REPORT TO THE PLANNING REGULATORY BOARD TO BE HELD ON FRIDAY 7TH SEPTEMBER, 2018

The following applications are submitted for your consideration. It is recommended that decisions under the Town and Country Planning Act 1990 be recorded as indicated.

INDEX PAGE

RB2018/0918	
Construction of a well site including the creation of a new	Page 5
access track, mobilisation of drilling, ancillary equipment and	
contractor welfare facilities to drill and pressure transient test	
a vertical hydrocarbon exploratory core well and mobilisation	
of workover rig, listening well operations, and retention of the	
site and wellhead assembly gear for a temporary period of 5	
years at land adjacent Dinnington Road Woodsetts for INEOS	
Upstream Limited	

Application Number	RB2018/0918
Proposal and	Construction of a well site including the creation of a new access
Location	track, mobilisation of drilling, ancillary equipment and contractor
	welfare facilities to drill and pressure transient test a vertical
	hydrocarbon exploratory core well and mobilisation of workover
	rig, listening well operations, and retention of the site and
	wellhead assembly gear for a temporary period of 5 years on land
	adjacent to Dinnington Road, Woodsetts, Rotherham, S81 8RJ.
Recommendation	Grant subject to conditions

Introduction

No hydraulic fracturing (fracking) is proposed as part of this planning application. This application only seeks permission for an exploratory vertical core well and associated geological testing and logging.



Site Description and Location

The proposed exploratory well site is located in the south of the Rotherham Borough to the west of Woodsetts village (the "site"). The site is approximately 850m west of the centre of the village and 500m from the nearest houses located on Berne Square off Dinnington Road.

The site lies on the southern side of Dinnington Road, a two lane road which connects North Anston with Woodsetts. The site lies to the north of Dewidales Wood which is split into two separate areas of woodland, both of which comprise of Ancient Woodlands. The majority of the eastern block of the woodland is Ancient Woodland with a small section of the eastern section being outside of this category.

The planning application boundary comprises a roughly rectangular area which is approximately 1.86 ha in area and lies to the north-west of the easternmost block of Woodland. Access is proposed to be taken from Cross Lane, a predominantly single lane track which connects to Dinnington Road and is approximately 330m to the south of the main road.

The site lies within the lowest flood risk category (Zone 1) on Environment Agency maps and does not lie within a locally identified surface water flood risk area.

Several public footpaths connect the areas around the site along its southern (Anston Bridleway No. 39) and western (Anston Bridleway No. 23) boundaries.

Background

The site was previously subject to a similar test drill application RB2017/1577 which was recommended for refusal due to a lack of information in respect of the impact of the development on ecology. However, following a site visit by Planning Board, the application was refused in March 2018 and included an additional reason for refusal relating to highway safety matters. The application was refused for the following reasons:

01

The Council considers that the supporting ecological information provided with the application is deficient to determine the application. The application red-edge site area lies approximately 25m from Dewidales Ancient Woodlands (eastern block) and there is significant built development less than 50m of the woodland boundary. The applicant has submitted insufficient evidence to justify this limited buffer protection area. The Council further notes that due to the lack of an adequate bat, badger and breeding bird survey, it cannot fully assess the potential future adverse impact on the adjacent wildlife and local ecology. Accordingly the applicant has not sufficiently demonstrated that the development can satisfactorily mitigate the potential for harm to the ecology of the surrounding rural environment, contrary to paragraph 118 of the National Planning Policy Framework which indicates that if significant harm resulting from a development cannot be avoided then planning permission should be refused.

02

The Council consider that the proposed development, which will significantly increase the number of HGV movements through the village of Woodsetts, the surrounding highways and at the junction with the proposed access on Dinnington Road, would give rise to unacceptable highways safety issues, including increased likelihood of conflict with vulnerable road users such as cyclists, equestrians, children and the elderly such that it would be contrary to the National Planning Policy Framework which expects developments to include safe and suitable access for all people.

The Secretary of State for Energy and Climate Change previously issued Petroleum Exploration and Development Licences (PEDL) for a defined geographical area and specified period of time, although responsibility for this now lies with the Oil and Gas Authority (OGA) as an executive agency sponsored by the newly formed Department for Business, Energy and Industrial Strategy (DBEIS). The licences give exclusive rights for the licensee to "search, bore for and get" petroleum. However, the licences do not in their own right confer on the licensee any consent, permission or authorisation to carry out development activity.

INEOS was awarded PEDL 304 by the Department for Business, Energy & Industrial Strategy (BEIS) (formally the Department of Energy and Climate Change - DECC) following the 14th Licencing Round.

The hydrocarbon extraction process involves three distinct phases:

- 1. Exploration: Through the drilling of a vertical well. This is the stage proposed by this planning application;
- 2. Appraisal: Through gas flow testing following horizontal drilling and hydraulic fracturing either from existing core well sites or new sites (3D seismic data will be acquired to enable placement of wells involving hydraulic fracturing).
- 3. Production: Through drilling of horizontal wells from multi-well pads followed by hydraulic fracturing, production, decommissioning and restoration.

Planning permission is required for each phase, with the cumulative environmental effects of combined applications at different stages being considered each time an application is made.

The applicant (INEOS) has also submitted planning applications for similar exploratory well development:

- Off Common Road, close to Harthill village (reference RB2017/0805). This
 application was granted on appeal by the Planning Inspectorate following an appeal
 against non-determination. The Inspector was satisfied that the Council's highway
 concerns could be overcome.
- In Marsh Lane, north east Derbyshire, approximately 15km to the south west of the site. This application has also been granted on appeal by the Planning Inspectorate following an appeal against non-determination. The Inspector was satisfied that Derbyshire County Council's concerns on Green Belt issues, impact of traffic and the impact of night time noise was acceptable.

To the east of the site applications for a Stable block off the eastern side of Cross Lane were approved in 1989, 1990 and 2016.

Screening Opinion:

Following an initial Screening Request, the Council determined that the planning application at Woodsetts did not represent Environmental Impact Assessment (EIA) development.

On the previous application (RB2017/1577) the applicant also submitted a Screening Request to the Planning Casework Unit. However, the PCU declined to determine this request on account that this did not represent an efficient use of resources along with the absence of a challenge from third parties. The Council's Screening Opinion is therefore still considered valid.

The Environment Agency have also confirmed that a Standard Rules Permit has been issued for the site (ref EPR/FB3503KK/A001).

Proposal

The proposal is to drill a vertical core well to a depth of approximately 2,800m and to recover cores of the target geological formations. Subsurface data would be collected

during the drilling process and the core samples would be removed from site for testing of the potential to produce hydrocarbons. Testing of the borehole will then be undertaken, including a "Pressure Transient Test" which checks whether the rocks have enough pressure naturally to push gas into the borehole. Once drilled and cored, the well would be suspended for a period of time, for potential later use as a "listening well" during the potential development of other sites in the area.

Changes to the previously submitted application RB2017/1577 can be summarised as follows:

- Submission of a Planning Statement Addendum which includes reference to the approval of the Harthill Appeal (Council application RB2017/0805) in June 2018.
- Additional Ecological data including Bird Breeding survey work. This took place between March and May 2018. Four visits have been undertaken (26th March 2018; 11th April 2018; 14th May 2018, 29th June 2018).
- Updates to the Phase 1 Habitat Survey including additional target notes.
- The highway proposals have not changed. Some additional commentary on the highway aspect and the appeal has been included within the Planning Statement Addendum.
- Correspondence between relevant parties (RMBC Highways, Drainage, Planning, Highways England and Archaeological Evaluation) that took place between December 2017 and February 2018 has also been included.
- INEOS have undertaken a further consultation exercise, which included sending a letter to properties in the area as well as writing to Parish Councils, Local Councillors and the MP Kevin Barron.

The appellant goes onto state:

"This application has been re-submitted to offer an opportunity to rectify that decision and thus to avoid the potential for a second appeal, and the associated costs claims that may be made in light of the lack of evidence behind the reason for refusal."

Whilst not specifically highlighted by the applicant, it is also noted that the wording of the July 2018 NPPF has also changed to make test drilling more favourable compared to the 2012 version. This is discussed in more detail in the appraisal section below.

Planning permission is sought for a temporary period of five years and during this time the proposed development would comprise five phases. These phases can be briefly summarised as follows:

Stage 1: Site development and establishment

Estimated duration: 3 months

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday

Operations include:

- Mobilisation

 this would involve any necessary pre-commencement surveys, including geotechnical surveys, site investigation surveys, road construction surveys and environmental surveys. Any construction equipment would also be brought to site during mobilisation.
- Access Tracks formal access construction including visibility splays and geotextile membrane to be covered with aggregate and on-site parking provision.

- Site Clearance the site would cover 120m by 100m (1.2 hectares). Vegetation clearance and hedge trimming, topsoil/subsoil removal (up to 300mm) would occur.
- Site Development and Lining impermeable site liner trench and subsequent appropriate infilling at foot of topsoil bund to be installed immediately around the drill site. The bund would be approximately 2m high on the perimeter of the site created from topsoil from within the site. The bund would assist with visual and noise screening. The site hardstanding area (drill pad) would be constructed within the central site area.
- Development of Drainage –a perimeter water storage pipe installation to be inserted from across the site to catch any potential surface water runoff. All surface runoff from the core well site would therefore be retained on the site and removed by a licensed waste contractor. Drainage from the central rig area would feed into a separate bunded tank for removal and treatment by a licensed waste contractor.
- Development of Site Accommodation cabins stacked (up to two high) on top of each other would be placed at the perimeter of the site, to provide further screening.
- Installation of Monitoring Boreholes groundwater monitoring boreholes installed, in liaison with the Environment Agency (EA), under permitted development rights, not part of this application.
- Construction of Well Cellar a well cellar (2.5m diameter and 3m deep)
 would be excavated, from which the well would be drilled. A conductor installation rig
 up to 10m in height would be set in the top section of the well
 bore. The conductor rig would be a smaller drilling rig designed to drill to shallower
 depths. This would also allow for greater flexibility of drilling and reducing the amount
 of time the main rig is in place.
- Installation of Conductor/ Surface Casing a Conductor/ Surface drill rig or auger of up to 32 m, would be mobilised to site. This would drill the upper section of the well, and install the upper strings of casing to approximately 610 m (2,000 ft.). This would isolate mine workings in the Westphalian coal measures and aquifers. The rig would be operational for 24 hours a day, for approximately 3 weeks and would then be demobilised.
- Demobilisation grass seeded geotextile membrane introduced to soil bunds and security measures and lighting installed around site. Demobilisation of construction equipment in preparation for mobilising main drilling rig and equipment.

Stage 2: Drilling, coring and testing

Estimated Duration: 5 months

Working hours: 24-hour for drilling; 7am-7pm Monday-Friday; 7am-1pm Saturday for mobilisation, deliveries and Pressure Transient Test.

Operations:

- Mobilisation of drill rig and associated equipment including temporary mobile lighting (up to 9m in height).
- Drill rig, drill pipe and water and mud pumps brought onto site
- Drilling and Coring- well drilled to a depth of approximately 2,805m with a drill rig up to 60m in height. The well would be logged during drilling and cores would be sent off site for laboratory analysis. No flow testing would be undertaken.
- Pressure Transient Test to establish reservoir properties
- Main rig replaced by 32m workover rig
- Well perforated and packer (a device to seal the borehole) lowered into well
- 10m3 (maximum) potassium chloride solution (2-4%) squeezed into formation at target zone at pressure

- Pressure monitored for two weeks
- Plug removed
- Process repeated in up to two additional target zones
- Workover rig and waste removed
- Demobilisation drill rig and ancillary equipment would be removed from site including waste from drilling and coring process (drill cuttings and waste drill muds).

INEOS indicates that standard well safety equipment would be present on site during drilling, including a blow-out preventer, vent for emergency venting of gas, and methane monitoring.

Stage 3: Maintenance of the Suspended Well Site

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday

Operations:

Once the suspended well is in place, routine visits to the core well site would be made for maintenance. These checks would include:

- Integrity of pipework and site surface;
- Integrity of fencing and security arrangements;
- Site drainage and containment, including tanks;
- Wellhead structure and pressure monitoring;
- The core well site would be unmanned once the well is suspended, but site security including CCTV would remain.

Stage 3a: Possible Workover of the Suspended Well

Up to one month as required. This stage is included as a contingency and would only be required if the well required to be re-entered for maintenance or similar purposes. However, the planning application requests for the potential to undertake these operations to allow a rapid deployment of the drill rig if required.

Stage 4: Undertaking Listening well operations

Estimated duration: 5 weeks

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday This work would be carried out to undertake baseline monitoring.

Activities during Stage 4 would only take place to undertake baseline monitoring or when another well is hydraulically fractured, subject to separate consent for that activity being granted within the period of planning consent for this well. Activities during Phase 4 would include:

Operations:

- Mobilisation of wireline truck or workover rig (maximum 32 m), 30 tonne mobile crane (50m maximum), mast, elevated work platform and temporary welfare facilities
- Placement of geophones (small seismic receivers) on wireline inside reservoir casing
- Demobilisation

Stage 5: Decommissioning and Restoration

Decommissioning of the well would take place on a 24 hour basis for up to two weeks

Restoration estimated duration: 2 months

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday

Operations

- Plugging and decommissioning the well. Decommissioning of the well would be undertaken in accordance with Oil and Gas UK Guidelines on Well Abandonment and according to an abandonment plan to be agreed with the Environment Agency, Health and Safety Executive (HSE) and an independent Well Examiner.
- Wellhead removed and casing/cement cut to 2m below ground
- 32m workover rig required for a short period during the 1 month abandonment and restoration stage.
- Removal of site equipment and surfacing. The site would be fenced with temporary Heras fencing to allow the permanent fencing and security fencing to be removed.
- Restoration
 - Soil in bunds levelled across surface
 - Field drainage re-developed if required
 - Site reseeded for agriculture
 - Access tracks and road amendments would also be restored as agreed with the landowner and Highways Authority, or retained for continued use, subject to any necessary further planning consent.
- Aftercare an aftercare plan would be put in place as a condition of planning consent, to ensure appropriate aftercare of the site as agricultural land. A monitoring plan as agreed with the Environment Agency would be followed

Future Application Proposals:

This application only seeks approval for the drilling, testing, suspension, decommissioning and restoration of the proposed well, including possible use as a listening well. This application would not authorise any other future activities on this site.

Whilst the application proposals are not considered to require a formal Environmental Impact Assessment, it is accompanied by an Environmental Report and this can be summarised into the following main areas:

Noise

- A noise assessment was undertaken to consider the potential impacts of the daytime construction (Stage 1) and drilling and coring (Stage 2) of the well. These stages are representative of the worst case noise emission from all stages of the proposal.
- The nearest residential properties in the vicinity of the site include Woodsetts residential properties on Berne Square (approximately 425 m northeast of the site); Manor Farm residential properties (approximately 670 m east of the site); properties in Rackford Road (approximately 900 km west of the site), the residential properties Nirvana, Wildways and Lofties (approximately 590 m south of the site and the residential priorities at the south end of Lindrick Road (approximately 960 m southeast of the site).
- The assessment has shown that noise from construction is expected to exceed the
 assessment criteria at residential properties on Berne Square. However, the works
 are expected to be of limited duration during the 2-3 week bellmouth and access
 track construction period, and the effects are not likely to be significant.
- Traffic during the construction period is expected to result in noise impacts which are likely to be imperceptible against the current baseline and therefore the noise impact is considered to be negligible.
- Drilling and coring activities are expected to be below the Planning Practice Guidance (PPG) 42 dB LAeq (free-field) noise limit for night. Daytime noise levels

during drilling will also be well below the PPG absolute noise limit of 55 dB LAeq and the limit for daytime and evening based on background plus 10 dB(A). Taking both the temporary change in noise level and absolute noise level assessment into consideration, it is considered that the proposal will not result in a significant adverse impact to quality of life.

 There are no anticipated impacts that would arise due to ground borne vibration resulting directly from the drilling operations. During the construction of the access road there is potential for short term vibration effects at Berne Square. This is likely to be short lived and therefore its effect is not expected to be significant, however, to mitigate potential impacts non-vibratory compaction equipment would be used during road construction in this location.

Traffic and Transport

There are no specific changes to the transportation sections of the proposal compared to the earlier application RB2017/1577 with the proposed routeing, vehicle numbers and duration of construction.

The applicant has indicated that construction workers will be taken to the site by minibus, so there will be no private parking of vehicles belonging to workers on the site during working shifts.

- The traffic and transport assessment considered the access to the site and the impact of the proposal on traffic flows and highway safety.
- Following a route assessment of the surrounding road network against a range of criteria, a recommended route of approximately 12.5 km from the M1 motorway to the site has been proposed. This route exits the M1 motorway at junction 31 and follows the road network (A57 Worksop Road) between the M1 and Gateford for approximately 9.5 km. The remaining 3 km of the route is undertaken on Woodsetts Lane, Worksop Road and Dinnington Road.
- Access to the site will be provided from Dinnington Road via a priority junction. The speed limit on Dinnington Road is 60 mph in the vicinity of the site; however, vehicles are unlikely to achieve this speed due to fact that they are slowing down for the 30 mph speed to the east of the site access.
- A swept path assessment was also undertaken of constrained junctions and links identified on the recommended route. These showed that whilst traffic management measures will be required along the route, the range of vehicles travelling to the site will be able to gain access along the road network.
- In order to consider the effect of traffic generated by the proposal, baseline traffic data was collected from three points on the local highway network. The traffic analysis assessed the percentage change from baseline due to the peak vehicle movements generated by the project (70 total daily movements with 60 HGV movements, which occurs for a period during site development and establishment). The assessment concluded that the proposal will not have a material impact on the highway network that will be utilised as part of the route. The maximum impact of the development traffic on the links within the study area is approximately 1% increase over baseline which is below the 10% threshold set out in the Guidelines for the Environmental Assessment of Road Traffic (Institute for Environmental Assessment) for when separate traffic environmental assessments should be undertaken.

- A Route Management Strategy (RMS) and Traffic Management Plan (TMP) will be developed and implemented, following consultation with the Local Highway Authority, to manage vehicle movements to site. A draft TMP has been included with the application.
- Based on the assessment undertaken traffic and transport should not be considered opposing factors in granting planning permission.

Proposed Mitigation:

The proposed mitigation is largely embedded into the design of the proposed development. However, a Draft Traffic Management Plan has been prepared which includes details of the route management, driver behaviour and parking strategies for the site.

An additional addendum to the Transport Appraisal was submitted and can be summarised as follows:

- Clarification of HGV definition. The vehicle classification was based on the number of axles and the wheelbase.
- It has been demonstrated in the Environmental Report that the proposal will generate a maximum of 70 vehicle movements per day. This is equivalent to a maximum of 6 movements per hour based on a 12-hour working day.
- It is not intended to change the speed limit as part of the development proposals.
 Drawing 65863-06002 shows the visibility splays based on the existing speed limit (60mph) of the road. This shows that the required visibility of 4.5m x 215m is achievable within the adopted highway boundary.
- During the planning of the route, the applicant has tried to avoid sensitive areas such as schools, leisure centres, town centres and areas of congestion.
- A near site assessment of the well location was conducted, assessing any potential transport conflicts incurred from the point of exiting a main road and reaching the site entrance.

Following initial concerns raised by Highways England, further details on this aspect have been submitted, including Swept Path Analysis.

Ecology

The main differences between the current application and the previous submission RB2017/1577 can be summarised as follows:

 Bird breeding surveys that took place on 26th March 2018; 11th April 2018; 14th May 2018, 29th June 2018.

The results of the surveys can be summarised in the following table

Table 1.1 Species Recorded on Survey Visits (March, April, May 2018)

Species	Visit Number on		r on	Breeding Status in Derbyshire (Frost & Shaw, 2013)
(Alphabetical Order)	which Species Recorded			
	1	2	3	
Blackbird	✓	✓	✓	Abundant resident
Blackcap	-	-	✓	Fairly common summer visitor
Blue tit	√	✓	✓	Abundant resident
Buzzard	✓	-	-	Fairly common and increasing resident
Carrion crow	✓	✓	✓	Common resident
Chaffinch	✓	✓	✓	Common resident
Coat tit	-	✓	-	Common resident
Dunnock	✓	✓	✓	Abundant resident
Goldfinch	*	*	*	Increasingly common resident and summer visitor
Greenfinch	✓	-	✓	Common resident
Great tit	V	✓	✓	Common resident
Great spotted	-	✓	✓	Fairly common or common resident
woodpecker				
Grey heron	-	-	√	Fairly common resident
Grey partridge	-	-	✓	Fairly common resident
House sparrow	✓	-	✓	Common but decreasing resident
Jackdaw	-	-	✓	Common resident
Jay	V	✓	✓	Fairly common resident
Linnet	·	-	√	Common resident
Long-tailed tit	*	-	-	Fairly common resident

Species (Alphabetical Order)	Visit Number on which Species Recorded		ies	Breeding Status in Derbyshire (Frost & Shaw, 2013)	
Magpie		✓	✓	Common or abundant resident	
Meadow pipit	✓	✓	-	Common summer visitor	
Mistle thrush	·	-	-	Common resident	
Pheasant	✓	✓	-	Fairly common resident	
Reed bunting	-	-	✓	Fairly common resident	
Robin	✓	✓	✓	Common resident	
Rook	-	-	✓	Common but possibly declining resident	
Skylark	√	✓	✓	Common resident	
Starling	-	-	✓	Common or abundant resident	
Swallow	-	-	✓	Common summer visitor	
Treecreeper	✓	-	-	Fairly common resident	
Whitethroat	-	-	✓	Fairly common summer visitor	
Willow warbler	-	-	✓	Common summer visitor	
Woodpigeon	√	✓	✓	Abundant resident	
Wren	✓	✓	✓	Abundant resident	
Yellowhammer	√	-	✓	Common resident	

Conservation Concerns Status - Red, Amber, Green

 The Phase 1 habitat survey has been updated with an increased number of Target Notes from February 2018.

