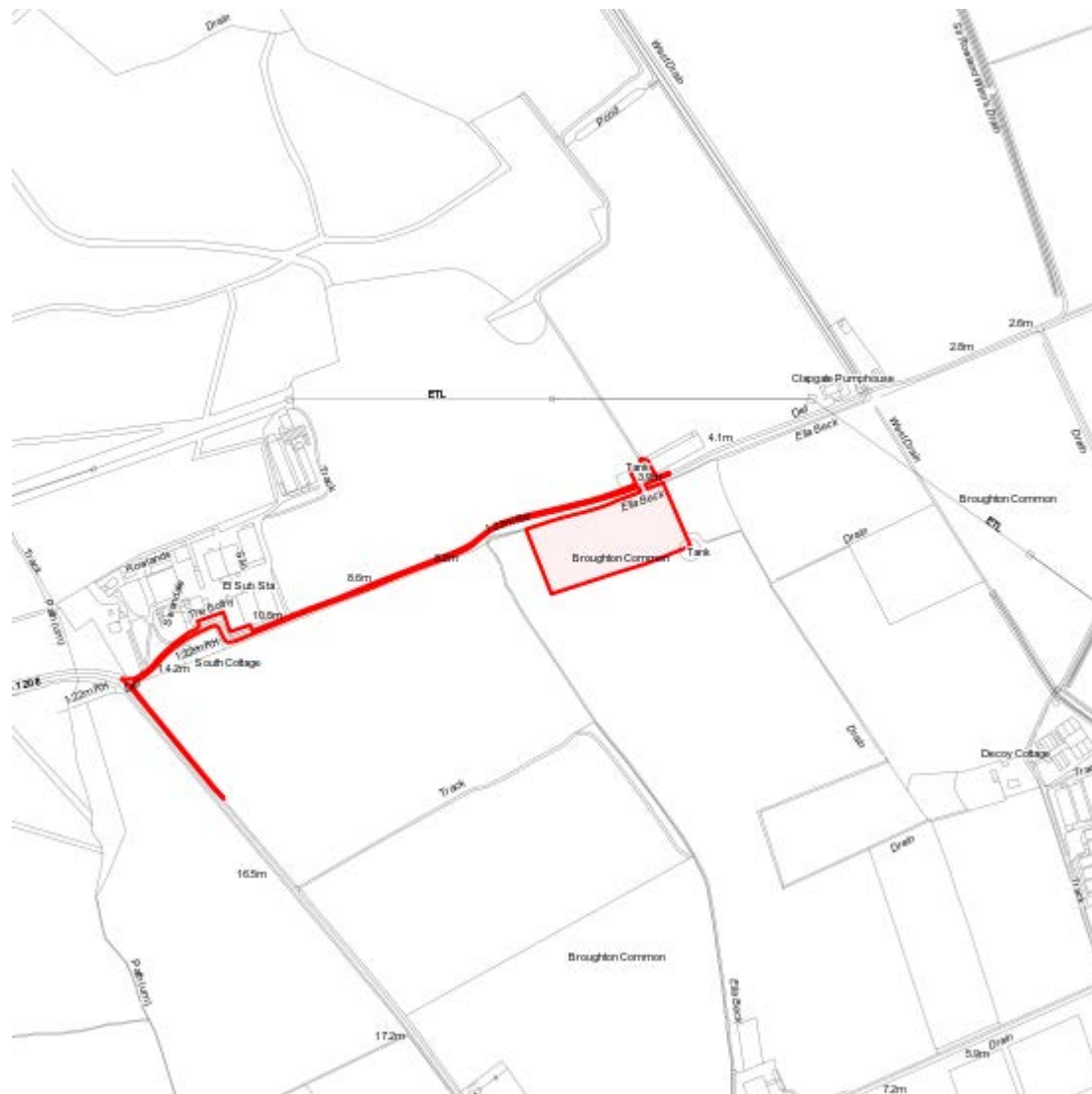
Informative 1

The applicants are advised to contact National Grid prior to the commencement of work on site to discuss potential impacts on their apparatus.

Informative 2

In determining this application, the council, as local planning authority, has taken account of the guidance in paragraphs 186 and 187 of the National Planning Policy Framework in order to seek to secure sustainable development that improves the economic, social and environmental conditions of the area.

PA/2017/696 – Site Location



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