

**RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL
MUNICIPAL YEAR 2015-2016**

**DEVELOPMENT CONTROL
COMMITTEE
6 AUGUST 2015**

**REPORT OF: SERVICE DIRECTOR
PLANNING**

	Agenda Item No. 8
APPLICATION NO: 15/0147 - DRILL AN EXPLORATORY BOREHOLE TO TEST FOR UNCONVENTIONAL GAS RESERVES IN THE WESTPHALIAN AND NAMURIAN STRATA. LAND NEXT TO FARM ACCESS TRACK AT HENDRE OWEN FARM, LLANHARAN	

1. PURPOSE OF THE REPORT

Members are asked to consider the report below and determine the application in accordance with the advice and recommendation.

2. RECOMMENDATION

To **APPROVE** the application in accordance with the advice given.

3. BACKGROUND

This application was originally considered at a meeting of the Development Control Committee on 2 July 2015 with a recommendation that it be approved (see **APPENDIX A**). Following a discussion on the proposal, it was resolved to defer the application to consider whether there were any implications for the proposal contained within the DEFRA Report which was released on the 1st July 2015 and that in the meantime, the Council's Ecologist be asked to provide further detailed comments on the Ecological Survey submitted by the Applicant owing to concerns about the time of year the study was carried out [Minute 18 refers].

In respect of the first of these matters the Department for Environment, Food and Rural Affairs (DEFRA) published a Draft Shale Gas Rural Economy Impacts paper on its website on 1 July 2015. However, DEFRA's website includes the following important statement about the paper:

'This paper is an early draft of an internal document; it is not analytically robust. Work on it has since been discontinued.'

'The draft paper was intended as a review of existing literature. It includes early, often vague, assumptions which are not supported by appropriate evidence. These were never intended as considered Defra positions or as statements of fact.'

'Containing no new evidence, the paper simply refers to data from overseas studies which cannot be used to predict impacts in the UK with any degree of reliability. The author of the paper was not asked to consider, and did not have an in-depth knowledge of, the UK regulatory framework.'

'In June 2012, the Royal Society and Royal Academy of Engineering report concluded that environmental (and health and safety) risks can be managed effectively in the UK if operational best practices are enforced through regulation. The UK has a rigorous and robust regulatory regime which is fully capable of preventing and managing any risks.'

'This paper has been released further to a Decision Notice issued by the Information Commissioner's Office (ICO) on 8 June 2015. The ICO accepted that the paper was an incomplete draft.'

Having regard to the early draft status of the DEFRA paper it is considered premature and potentially misleading for inferences and implications from it to be drawn for the current planning application for an exploratory borehole on land at Hendre Owen Farm, Llanharan.

In respect of the ecology matter, it is acknowledged that the ecological report that accompanies the planning application was undertaken in winter. The lack of summer survey work has been discussed with the Council's Ecologist who, having looked through the submitted Ecology Report dated January 2015 and examined photographs of the site, has offered the following comments:

'The site of the proposed drilling is clearly a relatively long, but thin track side area that has been used as agricultural storage ground by the farmer, with areas of short rutted grassland backed by taller ruderal vegetation (which from the ecology report appears to be Rosebay Willowherb and Spear Thistle). As shown in the photos these area seems to be used for storing silage bales.'

'The ecology report (and your photos) identifies the existence of a short section of (probably ancient hedgerow) which divides the drilling area into two and three large Oak lie in close proximity to the access track. These are locally important ecological features. Protection of these features is identified as a mitigation requirement in the ecology report and there is a proposal to fence off and reconnect hedgerow with further planting (which if the scheme gains permission should be secured via planning condition). The Ecology report also highlights the close proximity of Japanese Knotweed which is encroaching into the site from the adjacent railway line, and avoidance of the Knotweed is another recommendation of the report.'

'The Ecology, although undertaken in the winter, has considered potential protected species issues, including badgers, bats, dormice and reptiles, amphibians and birds, and from the survey method description included a thorough search of the drilling site area (which is not a large area of ground). Provided trees and hedgerow are protected, Japanese Knotweed measures are employed and lighting is controlled (re: nocturnal species), the report doesn't identify any significant species impacts.'

'A failing of the report is a lack of pre-consultation with local data or record holders. Certainly I don't think I was pre-consulted and as a result the Report lacks local ecological context. If consultation had been undertaken with the Council we would certainly have drawn attention to the presence of dormice in the woodlands between Llanharan and Pontyclun, and also issues of locally important bat roosts and bat activity in this area. We would also have also supplied SINC information, and pre-discussed the scope of assessment work further. Also, December is clearly a sub-optimal survey season. However, having reviewed the Ecology Report and having discussed the scheme with you, I don't think that these failings affect the overall adequacy of the assessment. The ground chosen for the testing drilling is of very low ecological value, and although features of higher value occur in close vicinity (hedgerows and trees) with appropriate controls and mitigation those features should be able to be protected. It will be very important that if any clearance of the tall ruderal vegetation which forms the railway boundary of the site is required those areas are cleared outside the nesting bird season, and that Japanese Knotweed control and night time light mitigation is applied, I don't think there is a requirement for any additional survey/assessment work to advise the application. Because of the evident low ecological value of the area directly affected, I think, despite the winter survey date, the submitted ecological survey/assessment is fit for purpose.

'If this scheme gains planning permission we will need a Tree, Habitat and Species Mitigation Plan which required with details of;

1. physical protection measures and assurance that testing drilling will not take place within the root zones of the three large oak trees identified in the ecology report,

2 .Japanese Knotweed avoidance and control measures,

3. timing of works to avoid nesting birds,

4. details of night time light control (re: Bats), and

5. the delivery of the enhancement measures identified in the Report including bird boxes, enhancement of hedgerow connectivity and stag beetle habitat.'