The remaining ecological detail is as follows:

• The site is situated wholly within an arable field, 30m to the north of Dewidales Wood which is a Local Wildlife Site and listed on the Ancient Woodland Inventory.

- An ecological assessment (extended Phase 1 habitat survey) of the site and surrounding area was carried out in July 2017, to identify potential ecological constraints, provide initial recommendations for avoidance of impacts and mitigation measures, and to determine whether any further ecological surveys were required.
- The habitat which will be lost from the site is of low botanical value, but could support
 ground nesting birds, typical of farmland areas, including quail (a protected species).
 Given the low numbers likely to be affected, and the extent of similar habitat in the
 surrounding area, significant effects on birds are not predicted. Standard approaches
 will be adopted to avoid any direct effects on birds during site clearance.
- The nearest habitat of botanical value is Dewidales Wood Local Wildlife Site (ancient semi-natural woodland), comprising two blocks of woodland and connecting species poor, gappy, hedgerows that could support a range of bird and other fauna species. The woodland and hedgerows will not be directly affected and the site design includes a buffer zone of 30m from the perimeter fence to the wood to reduce the risk of secondary effects (eg from noise, human activities and lights around the site). It is possible that the upper parts of the woodland edge facing the site may be illuminated by the site lights; light levels of a maximum of 2.96 lux at a height of 15 m above ground level have been predicted along the northern aspect of Dewidales Wood.
- A bat activity survey was undertaken in August 2017 to cover the summer maternity season, which confirmed low numbers of bats foraging along the northern boundary of Dewidales Wood and associated hedgerow. The presence of light-shy species (such as Myotis) which could be roosting within the woodland could be impacted, although only low numbers could be displaced and the effects would be temporary.
- A second activity survey was undertaken in September 2017 to cover the autumn transitional period of bats. The September survey supported the findings of the August survey, identifying low numbers of common and soprano pipistrelles using the woodland edge for foraging. Noctule, Leisler's bat, brown long-eared bat and Myotis species were also heard but not seen near to the site.
- Alongside the activity surveys, dusk emergence and pre-dawn re-entry surveys were carried out along the northern edge of the east section of Dewidales Wood (eg to the south of the proposed site). These were also undertaken in September 2017. The dusk emergence survey identified an area on the northeast corner of the woodland which supported pipistrelle bats displaying highly social behaviour with social calls recorded. The social behaviour suggests that there could be a hibernation site nearby. This area was also very active during the walked transect.
- A separate dusk emergence survey was undertaken on the eastern side of the west section of Dewidales Wood on 20th September 2017. No roosts were identified but pipistrelles calls were recorded near to sunset suggesting that a roost is nearby.
- The access track is unlit and initially follows an existing track and then passes through the arable field along the remainder of its length. It will not result in any significant effects.
- As a potential enhancement, gaps in the existing hedgerows linking the two sections of Dewidales Wood LWS could be planted with native species of local provenance, including fruit and berry bearing species. This would be subject to landowner agreement.
- Consequently ecology and biodiversity should not be considered opposing factors in granting planning permission.

Badger surveys

- No Badger survey information has been shared to date, so the distance between the setts identified and potential disturbing activities cannot be determined.
- Even if a sett is within a proximity that may be subject to disturbance during construction, the proposed development could still continue subject to licence from Natural England, although the applicant does not believe this is necessary. The applicant indicates that this is therefore not a material issue.
- The lighting assessment has considered the effects on the woodland edge and it is
 reasonable to assume that once within the woodland there will be a further reduction
 to the level of light spill due to screening from the edge vegetation.
- In relation to vibration, the Environmental Report states that vibrations are not expected beyond 20m from the bore hole, a distance well short of the north edge of the woodland. This is because it is rotary not percussion drilling (this is also pertinent in consideration of the buffer distance). The reference to proximity to wind turbines is acknowledged; however, these are 'permanent' noise sources and the drilling operation to be undertaken at this site will be for a much shorter, temporary period. Therefore, the 1km radius applied to wind turbine developments should not be applied here.

Lighting

The model outputs show that:

- Along the NE (northeast) boundary of Dewidales Wood, at up to 15 m above ground level, light levels to a maximum of 2.75 lx may occur
- At NW boundary of Dewidales Wood, at up to 15 m above ground level, light levels to a maximum of 2.96 lx may occur
- Along the hedgerow to the south, at up to 5 m above ground level, light levels to a maximum of 2.47 lx may occur
- Along the continuation of the hedgerow to the southwest, at up to 5 m above ground level, light levels to a maximum of 0.6 lx may occur
- At the N boundary of the Woodland to the west of the site, at up to 15 m above ground level, light levels to a maximum of 0.32 lx may occur

The applicant therefore concluds in the Environmental Report that it is possible that the upper parts of the woodland edge facing the site may be illuminated by the site lights; light levels of a maximum of 2.96 lux at a height of 15m above ground level have been predicted along the northern aspect of Dewidales Wood.

Landscape and Visual

- A landscape and visual appraisal was undertaken to assess potential effects of the proposal on the landscape (as a resource in its own right), and on views and visual amenity.
- The site is located within the East Rotherham Limestone Plateau and 750 m to the northwest of the Ryton Farmlands Landscape Character Areas (LCA), as defined within the Rotherham Landscape Character Assessment and Landscape Capacity Study (RLCA, 2010). These LCAs form part of the Southern Magnesian Limestone National Landscape Character Area (NCA), as defined within National Character Area Profile: 30 (2013). The sensitivity of the site, the wider East Rotherham Limestone Plateau LCA, and the neighbouring Ryton Farmlands LCA to the proposal is considered medium.

- During Site Development and Establishment (Stage 1), substantial effects are
 predicted on the landscape of the site and on the local landscape within
 approximately 1 km of the site boundary. Beyond this distance, the effect on the
 wider landscape will be moderate and lowering to minor beyond 1.5 km. This is
 primarily due to the presence of the conductor / surface rig which will be used during
 the latter part of Stage 1.
- During drilling and coring and pressure transient testing (Stage 2), the main activity with the potential to affect landscape character will be the erection and 24-hour operation of the drilling rig (up to 60 m high) with 15 m drill sub-structure and associated lighting. Substantial effects are predicted for the site and within the local landscape of the East Rotherham Limestone Plateau LCA, up to 1.5 km of the site boundary with a theoretical visibility of the drilling rig. For areas of the East Rotherham Limestone Plateau LCA that are within the drilling rig ZTVs and beyond 1.5 km of the site boundary, the level of effect will lower to moderate and minor beyond 3 km. Due to the limited amount of visibility of the drilling rig from areas of the Ryton Farmlands LCA, within 1.5 km of the site, substantial effects are considered unlikely.
- During maintenance of the site (Stage 3), the effects on the site will be minor, and effects on the wider landscape will be negligible.
- If a workover rig of up to 32 m high is required during the possible workover of the suspended well (Stage 3a), or during the listening well stage (Stage 4), substantial effects will affect the site and the local landscape within 1 km. This effect will reduce to moderate or negligible beyond 1 km and then minor beyond 1.5 km. These effects, however, will be experienced for a short time period of up to five weeks.
- During the listening well stage (Stage 4), if a workover rig or crane is not required, the effects on the site will be moderate, and effects on the wider landscape will be negligible.
- Decommissioning and restoration (Stage 5) effects are anticipated to be substantial
 within the site and the local landscape up to 1 km of the site, falling to low or
 negligible beyond 1.5 km and across the wider LCA. This is primarily due to the
 presence of a smaller rig used for the decommissioning purposes.
- Based on the viewpoint assessment undertaken, and with regard to the ZTV and the
 extent of localised screening, moderate or substantial effects on views may occur
 during all stages of the proposal. These effects, however, will be experienced only by
 higher-sensitivity receptors with a clear view towards the site and that are in
 relatively close range. This will include some residents of houses along the western
 edge of Woodsetts, a very limited number of residents of houses on the eastern
 edge of North Anston, and users of a limited number of PRoW and National Cycle
 Route 674 that are within close proximity to the site (i.e.1 km).
- Substantial visual effects may also be experienced by users of Woodsetts Road, Swinston Road and Dinnington Road that run in close proximity to the north of the site. During the drilling and coring and pressure transient test (Stage 2) operations the effect of the proposal on views will be more widespread. Although the drilling rig is likely to be partially screened by localised screening and woodland, up to substantial visual effects are predicted during daylight and night-time hours.
- At greater distances it is considered likely that only the drilling and coring and
 pressure transient test stage of the proposal will be noticeable in views due to the
 presence of the 60 m rig on-site. Due to the level of screening in the landscape, the
 distribution of receptors, and the temporary nature of the stage, visual effects are not
 predicted to be greater than minor at distances over 2 km from the site.

- Following the decommissioning and restoration activities no above ground features
 of the well will remain, and all impacts on visual amenity will cease. The permanent
 restoration of the site to its original agricultural use is considered to be a neutral
 effect on views. All the above effects are therefore considered to be temporary.
- On the basis of this assessment, landscape and visual should not be considered opposing factors in granting planning permission.

Surface Water and Flooding

- An assessment of the potential effects on water resources (including water quality) and drainage as a result of the proposal was undertaken.
- The site is not within an area at risk from flooding and is designed to be self-contained with regards to surface water runoff. The nearest surface watercourse, within hydraulic connection of the site, is Owlands Wood Dyke, located approximately 1.1 km east of the site. Anston Brook is technically closer to the site (approximately 820 m to the south); however, this water course is within a separate catchment and is not within hydraulic connection.
- Effects on the surface water quality of watercourses and other sensitive receptors
 within the surrounding area of the site have been assessed for Stages 1 to 5 of the
 proposal activities. Given the proposed embedded mitigation measures, the
 environmental assessment concluded:
 - A neutral effect on the water quality of nearby watercourses.
 - A neutral effect on the biodiversity of the surrounding area, including designated areas, as these are sufficiently distant from the proposal, and are not expected to be affected by the negligible magnitude of impacts to surface watercourses from the proposal.
 - A neutral effect on pressures on water resources in the surrounding area, due to the non-intensive nature of on-site activities.
 - A neutral effect on recreational uses within the surrounding area due to these being concentrated in areas greater than 2.1 km distant from the proposal and not within hydraulic connection.
- Flooding, residual and climate change impacts have been assessed as negligible
 due to Environment Agency flood maps showing the proposal as having a 'Low' risk
 of flooding from fluvial and pluvial water sources and based on the topography of the
 site and surrounding area. The proposal is not anticipated to result in any material
 increase in flood risk elsewhere.
- Surface water and flooding should not be considered opposing factors in granting planning permission.

Hydrogeology and groundwater

- An assessment on the potential hydrogeological effects resulting from the proposal was undertaken. Effects on the groundwater quality of the underlying bedrock aquifers and other sensitive receptors within the surrounding area of the site have been assessed for Stages 1 to 5 of the proposal activities.
- The site is within an area containing the Cadeby Formation Principal Aquifer, Pennine Upper Coal Measures Secondary B Aquifer, and Pennine Middle Coal Measures Secondary A Aquifer.

- There is one groundwater abstraction within the 2 km of the site, located at the Lindrick golf course. The site sits within Source Protection Zone (SPZ) 3, and is located over 3.1 km from the closest SPZ2.
- Environment Agency records identify a historic landfill site approximately 1.7 km west
 of the site (to the south of Rackford Road), at the site of the current water treatment
 works, as such landfill gas generation and migration is likely to be a low risk.
- The proposed drilling method has been frequently implemented in the UK and
 contains barrier mitigation and monitoring approaches to minimise the risk to
 hydrogeology. Key elements include staged steel casing to seal off aquifer sections
 and flow paths that may be encountered (such as that caused by former mining
 sections) and drilling sections of the well with non-hazardous water based fluids.
- Embedded mitigation measures will also be implemented to prevent groundwater pollution from accidental surface spillages and the handling/management of drilling fluids and cuttings. Given the proposed embedded mitigation measures, the environmental assessment concluded:
 - A neutral effect on the shallow groundwater quality of the surrounding area due to the non–intensive nature of the on-site activities.
 - A neutral impact on the groundwater quality, due to the drilling and well design using multiple casing solutions to seal off aquifer sections during drilling and well operation.
 - A neutral effect on groundwater quality due to protection afforded by multiple casing solutions to seal off aquifer sections during well testing activities and the separation distance between the PTT zone and overlying aquifers. The location of the site within an SPZ3 increases the risk to local groundwater quality if a leak were to occur, however, the mitigation proposed is designed to ensure that such an event cannot occur.
 - A neutral effect on groundwater resource availability due to the water use being contained within a closed loop.
 - A neutral effect on the transport and dilution capability of groundwater aquifers within the local area.
 - A neutral effect on the biodiversity of the surrounding area including designated areas. The on-site activities are not expected to affect groundwater availability or quality.
 - A neutral impact on pressures on water resources in the surrounding area, due to the non-intensive nature of on-site activities.

On the basis of the assessment, hydrogeology should not be an opposing factor in granting planning permission

Archaeology and Cultural Heritage

- An assessment of potential impacts on cultural heritage assets resulting from the
 construction and operation of the proposal was undertaken. The assessment
 considers the potential for significant effects as a result of the proposal on cultural
 heritage under three sub-topics of 'archaeological remains', 'historic buildings' and
 'historic landscape'.
- Based on Historic England guidance presented in Settings and Views of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Historic England 2017) a study area for archaeological remains and historic building was defined as an area extending 2 km in all directions from the footprint of the site.

- A total of 37 cultural heritage assets have been identified within the study area comprising 22 archaeological remains, nine historic buildings and six historic landscape types. The assets include Woodsetts Conservation Area (Asset 38); designated in 1977, it is characterised by several late 19th century brick built houses, including Woodsetts House, concentrated along the main north-south and east-west roads of the settlement.
- No impacts on identified cultural heritage assets are predicted as a result of
 construction. While the proposal represents the introduction of a new piece of
 infrastructure into the setting of four designated assets (Grade II Listed Buildings),
 the proposal is temporary and, as a result of the distance between the assets and
 the components of the proposal, is not predicted to result in a significant effect on the
 assets, this assessment includes consideration of the potential for causing
 substantial harm as defined within the NPPF.
- As a result of desk-based work, including historic air photograph analysis and historic
 map regression, this study has identified high potential for unknown buried
 archaeology within the site and study area. This conclusion is based on the high
 concentration of archaeological finds from within the ploughsoil of the study area
 from a number of prehistoric and historic periods. In addition, historic air photographs
 have demonstrated the possibility for the presence of a late Iron Age, early Roman
 period enclosure approximately 50 m to the north of the site.
- The possibility of unknown buried archaeology within the proposal footprint has been managed through a non-intrusive geophysical survey covering the area of the extent of surface works. This demonstrated the presence of a number of anomalies of potential archaeological origin, principally comprising linear and curvilinear anomalies falling within the area of the proposal. These anomalies are indicative of former land divisions and enclosures potentially dating to the Iron Age or Romano-British period. Further investigation of these features would be managed through standard archaeological investigation processes during the planning and construction phases, potentially comprising a watching brief and / or a programme of strip, map and sample.

Emissions to air

- Emissions to air would include vehicle and equipment exhaust fumes, dust and potentially hydrocarbon release (methane) during the drilling period.
- Road traffic associated with the proposal would produce emissions to air during the temporary construction and drilling phases, similar to any construction site. The percentage change against existing traffic flows means the site does not trigger the assessment thresholds in the current guidance for planning (Planning for Air Quality, IAQM 2017).
- On-site generators and the drilling rig (both diesel-powered) would produce temporary, localised emissions to air, likely to include NOx, SOx, PM10 and 2.5, CO and VOCs. Generators would be sized appropriately for site energy requirements and would be efficient, with emissions reduced as far as possible. These would be similar to generators on construction sites. Emissions from operating the rig would also be reduced through choice of an efficient rig appropriate for the site, with minimal emissions.
- The majority of the required generators would be present on the site for less than 6 months, although a single generator will be required throughout the operating period. The 60 m rig will be on-site for around 3 months during the 5 month Stage 2 operations.

- Dust from site preparation, construction and vehicle passage on access roads will be controlled with standard dust-control measures (as outlined in the Proposal) and is not considered likely to present a nuisance to site neighbours. As the well is only proposed to be cored and subject to a pressure transient test, there is very limited potential for hydrocarbon gas (methane) to be released during the drilling process. Any emissions which do occur will be short-term and very small in volume and are not expected to have a material effect on local air quality.
- The scale of the proposal is such that significant effects to air quality are not anticipated. The site is not within an Air Quality Management Area and so is not close to exceeding any air quality objective levels.

Climate Change

• The potential contribution of the proposal to national greenhouse gas emissions would be negligible. Climate change emissions associated with the proposal are expected to be limited primarily to those from vehicles and drilling equipment which are considered to be generally small and are not considered to be significant. The proposal does not include the extraction of hydrocarbons and as such there is minimal potential for the release of methane to atmosphere. Whilst not the operational expectation, there does remain a possibility of some fugitive hydrocarbons being vented during drilling and coring. These would not be material in relation to national greenhouse gas emissions.

Existing Contamination

 The site is located on and surrounded by arable land. Examination of historical maps shows that there are no potentially contaminative historic land-uses on-site, although there is a historic landfill near to the site which will not be affected by the proposed development.

Human Health

• The proposal is for an exploratory core well only. Low risk activities are recognised by the Environment Agency through "Standard Rules" permits. These permits set out a number of operational controls which INEOS will need to comply with. The proposed activities comply with the operational and locational criteria necessary to qualify for a standard rule environmental permit. On this basis it is considered that the risk to human health is negligible.

The applicant has included in the current submission the previous correspondence made to application RB2017/1577 following the original objection from Woodsetts Against Fracking (WAF) this is included as follows:

- Section 3 Traffic and Transport No sustainable highways reasons to refuse this application.
- Section 4 Ecology Objection The potential for bats to be affected by site lighting on the proposed development was assessed and stated in the Environmental Report. INEOS has demonstrated that an effective lighting strategy can control light levels, and avoid the risk of significant effects from lighting on any bat species in or around Dewidales Wood, and the connecting hedgerow.
- Section 5 Landscape and Visual The predicted extent of visibility of the 60m drilling rig is shown in the zone of theoretical visibility (ZTV). The receptors that are likely to

be affected are noted, including residents in Woodsetts and North Anston, and users of roads, cycleways and footpaths within 1-2 km of the site. The level of effect is judged to be "up to substantial". The effects considered to be substantial will occur over short time periods within the 5 year timescale, when drilling rigs are present on site. The longest period when a rig is anticipated to be present is up to five months during Stage 2.

- Section 6 Surface Water and Flood Risks The proposed development would be constructed within the catchment of the Owlands Dike. Figure 3.1 in the Environment Report clearly delineates the surface water catchment of the upper Owland Dike. Although it is correct to state that Owland Dike is a tributary of the River Ryton, as is Anston Brook, for a surface water hydraulic connection to exist between the site and the Anston Brook, would require water to flow up and over the drainage divide.
- The self-contained site drainage system, installed to prevent fluids from the site interacting with either ground or surface water, will result in a small reduction in the quantity of water that is able to soak into the underlying aquifer.
- Excess water will be removed from the unit as required by a licensed waste contractor. Surface drainage / soakaway from the wheel wash will not be required and the facilities will not increase local flood risk in the area.
- Section 8 Cultural Heritage Vibration issues have been addressed in the Environment Report, Section 2 (Noise and Vibration).
- Other issues
 - 1) Noise The highest predicted level from the rig at the nearest noise sensitive receptor (Berne Square) is 39 dB LAeq, and would not result in noise levels above LA90+ 10 dB(A) unless the representative background level was commonly below 30 dB(A).
 - 2) Land Contamination The land contamination incident (burial of cement bonded asbestos roofing) reported at Grange Farm in 2009 was not on land which will be used, or vulnerable from disturbance, by the proposal. Further, the incident was subject to a successful prosecution at Worksop Magistrates Court on 17th February 2011 and waste material was removed from the land in 2011 following action by the Environment Agency.
 - 3) Application Plans The issues raised in relation to the 30m buffer between the site and Dewidales Wood have been responded to in the applicant's response (dated 14 January 2018) to the Council's Ecology comments.
 - 4) WAF's position in respect of potential future 'fracking' at the site is noted.
 - 5) Cumulative development INEOS is aware of both of the applications referred to, and both are likely to change the current traffic position on the A57 roundabout. However, as they are significant housing developments, they have been subject to their own highways assessment process and will be providing any necessary mitigation to ensure that there is no significant effect on the junctions that will be shared by INEOS traffic.

Statement of Community Involvement

INEOS wrote to local residents, Ward Councillors and the Parish Council on the 8th and 13th June 2018 to indicate that it was INEOS's intentions to re-submit the application following the Harthill appeal decision. No further community consultation took place during this period.

