

TO: PLANNING & REGULATORY COMMITTEE

DATE: 11 September 2019

BY: PLANNING DEVELOPMENT MANAGER

DISTRICT(S) REIGATE & BANSTEAD BOROUGH
COUNCIL

ELECTORAL DIVISION(S):
Horley West, Salfords and Sidlow
Mrs Hammond

CASE OFFICER:
Duncan Evans Senior Planning
Officer, 020 8541 9094

PURPOSE: FOR DECISION

GRID REF: 525342 143607

TITLE: MINERALS/WASTE RE18/02667/CON

SUMMARY REPORT

Horse Hill Well Site, Horse Hill, Hookwood, Horley, Surrey RH6 0HN

Retention and extension of an existing well site, HH1 and HH2 wells, and vehicular access to allow: the drilling of four new hydrocarbon wells and one water reinjection well; the construction of a process and storage area and tanker loading facility; new boundary fencing; well maintenance workovers and sidetrack drilling; and ancillary development enabling the production of hydrocarbons from six wells, for a period of 25 years.

The 2.08 hectares (ha) application site is located on part of an arable field, found west of Horse Hill beyond an area of woodland. The site does not fall within an area, or site, designated for its landscape or nature conservation importance. It is however, located on farmland within a rural area in the Green Belt.

Planning permission was first granted at land off Horse Hill in January 2012 for the construction of an exploratory wellsite including plant, buildings and equipment; the use of the wellsite for the drilling of one exploratory borehole (HH-1). The HH-1 well was originally drilled in October 2014 and the well discovered oil accumulations in the Portland Sandstone and the Kimmeridge Limestones members. In November 2017 planning permission was granted for the appraisal stage involving the retention of the existing Horse Hill for an appraisal programme of the target formations of the Portland Sandstones and Kimmeridge Limestones, including for further drilling operations for a sidetrack well (HH-1z) and second borehole (HH-2) and flow testing.

Following a successful appraisal stage, the applicant now wants to retain the wellsite for the longer-term production of hydrocarbons.

It is necessary to consider the proposal against National and Development Plan policies and assess the potential environmental impacts against those policies, the advice provided by statutory and non-statutory consultees and the views expressed by other bodies, groups and individuals.

A key issue is the need for the development. Government policy makes it clear that oil and gas remains an important part of the UK's energy mix. Energy policies recognise the continuing importance of fossil fuels but aim to manage reliance on them, their potential environmental effects and the risks associated with security of supply. While the Government manages the transition to a low carbon energy mix this will mean that oil and gas remain key elements of the energy system for years to come (especially for transport and heating). Government policy is set out within the NPPF, the Annual Energy Statement, the Government's Energy Security Strategy

the White Paper and BEIS statistics and recognises there is a need to maximise indigenous oil and gas resources both onshore and offshore.

Mineral-related development need not be inappropriate development in the Green Belt provided that high environmental standards are maintained and the site is well restored.

This application is for conventional oil and gas exploration and does not involve hydraulic fracturing ('fracking'). The technical consultees have carefully reviewed the proposal and the mitigation measures for hydrological and geotechnical impacts and raised no objections.

The local Parish Councils, residents and local action groups have raised concerns in respect of various issues, which include highway and HGV traffic implication; air quality; noise; lighting; groundwater; landscape; ecology and pollution control.

No objections have been received from the technical consultees who were asked to comment on such issues as noise, lighting, traffic, air and groundwater quality, pollution control, flood risk, ecology and landscape and restoration considerations.

The policy position is to restore mineral sites to an appropriate Green Belt use as soon as is practicable. The applicant intends the site to be restored at the end of the appraisal operations to agriculture and woodland, both of which are beneficial and appropriate Green Belt uses, and the scheme retains measures for biodiversity value of the site through the provision of bat and bird boxes. Officers consider that the proposal should enable high environmental standards to be maintained and the site to be well restored. Accordingly, the proposal meets the policy requirements for mineral development in the Green Belt.

Taking into account the need for the development in the context of national policy and other relevant policy tests, Officers recommend that the application be permitted subject to appropriate conditions to protect the environment and amenity.

The recommendation is to PERMIT subject to conditions.

APPLICATION DETAILS

Applicant

Horse Hill Developments Ltd

Date application valid

20 December 2018

Period for Determination

11 April 2019

Amending Documents

Zetland Group letter dated 3 May 2019 – response to Environment Agency comments; Zetland Group letter dated 3 May 2019 – response to geotechnical comments; Zetland Group letter dated 16 May 2019 – response to County Highway Authority comments; Zetland Group letter dated 3 May 2019 providing proposed Outline Landscape and Restoration Plan dated 3 May 2019; Plan drawing number ZG-HHD-HH-PROD-PA-33, titled Restoration Site Area, dated May 2019; Spectrum Acoustic Consultants Noise Technical Document dated 11 July 2019 responding to noise comments; Zetland Group letter dated 3 July 2019 – providing clarification to geotechnical comments; Plan drawing number ZG-HHD-HH-PROD-PA-34 titled Process & Storage Area HDPE Membrane Layout Plan dated June 2019; and Zetland Group letter dated 5 July 2019 – clarification to landscape, visual and restoration comments.

SUMMARY OF PLANNING ISSUES

This section identifies and summarises the main planning issues in the report. The full text should be considered before the meeting.

	Is this aspect of the proposal in accordance with the development plan?	Paragraphs in the report where this has been discussed
Need for the Development & Climate Change	Yes	102 – 162
Highways, Traffic and Access	Yes	163 – 186
Landscape and Visual Impact	Yes	192 – 217
Ecology and Biodiversity	Yes	218 – 240
Noise and Vibration	Yes	241 – 272
Lighting	Yes	273 – 293
Air Quality	Yes	294 – 324
Water Environment and Geotechnical	Yes	325 – 367
Archaeology and Heritage	Yes	368 – 374
Restoration	Yes	375 – 386
Green Belt	Yes	394 – 415

ILLUSTRATIVE MATERIAL

Site Plan

Plan – Site Location and Application Site

Aerial Photographs

Aerial 1 – Site location showing surrounding area to the application site

Aerial 2 – Site location showing the application site

Site Photographs

Figure 1 – The existing wellsite access on Horse Hill

Figure 2 – Existing wellsite access viewing south on Horse Hill

Figure 3 – The existing well pad viewing north west

Figure 4 – Proposed extension area for oil process and storage area and tanker loading facility in field east of well pad

Figure 5 – The existing well pad southern boundary

Figure 6 – The existing well pad western boundary

Figure 7 – View of existing site access track to Horse Hill looking east

BACKGROUND

Site Description

- The 2.08 hectares (ha) application site is located on part of an arable field, found west of Horse Hill beyond an area of woodland. The proposed application site comprises the existing 1.16ha Horse Hill wellsite (HH-1) consisting of well pad, access road and site

access onto Horse Hill, plus additional land to accommodate new security fencing and realignment of the access road.

- 2 The site is situated within a rural area approximately 3.1 km directly west of Horley town centre, 2.3 km northeast of the village of Charlwood and 1.6 km northwest of the village of Hookwood. Gatwick International Airport is approximately 2.2 km southwest of the site. Access to the site is from Horse Hill, which runs north from the A217 junction at Hookwood. Horse Hill becomes Irons Bottom Road north of Collendean Lane before re-joining the A217 at Sidlow.
- 3 The site is bounded by farmland on all sides with patches of woodland to the east, north west and south west. The arable field on which the wellsite is located rises from the south (65.5 m AOD) to 72.5 m AOD in the north. Between Horse Hill and the well compound is an area of woodland. The woodland covers approximately 2.8ha and is some 165m deep and includes the area where the site access and commencement of the access track to the wellsite is situated. The woodland has water areas at its northern end. A public right of way, Footpath 414 is situated along the northern end of the adjacent field to the south of the access track and wellsite. The field complex to south of the footpath 414 is used for horse paddocks, and Lomond Equestrian Centre.
- 4 The existing site comprises a wellsite compound, access track and site access. The wellsite compound contains a well pad, consisting of the capped HH-1 wellhead, concrete cellar and hardstanding area. The wellsite compound is situated at the western end of an approximately 250m long access road to the site access off Horse Hill. There are existing soil bunds and security fencing around the perimeter of the well compound. The access road is made of aggregate surface with a tarmac entrance where it meets Horse Hill.
- 5 The wellsite falls within the Metropolitan Green Belt, although it is not situated on land that is covered by, or adjacent to, any areas of local, national or higher-level nature conservation designations or any areas of local or national level landscape designations. There are however sites of ecological importance in the vicinity with Crutchfield Copse Site of Nature Conservation Importance (SNCI) located 1.1km to the northeast, Eldophs Copse Local Reserve some 1.8 m to the northeast, Glovers Wood Site of Special Scientific Interest (SSSI) 3 km distant and the Rowgarden Wood Ancient Woodland approximately 330m to the north west of the application site.
- 6 The closest residential properties to the well pad are Wrays Farm House situated approximately 370m to the east, Five Acres approximately 410m south east and High Trees Court situated 350m north. The access road and site access are in closer proximity to residential properties with Wrays Farm House situated 50m from the site access and other properties to the south east within 250m of the access.