Having regard for the above comments it is not considered necessary for additional (summer) ecological survey work to be undertaken to inform the planning application and decision making process. However, in accordance with the Ecologist's advice and in the event of Members resolving to grant planning permission then the following wildlife protection condition is recommended:

'No development shall take place until a Wildlife Protection Plan for Construction has been submitted to and approved in writing by the local planning authority. The plan shall include:

- a) *An appropriate scale plan showing 'Wildlife Protection Zones' where construction activities are restricted and where protective measures will be installed or implemented;*
- b) *Details of protective measures (both physical measures and sensitive working practices) to avoid impacts during construction, including physical protection measures and assurances that test drilling will not take place within the root zones of the three large Oak trees identified in the Ecology Report dated January 2015;*
- c) *A timetable to show phasing of construction activities to avoid periods of the year when sensitive wildlife could be harmed (such as nesting bird season);*
- d) *Japanese Knotweed avoidance and control measures;*
- e) *Details of night time lighting control to avoidance disturbance to nocturnal species;*
- f) *The delivery of enhancement measures identified in the Ecology Report dated January 2015, including bird boxes, enhancement of hedgerow connectivity and Stag Beetle habitat;*
- g) *Persons responsible for:*
 - i) *Compliance with legal consents relating to nature conservation;*
 - ii) *Compliance with planning conditions relating to nature conservation;*
 - iii) *Installation of physical protection measures during construction;*
 - iv) *Implementation of sensitive working practices during construction;*
 - v) *Regular inspection and maintenance of physical protection measures and monitoring of working practices during construction;*
 - vi) *Provision of training and information about the importance of the 'Wildlife Protection Zones' to all construction personnel on site.*

'All construction activities shall be implemented with the approved details and timing of the plan unless otherwise approved in writing by the local planning authority.'

'Reason: To afford protection to animal and plant species in accordance with Policies AW5 and AW8 of the Rhondda Cynon Taf Local Development Plan.'

Also, it is recommended that, in the event of Members resolving to grant planning permission, condition 3 in the report attached as **APPENDIX A** be amended to read as set out below so as to permit testing and monitoring of the borehole in addition to site restoration once drilling operations are completed:

'No operations authorised by this permission, with the exception of monitoring, testing and site restoration works, shall take place after a period of 8 weeks following the commencement of drilling operations of the site, unless otherwise agreed in writing with the local planning authority. Written notification of the date of commencement of development shall be submitted to the local planning authority not less than 14 days prior to the commencement of activities on site.'

'Reason: To specify a reasonable timescale for this temporary permission to allow a period of exploration to take place and to ensure the site is returned to its former conditions in the interests of visual amenity in accordance with Policy AW5 of the Rhondda Cynon Taf Local Development Plan.'

Finally, Members are advised that the subsequent to their consideration of the application on 2 July seven late letters making representations in opposition to the proposals have been received from members of the public and the Assembly Members for South Wales West. The grounds of objection in these representations are the same as those raised other representations made by members of the public and summarised in the original report attached **APPENDIX A**.

Members are asked to consider the above report in conjunction with the original report attached at **APPENDIX A**.

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APPENDIX A

APPLICATION NO: 15/0147/10 (PB)
APPLICANT: Coastal Oil and Gas Limited
DEVELOPMENT: Drill an exploratory borehole to test for unconventional gas reserves in the Westphalian and Namurian strata
LOCATION: LAND NEXT TO FARM ACCESS TRACK AT HENDRE OWEN FARM, LLANHARAN
DATE REGISTERED: 02/02/2015
ELECTORAL DIVISION: Llanharan

RECOMMENDATION: Approve

REASONS:

Although the proposed drilling rig, compound, lighting and associated structures will have a visual impact, particularly upon the setting of the historic park and garden at Llanharan House that overlooks site, their impact will be temporary, short-lived and reversible and therefore will have no unacceptable long-lasting harm. Also, the proposal does not give rise to adverse impacts in terms of its consequences for ecology, transport and highway safety, residential amenity, surface and ground water pollution and the operation of the adjacent railway. In conclusion this proposal to undertake exploratory drilling to test for unconventional gas is acceptable in land use planning terms.

APPLICATION DETAILS

Planning permission is sought to drill a single vertical exploratory borehole to a depth of approximately 1300m to test for unconventional gas reserves in the Westphalian and Namurian strata on land next to a farm access track at Hendre Owen Farm, Llanharan. The application is for the purpose of drilling to take samples of these strata to enable laboratory testing for both coal bed methane and shale gases. This is a continuation of the applicant's ongoing sampling and testing program across South Wales, Bristol, Somerset and Kent.

This application is for exploration works only and does not entail any ground stimulation, more familiarly known as hydraulic fracturing or 'fracking', nor does it involve directional drilling and any gas production.

The consent is sought for a temporary period of one year, during which time establishment and site clearance would last 4 weeks, drilling and associated operations 8 weeks, laboratory testing 4 weeks, and gas testing 36 weeks. Hours of work during site establishment, drilling and site clearance would be 11 hours per day from 07.00 to 18.00 hours Mondays to Friday and from 07.00 to 13.00 hours on Saturdays, and during the drilling period would be 24 hours, seven days per week.

The layout of the site will involve enclosing the entire perimeter of the application land with 2 metre high mesh-panel temporary fencing together with the construction of a cut-off drainage ditch linked to a submerged interceptor tank on the site boundary to collect any surface water run-off from the site. An 11 metre high drilling rig will be erected towards the centre of the site, together with a fuel tank, pipe rack, settling tanks and mud mixing tanks. Portable cabins for use as site offices, on-site laboratory, mess room and drying room. Four floodlights will be erected at the site. The lights will be on stands no more than 3m in height, the lights will be hooded and down pointing so that light cannot spill over the site boundary. Parking facilities will be laid out near the site entrance. To reduce the site noise to a minimum, additional screening around the noise sensitive equipment and around the site will be implemented. Soft noise absorbent matting will be used on the site fencing and around the main sources of noise.