A Statement of Community Involvement has also been submitted with the application and this can be summarised as follows:

- In August 2017 the applicant set up a consultation website (https://www.ineos.com/businesses/ineosshale/our-operations/woodsetts/).
- This webpage introduced the scheme, included a list of frequently asked questions, provided copies of relevant information, and publicised details of the forthcoming public consultation events.
- The applicant held a public exhibition event in advance of submitting the planning application at Woodsetts Village Hall. The applicant invited residents to the exhibition through posting two letters directly to residents. These being the residents' information sheet first and the exhibition invite second. Updates were also provided on the applicant's consultation website.
- The exhibition was held on Monday 25 September 2017 (between 2:30pm and 7.30pm). 180 members of the public attended and provided written feedback. The main concerns raised were on the following areas
 - Why are small villages being targeted? If Shale Gas is found, this will cause more disruption to small villages.
 - Existing road system and amenities are not compatible with the intended work
 - Against the extraction of Shale Gas mining was considered unsafe.
 - The map doesn't show the Bridle Path.
 - The proposed development will adversely affect the environment, including increase traffic, pollution in the village, house prices, water and wildlife.
 - Providing the licence is fully controlled by INEOS Shale i.e. environment security and health and safety aspects.
 - Renewable energy sources should be a priority.
 - Concerns over residents with medical conditions, such as dementia.
 - Hope that all interpretations heard at the exhibition can be relied on and the views of the public matter
- Woodsetts Parish Council organised a special meeting on 16 August 2017. Lynn Calder, Peter Reilly and Gordon Grant of INEOS were in attendance. Also in attendance were the Parish Councillors, at least two Rotherham Metropolitan Borough Councillors, the local MP (Sir Kevin Barron) and over 100 members of the public.
- Tom Pickering, Peter Reilly and Gordon Grant of INEOS attended a meeting at the home of a Woodsetts resident on 29 August 2017 to discuss forming a Community Liaison Group (CLG). The second CLG meeting met on 16 October 2017.
- INEOS also wrote directly to the local MP (Sir Kevin Barron), Ward Councillors and the Parish Council informing of them of the forthcoming application.

Development Plan Allocation and Policy

The Core Strategy was adopted by the Council on the 10th September 2014 and forms part of Rotherham's Local Plan. The Rotherham Local Plan 'Publication Sites and Policies' was adopted in June 2018 and replaces the previously saved UDP Policies.

The site is allocated for Green Belt purposes in the Local Plan. Dewidales Wood is within an area of Ancient Woodlands.

For the purposes of determining this application the following policies are considered to be of relevance:

Core Strategy policy(s):

CS4 Green Belt

CS20 Biodiversity and Geodiversity

CS21 Landscape

CS25 Dealing with Flood Risk

CS26 Minerals

CS28 Sustainable Design

Sites and Policies Local Plan:

SP2 Development in Green Belt

SP34 Sites Protected for Nature Conservation

SP35 Protected and Priority Species

SP42 Archaeology and Scheduled Ancient Monuments

SP48 Assessment of Mineral Extraction Proposals

SP50 Exploration and Appraisal of Hydrocarbons

SP51 Hydrocarbon Production Facilities and Ancillary Development

SP52 Pollution Control

SP55 Design Principles

SP69 Utilities Infrastructure

Other Material Considerations

The Water Framework Directive relates to groundwater issues and is monitored by the Environment Agency.

Hedgerow Regulations 1997.

The Offshore Installations and Wells Regulations 1996 (Design and Construction).

Secretary of State for Business, Energy and Industrial Strategy - Written Statement to Parliament on Energy Policy (17 May 2018)

National Planning Practice Guidance (NPPG) - On 6 March 2014 the Department for Communities and Local Government (DCLG) launched this planning practice guidance web-based resource. This was accompanied by a Written Ministerial Statement which includes a list of the previous planning practice guidance documents cancelled when this site was launched.

National Planning Policy Framework: The revised NPPF came into effect on July 24th 2018. It states that "Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise."

The Local Plan policies referred to above are consistent with the NPPF and have been given due weight in the determination of this application.

Publicity

The application has been publicised by means of 16 site notices (21 June 2018) placed around the site and within Woodsetts village, along with press notification (Rotherham Advertiser and Dinnington Guardian, 22 June 2018). The Council has received

approximately 650 objections to the proposed development (including from Woodsetts, Letwell and Firbeck Parish Councils).

Members should be aware of the following differences between the objections received in relation to this and previous applications:

- A much higher proportion of the objections are from within the Rotherham Borough, and particularly from the Woodsetts area.
- The length of the objections is generally longer with a greater level of detail provided within the objections.
- Woodsetts Against Fracking (WAF) have provided a very high level of detail within their objections. These are summarised in more detail in the paragraphs below.

The representations can be broken down into the following main areas:

Standardised tick box letter

Traffic

- Increase in traffic
- Increase in non HGV traffic from the south
- · Concerns about introduction of parking restrictions on Worksop and Dinnington Road
- Pedestrian safety and damage to parked cars
- · Lack of credibility of INEOS baseline data

Environmental

- Pollution from traffic
- Pollution from on-site generators
- Pollution from emissions from the well
- Light pollution from night working
- Unsightly nature of drilling station
- Risk from old mine workings
- Removal of high quality land from agricultural use
- Increase in greenhouse gas emissions from continued use of fossil fuels

School and Children

- The school is directly downwind of the plant in the prevailing wind direction
- Gas emissions from the well
- Reduction in amenity with the loss of a main bridleway and footpath route

Health

- Stress and poor sleeping patterns from 24/7 noise and light pollution
- Short and long tern concerns over emissions from well
- Special concern about the residential area on the east side of the village, including the school

Ecological

- Contamination of water table
- Dangerous gas emissions
- Long term damage to farmland
- Change in the character of the area from rural to industrial
- Risk of faults from natural geology

- Effect on skylark population
- Effect on vulnerable geological features
- Inability of application to sustain potential rectification cost of a significant ecological or environmental incident
- Impact on Great Crested Newts which have been seen in gardens close to the application site

Property and district

- Damage to houses from vibration and seismic activity
- Increased cost of home insurance
- Reduction in property values and difficulties in selling
- Potential damage to listed buildings from seismic activity
- Development contrary to aims of the RMBC Core Strategy

Protesters coming into village

- Potential influx of protestors with subsequent adverse publicity for the village
- High police costs of maintaining fracking operations
- Disruption to traffic from protests
- Arrests and incidents in village will affect insurance and credit ratings for residents.

Other

- Concerns over uncertainty that these applications bring
- The process is banned in other countries meaning it must be unsafe
- Fracking proven to be unsafe in the USA
- Conflict between HGVs and other road users, particularly cyclists
- Effect on the future of our grandchildren
- The coal mines should never have been closed
- Loss of flora and fauna
- Fracking will not turn out to be financially viable

Standardised letter template

- Significant increase in heavy traffic
- Increase in volumes of lighter traffic
- Increase in pollution along with noise and disruption from traffic
- Visual blight from the proposed drilling rig
- Increased seismic activity from disturbance of old mine workings
- Loss of agricultural land
- Use of fossil fuels is a retrograde step
- Increased risk that gas released will contain harmful material
- Increase in noise from drilling operations negatively affecting quality of life for residents
- The school is downwind of any gas releases from the site
- Loss of agricultural land
- Negative impact on local skylark population
- Anston Woods includes an area of SSSI
- Will the bill of any potential incident be passed onto taxpayers
- Increased cost of home insurance
- Reduction in property values even before a planning application was submitted with further and difficulties in selling

- Development contrary to aims of the RMBC Core Strategy
- Potential influx of protestors with subsequent adverse publicity and disruption for the village
- The fracking process is banned in France, Germany and Scotland

The individual letters received also cover similar points to those summarised above.

In addition to comments from the general public, comments have also been received from the following bodies:

Firbeck Parish Council

Objects on the following grounds:

Visual and Landscape

- Change of character from rural to industrial
- Industrialisation of the Green Belt
- · Risk from geological faults
- Potential impact on wildlife
- Visual impact of 60m drilling rig
- Operation of a 24hour industrial facility and subsequent noise and light pollution
- Proximity to Woodsetts village

Transport

 Increase in HGV movements, up to 60 per day and subsequent concerns about pedestrian safety, damage to cars and increase in pollution

Environmental

- Impact on air quality, increase in noise and light pollution, risk of pollutants escaping from site and impact on public health
- This is a small community that will be subject to considerable stress
- Conflict with Core Development Strategy 1 to support low carbon industry, development green industry and improve Rotherham as a visitor destination.
- The close proximity of the drilling rig to an ancient woodland.
- The risk of escape of pollutants from site and/or in the course of removing waste products and foul water from site by road transport.
- Risk from faults in natural geology.
- Effect on wildlife in the area.

General

Disappointment that a further application has been submitted.

Letwell Parish Council

Objects on the following grounds:

- The close proximity of the site to residential housing.
- The serious impact of noise and light pollution which will ensue from the applicants stated intention to operate 24 hours a day seven days. Families living in properties overlooking the site will see their lives blighted for years to come.

- The threat of air-borne pollution affecting nearby properties, and impacting on children attending Woodsetts Junior School which is close by.
- The overwhelming public opposition to the proposal. Over 90 per cent of the village population came out against the scheme in a recent survey.
- The loss of open countryside and prime farm land capable of sustaining high yield crops.
- INEOS's failure to engage properly with the local community.

Woodsetts Parish Council

Objects to this proposal on the following grounds:

Highway safety issues:

- Woodsetts is a rural village and not suited to the construction phase traffic or the increase in traffic after construction phase.
- Woodsetts Road is used by parents and children attending the local School and the safety of them should be a major priority for the Borough Council.
- Given the regular excess speed of vehicles in the village the visibility splays onto and from the site are not adequate and the Borough Council / police need to ensure that speed limits are adhered to.
- Proposed Escort vehicles will cause much disruption to residents, through traffic and possible obstructions caused will lead to unnecessary manoeuvres on a busy road.
- This development will exacerbate the traffic problems that have been a serious concern for villagers for many years.
- The development is dangerously close to the Footpath/Bridleway and walkers/children/animals will be put in danger.

Traffic Generation:

- The Parish Council is extremely concerned that the increase in traffic through the village and particularly the size of these vehicles will cause inconvenience to the Emergency Services.
- The proposed Road sweeping will also add to problem traffic in the village.
- Increase in "Road Furniture" in the picturesque village is unwelcome and visually unappealing.
- Public Transport will be adversely affected by the excessive new traffic created.
- The increase in traffic will lead to further damage to already poor road surfaces throughout the village.
- The moving of the 30mph zone and the humps will cause unwelcome inconvenience to local road users.

Loss of outlook to the detriment of residential amenity and loss of important open spaces:

- This proposed site is in the Green Belt and of high visual importance to residents.
- Due to its location it is highly visible, and the proposed development will be to the detriment of an area of high landscape quality.
- Walkers and families who use the Footpath and Bridleway will lose a vast majority of their enjoyment in this area, i.e. quiet, peaceful and visually attractive views which at present increase the quality of life for many local residents.

Noise and disturbance resulting from use during hours of operation:

• The noise and fumes from the diesel generators on site will cause a significant nuisance and health disturbance to local residents.

- In addition, the prevailing wind direction will mean that the school may be affected also. Bernes Square residents are all elderly and some are vulnerable.
- At their time of life they should not be subjected to such a major upheaval and nuisance.
- It has been reported to our Councillors the stress and anguish of this proposed development is already having a detrimental effect on their mental and physical wellbeing.

Smells and Fumes:

 People who use the footpath and bridleway should have the right to a peaceful and clean enjoyment. The fumes, noise and light pollution from this proposed site will have an adverse effect on home owners and pedestrians in our village.

Possible contamination of mining works and water supplies:

 The village has many unused mines and springs and any contamination of the water supplies and natural springs in Woodsetts is of significant concern.

Effect on trees and wildlife:

 The proposed site is very close to a historic woodland and this woodland and its surrounds house 5 different species of bats, Midwife Toads, hares, deer, partridge, quale and slow worms to name but a few. This proposed development would have a catastrophic effect on all this wildlife.

Inappropriate means of enclosure:

• The proposed enclosure is not in keeping with the surrounding area and would be visually intrusive.

Scale and dominance:

 The proposed development's overall size is not in keeping with the surrounding area and will have an adverse effect on local properties. It will have an overbearing and disproportionate impact on the surrounding area.

Archaeology:

 Woodsetts has 37 Cultural Assets including many pre-historic sites. An iron-age settlement was discovered just 50 m from this proposed site. Any undiscovered history and archaeology present at the proposed site will be lost forever if it goes ahead.

Economic impact and sustainability:

- This site does not offer any more advantages to the developer than one placed in a location away from houses and schools.
- The applicant has not explored fully or to our satisfaction alternative sites.

Overall, Woodsetts Parish Council recommend refusal of the application on the grounds that the negative aspects of the development outweigh the positives.

Woodsetts Against Fracking (WAF)

Woodsetts Against Fracking is a residents' community action group that has submitted detailed objections, the main areas of which can be summarised below:

- A noise recording of 42dB LAeq1hr does not necessarily imply that there would be no adverse or negative effects on health and wellbeing, nor automatically demonstrate compliance with the PPG criteria.
- Comparative proximity to other sites in the wider region which have either approved, or are at appeal stage have been quoted the following distances to the nearest residential properties:

Harthill – 700m

Marsh Lane – 350m

Preese Hall – 900m

Misson Springs – 2.3km

Tinker Lane – 800m

Kirby Misperton – 1Km

- No mitigation offered in this application.
- Query whether a new further access could be made to the west of the current proposed access.
- Berne Square is comprised of 13 Local Authority dwellings, 12 of which are bungalows. RMBC letting policy ensures that these homes are predominantly occupied by elderly tenants and as such many of the residents are disabled, unwell and/or highly vulnerable.
- Vibration from HGV's will increase impact on road surface damage, including potholes. Convoying would exacerbate road damage.

Traffic and Transport:

- The baseline data used to calculate impact is incorrectly applied.
- The route used has not been sufficiently researched resulting in errors and omissions.
- Convoys of lorries holding up traffic, interfering with bus timetables and creating an intimidating environment, especially around the bus stop near Berne Square.
- Road safety issues due to increased HGV movements and a lack of crossing facilities in the village.
- Congestion around the end of Berne Square limiting access and egress from the street.
- Vehicle emissions and noise.
- Site vehicles causing obstructions at the bell-mouth off Dinnington Road.
- Large numbers of HGV and other vehicle movements along the access track at the rear of properties on Berne Square, creating noise, dust, emissions and an intimidating environment.
- Anti-fracking protesters gathering in the bell-mouth and on the track at the rear of properties on Berne Square, causing nuisance, noise and confrontation with police.
- WAF concur that there are around 6,000 daily vehicle movements through the village. This is already exceptionally high for an unclassified rural/ village road, so any significant increase in traffic, especially of HGV's, will generate congestion at some point during the day.
- Overall impact of increased numbers of HGV's will be around 300% to 600% and not the 3% to 19% overall impact INEOS claim.
- The percentages of HGVs which fall below and above 32 tonnes (in effect 5-6 wheel based articulated lorries and abnormal loads compared with the rest). It shows that during all stages of operation, apart from commissioning and decommissioning, the overwhelming majority of lorries would be the heaviest articulated vehicles.
- INEOS has not yet submitted a Route Management Strategy (RMS). Their TMP is vague and repetitive.

- INEOS have not mitigated for a closure of the A57 when all traffic is diverted through Woodsetts.
- The A57 is a single carriageway route from the M1, it is already heavily trafficked, has a poor accident record at several junctions, and has residential properties, businesses, leisure facilities, retail outlets, agricultural use, footpaths and bridleways along its length. There are two committed developments in Bassetlaw district which would impact on the route.
- Swept path analysis by INEOS does not appear to include wing mirrors and show only an Audi car and no larger vehicles. Swept path analysis does not guarantee how a vehicle will behave.
- Woodsetts village has pavements on both sides but are narrow at some points.
- The route divides the village into two and every villager will have to cross it to get to some of the facilities on a daily basis.
- Cyclists use the route and it is well used and the preferred route avoiding the A57.
- Horse riders use the bridleways from a number of stables ranging from 60 + horses to 20/30 horses and individual owners.

Lighting

Disturbance from artificial lighting of the well pad and rig

Public Right of Way – Loss of Amenity

- Several local residents utilise the PRoW at present, but feel they would not be able
 to do so if the industrial development went ahead, citing noise, dust and intimidating
 environment created by the well pad and HGV movements.
- Currently the route alongside the proposed site is a very pleasant walk across open fields of agricultural nature with distant views and big skies.
- WAF argue that even though the PRoW will remain open, the development is tantamount to a loss of the amenity due to the intimidating and dangerous (for horse riders in particular) environment it will create.
- There are significant concerns from the community about the effect of the service road and the wheel wash on the PROWs as it is not only adjoining the PROW but very close to it for some considerable distance and it is felt that there are limited measures (if any) in place to minimise the effects to the users of the PROW.
- A fence around the site as described is not much protection from any potential explosion, dust, chemical, tankers, run off from the wheel wash and HGV's and of course will be a blight on the amenity.

Ecology:

- Many residents enjoy the local wildlife that visits them in their gardens. They fear this
 will be adversely affected by vehicle movements and development.
- Woodsetts Parish Council have commissioned a full ecological survey of Dewidales Wood by an Ecology consultant company. In addition, a bird survey was carried out by a member of the SK58 Birders local bird group. (However, no specific results of this work has been provided by WAF)
- The proximity of the development to this site has the potential to degrade or cause deterioration to the ecology of the woodland. The buffer of 30m (disputed accuracy) is insufficient.
- Natural England's standing advice (recently updated) specifies that a buffer of 50m is required to protect ancient woodland from disturbance and pollution. The Standing advice is a 'material' planning consideration.

Application Plans

- The site has been drawn-up to show a 30m buffer zone around the Ancient Woodland.
- On close inspection of the technical drawings, WAF would like to request the buffer zone is checked for accuracy.

Landscape and Visual:

- The applicant has sought to downplay the effects of their proposed development on the landscape around Woodsetts and the consequent visual impact:
 - Devaluing the landscape by primarily assessing it in a national context rather than a far more relevant local context.
 - Devaluing the proposed sites AHLV designation.
 - Continually emphasising the temporary nature of the development.
 - Completely dismissing the potential 5+ year impact of this temporary stage.
 Especially given that the current application is the first stage of a longer plan that has the potential for a further planning application to hydraulically frack.
 - Underplaying the numbers of people significantly affected.
- Users of Swinston Hill Road, Woodsetts Road and Dinnington Road will be significantly impacted on a daily basis (approx. 5,500 vehicle movements per day).
- The proposed site is important for its tranquillity, landscape quality and dark skies. The site remains designated as being within an Area of High Landscape Value.
- Greater weight should be given to the substantial visual impact and effect upon the landscape that will occur for a significant proportion of that time.
- Given that this application for a test core well is inextricably linked to the intention to hydraulically frack, then the period of time that the visual amenity could be affected is potentially as long as 30 years. WAF feel that this should be taken into account at this stage of the planning, even if the next stage of planning has not been submitted.

Cultural Heritage:

Matter 1: Impact on Ancient Woodland

Matter 2: Visual Impact on Heritage Assets, including Landscape & Buildings

Matter 3: Impact on Conservation Area

Matter 4: Unacceptable harm to Green Belt Land

Matter 5: Unacceptable Loss of fertile Agricultural Land

Matter 7: Impact on Known Assets of Cultural Heritage (Historic Buildings) and other buildings

Matter 8: Uncertainty regarding previous Mining extractions and Pipelines on or under the site

Matter 9: Air, Noise, Vibration and Light Pollution: Impact on Known Assets

Matter 10: Loss of Amenities

Matter 11: Legacy

Geology, Hydrogeology and Minerals

- The British Geological Survey hold geological and sub-surface information but are not a Statutory Consultee, therefore cannot be relied upon to provide information on the technical aspects that the Local Planning Authority (LPA) have been asked to properly consider by the statutory consultee, the Coal Authority (CA).
- WAF request that the LPA instruct experts in these areas so that they may properly consider the list of technical points raised by the CA.
- The LPA cannot rely on the Environment Agency (EA) or the Health and Safety Executive (HSE) to cover these technical points because:

- No hydrogeological or hydrological risk assessments are required in order for the EA to issue the permit to drill an exploratory well, permit type, SR2015 No1.
- Where exploratory drilling for shale gas is concerned, the EA or the HSE are not responsible for ground stability, mine gas pathways, or hydrogeology.
- For the avoidance of doubt and in line with the Precautionary Principle, WAF request the LPA commission expertise in these areas at the developers cost so that they may properly consider and be satisfied with the relevant information.
- WAF indicate a hydrogeological risk assessment is required at the planning and permitting stages, but WAF conclude that none are required for either permitting or planning and even if one were to be provided, there isn't a regulatory body responsible for assessing this at either of these stages.
- The LPA cannot properly consider any of these issues because there isn't a statutory
 consultee or regulatory body that is responsible for ensuring or assessing the issues
 raised by the CA.
- The LPA have not commissioned any expertise in these areas to be able to properly consider these technical areas and therefore the LPA cannot be satisfied that they have adequate information in order to inform the decision making process of this controversial major planning application.

Seismic Risks

- Professor Peter Styles, former President of the Geological Society of London, has indicated that fracking should not take place within 850 metres of any fault, but in mining regions he suggests the risks could be greater.
- In the event that any future plans are approved, WAF ask that the LPA deploy seismic testing at suitable local sites to monitor any induced activity, before drilling commences and further investigations made to understand existing faults and their potential for impact on the village and surrounding villages.

Finally, WAF have indicated to the Council in additional correspondence the following:

- WAF are disappointed with the lack of communication from INEOS and do not consider that INEOS have fully engaged with them or the local community.
- Insufficient notification periods have been given in advance of intended additional survey work, leading to further confusion in the community.

Campaign for the Protection of Rural England (CPRE)

Maintains its objection on the following grounds:

Impacts of the proposed development on the negative impact on landscape, local amenity, tranquillity, and contrary to local policies in the Development Plan.

The potential benefits do not outweigh the local impacts. Furthermore any claimed benefits of the supply of future shale gas, in terms of energy supply and security, must be discounted as this is only an exploration well. If such benefits fall to be considered, then also should the disbenefits of extracting fossil fuels and the likely failure to meet climate change targets.