Planning History

- 7 The land use planning process for on shore oil and gas development is divided into three distinct stages comprising, exploration, appraisal and production.
- 8 Planning permission was first granted at the application site for the exploratory stage of on shore oil and gas development under permission reference RE10/2089 dated 16 January 2012. The planning permission allowed for the construction of an exploratory wellsite including plant, buildings and equipment; the use of the wellsite for the drilling of one exploratory borehole and the subsequent short term testing for hydrocarbons; the erection of security fencing; construction of a new access onto Horse Hill and associated access track with passing bays, all on some 1.16 hectares for a temporary period of up to 3 years, with restoration to agriculture and woodland.
- 9 Works to construct the wellsite commenced in February 2014. The exploratory borehole, known as HH-1, was originally drilled in October 2014 and the well discovered oil

accumulations in the Portland Sandstone and in multiple deeper Jurassic formations of the Kimmeridge Limestone members. Flow testing was later carried out in 2016 which the operator considered highly successful.

- 10 In November 2017 planning permission reference RE16/02556/CON (dated 1 November 2017) was granted which increased the size of the site from 1.16 hectares to 2.08 hectares. The 2017 planning permission (RE16/02556/CON) allowed for the retention of the existing exploratory well site and vehicular access onto Horse Hill; the appraisal and further flow testing of the existing borehole (Horse Hill-1) for hydrocarbons, including the drilling of a (deviated) sidetrack well and flow testing for hydrocarbons; installation of a second well cellar and drilling a second (deviated) borehole (Horse Hill-2) and flow testing for hydrocarbons; erection of security fencing on an extended site area; modifications to the internal access track; installation of plant, cabins and equipment, all on some 2.08ha, for a temporary period of three years, with restoration to agriculture and woodland. This permission was subject to some 34 planning conditions, some of which required the approval of further details.
- 11 The following details schemes were approved pursuant to planning permission ref.RE16/02556/CON:
- Planning ref. RE18/00012/ CON – Details of a Transport Management Plan submitted pursuant to Condition 1 approved on 9 March 2018.
 - Planning ref. RE18/00013/CON – Details of a Noise Mitigation Scheme submitted pursuant to Condition 2 approved on 8 March 2018.
 - Planning ref. RE18/00014/CON – Details of a Noise Monitoring Plan submitted pursuant to Condition 3 approved on 8 March 2018.
 - Planning ref. RE18/00015/CON – Details of a Lighting Scheme submitted pursuant to Condition 4 approved on 15 February 2018.
 - Planning ref.RE18/00016/CON – Details of a Surface Water Drainage Scheme pursuant to Condition 5 approved on 21 March 2018.
 - Planning ref. RE18/00017/CON – Details of an Ecological Mitigation Scheme submitted pursuant to Condition 7 approved on 15 February.
 - Planning ref. RE18/00018/CON – Details of a Dust Management Plan submitted pursuant to Condition 8 approved on 21 March 2018.
 - Planning ref. RE18/00019/CON – Details of a Landscape and Restoration Plan submitted pursuant to Condition 33 approved on 30 August 2018
 - Planning ref. RE18/ 00597/CON – Details of a Drainage Verification Report submitted pursuant to Condition 6 approved on 10 May 2018.

THE PROPOSAL

- 12 There are three separate phases of oil and gas development: exploration, appraisal and production. Each requires separate planning permission.
- 13 The Horse Hill well site (located in license PEDL 137) is operated by Horse Hill Developments Ltd (the Applicant) and development is currently at an Appraisal stage. The well is located on the northern side of the Weald Basin, 3km north of Gatwick Airport.

- 14 This application seeks planning permission to retain the existing Horse Hill wellsite for the Production stage of on-shore hydrocarbons for a proposed period of 25 years following the discovery of commercially viable oil accumulations in the Portland Sandstone and Kimmeridge Limestones.
- 15 The works proposed will involve: the retention of an existing well site and approved wells and access onto Horse Hill; the drilling of four new hydrocarbon wells and one water reinjection well; the construction of a process and storage area and tanker loading facility on additional land to the east of the existing well pad; to enable the production of hydrocarbons from six wells for a period of twenty years followed by decommissioning and site restoration.
- 16 The applicant proposes that the well site area is to be increased from 2.08 hectares to approximately 2.8 hectares to the east to accommodate hydrocarbon processing, storage and tanker loading facilities.
- 17 The proposed development comprises the following five phases:

Phase 1: Well Site Modifications and New Construction Works

- 18 Construction of five new drilling cellars within the existing well site pad to accommodate 4 new hydrocarbon production wells and 1 new produced water re-injection well. Construction of a new level plateau to accommodate oil processing, storage and tanker loading facilities on land directly to the east of the well site. A range of equipment is proposed for the processing area such as separators, pumps and water storage tanks. The oil storage plant comprises seven tanks, each with a capacity of 1300 barrels. Oil would be transferred from the tanks to the tanker loading area by above ground pipes.
- 19 Four gas-to-power generators are to be installed on the south east corner of the processing area within enclosed compound, containing ancillary equipment, transformers, oil tanks and a control unit and a control room. The generators convert produced gas to electricity which will be used to power the site with excess power being fed into the national grid. Two fire water tanks each with a capacity of 225 cubic meters area to be positioned on the eastern boundary of the processing area.
- 20 The existing 2.5 metre high security boundary fencing will be extended to enclose the new storage and process facilities. A new security gate will be installed adjacent to the woodland edge on the access track. A gatehouse will control vehicular access and a single storey welfare/ office unit is to be installed on existing hardstanding alongside the existing access track complete with parking bays.

Phase 2: Well Management and Drilling

- 21 The drilling of four new hydrocarbon production wells (the existing HH1 and HH-1z and HH-2 wells to be retained and converted for production) making a total of six producing wells and drilling of one produced water re-injection well. Drilling operations will require a drill rig to be mobilised to site and the typical rig that may be used, which was used in the previous stages, extends to a maximum height of 37m. The ancillary equipment associated to the rig such as water tanks, pipe store, mud and fuel tanks, generators and office and accommodation facilities are to be contained within the main drilling compound.

Phase 3: Production and Well Management

- 22 The installation of oil processing, storage and tanker loading facilities to enable export of oil from the site for a period of 20 years with maintenance workovers and sidetrack drilling (if necessary). Produced oil will be brought to the surface using a variety of pumps, which

will then be directed to the processing area by way of above ground pipes via an oil heater located on the well pad.

Phase 4: Plugging, Abandonment and Decommissioning

23 The removal of all surface production equipment followed by the plugging and abandonment of the six production wells and one produced water re-injection well.

Phase 5: Site Restoration and Aftercare

24 The regrading of soils and replanting of the land with subsequent aftercare monitoring

25 The applicant states that a planning consent of a period of 25 years is being sought to allow sufficient time for the construction activity of phase 1, the drilling activity of phase 2, twenty years of production within phase 3 followed by decommissioning and the restoration of the site during phases 4 and 5 respectively.

26 The applicant states that for the avoidance of doubt, the development does not include the use of hydraulic fracturing.