Upon completion of drilling the site will be cleared. Thereafter, the only structure that will remain on site will be a well-head cover that will cap the borehole and will be visited at regular intervals to recover gas samples for laboratory analysis for a period of up to 36 weeks. If the results indicate that viable reserves are present in the strata, the applicant will consult to explore a suitable site for gas production, to be the subject of a new planning application. If the exploratory borehole is unsuccessful, or not required, it will be formally abandoned and filled in accordance with Natural Resources Wales (NRW) guidance and the site reinstated in accordance with an agreed scheme. The technical aspects of the drilling will have to be assessed and approved in writing by the Health and Safety Executive Oil and Gas Division, The Coal Authority and the Department for Energy and Climate Change before works commence.

The application is accompanied by the following:

- Planning Statement for Drilling an Exploratory Borehole;
- Ecological Survey Report
- Noise Impact Assessment
- Method Statement for Drilling

SITE APPRAISAL

The site forms part of Hendre Owen Farm and is currently laid with hard core and used for temporary farm storage alongside the farm. The site is privately owned and it is understood the application is made with the full consent of the landowner. The site is flanked along its northern boundary by a cutting through which the Cardiff – Swansea mainline railway travels. To the north of the railway and A473 the land is predominantly open countryside and woodland, and includes Llanharan House and Gardens which are Listed. To the south the site the land is predominantly a mosaic of open countryside and woodland.

The farm access roads will be used to get to and from the site; no additional roads are required. The access to the site from the A473 is over a railway bridge that does not have any weight restrictions imposed. The nearest residential properties to the site are located 250m east and north-west.

PLANNING HISTORY

01/2240	Hendre Owen Farm, Llanharan, Pontyclun.	Construction of hardstanding for storage of winter feeds. Area to be filled with soil and stone.	Permitted Development 06/06/01
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PUBLICITY

The application has been the subject of neighbour notification, site notices and a notice published in the Press.

Arising from this process a total of 28 letters and emails have been received from members of the public and Llanharan Community Council.

The grounds of objection to the proposed development are summarised as follows:

- It is a dangerous and environmentally damaging development that poses unquantifiable risks to human and environmental health, and impacts adversely on local residential amenity.
- Risks causing air pollution from greenhouse gas emissions and flaring, water contamination from drilling fluids; noise pollution from drilling operations and other equipment; light, dust, and odour pollution.
- Risks causing subsidence, landslips and earth tremors in an area with a history of past mining activity.
- Requirement for large volumes of water and need to treat waste water generated by the development.
- Visual intrusion in the landscape, especially from the 11m high drilling rig.
- Promotes use of fossil fuels, which will create carbon emissions that contribute to climate change; renewable energy proposals should be supported instead.
- Generate additional traffic, especially HGVs, on an already congested highway network, and give rise to highway dangers because of an intensification of use of substandard highway access to and from A473.
- Road bridging the railway is unsuitable to serve as access to site for use by heavy vehicles.
- Ecological impacts on habitat, wildlife and protected species, which have not been properly assessed by applicant.
- Potential adverse impact on vitally important railway infrastructure immediately adjacent to the drilling site.
- Application site is agricultural land not a brown-field site.
- Application site is located in a green wedge between Llanharan and Pontyclun that will erode the countryside at this location.
- Perception that exploratory testing is related to and is a prelude to the process of hydraulic fracturing (known as fracking).
- Development lies in close proximity to and is not in keeping with Llanharan House, which is Grade II* Listed of historic significance, and the Registered Park and Garden at the House.

- Development unlikely to provide significant job opportunities and any that are created will be temporary.
- Failure to adequately consult with community affected by the development.
- Fracking is banned or subject to a moratorium in other countries.
- Development will lead to on-site protestors with attendant safety issues, policing costs and negative publicity.
- Concerns over the long-term integrity and safety of the borehole and legacy of any materials left in the ground.
- Development could affect public enjoyment of the footpath, and measures put in place to ensure the path is not obstructed.
- Depreciation of property values.

CONSULTATION

Transportation Section - no objection.

Land Reclamation and Engineering - no adverse comment from a flood risk perspective.

Public Health and Protection - comments that the applicant has submitted a report and associated acoustic scheme in respect of the proposed drilling work. The report includes necessary mitigation measures to reduce noise to a minimum. The Noise mitigation scheme, as approved, shall be implemented before the drilling commences and shall be maintained thereafter in accordance with the scheme for the duration of the works. In addition, for the applicant's information and consideration, according to our records there are two private water supplies within 1km of the exploratory borehole. The source of these supplies is unknown and may be further/closer to the proposed borehole than shown on the plans.

Natural Resources Wales - no objection subject to conditions covering compliance with Method Statement for Drilling, surface water protection, pollution prevention measures, ecology and lighting.

Dwr Cymru Welsh Water - no comments to offer on the application.

Cadw - the proposals lie within the essential setting of the grade II registered historic park and garden at Llanharan House PGW(GM)16(RCT). The small, eighteenth century landscape park provides the setting for Llanharan House. The house is situated on a south-east facing slope and the significant views (as identified in the Register) extend from the house and front terrace across the parkland.

The application site and associated works traffic would be clearly visible from key areas of the registered park and garden including the forecourt in front of the house, the formal garden to the west of the house and from the drive. The proposed drilling rig is approximately 11m in height and will be visible above the trees from the registered park. It is also highly likely that the compound and cabins will be visible. The visual impact is exacerbated by the proposed lighting and also during the winter months when there are no leaves on the intervening trees.