The proposed development site will detract from the surroundings.

Yorkshire Wildlife Trust

Maintains its previous objection on the following grounds:

Inadequacies of ecological survey information.

Impacts on protected species – breeding birds. No breeding bird surveys have been been undertaken of the site or adjacent areas of ancient woodland. Yorkshire Wildlife Trust has also been informed that the site supports skylark. Many other farmland bird species may also be on the site such as yellowhammer and linnet. All farmland birds are declining and have been identified as Biodiversity Action Plan (BAP) species. Developments should therefore not result in net declines of farmland birds.

Mitigation and enhancement. Paragraph 4.4.3 of the applicant's Environmental Report indicates that hedgerow enhancements may be possible as part of the scheme. Paragraph 118 of the NPPF states that ecological enhancements should be incorporated into developments. YWT advise that ecological enhancements are delivered as part of the proposed scheme, and secured by an appropriately worded condition in the event of any approval.

Rotherham Ramblers – object to the application on the following grounds:

- This proposal would disrupt the footpaths in the area, which are well used by local people and walkers from further afield.
- The construction of the well would also disturb wildlife in the area, create noise, dust and pollution, create more traffic causing congestion and a hazard to locals and walkers.
- Potentially cause pollution of the water supply. The risk of water pollution is high at the site due to previous mine working in the area.
- Creation of air pollution by dust and methane from old underground workings.
- This site is too near to the villages of Woodsetts, Dinnington and Anston

Rights to Speak

A total of 6 Right to Speak requests (including from the applicant) have been received as part of the application process.

Consultations

Specific Shale Gas consultees

Oil and Gas Authority (OGA) – The OGA does not offer specific geotechnical advice regarding the planning application. The OGA will only grant consent to drill after all the other regulatory permits and permissions are obtained.

Public Health England (PHE) – No objections subject to informative. The application does not include any horizontal drilling, nor does it include any hydraulic fracturing (fracking). The main issue of potential public health concern is noise. This is most likely to be encountered during stages 1 and 2, with the possibility of some recurrence in stage 3a, if it is required. This response is based on the assumption that the applicant will take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.

British Geological Survey (BGS) – No response received.

Business, Energy and Industrial Strategy (BEIS) – formerly Department for Energy and Climate Change (DECC). Application submission noted, the Department does not comment on individual applications.

Health and Safety Executive (HSE) – No objections subject to informatives.

Environment Agency (EA) – No objections subject to conditions and informatives.

External

Civil Aviation Authority – No objections received via NATS Safeguarding (who are responsible for the management of en route air traffic).

Traffic England (Highways Agency) –. No objections to revised details, subject to a condition that abnormal loads should only be undertaken between 1000-1600 hours.

Natural England – No formal objection. Raised concerns with the proximity of the proposals with the Dewidales Ancient Woodlands

Historic England – Concerns raised of the potential vibration on listed buildings. Overall, however, no objections.

Coal Authority – The LPA need to be satisfied that they have enough information to determine the application. However, no objections are raised subject to informative.

South Yorkshire Mining Advisory Service – No objections.

South Yorkshire Police – Have raised general concerns regarding future potential protest activity. The main forms of protest have been outlined as follows:

- Local Residents/protest groups blockading the entrance to the site.
- A "slow walk" with protestors walking in front of attending vehicles in an effort to publicise their cause.
- Vehicle occupation where a protestor will climb onto an attending contractor's vehicle and either lock on with some sort of device or simply refuse to remove them.
- Lock ons where a protestor secures themselves to entrance gates to the proposed site or anywhere along the route that would prevent access for vehicles.

South Yorkshire Archaeology Society – Overall, no objections subject to condition

Environment Agency (Flood Risk) – No objections subject to conditions and informatives.

Yorkshire Water – No objections.

South Yorkshire Fire and Rescue – no objections

Severn Trent Water – No objections following the submission of additional information

Sheffield Airport – No comments received.

RMBC – Internal

Transportation and Highways Design – Overall, no objections to the revised/clarified details, subject to conditions.

Environmental Health – Overall, no objections. The site does have the potential to have a noise impact on the nearest residential properties. No concerns are raised subject to conditions on final noise monitoring details. In respect of air quality there are no objections subject to recommended condition.

Ecologist – Overall, following the submission of additional supporting details to this revised application, including an updated Phase 1 habitat survey and Breeding Bird survey, there are no objections to application RB2018/0918, subject to conditions and informatives. The Ecologist notes that the distance from the nearest point of the compound to the nearest block of Dewidales Wood is approximately 28m which is in excess of the 15m buffer to ancient woodland that Natural England now recommends (January 2018).

Tree Service Manager – No specific objections to the proposals, subject to a condition to protect existing trees.

Landscape Design – Overall no formal objection. The development will result in substantial adverse landscape and visual effects, albeit experience locally within 1-1.5km of the site and over the short term.

Main Drainage – No objections following additional clarifications from the applicant.

Public Rights of Way – No objections.

Neighbouring Local Authorities

Bassetlaw Council - No comments received.

Bolsover Council – No objections.

Nottinghamshire County Council – no comments received

Appraisal

Where an application is made to a local planning authority for planning permission, in dealing with such an application the authority shall have regard to -

- (a) the provisions of the development plan, so far as material to the application;
- (b) any local finance considerations, so far as material to the application; and
- (c) any other material considerations. S.70 (2) TCPA 1990.

If regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise - S.38 (6) PCPA 2004.

The planning application seeks the development of a hydrocarbon well site which incorporates the drilling of a vertical exploratory well through the use of a drilling rig together with associated ancillary works. The purpose of the proposed development is logging and

coring of the shale strata, which would be assessed by the applicant. The assessment is to see whether <u>future</u> flow testing of the well(s) (which may involve well stimulation through hydraulic fracturing – or 'fracking') would be worthwhile.

Hydraulic fracturing (fracking) and/or flow testing are <u>not</u> part of this planning application. If either are demonstrated to be worthwhile then a further planning application would be required to be submitted. If the results are negative the site would be decommissioned and restored.

The Regulatory Regimes

Rotherham Council, as Minerals Planning Authority (MPA), is just one of the key Regulators involved in the hydrocarbon development process, each one of which must be satisfied before development can commence. The key Regulators and their involvement summarised as follows:

- a) The Oil and Gas Authority (OGA) which issues Petroleum Licences, gives consent to drill under the licence once the 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 and venting.
- b) The Minerals Planning Authority which where appropriate grants permission for the location of any wells and well-pads, and imposes conditions to ensure that the impact on the use of the land is acceptable.
- c) The Environment Agency protects water resources (including groundwater aquifers), ensures appropriate treatment and disposal of mining wastes, emissions to air, and suitable treatment and management of naturally occurring radioactive materials.
- d) Health and Safety Executive regulates the safety aspects of all phases of extraction, in particular they have responsibility for ensuring the appropriate design and construction of a well casing for any borehole.

There are other bodies which may be involved in the consenting of hydrocarbon development, including:

- a) The Coal Authority whose permission will be required should drilling through a coal seam take place.
- b) Natural England who may need to issue European Protected Licences in certain circumstances.
- c) British Geological Society who need to be notified by licensees of their intention to undertake drilling and, upon completion of drilling, must also receive drilling records and cores.
- d) Hazardous Substances Authorities who may need to provide hazardous substance consent(s).
- e) Public Health England are consulted during the planning process and advise on public health matters.

There may also be other additional consents and orders, such as stopping up rights of way or temporary road orders, which may need to be obtained in certain locations.

The main considerations in the determination of the application are as follows:

- Principle of the development in the Green Belt
- Updates since the refusal of application RB2017/1577 in March 2018
- Site selection process
- Traffic and transportation
- Public Rights of Way
- Ecological issues and impact on habitats
- Impact on hedges and trees
- Landscaping and visual impact
- Lighting
- Archaeology
- Heritage
- Noise and vibration
- Well design and safety
- Air quality
- Ground contamination, land stability and impact of mining legacy
- Flood risk
- Drainage
- Hydrology and groundwater
- Socio-economic impacts
- Health impacts
- Climate change
- Cumulative impacts
- Restoration and after use
- Other material considerations
- Other issues

Principle of the development in the Green Belt

The Development Plan currently consists of the Core Strategy (adopted 2012) and the Sites and Policies Document which was adopted in June 2018. The UDP has now been superseded since the earlier application RB2017/1577 in March 2018.

The site is located within the Green Belt and Core Strategy Policy CS4 'Green Belt' states that land within the Rotherham Green Belt will be protected from inappropriate development as set out in national planning policy.

Core Strategy Policy CS26 'Minerals' adds that: "Energy Minerals - Proposals for underground coal mine extensions (including colliery spoil disposal) and surface mining in addition to proposals for the exploration, appraisal and production of onshore oil and gas, including the gasification of coal, coal mine methane and coal bed methane will be assessed on their merits against all material planning considerations including national planning policy."

Policy SP2 'Development in the Green Belt' of the Rotherham Local Plan states that in considering planning applications for new development, including mineral workings within

the Green Belt, and to ensure proposals minimise the impact of the development on the openness of the Green Belt, particular regard will be had to the following factors: the size, scale, volume, height, massing, position, lighting and any proposed enclosures of the proposals.

National Planning Policy Framework (NPPF)

At the heart of the NPPF is a presumption in favour of sustainable development. For decision taking this means approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out-of-date, granting planning permission unless any adverse impact of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the Framework taken as a whole or specific policies in the Framework indicate development should be restricted.

Paragraph 146 of the updated NPPF indicates that certain forms of development, which includes mineral extraction, are not inappropriate in the Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in the Green Belt. An earlier appeal (after initially being dismissed) was subsequently approved in a High Court decision (July 2013) for Europa Oil & Gas at Holmwood, Surrey County Council [Europa Oil and Gas Ltd v Secretary of State for Communities and Local Government & Ors [2013] EWHC 2643 (Admin), Court of Appeal (June 2014) EWCA Civ 825]. This was then approved by the Planning Inspectorate in a re-determined appeal APP/B3600/A/11/2166561. The Inspector indicated that:

"This means that exploration and appraisal of a mineral resource are not inappropriate activities by definition, but would only be treated as inappropriate if they adversely affect the openness or any other purposes of the Green Belt designation identified in paragraph 80 of the Framework.... Without exploration and appraisal it would be extremely difficult, if not impossible, to prove the extent and viability of a mineral resource, the extraction and production of which would not necessarily be inappropriate. As paragraph 90 of the Framework advises, inappropriateness would only arise in circumstances where the openness and/or other purposes of the Green Belt would be compromised. As such, it is necessary to move to ascertain if appeal scheme would be inappropriate development in the Green Belt, by assessing its effect on Green Belt openness, its permanence and the purposes of the Green Belt."

Since the previous application was refused on 8th March 2018 the appeal against non-determination on the Harthill site has granted on appeal by the Planning Inspectorate. The Inspector considered whether the proposal would represent inappropriate development in the Green Belt having regard to the NPPF. The Inspector concluded that the Harthill site "...The proposed development would be associated with mineral extraction, which in itself is not inappropriate development in the Green Belt. The development would include plant, site buildings and minor topsoil storage and environmental bunding which would be in place for up to five years. The site would be returned to its existing condition following this period. In view of the extent and temporary nature of the development, which would not be unusually longer than other construction or mineral extraction operations, the development would preserve the openness and the purposes of including land in the Green Belt. It would therefore not represent inappropriate development and would not be harmful to the Green Belt under paragraph 90 of the NPPF.."

The Inspector dealing with the Marsh Lane appeal also considered these issues in detail remarking that "...With minerals exploration, some degree of operational development has to be expected. All of the proposed temporary buildings and other development on site would be necessary for carrying out the proposal and there are no elements which would not be normal and appropriate for this type of operation."

The principle is therefore not considered to represent "inappropriate development" in the Green Belt.

It is accepted that the provision of the 60m rig, security fencing and the temporary portacabins, as well as other ancillary equipment, would have an impact on the openness of the Green Belt, though this would be over a relatively short term period, at the end of which the site would be restored with all equipment/fencing/bunding being removed.

The Inspector dealing with the Marsh Lane gave significant weight to the duration of development and the reversibility of its effects. "...In this case, as the buildings are associated with the exploration, the duration would be temporary, for a maximum of 5 years, and the effects would be completely reversible with a restoration to agriculture. Green Belt policy is essentially a long-term policy, with paragraph 133 of the NPPF making reference to one of the characteristics of the Green Belt being its permanence. In this case there would be no permanent harm and a suitably-worded condition would ensure that all of the temporary development would be completely removed, ensuring the long-term openness of the Green Belt."

As such, it is considered that the proposals do not represent inappropriate development in the Green Belt.

On 17 May 2018 the Secretary of State for Business, Energy and Industrial Strategy (Greg Clark) made a Written Statement to Parliament on Energy Policy, which refers to the exploration and development of our onshore shale gas resources. The statement indicated:

"The UK has world class regulation to ensure that shale exploration can happen safely, respecting local communities and safeguarding the environment. The development of the shale gas industry so far has already led to millions of pounds being invested in the UK, supporting businesses and the supply chain, and creating British jobs. We have recently seen four planning approvals for exploratory shale development. The Government remains fully committed to making planning decisions faster and fairer for all those affected by new development, and to ensure that local communities are fully involved in planning decisions that affect them...However, recent decisions on shale exploration planning applications remain disappointingly slow against a statutory time frame of 16 weeks where an Environmental Impact Assessment is required. So, we are announcing a range of measures to facilitate timely decisions.

 holding an early stage consultation, in summer 2018, on the principle of whether non-hydraulic fracturing shale exploration development should be treated as permitted development, and in particular on the circumstances in which this might be appropriate.

The UK regulatory regime for shale gas is considered among the most robust and stringent in the world. However, we acknowledge that it is also complex, with three regulators, the Environment Agency, the Health and Safety Executive and the Oil and Gas Authority, all with responsibilities for regulation. It is not always transparent to both the public and industry who is responsible for what. Therefore, the Government is setting up a Shale

Environmental Regulator which will bring the regulators together to act as one coherent single face for the public, mineral planning authorities and industry. We intend to establish the regulator from the summer."

This was followed by an open consultation for "Permitted development for shale gas exploration" on 19th July 2018. The consultation is open until 25th October 2018 and seeks views on whether to introduce a permitted development right for non-fracturing shale gas exploration development.

"It is the Government's view that there are potentially substantial benefits from the safe and sustainable exploration and development of our onshore shale gas resources.

The UK must have safe, secure and affordable supplies of energy with carbon emissions levels that are consistent with the carbon budgets defined in our Climate Change Act and our international obligations. We believe that gas has a key part to play in meeting these objectives both currently and in the future. The development of the shale gas industry so far has already led to millions of pounds being invested in the UK, supporting businesses and the supply chain, and creating British jobs. We have recently seen five planning approvals for exploratory shale development.

The Government remains fully committed to making planning decisions faster and fairer for all those affected by new development, and to ensure that local communities are fully involved in planning decisions that affect them. These are long standing principles. No one benefits from the uncertainty caused by delay.

The UK has world class regulation to ensure that shale gas exploration can happen safely, respecting local communities and safeguarding the environment. Any developments that would be permitted through any potential permitted development right for non-hydraulic fracturing shale gas exploration, would still be required to receive the appropriate consents from the three regulators (the Environment Agency, the Health and Safety Executive and the Oil and Gas Authority) before development can proceed....Permitted development only covers the planning aspects of the development. It does not remove requirements under other regimes (e.g. environmental licencing and permitting or environmental legislation)."

In addition, Policy SP50 'Exploration and Appraisal of Hydrocarbons' states:

"Proposals for exploration and appraisal of conventional and unconventional hydrocarbons will be permitted where:

- a. they are supported by an overall scheme which allows for the exploration and appraisal of an oil or gas field together with any other fields in close proximity so far as is reasonable and practicable before production commences. This must include an indication of the extent of the resources and the extent of the area of search within the resource;
- b. the integrity of the geological structure is demonstrated to be suitable;
- c. infrastructure and associated facilities are sited in the least sensitive location from which the target resources can be accessed, so as to avoid the environmental and ecological impact of development wherever possible;
- d. any adverse impacts can be mitigated to an acceptable level, with safeguards to protect environmental and amenity interests put in place as necessary:
- e. operations are for an agreed, temporary period; and
- f. sites and associated facilities are restored in line with a scheme to be agreed by the Council at the earliest practicable opportunity if resources are

not found in economically viable volumes, or they are developed within a time frame agreed."

The explanatory text to the Policy states:

"As an emerging form of energy supply, there is a pressing need to establish – through exploratory drilling – whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas and coalbed methane present to facilitate economically viable full scale production."

Policy SP51 'Hydrocarbon Production Facilities and Ancillary Development' states:

- "Proposals for conventional and unconventional hydrocarbon production and other related ancillary development, will be permitted where:
- a. a full appraisal of the hydrocarbon resource field has been completed and agreed with the Council;
- b. they form part of a comprehensive scheme for the full development of the hydrocarbon resource within an agreed timescale;
- c. infrastructure and facilities are justified in terms of their number and extent, sited in the least sensitive location from which the target resources can be accessed, and designed and operated to minimise environmental and amenity impacts;
- d. any individual and cumulative adverse impacts can be mitigated to an acceptable level:
- e. existing facilities are used for the development of any additional fields discovered unless the applicant satisfies the Council that this would not be technically feasible and any adverse impacts can be mitigated."

It should also be noted that the revised NPPF, published July 2018, is more favourable towards the benefits of mineral extraction than the 2012 version of the NPPF. Paragraph 203 indicates that "It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs…" whereas previously it was regarded as "important".

Paragraph 205 highlights "...great weight should be given to the benefits of mineral extraction, including to the economy" now as the primary consideration, rather than one of several considerations in the 2012 version.

Paragraph 209 has further specific advice for hydrocarbon development stating that when planning for on-shore oil and gas development, including unconventional hydrocarbons, Minerals Planning Authorities should 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.

National Planning Practice Guidance (NPPG)

The National Planning Practice Guidance identifies a pressing need to establish, through exploratory drilling, whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas present to facilitate economically viable full scale production.

The NPPG explains that the exploratory phase of hydrocarbon extraction seeks to acquire geological data to establish whether hydrocarbons are present. It may involve seismic surveys, exploratory drilling and, in the case of shale gas, hydraulic fracturing (fracking), although no fracking would take place as part of the exploratory phase in this instance.

In terms of the weight that Planning Authorities should give to Shale Gas applications the Inspector dealing with the Harthill appeal stated..."The Government therefore considers that shale gas development is of national importance and that there is a clear need to explore and test our shale potential. The Government expects Mineral Planning Authorities to give great weight to the benefits of mineral extraction, and this includes shale gas exploration. The national importance of the development proposed is therefore a matter to which I attach great weight and it represents a benefit against which any harm from the development should be balanced.... It has been suggested that there are better sources of energy, and that the development would represent poor value for money. Given the Government's position on this type of development and the granting of the exploration licence, these generic concerns in respect of the appropriateness of this type of investigation are not matters to be addressed at this Inquiry."

Overall, it is not considered that there would be an adverse effect on the long term permanence of the Green Belt in this area. Any harm to the openness of the Green Belt is considered temporary. Landscape character effects are considered further below. The application is for minerals development which can only be undertaken where resources are located and the number of sites available for appraisal will be limited in this respect.

In view of the above it is considered that the temporary use of the site as part of associated mineral extraction, whether at this site or another nearby, is acceptable in principle, and other impacts of the scheme will now be looked assessed.

Future applications

As indicated above, this application only seeks approval for the drilling, testing, suspension, decommissioning and restoration of the proposed well, including possible use as a listening well. This application would not authorise any other future activities on this site.

A number of objectors wish to know whether or not this is likely to lead to a future application for high volume hydraulic fracturing, or "fracking". The applicant indicates that until the potential commercial viability of the target resource is established through the laboratory analysis of the extracted core of shale rock, the prospect of development being taken forward to the appraisal stage is uncertain, both in respect of the content and timing of any future application.

Therefore, there are a number of possible outcomes that could follow this application. However, the present intention is for this site to be restored. If future appraisal or production proposals were to be brought forward, either on the application site or within the surrounding area, an application for planning permission would be required along with a range of consents from other regulators.

Site selection process

Identifying a suitable exploratory site depends upon a number of factors, including environmental constraints, appropriate mitigation measures and land availability. However, the fundamental and most essential requisite for a new well site is the subsurface geology. As with any other mineral resource, hydrocarbons can only be extracted where they are located. In order for a vertical core well to be worthwhile, the well pad needs to be immediately above the geological formation where existing data has identified potentially hydrocarbon-bearing strata.

It is stated that to achieve these objectives a vertical well would be drilled through each of the geological strata to achieve a full assessment of the strata to be made.

The application is also required to stay within the licence boundaries of PEDL 304.

The applicant has identified that within the search area the choice of location took into account a range of environmental and planning constraints, site availability and logistics. The constraints that were considered include:

Landscape

National Parks
Areas of Outstanding Natural Beauty, and
Country Parks

Ecology

Ramsar Sites

Special Areas of Conservation (Habitats Directive) and candidate SACs

Special Protection Areas (Birds Directive) and potential SPAs

Sites of Special Scientific Interest

Ancient Woodlands

Biosphere Reserves

Core Grassland/Heathland/Mire/Fen/Bog

National Nature Reserves,

Local Nature Reserves

Land use and Access

Agricultural Land Classification

Coastal Paths

Countryside Rights of Way Access Areas

Environmentally Sensitive Areas (agricultural),

National Trails

Cultural Heritage

World Heritage sites

Listed Buildings (by grade)

Scheduled monuments

Heritage Coast,

Conservation Areas

Water

Flood plain

Main rivers,

Groundwater aquifers providing potable water supplies (including Source Protection Zones)

General

Areas with sensitive properties (schools, hospitals and care homes for the elderly), Air Quality Management Areas

Sites are preferably greater than 400m from residential properties. This broad guiding principle was then reviewed once site specific factors could be taken into account to ensure that the chosen site was not likely to have a significant effect on any nearby receptors.