27 The approximate timings of the phases and operations are set out in the table below.

Phase	Programme	Hours of operation	Estimated Duration
Phase 1	Well site Modifications and New Construction Works	0800 – 1830 Mondays to Fridays; and 0900 – 1300 Saturdays; and no other days	3 Months
Phase 2	Workover – mobilisation and demobilisation	0800 – 1830 Mondays to Fridays; and 0900 – 1300 Saturdays; and no other days	2 Weeks
	Workover Operation of HH-1z and HH-2 wells	24 Hours, 7days per week	1 Month
	Drilling Rig – mobilisation and demobilisation	0800 – 1830 Mondays to Fridays; and 0900 – 1300 Saturdays; and no other days	2 Weeks
	Drilling and completion – drilling 4 hydrocarbon production wells (HH-3 to HH-6) and 1 water reinjection well	24 Hours, 7days per week	15 Months
Phase 3	Installation of Production Equipment	0800 – 1830 Mondays to Fridays; and 0900 – 1300 Saturdays; and no other days	4 Months
	Production of Oil	24 Hours, 7days per week	20 Years
	Maintenance Workovers	24 Hours, 7days per week	1 Month
	Sidetrack Drilling	24 Hours, 7days per week	3 Months
Phase 4	Plugging, Abandonment, and Decommissioning	0800 – 1830 Mondays to Fridays; and 0900 – 1300 Saturdays; and no other days	5 Months
Phase 5	Site Restoration and Aftercare	0800 – 1830 Mondays	2 Months

		to Fridays; and 0900 – 1300 Saturdays; and no other days	
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The Development Programme (Phases 1- 5) and Hours of Operation

- 28 The applicant advises that the phases (as set in the table above) are largely consecutive with relatively limited periods of simultaneous operations. They advise that phase progression may be disrupted as a result of equipment constraints, the need for maintenance or adverse weather conditions although they envisage such periods will not be significant when the development programme is considered as a whole.
- 29 As the development is for the production stages of hydrocarbons this will require 24-hour operations at the site. It is drilling or workover operations, which are continuous operations, that would give rise to the most levels of disturbance such as noise and light and the estimated duration for these activities during the life of the development as a whole are set out in the table above. For all other operations at the site, such as construction works, the proposed hours of operation are to be limited to 0800 – 1830 Mondays to Fridays; and 0900 – 1300 Saturdays; and no other days.

HGV Movements and Staff Movements & Parking

- 30 The applicant proposes the main envisaged traffic impact associated with the development would be during part of Phase 3 production, where up to 32 daily HGV movements are expected (16 HGV arrivals and 16 HGV) departure, albeit over a limited period (4 months) with lower traffic generation during all other phases and sub-phases.
- 31 The applicant states that the maximum number of staff on-site will vary across the different phases, approximately between 12 and 20 staff. Staff vehicle movements are to be spread across the day with the site being operational across a 24-hour period during some phases; and car sharing is to be promoted.

Flaring

- 32 The applicant proposes the installation of an enclosed flare located in the north- west corner of the processing area. They state that flaring will only be used in the event of an emergency or for maintenance.

(Note: The design and operation of the flare equipment will be required to be in accordance with an approved Waste Permit from the EA and permit to drill from the Oil and Gas Authority, and safety regulations by the Health and Safety Executive)

Proposed Lighting and Security

- 33 The proposed development will require artificial lighting for safe working, safe passage (including for pedestrian and vehicular), security and amenity.
- 34 It is proposed a mix of low-level and downward facing lighting will be installed within central locations, and shrouded and internal facing light at the site boundary with discrete pole mounted surveillance equipment.
- 35 The rig mast will be illuminated for safety reasons by strip lights that will face inward and downward. It will also be necessary for the rig to have a red strobe aircraft warning light. Additional lighting will be located on the rigs ancillary plant and equipment.

- 36 Floodlighting will be positioned around the well pad during drilling and workover operations. Bulkhead lamps are proposed for illumination of portable cabins and containers when installed on the well pad.

Site Access

- 37 The existing 2.5m security gates at the site entrance with Horse Hill are to be retained along with new 1.8m high boundary fencing that runs along the sites road frontage.

Permitting

- 38 In addition to any planning consent the operation of the site will require other overarching consents, including for an environmental permit issued by the Environment Agency and also licences to drill (and also for flaring) issued by the Oil and Gas Authority (OGA). Those will be the subject of separate application the applicant will be required to make to those agencies.

CONSULTATIONS AND PUBLICITY

District Council

- 39 **Reigate & Banstead Borough Council**
 Planning – No views received
 Environmental Health - No views received

Neighbouring Authority

- 40 **Mole Valley District Council**
 Planning – no objection
 Environmental Health – no objection

Consultees (Statutory and Non-Statutory)

- 41 **Environment Agency South East:**
 No objection, subject to conditions.
- 42 **Natural England:**
 No objection.
- 43 **Historic England:**
 No objection
- 44 **County Highway Authority:**
 No objection, subject to conditions
- 45 **Lead Local Flood Authority – SuDS & Consenting Team:**
 No objection, subject to conditions.
- 46 **County Ecologist:**
 No objection, subject to conditions
- 47 **County Noise Consultant**
 No objection, subject to conditions.
- 48 **County Lighting Consultant:**
 No objection

- 49 **County Air Quality Consultant:**
No objection
- 50 **County Landscape Consultant:**
No objection, subject to conditions
- 51 **County Geologist:**
No objection, subject to conditions
- 52 **County Archaeological Officer:**
No objection
- 53 **Rights of Way:**
No objection
- 54 **Gatwick Airport Safeguarding:**
No objection, subject to conditions
- 55 **Health and Safety Executive - Oil and Gas:**
No objection.
- 56 **Arboriculturalist:**
No views received
- 57 **Enhancement Officer:**
No views received
- 58 **British Pipelines Agency:**
No objection
- 59 **Environmental Assessment:**
Comments provided within the EIA section of this report
- 60 **Sutton and East Surrey Water:**
No views received
- 61 **Surrey Wildlife Trust:**
Objection
- 62 **Thames Water:**
No views received.
- 63 **Surrey Fire & Rescue:**
No objection, subject to informative.
- 64 **SCC Emergency Planning:**
No views received
- 65 **Planning Casework Unit/DCLG:**
No objection
- 66 **Department of Business, Energy and Industrial Strategy (BEIS):**
No views received

Parish/Town Council and Amenity Groups

- 67 **Salfords & Sidlow Parish Council:**

Objection, on the following grounds: inappropriate location and setting and inappropriate development in the Green Belt; devastation and impact to the environment; noise; light and traffic impact; drilling of further sidetrack wells at any time not yet identified; independent seismic assessment should be carried regarding recent earthquakes; a range of conditions imposed on any new consent; and consider a financial bond should be secured for the land.

68 Charlwood Parish Council:

Objection, on the following grounds: incompatible with the IPCC recommendations for Climate Change; industrialisation of the Green Belt and fails to preserve its openness; visible from along the road, the surrounding land and adjacent footpath and is an eyesore, particularly when illuminated at night; risk of local earthquakes and impacts on well integrity; contraventions of current Traffic Management Plan; long-term increase in traffic; accidents at junction of A21, and safety of other road users from HGVs; insufficient consultation on the application; supports the concerns raised by other local parish councils and residents groups.

69 Norwood Hill Residents':

Objection on the following grounds: concerns of the national need and decision making for oil supply, particularly with climate change targets inappropriate development in the Green Belt; noise, light, gases, traffic and human industrial activities from the development impinge adversely on local amenity and wildlife; details of side track wells are too vague; connection between the development and local earthquakes.

70 The Charlwood Society:

No views received.

71 CPRE:

Objection for the following reasons: the CPRE suggests that the application is for Unconventional drilling as the Government is encouraging shale oil production: very concerned with the continuing earthquake activity in Surrey since 1 April: the increase to 6 wells, with more drilling, acidisation under pressure and water reinjection could have significantly greater impact on the geology than has happened so far: concerns for meeting carbon emissions and global warming targets and encouraging more fossil fuel burning is not the solution; potential industrialisation of the countryside the development will cause; there should be more tree screening of the site; traffic impacts from substantial increase in traffic movements; and the operator should pay for any damage to verges and highway surface ; the Council should ensure a system is place for financially compensating those badly harmed by the works or land; concerns on air pollution caused by flares, generators, pumps and HGVs; storing of hazardous chemicals on site essential safety plans are plans to counter possible explosions, fires and leakages; and noise.