Cadw understands that it is proposed that the drilling rig and lighting will remain on site for a period of up to 10 weeks. The applicant has also advised that once the drilling operations are complete, the rig, lighting, cabins and fencing would be removed and the only structure left on-site would be a well-head cover which would be visited periodically over the remaining period to permit gas samples to be taken and analysed.

If planning permission is granted Cadw suggests that conditions are put in place to ensure the rig, lighting, cabins and fencing are removed at the end of the limited time period as advised by the applicant (approx 10 weeks) to reduce the visual impact on the registered park and garden.

Although Cadw considers the development to have an adverse visual impact on the registered park and garden at Llanharan House, Cadw does not consider that impact to be significant because of the short-term, temporary nature of the proposals.

Parks and Countryside Section - no records of statutory protected species from the immediate vicinity, though Bat informative note advised. No objection on the basis the application is intended to take place on land covered in hard core and does not propose any works to existing trees and hedgerows.

Glamorgan Gwent Archaeological Trust - no objection on archaeological grounds.

Coal Authority - no objection.

Network Rail - no objection, though offers comments and requirements for safe operation of the railway and the protection of Network Rail's adjoining land.

POLICY CONTEXT

Rhondda Cynon Taf Local Development Plan

The application site lies outside settlement limits of Llanharan and Pontyclun, as defined in the LDP (policy SSA 13) and within a Green Wedge between Llanharan, Pontyclun and Llanharan (policy SSA 22.4).

Policy CS2 places emphasises on sustainable growth in the Southern Strategy Area.

Policy AW2 - advises that development proposals on non-allocated sites will only be supported in sustainable locations.

Policy AW5 specifies criteria for new development. It requires new development to have an acceptable impact on the character and appearance of the site and surrounding area, no significant impact on the amenities of neighbouring occupiers, retention of site features of natural environmental value, to design out opportunity for crime, and to have good access.

Policy AW7 seeks to ensure development proposals do not adversely impact of site of archaeological and historic importance.

Policy AW8 seeks to preserve and enhance the natural environment by protecting it from inappropriate development.

Policy AW10 seeks the protection of environmental and public health and does not permit development proposals where they would cause or result in a risk of

unacceptable harm to health and/or local amenity because of issues such as contamination and pollution, etc., unless they can be adequately be mitigated or overcome.

Policy AW12 supports development proposals which promote the provision of renewable and non-renewable energy, such as on-shore oil and gas, where there is no unacceptable effect upon the interests of soil conservation, agriculture, nature conservation, wildlife, natural and cultural heritage, landscape importance, public health and residential amenity.

National Guidance

In the determination of planning applications regard should also be given to the requirements of National Planning Policy which are not duplicated in the Local Development Plan, particularly where National Planning Policy provides a more up to date and comprehensive policy on certain topics.

The Department for Energy and Climate Change (DECC) published the Overarching National Planning Policy Statement (NPS) for Energy EN1 in July 2011, which indicates that fossil fuel power stations will continue to play a role in our energy mix as the UK makes the transition to a low carbon economy.

The following documents set out the land use planning policy guidance of the Welsh Government in relation to mineral extraction and related development in Wales.

Planning Policy Wales

Mineral Planning Policy Wales states 'where oil and gas operations can be carried out in an environmentally acceptable way and consistent with the principles of sustainable development, there is no case in land use planning terms for placing more restrictions on the development than are necessary to ensure the protection of the environment.

MTAN2: Coal (January 2009).

Welsh Government's '*Energy Wales: A Low Carbon Transition*' states that gas will be a key transitional fuel because greenhouse emissions from gas are significantly less than coal subject to the method of extraction. It goes on to note that gas is a flexible, responsive and reliable source of energy which can play a key role in the transition to a genuinely low carbon energy system.

REASONS FOR REACHING THE RECOMMENDATION

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that, if regard is to be had to the development plan for the purposes 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.

Furthermore, applications that are not in accordance with relevant policies in the plan should not be allowed, unless material considerations justify the grant of planning permission.

Main issues:

The chief material considerations in the determination of the application for proposed exploratory drilling to test for unconventional gas reserves at this location are:

- Planning policy context
- Potential environmental and amenity impacts, with particular reference to visual and landscape, historic assets, ecology, access and highway safety, water environment, noise and vibration, railway operations, and other miscellaneous matters.

Before these material considerations are considered it is important to deal with some preliminary matters.

Firstly, a significant number of objectors to this application raise concerns as to possible future proposals for gas extraction and in particular the process known as hydraulic fracturing (familiarily termed 'fracking'). Whilst these concerns are understood, the current proposal does not include extraction whether by fracking or other methods. Any future proposals for extraction would require a further application for planning permission and the grant of planning permission for mineral exploration does not indicate a presumption in favour of future exploitation of any mineral resources found. **Therefore, concerns about fracking, and the perceived consequences of it, are not material in the determination of this application.**

Secondly, the Town and Country Planning (Notification) (Unconventional Oil and Gas) (Wales) Direction 2015 came into effect from 16 February. The Direction requires that any application registered from that date for the exploration, appraisal or extraction of unconventional oil and gas which would utilise unconventional techniques (including hydraulic fracturing) must be referred to the Welsh Ministers, where local planning authorities are minded to approve them. The effect of the Directive is to give Welsh Ministers the opportunity to consider whether wishes to call-in such applications for their own determination; therefore, it does not amount to a moratorium on fracking. The current application before Members was submitted and valid on 30 January 2015 therefore, **the Direction does not apply to this application.**

Thirdly, the application has been screened and an Environmental Impact Assessment (EIA) not required. The proposal does not fall within any of the descriptions given in Schedule 1 of the *Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999*, as amended. Although Schedule 2 of the same Regulations includes deep drillings, the site area at 0.14 hectare is well below the applicable threshold of 1 hectare, accordingly the proposal is not EIA development and an Environmental Assessment not required to be submitted to accompany the planning application.