Whilst the applicant has not identified other potential sites within the supporting detail of this application, it is understood that the selected site meets the criteria set out above. The application is not defined as EIA development and the applicant is not required to list and discount sites in order of their sequential preference in policy terms. The detail of the application will be examined further below.

Traffic and Transportation

RMBC's Transportation Unit disagree with the submitted information around classification of HGVs and consider the more appropriate definition of an HGV to be a vehicle with an operating weight exceeding 7.5 tonnes. This would indicate a significant percentage increase in HGV traffic travelling through Woodsetts. However, the actual number of HGV movements would be relatively modest (i.e. a maximum of 60 No. per day on the basis of 30 in and 30 out at an average of 5 No. per hour assuming a 12 hour day). The carriageway width along the C70 between the A57 at Gateford Roundabout and the site varies between 5.5m and 7.3m (approx.), which is considered to be capable of satisfactorily accommodating the additional vehicular traffic anticipated. Furthermore, the route through the village is subject to a 30 mph limit, with traffic calming and separate pedestrian facilities.

The revised draft Traffic Management Plan now confirms the route as being between the Gateford Roundabout along the C70 to the site and lists intended mitigation measures such as signage, escort vehicles (when required), convoy system from staging areas etc.

The traffic and transport objections detailed in the document dated 2018 submitted by Woodsetts Against Fracking have been considered, indeed some of these issues have already been addressed (see above). The road safety concerns are noted. The research from the Transportation Unit reveals there have been 8 No. personal injury accidents recorded along the C70 between the Worksop Road/Owday Lane junction and the intended site access in the period January 2012 to December 2016. Updated records during the period 1st January 2017 to 31st May 2018, 1 no. personal injury accident was recorded.

In these circumstances, the Transportation Unit are of the opinion that safe and suitable access to the site can be achieved and the cumulative impact of the development in transport terms is unlikely to be severe. Accordingly, the development can be supported from a highway aspect subject to conditions. These include:

- 1/ Prior to the development being commenced, details of a Traffic Management Plan and Route Management Strategy shall be submitted to and approved by the Local Planning Authority and the approved details shall be implemented throughout the duration of the development.
- 2/ The development shall not be commenced until a signage scheme for C70 between Gateford Roundabout and the site access has been implemented in accordance with details which shall have been submitted to and approved by the Local Planning Authority.
- 3/ Details of the surfacing and draining of on-site vehicular areas shall be submitted to and approved by the Local Planning Authority before the development is commenced and the approved details shall be implemented.
- 4/ Details of on-site parking and turning facilities for staff and construction traffic shall be submitted to and approved by the Local Planning Authority before the development is

commenced and the approved facilities shall be retained throughout the duration of the development.

In addition, Highways England were also consulted. Highways England initially raised concerns on the Traffic and Transport plan. However, these were subsequently withdrawn following the submission of additional supporting information to the Traffic Management Plan (TMP) and Route Management Strategy (RMS) to control vehicle movements associated with the proposed development and reduce the traffic impact on the surrounding highway network. The final response from Highways England is to raise no objections to the revised details, subject to conditions that abnormal loads should only be undertaken between 1000-1600 hours and the traffic stages of the development be agreed with Highways England.

The Inspector dealing with the Harthill appeal concluded that "...there would be no residual, cumulative and severe impacts from the proposal that would make it unacceptable on transport grounds. I therefore conclude that the proposal would not necessarily have an unacceptable impact on the existing uses of the highways in the surrounding area. I further conclude that it thus would not conflict with the NPPF."

It is also of note that the Woodsetts application site with does not pose the same potential access problems as the Harthill site (which has a network of narrower roads, a number of which are single track with passing places).

Overall, subject to future conditions, both RMBC's Transportation Unit and Highways England have concluded that they are able to support the proposal on road safety grounds.

Public Rights of Way

The proposal does not involve any path closures. The Council's Public Rights of Way (PROW) officer indicates that there are no Definitive Public Rights of Way recorded passing through the site itself, though there are adjacent public bridleways. These routes carry equestrian rights as well as those for walkers and cyclists.

Following the objections received, the Council's Rights of Way section have further reviewed the submitted details and have confirmed that the development does not directly affect the lines of any public rights of way in the area. PROW have also indicated that a substantive argument cannot be made that riders or other users' safety will be compromised by the adjacent development; any number of public rights of way coexist with development, working farms and private vehicle access as well as busier adjacent roads such as the M1.

The effect upon adjacent communities, highways, open spaces and other leisure activities is determined as part of the broader planning process and is taken into account by the authority when determining such applications.

Overall, subject to final details of the traffic management plan the Council's PROW department have not raised any objections to the proposals.

Ecological issues and impact on habitats

National policy

Paragraphs 170 of the NPPF state that

- "170. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"

Responses from nature conservation organisations

Yorkshire Wildlife Trust (YWT) and the Campaign for the Protection of Rural England (CPRE) have objected to the ecological element of the application and criticise the ecological information submitted as being insufficient.

Natural England have assessed the proposed development with specific regard to the likely future impacts on the nearby SSSI and Dewidales Ancient Woodlands.

Natural England (NE) have indicated that this application is in close proximity to Anston Stones Wood, Lindrick Golf Course and Creswell Crags Sites of Special Scientific Interest (SSSIs). Natural England is satisfied that the proposed development being carried out in strict accordance with the details of the application, as submitted, including the embedded mitigation measures listed, will not damage or destroy the interest features for which the sites have been notified. NE advise the Planning Authority that these SSSI's do not represent a constraint in determining this application.

NE have not assessed this application and associated documents for impacts on protected species. They would expect the Local Planning Authority (LPA) to assess and consider the other possible impacts resulting from this proposal on the following when determining this application:

- local sites (biodiversity and geodiversity)
- local landscape character
- local or national biodiversity priority habitats and species.

Natural England does not hold locally specific information relating to the above and recommend that further information is sought from the appropriate bodies (which may include the local records centre and wildlife trust.

Swinston Hill Woods LWS is 617m to the north-west of the application site and is designated for its neutral/calcareous woodland and ancient woodland. Lindrick Common LWS located 717m to the south-east has been designated on the basis of several mosses, plants, invertebrates, neutral/calcareous grassland, wet grassland, rich fen, ancient woodland, etc. Anston Stones Wood LWS is 777m to the south-west. This important site is designated for its grassland and woodland habitats, local plants, local insects and other infrequent species. The other woodland Local Wildlife Sites could be indirectly impacted unless suitable mitigation was put in place.

The Council's Ecologist has reviewed the revised application which is considered in more detail below.

Potential Impact on Dewidales Wood Ancient Woodland

The development proposal is located approximately 25m at its nearest point from Dewidales Wood, which is an ancient woodland site. Dewidales Wood AW could easily be impacted by the development. NE has issued standing advice on ancient woodland and veteran trees, which provides advice on how ancient woodland and plantations on ancient woodland should considered sites be in the planning https://www.gov.uk/quidance/ancient-woodland-and-veteran-trees-protection-surveyslicences. Standing advice is a 'material' planning consideration. This means you should take it into account when making decisions on relevant planning applications. The Standing Advice as it relates to ancient woodland states:

"You and the developer should identify ways to avoid negative effects on ancient woodland or veteran trees, such as selecting an alternative site for development, or redesigning the scheme. You should decide on the weight given to ancient woodland and veteran trees on a case-by-case basis, taking account of the NPPF and relevant development plan policies. If you decide to grant planning permission, you should use planning conditions or obligations to make sure the developer either:

- avoids damage
- mitigates against damage
- compensates for loss or damage (use as a last resort)"

Buffer Zones to Ancient Woodland

In February 2017, the Government indicated its desire to increase protection for ancient woodland under the Housing White Paper. The Woodland Trust has recently provided guidance in deciding on how ancient woodlands should be assessed in planning applications, which takes account of Natural England's Standing Advice, the Housing White Paper mentioned above and other recent initiatives. One result is that the Woodland Trust recommends a buffer of 50m between development and ancient woodland.

More recently (in January 2018) Natural England reduced its guidance to a recommended 15m buffers to ancient woodland. When scaled from the applicant's submitted plan (ref P304-S21-PA-10), the distance from Dewidales Wood is approximately 24m to the rededge site area, increasing to approximately 28m to the edge of the proposed site bund, 38m from a proposed waste area within the site and 41m from the nearest offices. No part of the application site falls within 15m of the ancient woodland, and the majority of built development is over 50m from Dewidales Wood.

Local Wildlife Sites

Dewidales Wood is a Local Wildlife Site and adjoins the south-eastern corner of the site. Dewidales Wood was designated on the basis of its neutral/calcareous woodland types and rich/ancient hedgerow(s). Dewidales Wood could easily be impacted by the development. Natural England's Standing Advice is that Local Wildlife Sites which adjoin planning application sites should be surveyed. This has not been done here, however it is considered that any potential impact could be mitigated by condition.

General comments on protected species

The most likely impacts on protected species are likely to be indirect impacts produced by light pollution, noise and human disturbance.

Phase 1 Habitat Survey

A second visit was undertaken in February 2018. Whilst outside the optimum period, it is considered that this would supplement the earlier visit which was undertaken within the optimum period, in July 2017. Some features such as the grassy field margins, crop and badgers can be dealt with in February. The Council's Ecologist has confirmed that the new plan is an improvement as it now includes 23 Target Notes with accompanying text.

Some criticism due to the lack of a master plant list has been made, as well as omissions within the target notes. However, overall this is considered to be a significant improvement.

Badger survey

A second visit was undertaken in February 2018. Overall the Council's Ecologist is now satisfied that badger survey has been dealt with in a satisfactory manner. The final lighting scheme condition recommended is considered sufficient to minimise any potential disturbance to any badgers in nearby areas.

In the Marsh lane appeal the Inspector noted "...The site and the surrounding area has a badger population and it is likely that they use the site as a foraging area. Subject to the use of suitably-worded conditions this protected species would not be adversely affected by the development."

Bat survey

The executive summary of the submitted bat report states: "There is also a possibility that the lighting would provide more foraging resources for light tolerant bat species as there would be an increase in insect numbers." There is substantial literature which indicates that where excessive lighting of habitats occurs this diminishes insects which in turn reduce feeding resources for bat species that are less tolerant to light pollution, including *Plecotus* and *Myotis* species, both of which were recorded during bat surveys of the application site.

The Bat Survey report states "One pass of a Myotis species was recorded one hour after sunset, but the bat was not observed." Furthermore, the author states that light-shy bat species (Myotis species and brown long-eared bat) were recorded in lower numbers in comparison to the light intolerant species, concluding there were no visual observations of these species during the surveys, and suggesting that they do not frequently use the northern edge of the woodland. This may be due to the late mean emergence times of light-shy bat species and the fact that they are often not seen during surveys.

Regarding the potential impact of the development against bats present in Dewidales Wood, the applicant has submitted data from the latter end of the recognised ecological survey period. Ideally monthly transects and automated bat recordings should have been conducted in the months of May, June and July as well (and possibly in April and October) as the adjoining habitat (Dewidales Wood and the defunct hedgerow) are judged to be of moderate habitat suitability for bats. However, subject to a future condition to limit overspill lighting onto Dewidales Wood and the connecting hedgerow to a maximum of 1lux and colour temperature not exceeding 4,000Kelvins, this is considered to acceptably minimise any future impact.

Overall the Ecologist considers that the supporting information on this aspect of the application, whilst lacking in some detail, is now sufficient to overcome the earlier reason for refusal, and subject to final lighting details being submitted as part of a condition, this aspect can now be considered acceptable.

Breeding bird survey:

Breeding bird surveys are recommended for woodlands within or adjoining application sites and also for Local Wildlife Sites and ancient woodlands that might be affected by proposals. The presence or possible presence of Principal Species of Importance (as covered under the NERC Act 2006) and RSPB Red and Amber List species also provided justification for requesting such as survey.

The breeding bird survey report undertaken by INEOS between 26th March and June 11th 2018 comprised four visits. Skylark, which has been recorded on the site, is a Red list and a Principal Species of Importance.

These results show that declining bird species are present in the surrounding area and that all the surrounding habitats (arable fields, hedgerows and woodland) support bird species of concern. Breeding bird surveys do not adequately record nocturnal species such as barn owls or other owl species which could be present (barn owls have been recorded in the area). It is considered that any potential for light impact this is an issue that could be satisfactorily mitigated within future lighting conditions along with biodiversity enhancements (i.e. installation of barn owl box) in any future permission and this is recommended to overcome these concerns.

The Council's Ecologist still had some criticisms regarding the lack of information on the surveyor's qualifications, experience and licences held and was disappointed with the lack of recommendations and mitigation measures following the survey findings. However, these omissions are not considered sufficiently detrimental to justify refusal on this aspect.

Great Crested Newts

With regard to the residential objection which indicates that great crested newts have been seen in nearby gardens, the Councils Ecologist has commented that the Environmental Report submitted by INEOS had no amphibian records within 2km of the application site. Also, there are no obvious ponds or ditches near to the application site, so there is appears to be no suitable habitat for breeding. There may be garden ponds in Woodsetts or farm ponds associated with the surrounding ponds. In particular there is a farm pond and drain at Brands Farm House to the north of Dinnington Road which could be the provenance of the newts seen at Berne Square but is separated from Woodsetts and the application site by the Dinnington Road and is a reasonable distance from the application site. There also appear to be wetlands associated with Owlands Wood Stream to the north-east of Woodsetts but these are on the opposite side of Woodsetts from the application site and, whilst they might be the source of newts turning up in Woodsetts, the potential presence of Great Crested Newts in the wider area is not considered to be adversely affected from the application site.

Overall, and with reference to the revised information provided in this application submission, the Council's Ecologist considers that this resubmitted application has provided a higher level of supporting data with earlier surveys covering the Phase 1 Habitat Survey updated along with additional work on the bat and badger survey and a new breeding bird survey. Consequently it is now considered that the level of detail submitted in this application compared to application RB2017/1577 is a substantial improvement. Having also had regard to the weight given by the Inspector in respect of the ecology aspects of the Harthill and Marsh Lane appeals, the Council is of the view that final lighting details, mitigation methods and biodiversity enhancement could be conditioned.

This re-submitted application is now considered to be in conformity with the principles of paragraph 175 of the NPPF along with the relevant Policies in the Local Plan.

Landscaping and Visual Impact

The Council's Landscape Team have reviewed the landscape and visual appraisal, and are satisfied that the judgements made in the report in respect of both landscape effects and visual effects are a reasonable representation of the likely worst case effects of the proposed operations included within this development.

The effects are summarised the effects in the table below as there are a number of stages of development, with different levels of effect.

Stage	Max height of elements	Duration	Nature of effect
Stage 1 Development & Establishment	32m surface rig	3 months	Site – Substantial adverse effect Landscape character - Moderate adverse effect Up to 1km Minor adverse effect beyond 1.5km.
Stage 2 Drilling & Core Pressure Transient Test	60m mobile drilling rig & sub-structure up to 15m (including lighting, double stacked containers (5m) 32m workover rig	5 months Up to 2 months after drilling	Site – Substantial adverse effect Landscape character – Moderate adverse effect 1- 3km Minor adverse effect beyond 3km
Stage 3 Maintenance of Site	2m high fencing and bund, gatehouse.	Up to 5 years	Site - Minor adverse effect Landscape character – Negligible effect
Stage 3a Possible Workover of Well (the process of pulling and replacing a well completion)	Max 32m	Up to 1 month	Site – Substantial adverse effect Landscape character - Moderate adverse effect up to 1km Minor adverse effect beyond 1.5km
Stage 4 Use of Listening Well	Workover rig 32m, or wireline truck and 30tonne crane (up to 35m)	5 weeks	Site – Substantial adverse effect Landscape character - Moderate adverse effect up to 1km Minor adverse effect beyond 1.5km.

Stage 5	Up to 32m initially	Up to 2	Site - Neutral effect
Decommissioning	and	months	Landscape character –
&	reducing to nil	(aftercare 5	Moderate adverse effect
Restoration		years)	up to 1km
			Minor adverse effect
			beyond 1.5km
			Neutral effect upon
			completion of restoration
			stage.

Those elements of the development involving tall structures/ cranes & drill rigs (32m, 35m and 60m respectively) will result in a substantial adverse effect locally (within 1-1.5km of the site). These effects are likely to be experienced over a short period of time of less than 1 year. For the remaining time during operations, when taller structures are not present (up to 15m) the visual effects are considerably reduced and are more likely to be screened by the on-site mitigation bunding or existing woodland blocks. As such, this is likely to result in Moderate to Minor adverse effects again, experienced over a relatively short period of time of up to 5 years.

On rig height, the applicant has further specified a 60m height as this is the highest rig available which can drill to the required depth. This is a worst case scenario as the applicant has not yet determined which drilling rig will be used. The selected rig will also depend on rig availability at the time of drilling. The parameters set allow for a range of rigs to be used. The applicant has indicated that a 36m rig would be operationally inefficient when drilling to this depth and, further, has indicated that:

"....Whilst a 36m rig may be technically capable of reaching the required depth, it may require more time and will therefore take longer to reach the depth than the 60m equivalent. We wish to maintain the drilling period at the 5 month "worst case" maximum we have set. Our preference would be to not increase the time period during which the effects of the operation are occurring. To use a shorter rig for longer would simply extend the period of effects, whilst not removing what is still likely to be temporarily harmful visual effects".

Policy CS21 states that in areas of High Landscape Value, development will only be permitted "where it will not detract from the landscape or visual character of the area and where appropriate standards of design and landscape architecture are achieved".

Furthermore, Policy CS21 then states:

"Developers will be required to put in place effective landscape management mechanisms including long term landscape maintenance for the lifetime of the development". Policy SP35 is also relevant, with the policy requiring consideration of landscape impact."

Concerns have also been raised that the photos submitted show only existing views, thereby omitting how the proposed development would appear in the landscape (e.g. landscape bunding, site infrastructure, site accommodation.

The findings of the Zone of Theoretical Visibility (ZTV) suggest that the substantial (i.e. significant) landscape and visual effects will only be "short term and temporary". Criticism has been made of the evidence supplied and on the conclusions drawn.

The Council's Landscaping Team indicate that the development will result in substantial adverse landscape and visual effects, albeit experience locally within 1-1.5km of the site and over the short term. Whilst soil bunding and site cabins (34no. cabins stacked 2no. high) are referred to as offering screening of the site activities their very presence is incongruous to this rural setting and as such are likely to result in Moderate adverse effects. It should be noted however that these changes and effects will be experienced over a relatively short period of time of up to 5 years.

This will result in a noticeable deterioration in the landscape character of the area and its enjoyment by the local community, as is noted by the strength of local objections raised. However, the Council's Landscaping Team have not raised a formal objection to the proposals on visual amenity grounds due to the temporary nature of the development.

In both the Harthill and Marsh Lane appeals the Inspector included reference to visibility issues, indicating that on visual harm.... "This harm or conflict would not however be sufficient reason to dismiss the appeal when balanced against the benefits of the development in terms of potential future energy supplies."

Overall, whilst the development is in a moderately sensitive location with identified, short-term, substantial adverse landscape and visual effects, the Council's Landscaping Team have not raised a formal objection against the development from a visual amenity perspective. On balance, therefore, and taking into account the objections raised, it is not therefore considered that a refusal against the development on visual amenity grounds could be sustained.

Lighting

The applicant indicates that it is proposed for the site to operate for 24 hours a day during drilling activities (Stage 2) and temporary lighting will therefore be installed to ensure that the site can operate safely. This will be for a limited period during the lifetime of the proposed development and the most intensive working periods will be limited in duration to 21 weeks.

The applicant has stated – and conditions could be imposed to ensure – that lighting will be located to avoid direct glare outside the site and will be shielded to direct light to where it is needed. The lighting will be shielded and directed to where it is required. Lighting levels will be minimised to the lowest level possible, there is no potential for direct glare impacts at these properties. The drilling rig will have lighting on its mast, but these are limited in both intensity and number. The lighting will be relatively low level and directed at the rig itself. The applicant goes onto indicate that this is designed for safety of working purposes rather than lighting a wider area. Whilst this will make the rig visible at night, there should be no significant effects such as direct glare to habitable room windows.

Local Airports (Doncaster Robin Hood, Sheffield) as well as the Civil Aviation Authority have raised no objections from a safety aspect and the lighting is not considered to have any adverse impact on flight navigation systems.

On the issue of light, the Council's Environmental Health department note that the site is to have lighting as it will operate 24 hours. This is shown in draft format though no detailed design of the lighting units has been shown, including Lux levels. However, Environmental Health consider that this element could be satisfactory controlled by condition, including the

type and intensity of lights, types of masking or baffle at head, as well as the number, height and colour of lighting columns.

Overall from a residential amenity perspective the Environmental Health department have not raised any objections to this aspect of the proposals.

Archaeology

In line with the requirements set out in Paragraphs 128 and 129 of the NPPF the applicant has described the significance of the heritage assets. The level of detail is considered proportionate to understand the assets' importance and the potential impact of the proposal on their significance.

The Environmental Report includes a desk based archaeological assessment and a geophysical survey, which concludes that there should not be a significant effect on built heritage or designated assets. The geophysical survey, along with aerial photography analysis has shown a series of linear features across the site. It is not clear whether these are archaeological or geological in nature. Following comments from the South Yorkshire Archaeologist, further archaeological and trial trenching has been undertaken to inform a detailed programme of mitigation.