72 Horley Town Council:

No Objection. Have raised concerns in respect of the following: extent of lateral drilling and the impacts on important infrastructure such as sewage works in Meath Green area and the West Vale Park development; risk of tremors, subsidence, sink holes or contamination of water; whether Horse Hill is suitable for HGVs and if the road needs improvement who will pay; where will waste from site will go and how to be transported; if local communities will benefit either financially or in terms of enhanced facilities from the oil extraction activities; and further investigation for source of earthquakes.

73 Betchworth Parish Council:

No objection. Though requests all site HGV traffic travels on primary road network.

74 Newdigate Parish Council:

Objection, raising concern regarding recent swarm of earthquakes. Stating that there is a strongly held belief that these earthquakes are being triggered by the drilling taking place at Horse Hill and drilling should be halted until reason for earthquakes are established.

75 Friends of the Earth Bromley (FOE):

Objection. The FOE have a number of concerns with the proposals. The application is incompatible with the need to tackle climate change, to reduce fossil fuels and reduce emissions by 45% in 12 years. The impact on the natural countryside, historic woodland and local wildlife would be detrimental. There are dangers of pollution to groundwaters and air from use of chemicals and acidisation. Concerns of horizontal drilling and known geological fault and also the drilling technology is unproven. Local horse riders, pedestrians and cyclists would be severely affected by the increased site traffic. Condition of the local roads not suitable for HGVs. Site no longer resembles Green Belt land and this should be preserved. The public footpath south of the site has been moved and no longer accessible to the public. Local house values could be affected by the development.

76 Keep Kirdford and Wisborough Green KKWG:

Objection. The KKWG has raised a number of concerns with the application. Suggests that the proposal is not in accordance with policy for protecting Green Belt and also that NPPF policy cannot be relied on, including paragraph 209a. The KKWG also suggest that 'fracking' cause earthquakes. The local earthquakes could damage well integrity leading to gas/oil getting into groundwater. Further concerns the proposal for oil and gas extraction are against climate change. Emissions from on-shore oil and gas will endanger public health. They also suggest the industry runs counter to economic gains with large deficits.

77 The Weald Action Group:

Objection. Concerns raised the Horse Hill wellsite is the source of recent local earthquakes.

Summary of publicity undertaken and key issues raised by public

78 The application was publicised by the posting of three site notices and an advert was placed in the local newspaper. A total of 650 of owner/occupiers of neighbouring properties were directly notified by letter.

79 A second consultation exercise was carried out by the County Planning Authority following clarifying or other information submitted for the application on 23 May 2019. This resulted in the posting of two site notices and an advert was placed in the local newspaper. Letters were sent to the owner/occupiers of neighbouring properties originally notified of the application, and to people and organisations who had expressed an interest in the application prior to the receipt of the additional information received in May 2019.

80 A third consultation exercise was carried out by the County Planning Authority following clarifying or other information submitted for the application on 18 July 2019. This resulted in the posting of two site notices and an advert was placed in the local newspaper. Letters were sent to the owner/occupiers of neighbouring properties originally notified of the application, and to people and organisations who had expressed an interest in the application prior to the receipt of the additional information received in July 2019.

81 Total of 1658 written representations have been received to date, although some people may have written more than once.

82 Of the letters received approximately 921 have written in support of the proposal. A summary of key points in support are on the grounds:

- National need for oil for meeting UK policy on energy security and for the economy.
- Domestic oil supply would reduce the need for overseas imports and the impacts on the environment that may cause.
- The UK has a continuing need for oil until sustainable renewable resources are in position to provide enough energy.

- Oil Industry has shown many times that onshore UK oil development and production is possible with minimal environmental impact.
- Oil is used in manufacturing products.
- The significance of the reserves at Horse Hill need to be established by appraisal drilling and testing.
- Onshore oil is needed to help the UK be self-sufficient in energy given a decline in North Sea oil and gas.
- Modern drilling methods are greatly improved and regulated, and developed mindful of impacts to environment and people.
- The site is discreetly placed and well hidden in environment.
- The site is not covered by any conservational designations.

83 Of the remaining representations approximately 717 objections have been received. The issues raised will be addressed in the following sections of this report. The main points of public concern are summarised as follows:

- **General**
Very harmful to the community, the environment and the future; 25 years is not temporary; not in public interest; overdevelopment; consequences of activity near farm land, residential or schools; claims that all capped wells fail within 6 years, with resultant issues/liability; no benefit to local residents or community; minimal difference to the UK's energy security; loss of amenity for walkers, cyclists and riders; impact on local stables and horses; lack of appropriate public consultation; inadequate independent and random monitoring of emissions; inconvenience during construction; question over method of extraction; water supply and contamination; quality of surveys.
- **Earthquakes**
Potential earthquakes caused from the production, which could affect the health, property and wellbeing of residents; fracturing of rocks and water re-injection can trigger earthquakes; causality between extraction at Horse Hill and the tremors not ruled out; impact on water table; sits on a major fault line; applicant should fund continuous seismic monitoring.
- **Fracking**
Fracking could result in risks to human health and the environment; consider that injecting material into the ground is the same as fracking; corruption of government and civil service with members of the oil industry.
- **Environmental Impact Assessment (EIA)**
Concern over the revised NPPF; Environmental Statement is flawed in its conclusions and further information should be provided.
- **Cumulative Effects**
Further wells and expansions will be required; long term consequences of activity; sets a precedent for future extraction applications.
- **Company Trust**
Credibility of applicant and companies behind the applications and their actions; driven by profits.
- **Policy**
Gains from oil extraction so minimal to the wider UK demand; no shortage of oil and alternative renewable energy sources are available; production is directly against Reigate & Banstead's own Mineral and Waste Policy "not to industrialise the rural nature of the County"; not in line with NPPF due to inadequate community discussion; not sustainable development; Surrey County Councils policy on oil and gas is out of date and does not include acidisation.

- **Climate Change**
 Concern that production and burning of fossil fuels will contribute to global warming and climate change; does not accord with Climate Change agreements such as the Paris Agreement and UN targets; UK has legal commitments to reduce carbon emissions; not green/carbon neutral footprint; need for diesel is decreasing with advancements in electric cars; local authorities have to consider the impact on climate change.
- **Location/ Setting**
 Concern about Industrialisation of the countryside and precedent for future industrialisation; close proximity to private residences and the town of Horley; out of character with the rural nature of the surrounding area; rural infrastructure unable to cope with this industry and its operations; conditions are need to limit distance and direction of drilling; no need to support local economy; no benefits from the wells to local area; no assessment of wells passing underneath properties; greater impact on residences which are within 300 metres of site.
- **Metropolitan Green Belt**
 Harm to Green Belt and countryside; destruction of woodland; industrialisation; inappropriate; does not preserve openness.
- **Landscape and Visual**
 Out of character with the surrounding rural area; poor design; damages the natural amenity; site is already big enough; impact on footpaths, woodlands, soil contamination; no screening to the East/North East of the site towards High Trees Court; noise and visual screening barriers need to be installed.
- **Ecology**
 Harm to habitats and environment; disturb or harm the local wildlife (including newts); environmental impacts not yet understood so cannot be considered or mitigated; damage to normal and ancient woodland from HGV traffic; concern for grazing animals on adjacent land; process of reinjection harmful to the environment.
- **Conservation Area**
 Harm to the conservation area.
- **AONB**
 AONB would suffer serious damage to its small roads and public enjoyment of the valuable countryside.
- **Stability**
 Ground is unstable due to drilling and increased risk of earth movements; long term environmental impact of tunnelling will be monumental, and impact on water table; homes at risk from horizontal drilling.
- **Duration**
 Objection to 24 hour drilling due to disturbance caused; period of 25 years is excessive in terms of ecology and use of fossil fuels, should be limited to 10 years.
- **Land Contamination**
 Farms affected by contaminated water, and is difficult to treat.
- **Acidisation**
 The extraction will use acidisation, involving large amount of acid and fresh water; produces large volumes of toxic waste water which is difficult to treat, transported to a treatment facility or pumped back into the ground; chemicals used are unknown; impact on aquifers.