The proposed development in the context of national and local planning policies

Exploration and extraction of indigenous gas resources has considerable support at a national level, evident in the Department of Energy and Climate Change's

Overarching National Planning Policy Statement for Energy (EN-1) and the Welsh Government's *Energy Wales: A Low Carbon Transition*, which see gas as a playing a key role in our energy mix as the UK makes the transition to a low carbon economy. Likewise, *Mineral Planning Policy Wales* also supports oil and gas operations where they can be carried out in an environmentally sensitive way consistent with the principles of sustainable development.

The local planning policy context is provided by the Rhondda Cynon Taf Local Development Plan (LDP), within which the application site lies outside settlement limits of Pontyclun and Llanharan, though is not covered by any specific allocations and designations. Planning Policy Wales provides that the countryside will be conserved and enhanced for the sake of its natural heritage, natural resources etc. Although the application site is located in the countryside where development is strictly controlled, exploration for mineral and fossil fuel reserves can only ever take place where those reserves are known to occur. Seldom will it be either appropriate or practicable to undertake such exploration in built-up areas. Also, the exploration under consideration in this application is for a temporary period, after which the site is capable of being restored to its pre-development condition. Its effects are therefore comparatively short-lived and reversible.

Having regard to these factors it is considered there is as a matter of principle no planning policy objection to exploratory drilling for unconventional gas at this location provided that no other material considerations are of sufficient weight to indicate to the contrary.

Visual and Landscape Impact

The application comprises a relatively small and fairly well-secluded parcel of agricultural land on Hendre Owen Farm situated in a sparsely populated rural location between Llanharan to the west, Pontyclun to the east and Llanharan to the south. It is partly shielded from public vantage points, in particular the A473, by trees, a hedgerow and embankment. Also, it is physically separated from land to the north by the main Cardiff to Swansea railway line which runs in a cutting between the site and the A473. Much of the equipment and cabins that is proposed to be installed on the site will no greater than the height of a single storey building and will be screened from view by the boundary vegetation. At 11 metres in height the drilling rig will to be the most prominent visible piece of equipment on the site, and will be clearly visible above the boundary hedgerow and tree-tops, especially when viewed from higher ground to the north of the A473 and from Llanharan House and Park. However, drilling is proposed for a temporary period of 8 weeks after which the rig and cabins will be removed and all that will remain will be the well-head apparatus. The compound will be lit at night, which will render the development more visible in the hours of darkness, though the lights will be no more than 3 metres in height and will be hooked down and pointed so that light cannot spill over the site boundary.

Although situated in close proximity to a heavily trafficked public highway (A473) and a mainline railway, any views of the development from the A473 and the railway line will be relatively brief and fleeting, Views will be more prolonged for pedestrians using the A473 and the occupants of and visitors to Llanharan House and the associated registered park and garden. There are unlikely to be prominent views of

the application site and associated works from other dwellings in close proximity to the site. Therefore, at this more general level it is considered that the visual and landscape impacts would be minimal, particularly having regard to the rural location, the temporary nature of the drilling operations and associated works, and the reversibility of any short-term harm. As a consequence it is considered that the development would not have long term and irreparable visual and landscape impacts, and does not conflict with Policy AW5 of the LDP.

Impact on Assets of Historic Interest

Notwithstanding the conclusion reached on the consequences of the proposal for the general visual and landscape amenity of the area, it is important to focus upon and consider the consequences of the development for features of specific historic and landscape interests in the locality. In this regard it is evident that the proposals lie within the essential setting of the grade II registered historic park and garden and is visible from the grade II* listed building and associated features at Llanharan House. The documents submitted in support of the application fail to acknowledge the park and garden at Llanharan House or its registered status, and this is a significant omission.

The small eighteenth century landscape park at Llanharan provides the setting for Llanharan House. The house is situated in an elevated position on a south-east facing slope and the significant views (as identified in the Register) extend from the house and front terrace across the parkland in a south-easterly direction and take in the rural backdrop beyond. Although partially screened by trees, the proposed development lies within and interrupts those views. This aspect of the proposed development has been carefully considered by Cadw and the Council's Conservation Officer. They advise that the application site and associated works traffic would be clearly visible from key areas of the registered park and garden including the forecourt in front of the house, the formal garden to the west of the house and from the drive. The drilling rig will be visible above the trees from the registered park. It is also likely that the compound and cabins will be visible, and that the visual impact is exacerbated by the proposed lighting and also during the winter months when the intervening trees are not in leaf. The development will therefore have an adverse visual impact on registered park and garden at Llanharan House. But, in that the drilling rig, lighting, compound and associated cabins and fencing would remain in place for a no more than 8 weeks both Cadw and the Council's Conservation Officer consider that impact not to be significant because of the short-term, temporary nature of the proposals. In the event of planning permission being forthcoming the applicant is prepared to accept a condition (see condition 3 below) that requires removal of all above ground apparatus within 8 weeks of the date of commencement of development. On this basis the proposal it is concluded that the proposed development does not conflict with Policy AW7 of the Local Development Plan which seeks to safeguard Rhondda Cynon Taf's historic environment from the effects of harmful development.

Access and highway safety

The proposed borehole site and compound is served off the A473 and via a private farm track and Network Rail maintained bridge. The applicant has submitted a traffic

management plan within the Planning Statement which indicates limited vehicular movement to and from the temporary site over the period of site establishment, drilling, and equipment removal, whilst monitoring of the borehole will continue for a further 36 weeks with minimal daily traffic to site.