Policy SP42 Archaeology and Scheduled Ancient Monuments further notes that the preservation of archaeological remains in situ is the preferred solution, but where this is not justified preservation by record would be acceptable.

The applicant initially indicated that there is potential for non-designated heritage assets to be discovered on the site, but on the basis of the desk based report and investigations available to date, these are unlikely to be significant. Following further discussions with SYAS a more comprehensive Archaeological Evaluation Report was submitted.

The evaluation comprised nine trial trenches (Trenches 1-9), representing a 3% sample of the Site. Each trench measured 30 m by 2 m and targeted geophysical anomalies. The evaluation was undertaken between 15 and 19 January 2018.

No prehistoric remains are known within 1km of the Site, although assemblages of worked stone are known from the wider area.

The archaeological evaluation was executed as designed. Apart from a 19th century boundary ditch, no other archaeological features, deposits or artefacts were encountered. With the exception of the 19th century ditch, anomalies previously identified during geophysical survey did not translate into archaeological features.

The SYAS assessed the report and concluded that there are no significant archaeological features within the proposed development boundary.

Heritage

National Policy seeks positive management of the historic environment. Where there is likely to be an effect on a heritage asset its significance needs to be understood and a proportionate assessment of the effects of the development must be undertaken. Where a development will result in effects on a non-designated heritage asset, policy notes that a balanced judgement must be made having regard to the scale of any loss.

The Development Plan seeks to protect and enhance the historic environment, whilst supporting appropriate development. The Core Strategy has a similar aim and notes that proposals will be supported which protect the heritage significance and setting of locally identified heritage assets.

The site and immediately surrounding area does not have any listed buildings or scheduled ancient monuments on it and it is not within a conservation area. There will be no direct effects on any surface based heritage assets. There are several listed buildings in Woodsetts and the village centre also lies within a Conservation Area. However, these are all village related structures (houses, church stones, barns, etc) which are located within the village. Whilst there may be some visibility of the drilling rig when that is on site, it is considered that the development would be unlikely to have any direct effect on the structures or their setting.

Historic England have raised concerns about potential visual impact on listed buildings in the earlier phases as well as the possibility of damage from vibration during the drilling phase. However, no formal objections are raised on this aspect of the proposals. The applicant has covered this within the supporting details within the noise and vibration section of the application and it is not considered that the drilling phase would significantly increase levels of vibration as indicated in the paragraphs below.

A number of the objections also highlight the potential negative impact on the heritage of Woodsetts, along with the potential for negative publicity for the village.

Overall, taking into account the issues raised above along with the site being located in excess of 500m from the nearest heritage asset, it is not considered that the proposal would have any adverse effect on heritage or conservation aspects and it is not considered that a refusal on these grounds could be justified.

Noise and Vibration

The aspect under consideration in this planning application relates primarily due to noise from traffic and access into the site associated with the development. Any noise emissions to air, water or land associated with the regulated activities on the site including noise and vibration, odour and fugitive emissions are regulated under Environmental Permits. The EA are responsible for granting or refusing Environmental Permits and if the former, setting any conditions and ensuring that permit holders comply with these conditions.

The permit issued by the EA seeks to regulate noise and vibration arising from the oil and gas prospecting activities. This relates to noise and vibration generated from those activities that extract / process material that is classed as waste. Materials that are brought out of the well as a result of these activities are classed as waste.

The mining waste permit has regulatory control over noise and vibration arising from: operations and equipment within the permitted surface operation boundary which is used in the handling / treatment of waste material.

A mining waste permit does **not** have regulatory control over noise and vibration arising from:

 Operations and equipment used for any treatment/movement/use of nonwaste materials. All operations and equipment not within the permitted surface operation boundary and therefore not engaged in activities regulated by the permit. For example, noise from vehicle movements outside the permitted surface operation boundary.

Paragraph 180 of the NPPF requires decision-makers to ensure that there are no unacceptable adverse impacts upon human health and that they take into account the cumulative effect of impacts from individual sites. The applicant states that the works will conform to the relevant Industry Standards, including the Borehole Sites & Regulations 1995, the Construction (Design & Management) Regulations 2007 and the Offshore Installations & Wells (Design & Construction etc.) Regulations 1996.

The main issue of potential public health concern raised by consultees and the local community has been identified as noise and vibration. This is most likely to be encountered during stages 1 and 2, with the possibility of some recurrence in stage 3a, if it is required. The applicant has considered the potential for noise to arise from the proposed works, and noted the possibility for night time noise from the site.

While it is inevitable that some noise will arise from works of this type, the applicant has considered this potential within the noise report, which concludes that the noise arising from the construction will be lower than the night time noise LAeq, 1hour of 42dB, at 37dB.

The applicant further proposes sympathetic working practices such as bunding and silencers/noise attenuation equipment in order to mitigate any potential for nuisance.

The applicant has highlighted that the most sensitive properties around the site as being:

- Manor Farm along the west site of Lindrick Road (in excess of 670m to the east of the site of the proposed site);
- Berne Square residential properties (approximately 425m northeast of the site and approximately 30 m east of the access track at the closest point);
- The residential properties of Rackford Road (approximately 900 m west of the site);
- The residential properties Nirvana, Wildways, Lofties located along the north side of the private road that connects the south end of Lindrick Road with Workshop road (approximately 590 m south of the site); and
- The residential priorities at the south end of Lindrick Road (approximately 960 m south-east of the site).

Given that noise has also been identified as a potential source of concern by the local community, it would be prudent for the applicant to ensure that the local community is kept up to date with progress on works and to provide advance warning (as far as possible) of any particularly noisy periods.

Overall, Public Health England have raised no significant concerns regarding the risk to the health of the local population from the installation.

Objections have been received in respect of the proximity of the site to the nearest residential properties, and whether the site access could be re-located further to the west of the current proposal. In this case the application site is in excess of 500m from the nearest residential property and the site benefits from an existing access with adequate visibility onto Dinnington Road. It is acknowledged that this is closer to the properties near Berne Square, though it is considered preferable to re-use an existing available access rather than

create a dedicated new access. A new access may lead to the further disturbance and removal of hedgerows to the west of the site.

In terms of the hours of operation, the applicant has indicated that site preparation, earthworks, site construction and HGV deliveries shall only take place during the hours of 07.00 hours and 19.00 hours Monday to Friday and 07.00 hours and 13.00 hours on Saturdays, unless there is an operational need which has been agreed in writing in advance with the Minerals Planning Authority.

Assembly and demobilisation of the drilling rigs at the wellsite shall only take place during the hours of 07.00 hours and 19.00 hours Monday to Saturday.

In its role as a planning consultee on this application, the EA has raised no objections to the proposal, subject to a recommended condition in case potential ground contamination is discovered. The Environmental Permit will regulate noise and vibration from the oil and gas prospecting activities and the operator will have to abide by the permit.

The Council's Environmental Health department (EHO) would seek to regulate operations and equipment used for any treatment/movement/use of non-waste material and noise from vehicle movements outside the permitted surface operation boundary.

The noise modelling has been carried out using SondPLAN software (v7.4). The model has been run using a receiver height of 5m to represent the noise impact from night-time operations that would be experienced on the top floors (to represent bedroom space). This is to assess any potential noise disturbance that the occupier may experience at the property which may affect sleep. The model can also predict the noise levels at the ground floor whilst calculating the top floor. The model has predicted the noise level to be the same on the ground floor as on the top floor.

The EHO notes that the noise from construction activities has been predicted as being 81 dB LAeq,1h at location NSR2 which is the nearest noise sensitive receiver location. This level exceeds the recommended level in the BS5228 for construction noise and therefore is of some concern as the operator has not submitted any mitigation measures to reduce this level and impact on future residential amenity and has only stated that it will be temporary for 2-3 weeks.

However, the applicant has taken the high levels of noise that will be produced from this activity into consideration and has stated that no construction works will be carried out or undertaken during the evening or night time period. If the working hours for construction work are restricted to daytime only then the predicted level of 81dB LAeq,1hr will only have a significant observed adverse effect level on local residents during the daytime period.

Providing that the working hours for construction work are restricted to daytime only then the Council's Environmental Health department do not consider that there will be any significant or adverse health impact on local residents during the evening or the night time periods.

Road traffic noise is being predicted to be notable as heavy goods vehicles (HGV) will be using Dinnington Road to access the site but the impact from this additional traffic has not be calculated by the applicant since there are no noise sensitive receptors along this route.

In terms of vibration occurring during the drilling stage, the applicant has indicated that the drills are rotary bored only and therefore impart relatively small amounts of energy into the ground, particularly when compared to percussive pilling techniques. The applicant goes onto indicate that data available for rigs used during conductor installation suggests that ground borne vibration would be imperceptible at distances of greater than 20 m. Vibration levels from the drilling operations are not expected to be significantly different in magnitude. Consequently, at the nearest receptor ground borne vibration would be considerably lower, and certainly not perceptible.

Based on the above, the Council considers the likely impact from ground borne vibration resulting directly from the drilling rig to be small.

Overall, the Council's Environmental Health department have raised no objections to the application, subject to conditions on noise monitoring. The proposals will potentially have adverse health effects on local residents mainly during the daytime period. However, the noise impact from the drilling will be temporary with a maximum duration of 3 months. It is recommended that a condition detailing rig specifications be incorporated into any future permission as well conditions detailing a noise monitoring strategy and management plan to ensure that noise levels will be at or below the night time (22:00-07:00) level of 37dB and day and evening time (07:00-22:00) levels of 55 dB.

EA Permitting

The EA are responsible for granting or refusing Environmental Permits and if the former, setting any conditions and ensuring that permit holders comply with these conditions. Environmental permitting is the method specific industrial and commercial activities are regulated to protect the environment and people.

The permitting process is completely separate from the planning process. The planning process determines whether the development is an acceptable use of land, taking into account the impact of the proposed use, and considers a broad range of matters such as visual impact, traffic and access, which do not form part of our permit decision-making process. Permits allow sites to operate, within certain environmental constraints, once built.

The EA indicate that a mining waste operation permit is required under EPR 2010 for this activity. It is noted that the proposals at this time include no hydrocarbon production/storage and no hydraulic fracturing activities. Should future development of the site operations intend to include such operations then further permissions under the EPR regulations may be required, potentially including a radioactive substances activity permit, an installation permit and/or a groundwater activity permit.

The applicant, INEOS Shale Ltd, has applied for a standard rules permit (SR2015 No.1) entitled:

"The management of extractive waste, not including a waste facility, generated from onshore oil and gas prospecting activities including drilling, coring, leak off testing (LOT), acid wash and decommissioning but excluding hydraulic fracturing for the production of oil or gas (using oil and water based drilling mud)"

The EA has indicated that a permit has been approved and conditions are in place requiring controls for the following areas:

- The management of the site
- The drilling operations on the site

- Any emissions to air, water or land associated with the regulated activities on the site including noise and vibration, odour and fugitive emissions
- Monitoring requirements (as specified in the waste management plan) associated with the regulated activities on the site
- Information requirements including record keeping, reporting and actions requiring notification to the Environment Agency

Paragraph 183 of the National Planning Policy Framework states that "The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities."

The above paragraph makes it clear to planning authorities they should assume that where processes or emissions are subject to approval under pollution control regimes these will be effectively controlled. Accordingly, it is considered that this element of the proposal would be adequately regulated by other environmental legislation.

As indicated in the paragraphs below, the HSE and EA have not raised objections on potential future groundwater contamination. The detailed wellhead design would be subject to separate legation by an independent third party well examiner to ensure wellbore integrity. From a Development Management standpoint there are no objections to this element of the proposals.

Well Design and safety

The detailed design of shale oil and gas wells is not an issue that the Local Planning Authority can assess. An oil or gas well is a complex engineered construction, most of which is below ground and not accessible to visual inspection.

The detailed well design is regulated by the Health and Safety Executive (HSE). The HSE have indicated that wells drilled to explore for shale oil or gas are designed and constructed to the same standards as all other oil and gas wells that have been in operation in UK for a number of years. There have been 350 onshore oil and gas wells drilled in the UK since 2000.

HSE's regulatory approach has two main elements:

- 1. Specialist well engineers help develop best practice standards for the industry as a whole.
- 2. The second element is to use risk-based interventions on particular sites and operators to ensure the operator is managing risk to well integrity in the appropriate way.

All wells must be constructed to recognised industry standards and are cased using steel and cement to ensure the risk of an unplanned leak of fluids is as low as reasonably practicable. Near the surface, where there is nearby groundwater, or an aquifer, there are normally three layers of this steel casing. The operator will conduct a range of checks on the well to test for leaks. Suitable well control equipment must also be provided to protect against the risk of a release of fluids (liquid or gas) from the well.

The Borehole Sites and Operations Regulations 1995 (BSOR) apply to all onshore oil and gas wells. These Regulations require notifications to be sent to HSE about the design, construction and operation of wells, and the development of a health and safety plan which sets out how risks are managed on site.

The Offshore Installations and Wells (Design and Construction etc) Regulations 1996 (DCR) include specific requirements for all wells, whether onshore or offshore, and include well integrity provisions which apply throughout the life of shale gas or oil wells. They also require the well operator to send a weekly report to HSE during the construction of the well so that inspectors can check that work is progressing as described in the notification.

The operator must also appoint an independent well examiner who has an important quality control role in ensuring that the well is designed, constructed operated and abandoned to industry and company standards and that regulatory requirements are met.

This combination of duties ensures that HSE is provided with information at key stages in the lifecycle of a well and allows HSE inspectors to assess whether risks are being adequately controlled and, if not, to take the appropriate regulatory action.

To comply with BSOR, the well operator must submit a notification to HSE at least 21 days before work commences. It consists of information on the design and construction of the well including:

- The design of the well,
- Equipment to be used,
- Programme of work,
- Location, depth and direction of the borehole,
- Its relationship with other wells and mines,
- The geology of the drilling site,
- Risks identified with the work and how these risks will be managed.

In this instance, the HSE have not raised any objections to the proposal at the planning application stage.

Any concerns raised by objectors about the detail of well design and its construction and integrity would be controlled by the Design and Construction Regulations. The operator must report to HSE every week during construction of the well and during work to abandon the well. This provides HSE with assurance that the operator is constructing and operating the well as described in the notification. If they are not, HSE can take the appropriate regulatory action.

The weekly report gives details of all work that has taken place since the previous report including:

- Well integrity tests,
- The depth and diameter of the borehole,
- The depth and diameter of the well casing,
- Details of the drill fluid density which allows the inspector to gauge the pressure in the well and identify any stability issues.

There is also a specific set of occurrences that the well operator must report to HSE under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations):

A blowout, i.e. an uncontrolled flow of well fluids.

- The unplanned use of blowout prevention equipment,
- The unexpected detection of H2S (hydrogen sulphide an explosive gas),
- Failure to maintain minimum separation distance between wells,
- Mechanical failure of any safety-critical element of a well.

Air Quality

Emissions to air would include vehicle and equipment exhaust fumes, dust and potentially hydrocarbon release (methane) during the drilling period.

Road traffic associated with the proposal would produce emissions to air during the temporary construction and drilling phases. The applicant considers that these are likely to be of a similar scale to any construction site. Dust from site preparation, construction and vehicle passage on access roads will be controlled with standard dust-control measures.

The Council's Air Quality Officer has previously confirmed that the site is not in an Air Quality Management Area and so is not at risk of exceeding the national objectives for common pollutants. The development is not considered to generate a level of traffic which would suggest that there will be a vehicle emission related air quality issue in this area. The key phase of development when air quality impacts could occur is during construction and particularly during phases 1 and 2. The Environmental Report and Proposals set out a range of industry best practice mitigation measures which will ensure that dust suppression measures are in place. These include selecting and maintaining equipment, as well as simple practices like sheeting lorries which deliver loose materials, damping down any exposed earth in dry and windy conditions, and seeding stored top soil bunds to bind soil.

Rotherham's Community Protection Team have been contacted by members of the public and have started to monitor levels of air pollution in the area. This monitoring will be ongoing. Overall, it is considered that a monitoring regime to be carried out during the timeframe of the application should be conditioned. They have concluded that subject to conditions to ensure mitigation is in place they would have no objection to the development.

Flood Risk

The applicant has undertaken a Flood Risk Assessment (FRA) to support the proposed development. The applicant highlights that the proposed development is located within Flood Zone 3a (risk to the site of a 1 in 100 year fluvial event – 1% Annual Exceedance Probability (AEP)) based on Environment Agency mapping.

The applicant indicates that flooding, residual and climate change impacts have been assessed as negligible due to Environment Agency flood maps showing the proposal as having a 'Very Low' risk of flooding from fluvial and pluvial water sources and based on the topography of the site and surrounding area.

The EA have not raised any objections on flood risk grounds and the proposal is not anticipated to result in any material increase in flood risk elsewhere.

The Council's Drainage Officer has raised no objections to the proposal from a flood risk perspective.

<u>Drainage</u>

The applicant has summarised the proposals to protect groundwater sources and prevent cross-contamination occurring from surface water runoff in the table below. It is considered that the stage 1, followed by stage 2 of the process is the most critical to ensure prevention of surface water runoff becoming contaminated. A number of these issues will also be covered by the permitting process of the EA as well as good well design monitored by the HSE.

Stage 1

Aim Prevent pollution of soil, groundwater or surface water from leaks from construction vehicles or on-site tanks

Measures built into Proposal

A triple-layered geotextile/ HDPE membrane would be laid between the site surface and soil by a qualified groundwork contractor under a Construction Quality Assurance Plan to make an impermeable site surface.

All fuels, oils, lubricants and other chemicals would be stored in double-skinned tanks (or a bunded, impermeable area) to provide appropriate secondary containment

All vehicles would be maintained regularly and would be subject to daily inspection at the start of the working day by plant operatives.

Any equipment maintenance would take place in a designated area within the construction compound where reasonably practicable.

Fuel and oil deliveries and any refuelling on-site would only be undertaken in appropriate impermeable areas. Double-skinned fuel tanks (or a bunded, impermeable area) would be used for refuelling trucks and pumps as well as fuel storage.

Standing machinery and refuelling points would have drip trays placed underneath to prevent oil and fuel leaks causing pollution.

Spill kits would be present on-site, and staff trained in spill response via contingency plans.

	On-site welfare facilities would be adequately designed and maintained, and all sanitary waste water and sewage would be removed from site by licensed waste contractors
Prevent pollution of soil, groundwater or surface water from runoff from site surface	No water would be discharged from the site to the surrounding environment once the drainage system was in place. All water would be removed from site by a licensed waste contractor.
	Works would be undertaken in suitable weather conditions to prevent silting of watercourses (especially avoiding periods of high rainfall).
	Runoff from access tracks would be to the surrounding road / field drainage. Aggregate used on these would ensure sediment laden runoff was not produced.
Prevent pollution from other construction activities	Concrete mixing for the rig pad would be undertaken by a mixer unit, with the components of the concrete enclosed in the unit prior to and during mixing. The mixer would be used on the lined site only.
	Shutters would be used when concrete is poured, and no concrete would be used where there is standing water.
	Pumps would be used to keep excavations dry if needed.
	Method statements would be produced for all activities that could pose a risk to the water environment and would clearly state what mitigation measures and monitoring requirements should be in place prior to and while the activity is underway.
Prevention of pollution of soil, groundwater or surface water from installing conductor and monitoring boreholes	Borehole design and operation (for example, fluids to be used) would be approved by Environment Agency (via Environmental Permit), Oil and Gas Authority, HSE, Coal Authority and an accredited Independent Well Examiner prior to drilling.
	Only air and water based fluids would be used as drilling fluids to install the

	conductor/ surface casing and monitoring
	boreholes.
	Once installed the cellar and conductor/ surface casing would be checked to ensure there are no leaks to the environment.
Prevent pollution of watercourses	The Environment Agency permits
through engineering works	engineering works in the water environment where required, through Flood Risk Activity permits. The site is located over 100 m from the nearest watercourse, and good practice to prevent silting and dust would prevent harm to the watercourse as a result of engineering works.
Monitoring	The site will be subject to an Environmental Monitoring Plan to be agreed with the Environment Agency. The area around the site (soils, field drains etc.) would be checked daily for visual signs of pollution (e.g. fuel oil, noticeable silting). An Environmental Clerk of Works would be present during Stage 1 to oversee the enabling works and construction and ensure operations proceed in accordance with management plans and planning conditions. Mitigation measures put in place (e.g. impermeable membrane, drainage system etc.), would be inspected regularly and suitably maintained to ensure they remain fully operational and effective. Where failures or shortfalls within mitigation measures were noted, these would be recorded, action identified and undertaken within a suitable timeframe.
Stage 2 Preventing pollution of soil, groundwater or surface water from leaks from construction vehicles or on-site tanks	The geomembrane and "closed loop" drainage system would be maintained to ensure all liquids remained on the site for removal by a licensed waste contractor, and treatment prior to disposal if required.
	Frequent checking of integrity of site surface and drainage system.
	Cement mixing for well cement would take place in truck-mounted silos on the concrete hardstanding area.

Rigs would be refuelled from dedicated tanks, which would be filled directly from fuel tankers that deliver to the site.

This would be undertaken in the hardstanding area to ensure any spillage would drain to the impermeable cellar rather than the perimeter drainage pipe.

Drilling fluids (muds) would be stored in a mud tank with a closed-loop system to prevent leakage.

Water for the drilling process would be contained within a closed-loop system.

contained within a closed-loop system with any potential excess water from the drilling process being transported off site in suitable tankers by a licensed contractor.

INEOS Safety Health and Environment (SHE) representative will ensure operations proceed in accordance with management plans and planning conditions

The area surrounding the site would be checked daily for visual signs of pollution (e.g. fuel oil, leakage from perimeter, noticeable silting) in accordance with the Environmental Monitoring Plan to be agreed with the Environment Agency.