- **Protesters and Policing Impacts**

Objectors cause problems on the highway network, impacting residents and causing unease; protestors have the legal right to peacefully protest however traffic made worse by protestors slow walking the HGV; protestors can be confrontational and police cause disturbance to commuters and residents; makeshift accommodation, camper vans and vehicles and impact on rural area; police do not seem to be able to control and manage the protestors; protestors may be present for the duration of the 24 month drilling.

- **Traffic, Highways & Access**

Increased production will be hazardous to highway safety; road access to the site is inadequate for large HGVs and oil should be removed by pipeline; Horse Hill is mainly narrow rural roads; access should only be south to the Black Horse Junction; junction is in poor condition; danger to other road users, pedestrians and equestrians; improvements are necessary before development begins; more pollution, noise and congestion to rural lanes; no HGV routes have been set out; high volumes of traffic already travelling at inappropriate speeds; no prediction for traffic levels for visitors, staff or deliveries to and from the site; does not take into account the popular Surrey Cycle Route, used by residents, clubs and general public; no footpath available for runners; tankers entering and leaving the site entrance are dangerous for other road users.

- **Lighting**

Site is brightly lit at night spoiling dark countryside; area already exposed to extreme light pollution due to increased activity from Gatwick airport; light is an issue for the local community and creates a long term industrial look to the area; no street lighting on roads around the site.

- **Noise and Vibration**

Will cause further noise and disturbance, even with mitigation measures proposed; generators need to be quieter; noise from traffic adds to the existing aircraft noise; defective equipment on existing site causing screeching sounds at night, exceeding limits; vibrations were felt at properties during the drilling of the borehole; no modelling of total noise impact; objection to the removal of the acoustic/lighting barrier; gas flare will be noisy.

- **Ground Water Pollution**

Risk of contaminating ground water supply from use of the disposal well, spills and faults; no assurance of water quality monitoring or evidence that water sources will be protected; acidised waste water could contaminate the underlying aquifers; water table in this area is high and the nearby river Mole which flows into the Thames could be compromised; inadequate hydrogeology assessments and impact on private water wells; hazardous substances will be stored on site; details of retaining wall construction need to be provided along with further ground investigation; existing Geotextile membrane will degrade before the end of the life the development; maintenance and repair not clear; HDPE geotextile liners are likely to degrade within life of the site and risk polluting local aquifers and also local tributaries leading to the River Mole.

- **Flooding and Surface Water Drainage**

Concern that flooding in adjoining land is impacting equestrian access; harm to drainage or sewage capacity.

- **Air Quality and Health Issues**

Harm to the health and wellbeing of residents and wildlife over 25 years; two local school's Meath Green Junior and Infants are within half a mile from the site; methane gas flaring, toxic fumes, traffic and air pollution, and impact on local residents; adds to existing hazards from Gatwick airport; lack of evidence based information on the risks to public health and wildlife from oil extraction; bad odour not investigated sufficiently by the

Environment Agency; pollutants above the Environment Agency screening criteria and above air quality standards.

- **Restoration and Abandonment**

Original application for the site test well stated it would be returned to its original semi-wild state at the end of the three year period; applicant only provided an outline restoration plan.

- **Finance**

Concern for the commercial lack of economic viability and sustainability of extraction in the area.; costs of security, policing traffic managed, removal of nuisances or waste incurred by the local authority or local neighbours and land owners should be met by the applicant; compensation assurances for pollution clean-up; investment should be spent on green energy solutions and renewables, locally and nationally.

- **Property Devaluation**

Concern that local properties would be devalued and cannot be sold; damage to the local commercial and residential property markets.

- **Environment Agency (EA) Environmental Pollution Control Regulations**

Previous objections from EA and Portsmouth Water; EA and HSE admit they do not have the manpower or knowledge to monitor this type of activity.

- **HSE and Safety**

No guarantee that proper safety guidelines will be in place, particularly for unstable ground and potential release of harmful gases; no health and safety plan or evacuation plan communicated to local residents; no input from emergency services; no insurance in the case of accidents or unforeseen consequences; 7 more storage tanks of 1300 barrels each changes the site to an extremely high level of risk from fire and explosion; the site needs to have regular auditing and inspections; design and build of the covered flare stick in unclear and evaluations should be carried out first before it is implemented; development will impact Gatwick Airport safety.

- **Monitoring/ Regulation**

Local planning laws ineffective in monitoring and stopping unplanned works; operators need to be monitored carefully, which would add additional cost to the public over hundreds of years to monitor the lifetime effectiveness of these pipeline and prevent pollution; concern over technical monitoring of sites; since 2016 there has been minimal monitoring of the gases being produced and flared, or the adverse symptoms to local residents; environmental monitoring should be actively undertaken by the council not the developers.

- **Heritage**

Concern of harm to listed buildings in the area and Horley.

- **Human Rights**

The permission must not be granted on humanitarian grounds.

PLANNING CONSIDERATIONS

Introduction

- 84 The guidance on the determination of planning applications contained in the Preamble/Agenda front sheet is expressly incorporated into this report and must be read in conjunction with the following paragraphs.

- 85 In this case the statutory development plan for consideration of the application consists of the Surrey Minerals Local Plan 2011 and the Reigate and Banstead Local Plan Core Strategy adopted on 3 July 2014, and the saved policies of the Reigate and Banstead Borough Local Plan 2005.
- 86 Part 1 of the Reigate and Banstead Local Plan (the Core Strategy) was adopted by the Council in 2014. This sets out the overall scale and location of growth that will take place in the borough between 2012 and 2027. Reigate and Banstead Borough Council are currently in the process of producing Part 2 of the Local Plan (the Development Management Plan) which will set out in more detail how the Core Strategy will be delivered. It will contain: policies to guide decision making on planning applications; policy designations; and development site allocations. Given the Plan is some way from adoption, Officers consider the draft policies within the Reigate & Banstead Development Management Plan should be given little weight in the consideration of this application.
- 87 In considering this application the acceptability of the proposed development will be assessed against relevant development plan policies and material considerations. In assessing the application against development plan policy it will be necessary to determine whether the proposed measures for mitigating any environmental impact of the development are satisfactory. In this case the main planning considerations are: Need, Green Belt, highways, water environment and geotechnical, air quality, noise, lighting, landscape and visual, ecology, and restoration. The application is accompanied by an Environmental Statement.

Licensing

- 88 Oil and gas exploration drilling requires planning permission but also requires licensing. Licences are issued by the Oil and Gas Authority (Formerly the Department of Energy and Climate Change - DECC). The objective of the licensing regime is to secure the exploration and appraisal of the United Kingdom's (UK's) oil and gas resources and the economic development of discovered reserves. The Petroleum Exploration and Development License (PEDL) issued by the Oil and Gas Authority (OGA) under powers granted by the Petroleum Act 1998, covers all the three stages of oil and gas development – exploration, appraisal and production.
- 89 The OGA has discretion in the granting of licences to help maximise the economic recovery of the UK's oil and gas resources. All companies on a licence share joint and several liability for obligations and liabilities that arise under it. Each licence takes the form of a deed, which binds the licensee to obey the licence conditions. As an example, these will typically require the avoidance of harmful methods of working through maintaining all apparatus and appliances in good repair and condition and the execution of all operations in a proper and workmanlike manner in accordance with good industry practise.
- 90 A license does not confer any exemption from other legal/regulatory requirements, such as the need to gain access rights from landowners, health and safety regulations, or planning permission. Once a PEDL has been granted, planning permission must be obtained before the OGA will authorise consent to drill and extended well testing (EWT). The consent to drill and for EWT is obtained from the OGA via the Petroleum Operations Notice (PONS) approval process.
- 91 In addition both the Health and Safety Executive and the Environment Agency have regulatory roles to play in relation to the proposed development under the Borehole Sites and Operations Regulations 1995 and the established pollution control regime.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