Measures have been identified within the Planning Statement to prevent dust or mud being deposited on the highway and to provide adequate space within the site compound to cater for parking for operatives, visitors and delivery vehicles. Measures have been identified to prevent glare from night time lighting. All of these measures are considered acceptable.

Adequate space has been set aside for turning to allow all vehicles to enter and leave the A473 in forward gear.

Taking all of the above into account and having regard to the limited amount of HGV vehicular movements and limited duration of the active site establishment and borehole drilling phase, the proposal is considered acceptable in terms of its accessibility and consequences for highway safety, and does not conflict with Policy AW5 in these regards.

Water Environment

A chief concern, commonly mentioned in association with the exploration and extraction of unconventional gas resources from rock strata, is the risks of pollution to surface water drainage systems and underground aquifers, in particular from any loss of drilling fluids used in the drilling procedures.

The applicant advises that the control of groundwater during exploratory drilling will be achieved by the density of the drilling fluids which will prevent any water ingress. The hydrostatic pressure created by the column of fluid in the borehole will reduce the ingress of groundwater by the fluid effectively creating a barrier against the wall of the borehole. The local aquifer will be completely sealed with steel casing cemented into place. Natural Resources Wales (NRW) has noted that borehole would be cased to a depth of 550 metres below which it would be open-hole. In view of this proposal and the inclusion of in-hole testing, NRW has expressed concern the drilling may produce gas or form water that could ingress the borehole. To minimise the risk of gas and water migration into the overlying strata NRW initially required the borehole to be cased to the target horizon. In response the applicant has advised the lower section of the borehole will not be cased to allow access to the coal seams. This is an exploratory borehole with a number of different horizons (coal seams) so it not feasible to case these individually. Instead the applicant proposes to use inflatable packers lowered down the borehole to seal off the sections above coal seam with pressure recorders placed between the packers to measure the changes in pressure. The applicant states that no formation water is produced from the zone and only clean water is pumped down the well to increase the pressure in the borehole. It is not expected to produce any gas from the formation as the hydrostatic head in the borehole will be maintained during the testing procedure.

The drilling fluid is a proprietary product known as 'Pure-Bore', which is a non-toxic biopolymer that degrades naturally within 8 to 52 weeks and is understood to be

commonly used to drill water wells without contamination problems arising and has been accredited by the Centre for Environment, Fisheries and Aquaculture Science (part of DEFRA) for use in the marine environment. The applicant advises that Pure-Bore has been granted approval under regulation 31(4)a of the Water Supply (Water Quality) Regulations 2000 and the Water Supply (Water Quality) Regulations 2010 and therefore approved for use in public water supplies. It is therefore considered to pose little risk or no risk to the environment. Also, the water and fluids used for drilling are contained in a closed loop system that can be easily monitored for leaks.

All oils and fuels will be stored within a bunded fuel tank where the volume of the bund will be 1.5 times the capacity of the tank. The site toilet will be a hired 'portaloo' type and will be emptied weekly by a licensed operator.

The applicant proposes the construction of a cut-off ditch around the site perimeter and submerged sealed interceptor tank to prevent discharge of surface water from the site. None of the drainage consultees has objected to this proposal as a means of preventing pollution of the surface water environment.

Natural Resources Wales is the relevant regulatory authority insofar as groundwater pollution is concerned, though Dwr Cymru / Welsh Water (DCWW) also has examined the application in relation to the vulnerability of its ground water sources. NRW has confirmed that it is satisfied with the information on the drilling fluid to be used, the methods to be used to minimise the risk of loss of drilling fluid during the drilling process, as well as measures for the collection and disposal of the drilling fluid. NRW has no objection to the proposal subject to compliance with submitted Method Statement for Drilling. DCWW has confirmed that that it also has no observations to make on the application at this time. Public Health and Protection has drawn attention to the existence of two private water supplies within one kilometre of the proposed borehole site though has raised no concerns in respect of any risks to that supply as a consequence of the development.

Taking the above into consideration, and having regard for the fact that the borehole would be sealed in accordance with NRW guidelines, there is no reason to believe the application development would pose a threat of pollution to surface water and ground water in the vicinity of the site. Accordingly, it is concluded that the proposal would not harm the quality of the surface water and ground water environment, therefore does not conflict with LDP Policy AW10.

Ecology

In order to inform the ecological consequences of the proposed development, the application is accompanied by an Ecology Survey undertaken by a Chartered Ecologist. The results of the survey conclude that the site is of low biodiversity value and does not support a wide range of species including protected ones such as Badger, bats and Barn Owl. Moreover, the Ecology Survey report concludes that it is unlikely the proposed development would have an adverse environmental impact upon bats in the area because there will be no loss of foraging areas for bats, as the site is sub-optimal habitat; there will be no loss of commuting routes for bats as no hedgerows will be removed; and there will be no loss of connectivity of habitat. Overall, therefore it is not thought that the development will have any adverse effects

on bats and other wildlife. The site set-up works will be restricted to daylight hours. The drilling operations will be a 24 hours per day operation, but contained within a small footprint, with no noise at night-time, so there will be no adverse potential impact on nocturnal birds or crepuscular bats, from equipment movements and lights. All lights will be downwards facing, so as not to interfere with bat movements, and will be shielded away from the railway line, so as not to lighten up the railway line at night when bats will be likely to be using the railway corridor as a commuting route. The heavy plant that will access the site will arrive from the west via the concrete farm track and will pass under the overhanging branches of a single oak tree. As a precaution against damage and harm to nearby trees, their protection is capable of being safeguarded by condition requiring measures to be put in place to protect them during operations at the site (see condition 12 below).