The applicant has indicated that any water falling onto site would feed into the site perimeter drain and be removed by a licensed waste contractor for treatment and disposal as appropriate. It is intended that all rain falling on the whole of the site for the whole duration of phases 2-4 will either be removed from site by tanker or used on site. The liner passes under the perimeter pipe and then extends up into the face of the surrounding bund, to ensure that the entire system is sealed.

The applicant has confirmed that the access track will not be lined. Run off from the access track will either permeate through the track, or run off to the sides. It is not intended to direct any of this flow into a highway drain. It would all be directed back to the field to soak away.

In terms of discharge from the onsite pumps, the applicant has confirmed that the system is closed and the perimeter ditch will collect water, which will be pumped to an above ground storage tank, which also sits on the lined area of the site. Tankers will come to empty the storage tank as required.

Some concerns were raised regarding the potential for perimeter bunds within the field having the potential to interrupt natural flow paths. The applicant has confirmed that field drainage will be maintained. They go onto indicate that a drainage strategy has been adopted which relies on a combination of (a) natural run off and soaking away at the fringe areas around the well pad and on the access track, to (b) a contained system which drains by gravity to a ditch and sump within the sealed working area.

The applicant goes onto indicate that the site will be levelled and for the most part lined and isolated from the surface water regime, with all water being collected by tanker. There will be areas where the site is not lined (access track and bunds). They anticipate that these will

simply soakaway in the same manner as the existing land, so this should leave a neutral effect. On this basis, the applicant has asserted that the direction of the drainage is unlikely to be a material factor.

Regarding a future water supply to the site, Yorkshire Water have confirmed that there are no groundwater abstractions for the public water in the vicinity of the proposed development. The site is remote from the existing water supply network and Yorkshire Water have raised no objections to the proposals.

The Severn Trent Water Authority initially raised some queries regarding abstraction and drill casing details and the composition of drilling muds to be used. However, following the submission of additional information, they have withdrawn these concerns at the Planning Application stage, and will seek further data and observation boreholes in conjunction with the EA under separate legislation. Abstraction licence details are a separate process and are not being considered in this application.

The EA agency have raised no objections to this aspect of the proposal but have indicated that the permit will require an operator to manage the site in accordance with a Waste Management Plan (WMP). A standard WMP has been produced to accompany the standard rules permit which the operator is expected to follow. The WMP sets out measures for the appropriate management of an uncontrolled discharge, as in a 'spill', on site.

After several clarifications, the Council's Drainage Officer has confirmed that the drainage aspects of the proposal are acceptable, subject to condition.

Hydrology and groundwater

In terms of potential future contamination of groundwater, this would generally be assessed as part of the overall Well Design and would be covered by other regulators, in particular the HSE and the EA.

The main issues relevant to hydrogeology include: the prevention of groundwater pollution from spillages and the handling/management of drilling fluids and cuttings. Prevention of the escape of drilling fluids, gas and formation fluids into groundwater by good well design.

In terms of surface damage, it is understood that site vehicles tracking on bare ground would have appropriate tyres to prevent damage, the use of temporary tracks or peat-boards, minimal works undertaken in periods of high rainfall. Bunding would ensure soils were stored appropriately, and kept separate from other construction activities. Vegetation removal would be minimised and works would be undertaken to minimise the area of soils exposed at any one time.

The applicant has supplied an indication of Environmental Protection Measures during ground restoration works which can be summarised as follows:

Aim	Measures built into Proposal
Prevent soil	Site vehicles tracking on bare ground would have appropriate
damage during soil	tyres to prevent damage.
strip prior to laying	
of membrane/	If large numbers of vehicle movements are needed on bare
development of	ground, temporary tracks or peat-boards would be used.
access tracks	

Works would be undertaken in suitable weather conditions to prevent soil damage (especially avoiding periods of high rainfall).

Bunding would ensure soils were stored appropriately, and kept separate from other construction activities.

Vegetation removal would be minimised and carried out according to good practice. Works would be undertaken to minimise the area of soils exposed at any one time.

Barriers and/or netting would be used to prevent vehicle movements in sensitive areas.

Preventing pollution of aquifer during drilling

Appropriate well design would be used. Any potential excess water or mud from the drilling process would be transported off site in suitable tankers.

Drilling activities would be designed to ensure that there would be no inputs of pollutants to groundwater.

Drilling fluids would be used in accordance with good practice as described in the Health and Safety Executive (HSE)'s guidance on 'The Offshore Installations and Wells (Design and Construction etc.) Regulations 1996' (DCR)) (in particular that they would be designed to prevent exchange of fluids between the borehole and any groundwater-bearing formation) and Borehole Sites Operations Regulations 1995.

Drilling fluids would exclude hazardous substances as defined in paragraph 4 of Schedule 22 to the EPR 2016

If karstic or highly fissured conditions were anticipated, INEOS would gain the Environment Agency's agreement to use any additives other than inert materials.

Casing would be installed and cemented into the low permeability formation beneath the groundwater body once that formation was reached. The maximum depth defined for a groundwater body is taken to be 400 m. (the surface casing for this well is anticipated to extend to 470 m (1,550 ft.) to isolate old mine workings).

Preventing pollution of soil, groundwater or surface water from leaks from construction vehicles or on-site tanks

The geomembrane and "closed-loop" drainage system would be maintained to ensure all liquids remained on the site for removal by a licensed waste contractor, and treatment prior to disposal if required.

Frequent checking of integrity of site surface and drainage system.

Cement mixing for well cement would take place in truckmounted silos on the hardstanding area. Rigs would be refuelled from dedicated tanks, which would be filled directly

	from fuel tankers that deliver to the site. This would be undertaken in the hardstanding area to ensure any spillage would drain to the impermeable cellar rather than the perimeter drainage pipe.
	Drilling fluids (muds) would be stored in a mud tank with a closed-loop system to prevent leakage.
	Water for the drilling process would be contained within a closed-loop system with any potential excess water from the drilling process being transported off site in suitable tankers by a licensed contractor.
Minimising soil damage during ground restoration works	Once the site surface membrane was removed, care would be taken to avoid pollution of soil, groundwater or surface water from fuel leaks or routine activities during ground restoration.
	Aggregate and concrete (pad and cellar) would be fully removed from site before the impermeable liner was removed so any residual contamination would not be washed into soil.
Avoid pollution of aquifer during decommissioning	Measures would be taken when decommissioning the vertical core well to ensure there would be no inputs of pollutants to groundwater and that there was no subsequent leakage of groundwater, including any gas or other contaminants that this may contain, into the well or to other geological horizons.
Prevention of leaks of gas or suspension fluid	At decommissioning, two permanent barriers would be set within the wellbore to seal the well.
from vertical core well once abandoned	The well has been designed in accordance with the Borehole Regulations reviewed by the HSE and by an independent third party well examiner to ensure wellbore integrity.
	Suspension/ Decommissioning fluid would be brine

The applicant has indicated that the methods in the restoration and aftercare plan would be followed to prevent soil damage. Once the site surface membrane was removed, care would be taken to avoid pollution of soil, groundwater or surface water from fuel leaks or routine activities during ground restoration. Aggregate and concrete (pad and cellar) would be fully removed from site before the impermeable liner was removed so any residual contamination would not be washed into soil.

The applicant has briefly outlined the measures that would be taken when decommissioning the vertical core well to ensure there would be no inputs of pollutants to groundwater and that there was no subsequent leakage of groundwater, including any gas or other contaminants that this may contain, into the well or to other geological horizons.

The applicant indicates that the well has been designed in accordance with the Borehole Regulations reviewed by the HSE and by an independent third party well examiner to ensure wellbore integrity.

The Council acknowledges the above comments, but considers that the potential impact on groundwater sources is not an issue that would be covered within the planning regulatory

aspect of the application. This is considered an issue that would be covered by satisfactory well design and is regulated by the Environmental Permit and overseen by the HSE.

Ground contamination, land stability and impact on mining legacy

In terms of land stability and historic subsidence, South Yorkshire Mining Advisory Service (SYMAS) has indicated that the area has been subject to deep coal mining with one coal seam has been worked as follows:

Barnsley depth ~584m worked in the 1950s

SYMAS indicate that the abandonment plan records indicate that the propose drill well will intercept Dinnington Colliery coal seams working at a depth of approximately 584m. There are no mine workings from other coal seams directly beneath the proposed borehole.

SYMAS indicate that deep coal mining subsidence has now ceased and the area can be regarded as stable. They have raised no objections to this aspect and indicate that well design would be subject to approval by other regulators (Oil and Gas Authority, Coal Authority, HSE and EA).

The Coal Authority have indicated that the application site does not fall with the defined Development High Risk Area and is located instead within the defined Development Low Risk Area. There is therefore no requirement under the risk-based approach that has been agreed with the LPA for a Coal Mining Risk Assessment to be submitted. The Coal Authority have therefore not raised any objections to proposal, though they have recommended that The Coal Authority's Standing Advice should be included within the Decision Notice as an informative note to the applicant in the interests of public health and safety.

With regards to future seismic effects the Inspector dealing with the Harthill site concluded that "...It has been suggested that the development could result in seismic effects or structural damage to properties in the surrounding area and that this could have an effect on householders' insurance policies. From the evidence provided, there is no apparent linkage between the development proposed and such effects, and I therefore give these matters limited weight in my decision."

Moving to the potential impact from underground mine workings and the general safety issues associated with the development, the Inspector concluded "...In view of all of this and all of the above points, I do not agree with the public safety concerns raised in respect of this appeal."

Specific ground contamination issues

The site has predominantly been used for agricultural purposes since the 1850's and it is therefore unlikely that significant contamination of the land has occurred. There may be some potential for minor contamination to exist within the surface soils from the use of insecticides, pesticides, agricultural machinery, unrecorded deposited wastes and natural sources of contamination.

The Council's Pollution Control Officer has indicated that inert waste poses a low risk of generating leachate which may migrate into shallow surface waters. Embedded mitigation

measures in the proposal around groundwater monitoring will provide the opportunity to establish current groundwater quality prior to commencement of the proposal operations.

The vertical exploratory well to be installed will pass through gas bearing stratum and a release of methane gas could occur. The Environmental Report provided by the applicant confirms that gas monitoring is to be undertaken on a continuous basis during the drilling works but is light on any details and how it will be reported. It is suggested that gas venting/flaring will not be required at the site. No information has been provided to suggest that any gas monitoring wells will be installed at the site to assess for any potential migration of methane gas or the impact of gases generated from off-site sources.

The applicant indicates that all surface water that will be generated at the site will be retained on site and then removed by an approved Waste Management Licenced Contractor. It is reported that no water will be discharged from site to the surrounding environment once a drainage system for the site is put in place. However, the site is located on an elevated plateau and any waters/accidental spillages will run towards nearby water courses and surface water features. The Pollution Control Officer indicates that measures to be put in place to ensure the collection and disposal of contaminated waters (flow back waters from the drilling techniques used) produced as part of the exploratory investigations should be deemed to be adequate and sufficient.

The nearest waterbody to the site is Owlands Wood Dyke, a minor watercourse which drains surrounding farmland and flows east, then northeast towards the River Ryton. Other surface water features include two impounded ponds on the Pudding Dyke at Lindrick Dale, immediately upstream of the confluence with the River Ryton. These waterbodies are located within approximately 1.3 km to the south of the site.

Key elements include staged steel casing to seal off aquifer sections and flow paths that may be encountered (such as that caused by former mining sections). The well plans include an initial conductor (surface casing) to approximately 490 m, which provides a barrier to migration for all currently designated aquifer formations and the suspected coal mining depth zones. Detailed review of mining abandonment plans has been undertaken to understand and design for the depths of former mine workings. This section will be drilled with water-based fluids. A second deeper section would also then be cased (intermediate casing) inside the primary casing. This would seal off to approximately 1,183 m depth and protect any further coal measures horizons prior to encountering the formations of interest (Namurian age). Thus the upper potable units and mine zones will have double cased sealing to protect units. The target zone of interest would be cased to approximately 1,679 m, providing a third sealing structure. The well would then be drilled to a total depth (approximately 2,800 m) and a liner installed. Final depths will be confirmed during detailed well design but will adopt the principles above and be subject to third party review.

The groundwater boreholes to be installed are reported to fall outside the scope of this planning application and will be installed under Permitted Development Rights. However, no details regarding the groundwater monitoring have been provided along with details of any surface water monitoring. An environmental monitoring plan will need to be specified and agreed to in order to ensure that contamination is monitored for prior to construction, during the exploratory works and post demolition/restoration works. Establishing a monitoring regime will help with the understanding of any environmental impacts from the drilling works and the communication of risks to the community of Woodsetts.

The applicant has confirmed however that a range of monitoring data will be collected and reported to the Environment Agency. Little information is reported on the monitoring locations, the long term schedule for monitoring and what is being monitored for, particularly in terms of the groundwater and surface water monitoring. This information is suggested will become available under the Environmental Permit to be issued by the EA. The Council's Pollution Control Officer has also recommended that the Council imposes a planning condition on the proposed monitoring to be undertaken. Details for long term monitoring of exploratory well integrity will also need defining.

The Council's Pollution Control Officer initially raised a concern that the applicant may seek the EA's agreement to use additives other than the inert low-toxic oil based drilling muds currently proposed. This may occur in the event that karstic or highly fissured conditions are encountered (which could be present within the principal aquifer on site of dolomite and limestone bedrock). The concern relates to the potential for future contamination. No specific information has been presented by the applicant as to what would happen in the event of alternative drilling additives being used or issues around potential well failure. However, this is not an issue that can be addressed within the planning element of the proposal. The site works fall under and to be regulated by the EA under an Environmental Permit which stems from the Environmental Permitting Regulations 2016. The EA consider that these activities are of a 'low risk' operation and therefore only a standard rules permit will be necessary which follow a set of standard rules relating to Waste Management for the site.

Overall, it is considered that the majority of any potential ground contamination issues will be safeguarded through the Permitting Regulations outside of this planning process. Subject to any additional planning conditions, this element of the proposal is acceptable.

Socio-Economic impacts

Paragraph 120 of the Minerals PPG advises that individual applications for the exploratory phase should be considered on their own merits. They should not be assessed by taking account of hypothetical future activities for which consent has not yet been sought.

A number of objections raise the issue that any future jobs created will not necessarily be available to local people, that INEOS are not a local company, as well as querying the economic benefit to the local area. A number of the jobs would be short term since the duration of the construction elements of the site are limited.

The applicant refers to potential wider economic benefits of shale gas production at this exploration stage carry limited weight. Although they also acknowledge that there may be some degree of economic dis-benefit to local residents and local businesses in close proximity to the site, these are indicated that the impacts will be localised and short in duration. Pollution control and potential health impacts can be addressed satisfactorily through planning conditions and other regulatory regimes and these have been discussed in more detail in the paragraphs above.

The numbers of jobs created is not explicitly specified by the applicant and it is not possible to quantify the numbers of jobs. At a regional and national level this is a growing industry and in future years this is likely to contribute to an increasing proportion of the wider UK economy.

Health impacts

Paragraph 180 of the NPPF requires decision-makers to ensure that there are no unacceptable adverse impacts upon human health and that they take into account the cumulative effect of impacts from individual sites. The Health and Well-Being PPG requires these matters to be considered in the planning decision-making process. The main public health impacts have been discussed in more detail in the paragraphs above, in particular on highway safety aspects, noise and vibration, groundwater supply, surface water quality and flood risk and land contamination and pollution control aspects.

The Environment Agency permit supplies conditions, though these conditions only apply directly to the activities specified by the permit, namely, the management of extractive waste. Additionally the conditions only apply to relevant activities inside the permitted area. Operations on site that are not associated with this activity would not be subject to these permit conditions. Activities outside the permitted area, for example traffic movement on access roads would not be subject to regulation under the permit and need to be considered as part of the planning application.

As indicated within the paragraphs relating to noise and vibration, it is considered that this, along with the volume of construction traffic is likely to have the most impact on public health.

Vibration is separate to seismic activity. Seismic activity is regulated by the Department of Energy and Climate Change (DECC).

As indicated within the noise paragraphs of this appraisal, Public Health England have not raised any objections from a health or noise impact.

The EA along with the Council's Environmental Health department have also not raised any objections on this aspect.

Climate Change

Paragraph 8 of the NPPF highlights the need for the planning system to perform an environmental role, including minimising waste and pollution and mitigating and adapting to climate change including moving to a low carbon economy. Paragraph 153 of the NPPF adds that planning plays a key role in helping to shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change.

The Written Ministerial Statement, Shale Gas and Oil Policy (dated 16 September 2015, updated in May 2018 the "WMS") states that there is a national need to explore the UK's shale gas and oil resources. The WMS states that the Government remains fully committed to the development and deployment of renewable technologies for heat and electricity generation but gas is required to support the Government's climate change target by providing flexibility and reducing reliance upon high-carbon coal. The Government therefore supports the exploration for shale gas as part of the UK's response to climate change.

The WMS represents the Government's position in relation to the need for shale gas exploration and the need for gas to support its climate change target. The potential contribution of this proposed construction of an exploratory well to national greenhouse gas emissions is not likely to be large. The proposal is not considered to have any significant

impact upon the national planning policy objectives relating to climate change and is therefore consistent with the NPPF.

In addition since the previous application was determined, another Ministerial Statement was made on 17th May 2018 which strongly supported the further exploration of the UK's Shale Gas reserves.

The applicant indicates that there is relatively little that an exploratory well can do to minimise its impact upon the causes of climate change. The applicant has indicated that the preferred access route for vehicles is the most appropriate route to the A-road network in order to try and minimise vehicle emissions.

The applicant further indicates that exploration emissions are generally small, although little information is available on emissions associated with exploration. Climate change emissions associated with the proposed development are expected to be predominantly to those from vehicles and drilling equipment which are considered to be generally small and are not considered to be significant.

Objections received indicate that the application contains insufficient information regarding fugitive methane emissions, with the risks therefore unknown. No information is provided regarding Air Quality, especially estimated quantities of escaping gas (leakage), nor how this will be dealt with.

The objections also indicate that it is known that methane escapes from onshore oil production processes. Methane is an extremely potent heat trapping greenhouse gas and thus leakage of methane from onshore oil sites should be part of risk assessment.

Whilst this proposed development is for exploration there would not be any well testing which would result in gas releases and there are no plans by the operator to vent methane. Indeed, the conditions of the Mining Waste Permit do not allow any point source emissions from the site. As such, emissions relating to this proposal would primarily be from the vehicle movements associated with the development and the drilling of the exploration well which, as stated in the Committee on Climate Changes report, are likely to be small.

Overall, from a planning standpoint it is not considered that there are any specific objections to this proposal on climate change grounds. With reference to its wider context and the general advice of the NPPF, this proposal is not likely to have more effects that are over and above that which could normally be expected on a development of this size.

Cumulative impacts

Objections on cumulative impacts have been raised. A number of these objections raise the possibility of future hydraulic fracturing taking place on the same of an adjacent site. The objections go onto indicate that this could be a precursor to a longer term development which could last longer than 5 years, once applications to vary restoration conditions and new phase two applications are submitted by Ineos, if phase 1 tests are successful.

The Council is currently considering this site and application on its own merits. As indicated in the paragraphs above the application at Common Road, Harthill was granted on appeal within the south-west of the Rotherham borough.

Other similar test well drilling applications covered by different PEDL licences have been approved in other local authorities including Mission Springs, Nottinghamshire 2015, Marsh Lane, by the same operator in north east Derbyshire. However, these sites are at least 10km from Dinnington Road. In any case the Inspector(s) dealing with the recent appeals at Harthill and Marsh Lane did not raise this as an issue of concern.

This application is considered to be a singular project that is a discrete proposal that could proceed independently. There are no wind turbines within 3km of the site. It is noted that the rig would only be on site for a short period of time (up to 5 months). As indicated in the landscaping and visual paragraphs above, this is considered to substantially reduce any long term cumulative impact on the surrounding environment.

Restoration and after use

The applicant states that if the results of the exploration work do not warrant further development, the wells would be made safe by plugging and abandoning in accordance with the relevant regulations and industry best practice.

The application indicates that the well would be plugged and decommissioned in accordance with i) good practice; ii) Oil and Gas UK Guidelines on Well Abandonment; and iii) an abandonment plan to be agreed with the Environment Agency, HSE and an independent Well Examiner. The application indicates that two permanent tested barriers (cement) will be set within the steel casing to seal the wellbore. The casing would then be cut approximately 2m below surface and capped with a steel plate. All on-site structures including any welfare and support buildings, the well cellar and sump-lining would be removed. Any residual waste or materials would be removed from the site along with the site lining. The land would be re-graded and deep scarified in accordance with best agricultural practice. Stored subsoil and top soil would be loose spread over the re-graded ground and subsoil to relieve compaction. The site would be re-contoured and restored to agricultural use.

The site would be fenced with temporary 'Heras fencing' to allow the permanent fencing and security fencing to be removed. The concrete pad and cellar would be broken for removal by a licensed waste contractor, and aggregate, drainage pipework and other infrastructure would be removed from the surface.

Paragraph 204 of the NPPF states that Mineral Planning Authorities should 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.

The applicant has applied for a five year planning permission and the supporting statement anticipates that restoration conditions would be used to ensure restoration upon completion of the development. It is considered that this could be adequately controlled by condition.

It is anticipated that the decommissioning and restoration section of the application would require up to two months to carry out the works in full. The applicant indicates that all restoration would be undertaken in appropriate weather conditions to minimise any further disruption and soil erosion. Access tracks and road amendments (junction amendments) would also be restored as agreed with the landowner and Highways Authority, or retained for continued use, subject to any necessary further planning consent.