- 92 The proposed development falls within one of the categories listed in Schedule 1 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended by Statutory Instrument 2018 No.695) (the EIA Regulations). Paragraph 14 of Schedule 1 of the EIA Regulations covers development that would involve the extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes per day in the case of petroleum and 500,000 cubic metres per day in the case of gas. Any development of a type and scale listed in Schedule 1 of the EIA Regulations is automatically classed as 'EIA development'. Planning applications relating to 'EIA development' must be accompanied by an Environmental Statement (ES).
- 93 Prior to the submission of the current application a request for an EIA Scoping Opinion was made to the CPA on behalf of the applicant. The CPA adopted its formal EIA Scoping Opinion on 25 October 2018. The EIA Scoping Opinion provided the CPAs advice on the topics and issues that needed to be addressed by the EIA process, covering those aspects of the environment at risk of significant impacts as a consequence of the proposed development.
- 94 The ES submitted in support of the current application has been reviewed with reference to the provisions set out in Regulation 18 (Environmental Statements) and Schedule 4 (Information for Inclusion in Environmental Statements) of the EIA Regulations. The information provided in the submitted ES satisfies the minimum requirements defined in Regulation 18(3) and address those aspects of Schedule 4 relevant to the scheme and the receiving environment.
- 95 Under Regulation 26¹ of the EIA Regulations the CPA is required to examine the 'environmental information' (as defined in Regulation 2 of the EIA Regulations²) relevant to the application, and to use that information to reach a reasoned conclusion in respect of the significant environmental effects of the proposed development. The ES forms one part of that 'environmental information' providing the applicant view of the likely significant environmental effects of the proposed development. The views of other parties have been sought through the consultation undertaken on the submitted application, and are summarised and reflected elsewhere in this report (see paragraphs 39 to 77).
- 96 The submitted ES includes chapters on the following topics, with a full discussion of the likely impacts of the proposed development on each of those aspects of the environment set out elsewhere in this report.
- 97 Greenhouse gas emissions and the climate – the question of the direct impacts of the proposed development on emissions of greenhouse gases and associated climate change is addressed in chapter 6 of the submitted ES. The question of the development's impact on climate change and global atmospheric composition is discussed in greater detail in paragraphs 102 to 162 of this report. On balance, and having taken account of the information and evidence submitted by all parties with an interest in the determination of the current planning application, the CPA has concluded that the proposed development would not give rise to significant impacts on the climate as a consequence of the emissions of greenhouse gases directly attributable to the implementation and operation of the scheme.
- 98 Noise – the question of the impact of the proposed development on noise levels and the incidence of noise disturbance is addressed in chapter 7 of the submitted ES. The question of the development's impact on local amenity due to emissions of noise is

¹ 26. Consideration of whether planning permission or subsequent consent should be granted (1) When determining an application ... in relation to which an ES has been submitted, the relevant planning authority, ... must— (a) examine the environmental information[as defined in Regulation 2];

² Regulation 2. Interpretation (1)In these Regulations- ... "environmental information" means the environmental statement, including any further information & any other information, any representations made by any body required by these Regulations to be invited to make representations, and any representation duly made by any other person about the environmental effects of the development;

discussed in greater detail in paragraphs 241 to 272 of this report. On balance, and having taken account of the information and evidence submitted by all parties with an interest in the determination of the current planning application, the CPA has concluded that the proposed development would not give rise to significant noise impacts. On a precautionary basis the County noise consultant has recommended that a number of conditions be attached to any planning permission granted in the interests of providing a framework that enables the CPA to control noise. Those conditions include provision of daytime and night time noise limits for different phases of the development, and the implementation of a noise monitoring plan.

- 99 Ground and groundwater protection – the question of the impact of the proposed development on the condition of the water environment, and in particular sub-surface waterbodies, is addressed in chapter 8 of the submitted ES. The question of the development's impact on the water environment is discussed in greater detail in paragraphs 325 to 367 of this report. On balance, and having taken account of the information and evidence submitted by all parties with an interest in the determination of the current planning application, the CPA has concluded that the proposed development would not give rise to significant impacts on the water environment. The protection of the sub-surface water environment will primarily be achieved through the Environmental Permit regime, and the Environment Agency has not objected to the scheme on sub-surface water grounds.
- 100 Traffic – the question of the impact of the proposed development on traffic levels on those elements of the local highways network by which the application site is served, and in particular on users of those highway links, is addressed in chapter 9 of the submitted ES. The question of the development's impact on traffic and highways is discussed in greater detail in paragraphs 163 to 186 of this report. On balance, and having taken account of the information and evidence submitted by all parties with an interest in the determination of the current planning application, the CPA has concluded that the proposed development would not give rise to significant impacts on traffic levels on the local highways network or on users of the highway network. On a precautionary basis the County Highway Authority has recommended that a number of conditions be attached to any planning permission granted in the interests of providing a framework that enables the CPA to control traffic impacts. Those conditions include, but are not restricted to, limits on the number of vehicles entering or leaving the site on a daily basis, further surveys and the development and implementation of traffic management plans.
- 101 Lighting – the question of the impact of the proposed development on light levels and the incidence of light pollution is addressed in chapter 10 of the submitted ES. The question of the development's impact on the local area in terms of light emissions is discussed in greater detail in paragraphs 273 to 293 of this report. On balance, and having taken account of the information and evidence submitted by all parties with an interest in the determination of the current planning application, the CPA has concluded that the proposed development would not give rise to significant impacts as a result of the use of external lighting on the application site.

NEED FOR HYDROCARBON DEVELOPMENT

Surrey Minerals Plan Core Strategy Development Plan Document 2011 (SMPCSDPD 2011) Policy MC1 – Spatial strategy – location of mineral development in Surrey Policy MC12 – Oil and Gas development.

- 102 There are three separate phases of oil and gas development: exploration, appraisal and production. Each requires separate planning permission.
- 103 In January 2012 planning permission (ref.RE10/2089) was granted for the exploration stage of the Horse Hill prospect and HH-1 was originally drilled in October 2014. The HH-1 well borehole discovered oil accumulations in the Portland Sandstone and in multiple

deeper Jurassic formations of Kimmeridge Limestone members. Flow testing was later carried out during in February to March 216 which the operator considered highly successful.

- 104 Planning permission reference RE16/02556/CON was granted in November 2017 allowing for amongst other things the retention of the existing Horse Hill exploratory well site for a programme of appraisal and further testing of the HH-1 well, and the drilling of a sidetrack well and second borehole (HH-2) and subsequent flow testing for hydrocarbons. The applicant advises that the appraisal permission (ref. RE16/02556/CON) was implement in June 2018 and on 10 September 2018 they declared the discovery of oil to be commercially viable. They state that this has changed the status of the wellsite from being one of appraisal to one that is capable of supporting production and brings forward new development and operational needs that will require new consents.
- 105 Accordingly the applicant has submitted this application seeking planning permission for the production stage at Horse Hill wellsite. The application site is located in a rural area within the Metropolitan Green Belt. One of the key considerations in determining this application will be the need for the development.

Development Plan Policy

- 106 In the case of minerals planning, any strategy is constrained by the fact that minerals can only be worked where they occur and some resources are sterilised by other development. In the case of oil and gas the Government licenses the exploration, appraisal and production of hydrocarbons. The Weald Basin is one of only two locations in southern England where commercial deposits of hydrocarbons are thought to exist. In Surrey, the Government licenses have been issued predominantly to the south of the North Downs.
- 107 The Surrey Minerals Plan Core Strategy Development Plan Document 2011 (SMPCSDPD 2011) paragraph 3.1 explains that the exploration and appraisal of hydrocarbons has occurred fairly widely across the southern part of the county since the 1950's. The Plan refers to two operational sites currently producing oil at Palmers Wood, Godstone and Felton's Farm, Brockham where production had been expected to continue beyond the end of the plan period.
- 108 Paragraph 3.19 states that further exploration and activity within the licensed areas is likely as UK offshore resources decline, although it is not possible to identify in advance locations within the licensed areas where proposals will be forthcoming and each must be treated on its merits. The SMPCSDPD 2011 Policy MC1 (Spatial strategy – location of mineral development in Surrey) states that oil and gas development will be concentrated in the southern half of the county.
- 109 Paragraphs 5.35 -5.40 of the SMPCSDPD 2011 discuss oil and gas development.
- 110 Paragraph 5.36 recognises that conventional oil and gas development differs from other mineral development as it involves continuous periods of working. However the paragraph recognises that most of this disturbance is at the exploration and appraisal stage (which are usually of relatively short duration).
- 111 Paragraph 5.37 identifies that there are three separate phases of development involving, exploration, appraisal and production, each of which requires a separate planning permission. The paragraph states that applications for exploratory wells will be considered on their individual merits in accordance with all levels of policy guidance. Key considerations are locating sites to minimise intrusion, controlling vehicular activity and vehicle routeing, and controlling, noise and light emissions from drilling rigs especially during night-time operations. Proposals will be expected to address all these issues.