Although it has been pointed out that the Ecology Survey was undertaken in the middle of winter, both the Council's Ecologist and Natural Resources Wales have offered no adverse comment regarding its findings and conclusions. On the basis that the drilling rig, compound, fence and lighting will be in situ for no more than 8 weeks, the proposal will have no significant and lasting effects on the ecology of the site and its surroundings therefore considered acceptable in this regard and in compliance with LDP Policy AW8.

Vibration

The applicant considers the perceived risk of vibration arising from the development to be nil for the following reasons:

- Experience from drilling previous sites near houses and industrial premises;
- Early stage drilling is through soft overburden that will absorb vibration;
- Once the sandstone is entered by the drill bit vibration will be cushioned by the over burden and distributed through low ground pressure tracks on the drill rig.

None of the consultees has taken issue with the proposal in respect of its potential vibration impact, therefore there is no objection in this regard. Nevertheless, as a precaution it is suggested that effects of vibration from the operations are monitored and assessed in accordance with a vibration methodology (see condition 7 below).

Noise

A Noise Impact Assessment accompanies the planning application, and identifies four noise sensitive premises which are farms and houses situated from 250 metres to 730 metres from the location of the application site. Predicted combined noise levels from stationary and mobile plant without screening are indicated to marginally exceed the night-time limit of 42dB(A) in MTAN1 at the nearest residences. In order to control noise levels at night, plant will be fully screened (excluding the high level drill section) and exhausts should point away from the critical receivers. To reduce the site noise to a minimum, additional screening around the noise sensitive equipment and around the site will be implemented. Soft absorbent matting will be used on the site fencing and around the main sources of noise.

Subject to implementation of the acoustic attenuation measures proposed as part of the development then Public Health and Protection offered no adverse comments in respect of the noise impacts of the overall scheme. This can be secured through condition (see condition 11 below).

Impact on operation of adjacent railway

The application site is located immediately adjacent to a railway cutting through which the main Swansea – Cardiff mainline railway travels. This is one of the primary communication routes through the County Borough and it goes without saying that any development that potentially affects railway service operations on that route requires very careful consideration. The particular concern with this proposal relates to the possibility consequences for railway services of drilling operations in close proximity to the railway corridor.

Network Rail has returned observations of no objection to the proposal on the basis that it is for vertical borehole exploratory drilling only. Network Rail will, however, will require submission of a full technical method of working and stability of the drilling rig prior to works taking place to ensure that any plant or machinery is positioned a sufficient distance from Network owned property to prevent accidental entry onto railway property of such plant. This should be sufficient to allow for the risks of drill rig toppling, particularly in the vicinity of the railway line. In the event of planning permission being forthcoming an appropriately worded condition is capable of safeguarding the operation of the adjacent railway (see condition 6 below).

OTHER ISSUES

Most of the issues raised in the representations received from members of the public and Llanharan Community Council are addressed in the assessment above. Those issues that have not been addressed so far – potential for earth tremors, need for large water volumes and treatment capacity, fossil fuels and climate change – are essentially matters that relate to oil and gas production which the current planning application is not about. In terms of the consequences of the proposal for public footpaths in close proximity to the site, none will be directly affected by the development. The consequence of the development for local property values is not a material planning consideration. Finally, the application has been the subject of adequate public consultation in the form of direct neighbour notification, erections of notices on an in the vicinity of the site, and publication of a notice in the Press.

Community Infrastructure Levy (CIL) Liability

The Community Infrastructure Levy was introduced in Rhondda Cynon Taf from 31 December 2014.

The application is for development of a kind that is not CIL liable under the CIL Regulations 2010 (as amended).

Conclusion

It is concluded that this proposal to undertake exploratory drilling to test for unconventional gas is considered acceptable in land use planning terms. Although the proposed drilling rig, compound, lighting and associated structures will have a visual impact, particularly upon the setting of the historic park and garden at Llanharan House that overlooks site, their impact will be temporary, short-lived and reversible and therefore will have no unacceptable long-lasting harm. Also, the proposal does not give rise to adverse impacts in terms of its consequences for ecology, transport and highway safety, residential amenity, surface and ground water pollution and the operation of the adjacent railway. The proposal is recommended for approval subject to conditions set out below.

RECOMMENDATION: Grant

1. The development hereby permitted shall begin no later than five years from the date of this permission.

Reason: To comply with Sections 91 and 93 of the Town and Country Planning Act 1990.

2. The development shall be carried out in accordance with the following approved plans and documents:

- Llanharan Borehole Location Plan
- Detailed Location of Proposed Drill Site
- Site Layout Plan
- North – South Section
- East – West Section
- Store Unit Plans and Elevations - drawing number 81136-16
- Office Unit Plans and Elevations – drawing number 81136-04
- Lighting Layout Plan – dated 30 January 2015
- Location of Cut Off Ditch Plan – dated 30 January 2015
- Llanharan Exploratory Borehole Method Statement for Drilling, January 2015
- Llanharan Exploratory Borehole Planning Statement for Drilling an Exploration Borehole, January 2015
- Llanharan Borehole, Hendre Owen Farm, Llanharan – Ecological Survey, with assessment of impacts of proposed works, mitigation and enhancements (dated 7 January 2015)
- Noise Impact Assessment 3602/ENS1 by Hunter Acoustics dated 8 January 2015.

Reason: In order to define the terms of the permission granted and to minimise the risk of loss of drilling fluid and protect vulnerable groundwater in accordance with Policy AW10 of the Rhondda Cynon Taf Local Development Plan.