Other issues

Many of the public representations to this application have objected for reasons linked to fracking, as set out in the publicity section of this report. Fracking forms no part of this application and the proposals have been assessed on their own merits. No further consideration is given to such comments.

Public representations have stated that granting this application would set a precedent for future fracking applications and would inevitably lead to more. However, any future application(s) would be assessed on their own merits and do not form part of the decision making process of this application.

South Yorkshire Police have raised concerns that the extraction of Shale oil gas is highly contentious and brings with it many challenges to Policing in the form of protest activity. A number of residents have also highlighted potential disruption and cost to the taxpayer of policing future protest. The main forms of protest have been outlined as follows:

- Local Residents/protest groups blockading the entrance to the site.
- A "slow walk" with protestors walking in front of attending vehicles in an effort to publicise their cause.
- Vehicle occupation where a protestor will climb onto an attending contractors' vehicles and either lock on with some sort of device or simply refuse to remove themselves.
- Lock ons where a protestor secures themselves to entrance gates to the proposed site or anywhere along the route that would prevent access for vehicles.

Whilst these issues are noted, they are not considered to represent material planning considerations that can be given weight when determining a planning application.

The potential detrimental impact on house prices has been raised as well as increased insurance premiums along with the negative reputation to the village. As is the case in all planning applications, this is not a material consideration and cannot be afforded any weight.

A number of objections raise concerns that INEOS (nor other operators) have previous experience of drilling in the UK and the industry remains untested. This is acknowledged, though again this cannot be afforded any planning weight.

The behaviour and profit motives of the industry are also not issues that can be afforded any material planning weight in the determination of this planning application.

A number of objections have also raised general concerns with the fracking industry at an international level, highlighting examples in the United States and Australia. Again, as these are licensed under different regulatory regimes to the UK, this is not an issue that can be afforded any significant weight.

Conclusion

The applicant seeks temporary permission for a maximum of 5 years, including restoration proposals. The site is in an area of open rural Green Belt. This would involve the temporary introduction of built development, but this is temporary and has also been supported by

future restoration proposals. The NPPG identifies a pressing need to establish, through exploratory drilling, whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas present to facilitate economically viable full scale production. It is not considered that there would be an adverse effect on the long term permanence of the Green Belt in this area. The proposals are not considered to represent inappropriate development in this Green Belt location and, therefore, the principle of development in this location is considered acceptable.

In the Harthill appeal decision of June 2018, the Inspector gave great weight to national government policy and to the benefits of Shale Gas exploration. The Inspector's appeal decision has been taken into consideration during the assessment of this revised application.

The Inspector's overall conclusions gave great weight to the NPPF and national policy and whilst all of the concerns raised were addressed in turn, these were given limited weight and were not sufficient to justify a refusal. The changes to the revised NPPF in July 2018 are also considered similar. The issues raised in this appeal are considered very similar to the current application site RB2018/0918.

From a highway safety perspective, the Council's Transportation Unit along with Highways England have concluded that a safe and suitable access to the site can be achieved and the cumulative impact of the development in transport terms is unlikely to be severe. Accordingly, the development can be supported from a highway aspect subject to conditions.

In terms of ecology, the red-edge site plan lies less than 30m from the Dewidales Ancient Woodland, eastern section. Overall however, whilst there are some omissions within the updated supporting ecological data, the Council's Ecologist now considers that the applicant has submitted sufficient evidence to overcome the previous reasons for refusal. Any omissions, particularly on future lighting details, are now considered to be satisfactorily overcome through the imposition of conditions to potentially mitigate against future detrimental ecological impact. Consequently, it is I now considered that the application can be supported in accordance within Local Policies along with paragraph 175 of the NPPF.

On landscaping and visual amenity, it is acknowledged that the development will result in substantial adverse landscape and visual effects, although these will be from generally within 1.5km of the site and over the short term only. This will also increase the potential for light pollution. The Council's Landscaping Team have not formally objected on visual amenity grounds and it is not considered that there are any formal objections in this regard.

In terms of noise and vibration, no objections have been raised from the principal regulators (the Environment Agency, RMBC Environmental Health or Public Health England). It is considered that noise levels would not be at such an adverse level that would justify a refusal. Subject to recommended conditions including a noise monitoring strategy and management plan, this is considered to safeguard future noise levels would be contained within acceptable parameters.

In terms of heritage and archaeological impacts, the South Yorkshire Archaeology Service indicated that there are significant archaeological features within the proposed development boundary. However, subject to an archaeological condition this is considered to mitigate this concern, the proposal is not considered to have a detrimental impact on the nearest

listed buildings within Woodsetts village centre. Likewise, Historic England have not objected on heritage grounds.

The site lies within the lowest flood risk level and is not within a known surface water drainage area. Both the Council's Drainage Officer and the Environment Agency have raised no objections to future drainage, subject to conditions. Likewise, the proposal is not considered to materially increase the potential for future flood risk.

The Council is currently considering this site on its own merits. Whilst there is a similar proposal recently granted on appeal at the Harthill site, this site is approximately 5km away and it is not considered that there are any significant cumulative impacts arising.

Summarising the issues involving potential future contamination, pollution of ground water and general pollution control issues, as indicated in the appraisal, all issues of well design and construction is considered by the HSE and Environment Agency regulators and is beyond the scope of this planning application. Both regulators have raised no objections to this aspect of the application and there are no planning objections to this element. The Council's Pollution Control Officer has raised no objections, subject to conditions.

A number of other issues have been raised and all representations received have been taken into account. The level of public interest in this application and the volume of objections received from the public is acknowledged, although this does not by itself constitute material grounds for refusal.

Conditions

01

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

Reason

In order to comply with the requirements of the Town and Country Planning Act 1990.

02

The permission hereby granted shall relate to the area shown outlined in red on the approved site plan and the development shall only take place in accordance with the submitted details and specifications as shown on the approved plans (as set out below) (Drawing numbers ref

P304-S21-PA-1001 Pre-Site Access Plan

P304-S21-PA-00 Strategic Location Plan

P304-S21-PA-01 Application Site Plan

P304-S21-PA-04 Existing Ground Plan

P304-S21-PA-05 Proposed Site Entrance & Highway works

P304-S21-PA-06 Proposed Site Layout Plan - Construction

P304-S21-PA-07 Proposed Site Layout Plan - Drilling Stage

P304-S21-PA-08 Proposed Site Layout Plan - Listening Stage

P304-S21-PA-09 Proposed Site Restoration

P304-S21-PA-10 Proposed Lighting Plan - Drilling & Coring

P304-S21-PA-11 Proposed Drainage Plan

P304-S21-PA-12 Proposed Site Layout Plan - Suspension

P304-S21-PA-13 Proposed Internal Access Plan

```
P304-S21-PA-16 Proposed Sections & Details
```

P304-S21-PA-17 Proposed Site Layout Plan - Possible workover

P304-S21-PA-21 Parameter Sections - Develop. & Establish

P304-S21-PA-22 Parameter Sections - Drilling & Coring

P304-S21-PA-23 Parameter Sections - Suspension

P304-S21-PA-24 Parameter Sections - Work over of Well

P304-S21-PA-25 Parameter Sections - Listening Stage

P304-S21-PA-26 Parameter Sections - Abandonment

P304-S21-PA-30 Fence Details

P304-S21-PA-31 Lighting Examples

Reason

To define the permission and for the avoidance of doubt.

03

A copy of these conditions, together with the approved plans and any details or schemes subsequently approved pursuant to this permission, shall be kept at the site office for the development at all times, and the terms and contents thereof shall be made known to the supervising staff on the site.

Reason

To define the permission and for the avoidance of doubt.

04

The development hereby permitted shall be for a limited period, being the period of five years from the date of commencement, as notified under condition 1. The site shall thereafter be cleared of all plant, buildings, machinery and equipment and the land restored in accordance with condition 26.

Reason

To define the permission and for the avoidance of doubt.

05

Prior to the development being commenced, details of a Traffic Management Plan and Route Management Strategy shall be submitted to and approved by the Local Planning Authority and the approved details shall be implemented throughout the duration of the development.

Reason

In the interests of highway safety and amenity.

06

The development shall not be commenced until a signage scheme for C70 between Gateford Roundabout and the site access has been implemented in accordance with details which shall have been submitted to and approved by the Local Planning Authority.

Reason

In the interests of highway safety and amenity.

07

Details of the surfacing and draining of on-site vehicular areas shall be submitted to and approved by the Local Planning Authority before the development is commenced and the approved details shall be implemented.

Reason

In the interests of highway safety and amenity.

O8

No drilling operations shall take place until space has been laid out within the site, in accordance with drawing no. P304-S2-PA-13 Rev B, for vehicular parking and turning facilities, and that space shall thereafter be kept available for parking and turning for the duration of the permission, unless otherwise agreed in writing with the local planning authority.

Reason

In the interests of road safety and amenity

09

No development shall take place until details of the measures to prevent the deposit of mud, clay and other deleterious materials upon the public highway have been submitted to, and approved in writing by, the local planning authority. The measures shall include as appropriate:

- i) the sweeping and cleaning of internal access roads;
- ii) the provision and use of wheel-cleaning facilities;
- iii) the provision and use of lorry sheeting;
- iv) the use of a mechanically propelled road sweeper on the public highway; and
- v) a timetable for providing the above.

Development shall be carried out in accordance with the approved measures. In the event that the measures do not adequately prevent the deposit of mud, clay and other deleterious materials upon the public highway then, within 7 days of a written request from the local planning authority, a scheme of revised and timetabled additional measures to be taken in order to prevent the deposit of materials upon the public highway shall be submitted to the local planning authority for its approval in writing. Following any approval, development shall thereafter be carried out in accordance with the approved revised and timetabled additional measures.

Reason

In the interests of highway safety and amenity.

10

No development shall take place until details of a photographic dilapidation survey of the sections of Dinnington Road and Worksop Road to be used by development traffic has been undertaken and submitted to, and approved in writing by, the local planning authority. A scheme for the repair of any damage incurred as a direct result of site traffic using Dinnington Road and Worksop Road, which shall include a delivery mechanism and programme for the works, shall be submitted to the local planning authority, for approval in writing, within 14 days of being requested. The approved scheme shall thereafter be implemented in full.

Reason

In the interests of highway safety and amenity.

11

No development shall take place until a Noise Management Plan has been submitted to, and approved in writing by, the local planning authority. The plan shall include:

- data from the relevant manufacturers' noise tests for each item of significant noise emitting plant to be used on site, to establish whether noise emissions are likely to be compliant with the noise limits set out in condition 20;
- ii) if significant noise-emitting plant is not likely to be compliant, details of what mitigation would be introduced and timescales for mitigation implementation;
- iii) procedures for addressing any complaints received;
- iv) details of a Noise Monitoring Scheme, including a mechanism to address any non-compliance with the noise limits set out in condition 20;
- v) management responsibilities including operator training, compliance response and investigation, and routine environmental noise monitoring and reporting; and
- vi) methods to determine whether noise is free from tonal, intermittent or impulsive characteristics, the incorporation of these methods in the Noise Monitoring Scheme and a mechanism for the setting of any necessary noise limits and weighting together with any mitigation, including approval in writing by the local planning authority. Development shall be carried out in accordance with the approved plan.

Reason

In the interests of amenity to the surroundings and residential amenity.

12

No development shall take place until verification surveys for the presence of protected species on the site and buffer area have been undertaken and the results submitted to, and approved in writing by, the local planning authority. If protected species are found on the site and buffer area which would be likely to be affected by the development, no development shall take place until mitigation measures have been submitted to, and approved in writing by, the local planning authority. Development shall thereafter be carried out in accordance with the approved mitigation measures.

Reason

In order to minimise the impact on surrounding wildlife.

13

No development shall take place until a Dust Management Plan, detailing a programme of measures to minimise the spread of airborne dust from the site during the development, have been submitted to, and approved in writing by, the local planning authority. Development shall be carried out in accordance with the approved plan.

Reason

In order to minimise the impact on residential properties and on the surrounding wildlife.

14

No development, including any groundwork, shall take place until the applicant, or their agent or successor in title, has submitted a Written Scheme of Investigation (WSI) to the

local planning authority which has subsequently been approved in writing. The WSI shall set out a strategy for archaeological investigation to include:

- i) a programme and method of site investigation and recording;
- ii) a requirement to seek the preservation in situ of identified features of importance;
- iii) a programme for post-investigation assessment;
- iv) provision for analysis and reporting;
- v) provision for the publication and dissemination of results;
- vi) provision for the deposition of the archive created;
- vii) nomination of a competent person, persons or organisation to undertake the works; and
- viii) a timetable for completion of all site investigation and post-investigation works. No development, including any groundworks but excluding any work associated with the approved WSI, shall take place until the local planning authority has confirmed in writing that the relevant pre-commencement requirements of the WSI have been fulfilled. The development shall be undertaken in accordance with the approved WSI

Reason

In order to satisfactory record any archaeological detail.

15

No development shall take place until a scheme to convene and operate a Community Liaison Group has been submitted to, and approved in writing by, the local planning authority. The scheme shall include measures to seek membership from the local planning authority and the local community. The scheme shall be implemented as approved and as far as practicable, unless otherwise approved in writing by the local planning authority.

Reason

In order to ensure that the scheme is effectively managed and monitored for the duration of the development.

16

If the development hereby permitted does not commence (or, having commenced, is suspended for more than 12 months) within 2 years from the date of this decision, the approved ecological measures secured through Condition 28 shall be reviewed and, where necessary, amended and updated. The review shall be informed by further ecological surveys commissioned to establish if there have been any changes in the presence and/or abundance of protected species and identify any likely new ecological impacts that might arise from any changes. Where the survey results indicate that changes have occurred that would be likely to result in ecological impacts not previously addressed in the approved scheme, the original approved ecological measures shall be revised and new or amended measures, together with a timetable for their implementation, shall be submitted to, and approved in writing by, the local planning authority prior to the commencement or recommencement of the development. The development shall thereafter be carried out in accordance with the approved new or amended ecological measures and timetable.

Reason

To define the permission and for the avoidance of doubt.

17

The development hereby permitted shall take place only between the following hours, except in the case of an emergency. Non-Drilling Works

Monday to Friday – 07.00 to 19.00

Saturdays – 07.00 to 13.00

Sundays, Public and Bank Holidays – Not at any time

Drilling Works - including the assembly and demobilisation of the drilling rigs Monday to Friday - 24 hours Saturdays - 24 hours Sundays, Public and Bank Holidays - 24 hours

Reason

In order to minimise the impact on residential properties and on the surrounding wildlife.

18

HGV movements accessing and leaving the site along Dinnington Road shall only take place between 07.00 and 19.00 Monday to Friday and 07.00 to 13.00 on Saturdays and not at any time on Sundays or on Bank or Public Holidays, except in the case of an emergency.

Reason

In order to minimise the impact on the wider residential area.

19

No hedgerows shall be trimmed, laid or removed and no vegetation shall be removed during the bird-breeding season between 1 March and 31 August inclusive, unless they have been previously checked and found clear of nesting birds in accordance with Natural England guidance. If appropriate, an exclusion zone shall be set up around any vegetation to be protected. No work shall be undertaken within the exclusion zone until birds and any dependant young have vacated the area.

Reason

In order to minimise the impact on the local wildlife as well as the visual impact on the surrounding area.

20

The level of noise during the construction of the site access road when these operations are adjacent to the dwellings in Berne Square, as measured at any noise sensitive receptor, shall not exceed, where reasonably practicable, 75dB LAeq 12hr (facade) between 07.00 and 19.00hrs. This noise limit shall apply for no more than 5 days. Thereafter the following noise limits shall apply. The level of noise during the construction set-up and restoration activities hereby permitted, as measured at any noise sensitive receptor, shall not exceed, where reasonably practicable, 65dB LAeq 1hr (facade) between 07.00 and 19.00hrs, 55dB LAeq 1hr (facade) between 19.00 and 22.00hrs and 45dB LAeq 1hr (facade) at any other time. The level of noise during any other activities hereby permitted, as measured at any noise sensitive receptor, shall not exceed 50 dB LAeq 1hr (free field) between 07.00 and 19.00hrs, 44dB LAeq 1hr (free field) between 19.00 and 22.00hrs and 42dB LAeq 1hr (free field) at any other time. The local planning authority shall be notified in writing of the dates of completion of the construction set-up activities, within 7 days of that date, and the commencement of restoration activities, at least 7 days prior to that date.

Reason

In order to minimise the impact on the wider residential area.

21

All reversing warning alarms fitted to vehicles and plant based at the site shall be of a 'white noise' or similar low intrusion type.

Reason

In order to minimise the impact on the wider residential area.

22

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

Reasons

To ensure the protection of controlled waters including the Nottingham Castle Sandstone Principal Aquifer.

23

Notwithstanding condition 2, no external lighting shall be utilised in respect of any phase of the development hereby permitted until details of all external lighting for that phase have been submitted to, and approved in writing by, the local planning authority. The submitted details shall substantially accord with the lighting report submitted with the planning application. The submitted details shall also have regard to the "Guidance Notes for the Reduction of Obtrusive Light GN01:2011" produced by the Institution of Lighting Professionals and "Bats and Lighting in the UK", the Bat Conservation Trust & Institute of Lighting Engineers (2009), Bats and the Built Environment Series BCT. The approved lighting details for any phase shall be implemented in full before the lighting for that phase is first used, and the approved lighting shall be retained for the duration of that phase, unless otherwise approved in writing by the local planning authority.

Reason

To define the permission and for the avoidance of doubt.

24

No drilling operations shall take place until details of the make, model and technical noise specification for the drilling rigs to be used in the development hereby permitted have been submitted to, and approved in writing by, the local planning authority. Development shall be carried out in accordance with the approved details, unless otherwise approved in writing by the local planning authority.

Reason

In the interests of visual amenity

25

Notwithstanding condition 2, no restoration shall take place until a detailed Restoration Plan has, within the period of this permission, been submitted to the local planning authority for approval in writing. The plan shall substantially accord with the measures set out in the

Proposal document, submitted to the local planning authority on 13 June 2018 and drawing no. P304-S21-PA-09 and shall include a timetable for implementation. The approved plan shall thereafter be implemented in full. The local planning authority shall be notified within 7 days of when the restoration works are complete, to allow the local planning authority to issue written confirmation that the restoration has been completed satisfactorily.

Reason

To define the permission and for the avoidance of doubt.

26

Any replacement hedgerow planted as part of the approved Restoration Plan shall thereafter be maintained for a period of five years including weed control, replacement of dead and dying trees and maintenance of planting protection measures.

Reason

To ensure that appropriate amenity is maintained in the construction of the development in the interests of visual amenity

27

Within three months of the issue of the local planning authority confirmation of the completion of the restoration works, a scheme for the aftercare of the site for a period of five years, to promote the agricultural after-use of the site, shall be submitted to the local planning authority for approval in writing. The approved scheme shall thereafter be implemented in full.

Reason

To define the permission and for the avoidance of doubt.

28

Prior to the commencement of development, a Biodiversity Improvement Scheme shall be submitted to and approved in writing by the Local Planning Authority. This scheme shall indicate how ecological enhancement and biodiversity gain will be delivered. The development shall then be carried out in accordance with the approved details.

Reasor

In order to enhance the level of biodiversity and ecological gain.

Informatives

01

Wildlife Legislation

Nature conservation protection under UK and EU legislation is irrespective of the planning system and the applicant should therefore ensure that any activity undertaken, regardless of the need for any planning consent, complies with the appropriate wildlife legislation. If any protected species are found on the site then work should halt immediately and an appropriately qualified ecologist should be consulted. For definitive information primary legislative sources should be consulted.

Furthermore, vegetation removal should be undertaken outside of the bird breeding season, March to September inclusive. If any clearance work is to be carried out within this period, a nest search by a suitably qualified ecologist should be undertaken immediately preceding

the works. If any active nests are present, work which may cause destruction of nests or, disturbance to the resident birds must cease until the young have fledged.

02

The applicant is reminded to obtain any relevant licences required from Natural England as part of the Wildlife and Countryside Act 1981 (as amended) prior to the commencement of any work.

consultations@naturalengland.org.uk.

03

Light spill on Dewidales Wood and the connecting hedgerow should not exceed 1lux and colour temperature should not exceed 4,000Kelvins (about 3,500Kelvins is suitable). These figures represent the latest thinking as regards bats and lighting and are increasingly adopted by local authorities (see Leicester, Leicestershire and Rutland Records Centre 2014 Bats and Lighting.

Available at:

https://www.leicestershire.gov.uk/sites/default/files/field/pdf/2016/8/22/LRERC_Bats_lighting.pdf

04

EA - Non-mains foul drainage

Government guidance contained within the National Planning Practice Guidance (Water supply, wastewater and water quality – considerations for planning applications, paragraph 020) sets out a hierarchy of drainage options that must be considered and discounted in the following order:

- 1. Connection to the public sewer
- 2. Package sewage treatment plant (adopted in due course by the sewerage company or owned and operated under a new appointment or variation)
- 3. Septic Tank

Foul drainage should be connected to the main sewer. Where this is not possible, under the Environmental Permitting Regulations 2010 any discharge of sewage or trade effluent made to either surface water or groundwater will need to be registered as an exempt discharge activity or hold a permit issued by the Environment Agency, addition to planning permission. This applies to any discharge to inland freshwaters, coastal waters or relevant territorial waters.

POSITIVE AND PROACTIVE STATEMENT

The applicant did not enter into any pre application discussions with the Local Planning Authority. During the determination of the application, the Local Planning Authority worked with the applicant to consider what amendments were necessary to make the scheme acceptable. The applicant agreed to amend the scheme so that it was in accordance with the principles of the National Planning Policy Framework.