Paragraph 5.38 outlines that subsequent proposals for appraisal will need to consider these issues afresh given that this may lead to further applications for production.

- 112 Policy MC12 of the SMP CSDPD 2011 covers all three stages of oil and gas development, it states that planning applications for drilling boreholes for the exploration, appraisal or production of oil or gas will be permitted only where the mineral planning authority is satisfied that, in the context of the geological structure being investigated, the proposed site has been selected to minimise adverse impacts on the environment. The use of directional drilling to reduce potential environmental impacts should be assessed. Planning applications for drilling to appraise potential oil or gas fields will only be permitted where the need to confirm the nature and extent of the resource, and potential means of its recovery, has been established. Well sites, including the re-use of wellheads used at the exploration stage, should be located such that there are no significant adverse impacts. The Policy MC12 goes on to state that proposals for commercial production of oil and gas will only be permitted where it has been demonstrated that the surface/above ground facilities are the minimum required and there are no significant adverse impacts associated with extraction and processing, including processing facilities remote from the wellhead, and transport of the product.
- 113 The environmental and ecological impacts of the development will be covered under the individual headings within the remainder of this report.

Government Planning Policy

- 114 Under the Government's National Planning Policy Framework (NPPF), hydrocarbon development are considered to be a mineral resource, reiterated by the UK Government ministerial written statement published on 23 May 2019 (ref.HCWS1586). Specific policy on the planning considerations associated with their mineral development, including for onshore oil and gas, is set out in paragraphs 203-205 and the remainder of paragraph 209 of the NPPF.
- 115 The NPPF policy for facilitating the sustainable use of minerals recognises that minerals are a finite natural resource which can only be worked where they are found and the best use needs to be made of them to secure their long-term conservation (paragraph 203).
- 116 Paragraph 205 outlines that when determining planning applications for mineral development, local planning authorities should inter alia: give great weight to the benefits of mineral extraction, including to the economy. In considering proposals for mineral extraction, mineral planning authorities should: ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in the area; ensure that any unavoidable noise, dust and particle emissions are controlled, mitigated or removed at source and establish appropriate noise limits for extraction in proximity to noise sensitive properties; and provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions.
- 117 Paragraph 209 says that when planning for on-shore oil and gas development, mineral planning authorities should clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate monitoring and site restoration is provided for.
- 118 The role of mineral planning authorities (MPAs) is to grant planning permission for the location of any wells and wellpads, and impose conditions to ensure that the impact on the use of the land is acceptable. When determining a planning application the National Planning Practice Guidance (the NPPG) at paragraph 124 states that mineral planning authorities should take account of government energy policy, which makes it clear that energy supplies should come from a variety of sources. This includes onshore oil and

gas, as set out in the government's Annual Energy Statement published in October 2013. The nPPG goes on to state that MPAs should use appropriate planning conditions, having regard to the issues for which they have responsibility, to mitigate against any adverse environmental impacts.

Policy Context – Energy Supply & Climate Change

- 119 Oil and gas form an integral part of the UK's energy and generation mix maintaining energy security, affordability and decreasing carbon emissions in the UK. The Annual Energy Statement 2014 (paragraph 39) explains that the Government is undertaking activities in a number of areas to enhance energy security whilst also delivering wider energy goals. This includes measures to: incentivise deployment of flexible gas and low carbon generation; maximise economic production of domestic oil and gas reserves; and prevent possible disruptions to UK energy supply. Nevertheless, the UK's energy and climate change policy is influenced by decisions taken in Europe and as the importation of oil and gas increases, so does the influence of international issues.

EU Context

- 120 The European Commission (EC) has adopted Green Papers and Strategic Energy Reviews to advance the agenda on sustainability, competitiveness and security of supply. A core goal of European energy policy is to ensure safe, secure, sustainable and affordable energy for all and is of fundamental importance to the EU's economy, industry and citizens.
- 121 The European Council has adopted ambitious energy and climate change objectives for reducing greenhouse gas emissions. To address the challenges of energy security and climate change, the EU's energy and climate goals are incorporated into the Europe 2020 Strategy for smart, sustainable and inclusive growth, which was adopted by the European Council in June 2010, and into its flagship initiative 'Resource efficient Europe'.
- 122 The current EU Energy Strategy (May 2014) sets out that the EU imports more than half of all the energy it consumes. Its import dependency is particularly high for crude oil (more than 90%) and natural gas (66%). The total import bill is more than €1 billion per day. Energy security has also to be seen in the context of growing energy demand worldwide, which is expected to increase by 27% by 2030, with changes to energy supply and trade flows.

National Context

- 123 National Policy with regard to energy is set out in the UK's Energy White Paper 'Meeting the Energy Challenge' published on 23 May 2007 (2007 Energy White Paper) and incorporates EU objectives towards energy and climate. The 2007 Energy White Paper recognises that 'energy is essential in almost every aspect of our lives, as well as for the success of our economy'. The 2007 Energy White Paper sets out the Government's response to the long-term energy challenges posed by the need to tackle climate change and reducing CO₂ emissions, and ensuring that the country has secure, clean and affordable energy supplies. The four energy policy goals in the White Paper are to:
- cut emissions by some 60% by about 2050, with real progress by 2020;
 - maintain the reliability of energy supplies;
 - promote competitive markets in the UK and beyond;
 - ensure that every home is adequately and affordably heated.
- 124 It is recognised in the 2007 Energy White Paper that a large percentage of the UK's energy needs are met by oil, gas and coal and that even though renewables and low carbon technologies will have an increasing role, fossil fuels will continue to be the predominant source of energy for some decades. In paragraph 4.03, it explains that while

the UK has benefitted from indigenous reserves of oil and gas for many years, as the North Sea matures, we will become increasingly dependent on imported energy, and therefore we need to be confident that the market for fossil fuels, supported by appropriate Government policies, continues to ensure reliable supplies of these fuels and at competitive prices.

- 125 The Government's summary of measures for oil, gas and coal are set out on page 124 of the 2007 Energy White Paper:
- 'Our policies recognise the continuing importance of fossil fuels in maintaining reliable and affordable energy supplies, but aim to manage our reliance on them, their potential environmental effects and the risks associated with higher levels of import dependency by:'*
- 'encouraging energy efficiency to reduce the use of fossil fuels...'
 - 'supporting and maximising economic production of fossil fuels in the UK...'
 - 'ensuring effective energy markets at home and abroad...'
- 126 The Energy Act 2008 implements the legislative aspects of the 2007 Energy White Paper and reflects the changing requirements for security of supply infrastructure and adequate protection for the environment and the UK's population, as the energy market changes. The Government's intention was, that along with the Planning Act 2008 and the Climate Change Act 2008, the Energy Act would ensure that legislation underpins the long term delivery of the UK's energy and climate change strategy. The Energy Act 2011 has three principle objectives: to tackle barriers to investment in energy efficiency, enhance energy security, and enable investment in low carbon energy supplies. The Energy Act 2016, which received Royal Assent on 12 May 2016, transferred the Secretary of States existing regulatory powers (excluding environmental regulatory functions) in respect of onshore oil and gas licensing in England to the Oil and Gas Authority (OGA).
- 127 The Climate Change Act established a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% below base year levels by 2050, to be achieved through action at home and abroad. To drive progress and set the UK on a pathway towards this target, the Act introduced a system of carbon budgets which provide legally binding limits on the amount of emissions that may be produced in successive five-year periods, beginning in 2008.
- 128 The Government introduced the 'The Carbon Plan: Delivering our low carbon future' in December 2011. The Plan sets out how the UK will achieve decarbonisation within the framework of our energy policy: to make the transition to a low carbon economy while maintaining energy security, and minimising costs to consumers, particularly those in poorer households.
- 129 The UK has signed up to the EU Renewable Energy Directive 2009/28/EC, which sets individual targets for each member state. The Government's approach to increasing renewable energy across the UK in the sectors of electricity, heat and transport has been set out in the UK Renewable Energy Roadmap published in July 2011 alongside the Electricity Market Reform White Paper. The Government believes that getting more renewable energy can give the UK 'much more security and a greater degree of energy independence - helping to shield us from global fossil fuel price fluctuation' (Page 4 UK Renewable Energy Roadmap).
- 130 The Government acknowledges that in the longer term, energy security will go hand in hand with climate security and in 2012 the Government set out its future strategy for energy security in the Department of Energy and Climate Change (DECC) Energy Security Strategy published in November 2012. The Energy Security Strategy 2012 (Page 20) explains the exploitation of our North Sea oil and gas reserves has brought significant energy security as well as commercial benefits. Although UK production still provided the

equivalent of 72 per cent of our oil use (including bunkers) and 55 per cent of our net gas use, the UK continental shelf (UKCS) is on a downward trend. By 2020 it expects the UK will be net importers of 43 per cent of the UK oil demand and 53 per cent of gas demand.