3. No operations authorised by this permission, with the exception of site restoration works, shall take place after a period of 8 weeks following the commencement of drilling operations on the site, unless otherwise agreed

in writing with the Local Planning Authority. Written notification of the date of commencement of development shall be submitted to the Local Planning Authority not less than 14 days prior to the commencement of activities on site.

Reason: To specify a reasonable timescale for this temporary permission to allow a period of exploration to take place and to ensure the site is returned to its former conditions in the interests of visual amenity in accordance with Policy AW5 of the Rhondda Cynon Taf Local Development Plan.

4. The development hereby permitted shall not be commenced until such time as a scheme for the storage of oils/fuels/chemicals has been submitted to and approved in writing by the Local Planning Authority

Reason: In order to prevent pollution of the water environment in accordance with Policy AW10 of the Rhondda Cynon Taf Local Development Plan.

5. Notwithstanding the submitted documents, full details of a scheme for the disposal of foul and surface water drainage shall be submitted to and approved in writing by the Local Planning Authority and the approved scheme shall be fully implemented prior to any drilling operations or site preparation taking place. The submitted scheme shall include:

- i) Proposal for the treatment and disposal of suspended solids from surface water runoff;
- ii) Proposals for the treatment and removal of suspended solids from water (groundwater and drilling fluids) abstracted from the ground during drilling and pumping works;
- iii) Emergency procedures to be implemented where any failure results in the pollution of controlled waters.

Reason: In order to prevent pollution of the water environment in accordance with Policy AW10 of the Rhondda Cynon Taf Local Development Plan.

6. Notwithstanding the approved plans full details of the technical method of the working and stability of the drilling rig shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of development. Drilling operations shall be carried out in accordance with the approved details.

Reason: To ensure that any plant or machinery is positioned a sufficient distance from adjacent operational railway land to prevent accidental toppling and entry onto railway property of such plant in the interests of public safety in accordance with Policy AW10 of the Rhondda Cynon Taf Local Development Plan.

7. Monitoring and assessment of vibration from the operations shall be carried

out in accordance with the vibration methodology below unless otherwise agreed in writing with the Local Planning Authority.

- i) An acceptable datum level of vibration will be agreed with the Local Planning Authority prior to drilling commencing.
- ii) The inherent vibration of the drill rig will be monitored before transporting to site.
- iii) Normal prevailing vibration over the drilling area will be measured at the nearest residential and commercial properties before drilling commences.
- iv) From the commencement of the drilling operation, vibration will initially be continuously monitored without interruption; at times when the drill is both in use and not in use. Monitoring will take place at both the nearest residential and commercial properties. The duration of continuous monitoring will be agreed with the Local Planning Authority once representative vibration data has been compiled and assessed.
- v) Once the recorded vibration level approaches 10% below the agreed datum level, drilling will cease.

Reason: To safeguard the amenity of neighbouring residential properties and the operations of neighbouring commercial properties in accordance with Policy AW10 of the Rhondda Cynon Taf Local Development Plan.

8. Any site lighting shall be carried out strictly in accordance with the submitted documents and plans, unless otherwise agreed in writing with Local Planning Authority.

Reason: To ensure there is no disturbance to wildlife in accordance with Policy AW8 of the Rhondda Cynon Taf Local Development Plan.

9. Before the development is brought into beneficial use the means of access, together with the vision splays, parking, hardstanding and turning facilities, shall be laid out and constructed in accordance with approved plans and shall be retained throughout the duration of the works.

Reason: In the interests of highway safety in accordance with Policy AW5 of the Rhondda Cynon Taf Local Development Plan.

10. The works to prepare the site for drilling, construct and dismantle the drill and associated equipment, and restore the site shall only be carried out between the hours of 08:00 to 18:00 hours on Mondays to Fridays and between the hours of 08.00 to 13.00 on Saturdays and at no time on Sundays and Public Holidays.

Reason: To safeguard the amenities of neighbouring properties in accordance with Policy AW5 of the Rhondda Cynon Taf Local Development Plan.

11. The noise mitigation scheme submitted as part of the application shall be

implemented before the commencement of drilling operations and shall be maintained thereafter in accordance with the scheme for the duration of the works.

Reason: To safeguard the amenities of neighbouring properties in accordance with Policy AW5 of the Rhondda Cynon Taf Local Development Plan.

12. Before any work is commenced on site, including site works of any description, each of the trees to be retained shall be securely fenced off by a chestnut paling or similar fence erected in a circle round each tree to coincide with the extremity of the canopy of the tree. Within the areas so fenced off the existing ground level shall be neither raised nor lowered, and no materials or temporary buildings or surplus soil of any kind shall be placed or stored thereon. If any trenches for services are required in the fenced-off areas they shall be excavated and back-filled by hand and any tree roots encountered with a diameter of 5cms or more shall be left unsevered.

Reason: To protect the existing trees on the site during the course of site set- up, drilling operations and restoration works in the interests of amenity in accordance with Policies AW5 and AW6 of the Rhondda Cynon Taf Local Development Plan.

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LOCAL GOVERNMENT ACT 1972

as amended by

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985

RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

LIST OF BACKGROUND PAPERS

DEVELOPMENT CONTROL COMMITTEE

06 AUGUST 2015

REPORT OF: SERVICE DIRECTOR PLANNING

REPORT

**APPLICATION NO: 15/0147 - DRILL
AN EXPLORATORY BOREHOLE TO
TEST FOR UNCONVENTIONAL GAS
RESERVES IN THE WESTPHALIAN
AND NAMURIAN STRATA. LAND
NEXT TO FARM ACCESS TRACK AT
HENDRE OWEN FARM,
LLANHARAN**

OFFICER TO CONTACT

**MR P BRISTOW
(Tel. No. 01443 494763)**

See Relevant Application File