- 131 The Government is committed to produce Annual Energy Statements of energy policy to be put before Parliament. The 2010 Statement reiterates that ‘the UK’s own indigenous supplies of oil and gas remain important’. (Page 9). The Statement recognises that encouraging the necessary investment in oil and gas production is an important component of the transition towards a low carbon economy (page 8/9).
- 132 The latest Annual Energy Statement was published in 2014 and states that the Government’s energy policies seek to meet three primary objectives: (i) ensuring light, power, heat and transport are affordable for households and businesses; (ii) providing energy security; and, (iii) reducing carbon emissions in order to mitigate climate change (paragraph 1). The statement advocates a balanced approach towards securing a reduction in energy consumption. This includes husbanding domestic supplies to reduce the reliance on imports, in combination with bringing forward cost effective renewables as part of a balanced, low carbon and secure energy mix.
- 133 In July 2019 the Government passed the Climate Change Act 2008 (2050 Target Amendment) Order 2019 to achieve a 100% reduction in net UK emissions of targeted greenhouse gasses by 2050.
- 134 The Local Parish Council Salfords and Sidlow have objected to the application on the grounds the application does meet climate change targets and the policy tests of the NPPF following the high court ruling striking out paragraph 209 (a) supporting oil and gas development. Therefore the local planning authority should consider reasonable and recent scientific evidence in relation to climate change and CO2 and methane emissions.
- 135 Public representation received have raised objection against the application suggesting the proposal is incompatible with international and national objectives on climate change to reduce global temperatures.
- 136 Some of the representations received in support of the proposal point to the national need for oil, the Country’s over reliance on imports, and the contribution of on-shore oil and gas resources towards energy security and supporting the transition to a low carbon economy, which includes increasing the focus on renewable energy.

Need for Hydrocarbon Supply

- 137 Oil and gas form an integral part of the UK’s energy and generation mix maintaining energy security, affordability and decreasing carbon emissions in the UK. Public objection made on this application has questioned the need for further fossil fuels exploration for oil and gas.
- 138 The national Planning Policy Guidance (nPPG) paragraph 124 states that in determining a planning application for oil and gas development, mineral planning authorities should take account of government energy policy, which makes it clear that energy supplies should come from a variety sources which includes onshore oil and gas.
- 139 The UK oil and gas industry has been the largest sector of industrial development throughout the past four decades predominantly from production of the UK’s Continental Shelf (UKCS).
- 140 The Annual Energy Statement 2013 (page 39) states that with oil and gas remaining key elements of the energy system for years to come (especially for transport and heating), the Government is committed to maximising indigenous resources, onshore and offshore, where it is cost-effective and in line with safety and environmental regulations to help

ensure security of supply. The 2014 Statement also states that “[...] bringing forward new UK oil and gas fields before existing infrastructure is decommissioned will ensure that as much as possible of the potential of UK oil and gas is tapped while it is cost effective to do so.”

- 141 Climate change and energy policies are interlinked. The Government recognises that the way we produce and use energy plays a major part in meeting the challenge of climate change and has emissions targets and policies in place for a transition towards a low carbon energy mix.
- 142 The Digest of UK Energy Statistics 2018 published by BEIS states that around 40% of the UK’s total energy production is from crude oils extracted from the UKCS, and UK refineries produce around 60 million tonnes of oil products (paragraph 3.1).
- 143 Overall demand from refineries has dropped by a third since 2000, but there has been a far steeper decline in oil production from the UK’s Continental Shelf. The UK Energy in Brief 2018 explains that total indigenous oil and gas production was down 1% in 2016, though this decrease was less than the average decline rate of 5% since UKCS production peaked in 1999. In 2017 the UK imported 35% of its oil and 46% of its gas.
- 144 As North Sea oil and gas production declines the UK’s import dependency will grow and the UK will become increasingly exposed to the pressures and risks of Global market (page 21 Energy Strategy 2012).
- 145 The Government sets out measures for UK production of oil and gas in the DECC Energy Security Strategy 2012. On page 20 the Strategy states the Government will work to maximise economic production of UK oil and gas resources through:
- Licensing rounds, which ensure this reliable source can continue to deliver supplies for as long as possible;
 - Providing a fiscal regime that encourages further investment and innovation in the North Sea, while ensuring a fair return for UK taxpayers; and
 - Considering the potential for UK unconventional gas production, and whether it will prove technologically, environmentally and economically sustainable.
- 146 The Government is also undertaking activities in a number of areas to enhance energy security whilst also delivering wider energy goals. This includes measures to maximise economic production of domestic oil and gas reserves; and prevent possible disruptions to the UK energy supply (Page 18 Annual Energy Statement 2014).
- 147 Under EU law the UK has an obligation to maintain stocks of key oil products. The UK’s policy obligations are set out in DECC UK Emergency Oil Stocks document published in August 2015. Under EU Directive 2009/119/EC EU member states are required to hold oil stocks at the higher order of a 90 days of average net daily imports or 61 days of average daily inland consumption in order to mitigate a supply crisis. The UK has legislation in place to meet these international obligations by directing companies to hold oil stocks.
- 148 Government energy policy stated on Page 19 of the Energy White Paper 2007 *that ‘... to meet our security of supply challenges, we will:*
- *maximise the economic production of our domestic energy sources which, together with our energy saving measures, will help reduce our dependence on energy imports;...’.*
- 149 In this context the importance of domestically produced oil and gas is recognised. *‘Renewables and other low carbon technologies will play an increasing role in our energy mix over the longer term; however, fossil fuels will continue to be the predominant source of energy for decades to come.’* (Para 4.02 Page 105 of the 2007 Energy White Paper).

- 150 Guidance on the Government energy policy provided in nPPG makes clear that energy supplies should come from a variety of sources including onshore oil and gas. Onshore oil and gas have only been discovered and produced in commercial quantities from certain sedimentary basins onshore. In the south of the UK the Wessex-Channel covers the productive Weald Basin and the Wessex Basin where the Jurassic rocks and the existence of trapping structures are suitable for hydrocarbon accumulation.
- 151 The current proposal falls within the Weald Basin, which extends from Hampshire to Kent and East Sussex and includes the Humbly Grove oilfield in Hampshire, along with the oil producing Horndean, Stockbridge, Storrington, Woodworth and Singleton oilfields. In Surrey the Weald covers the gas reservoir known as 'Albury 1' further west in the County, Palmers Wood Oilfield near Oxted, Brockham Oilfield near Dorking, the Kings Farm wellsite South Godstone, and Horse Hill wellsite near Horley.
- 152 The application is for the production stage of oil and gas development at Horse Hill wellsite. The production stage follows the appraisal phase which takes place (following the exploration stage) when the existence of oil or gas has been proven, but the operator needs further information about the extent of the deposit or its production characteristics to establish whether it can be economically exploited.
- 153 The HH-1 well is located within Petroleum Exploration Development Licence (PEDL) 137 on the northern side of the geological feature of the Weald Basin. The applicant states the HH-1 exploration well was originally drilled in October 2014 and the well discovered oil accumulations in the Portland Sandstone and in multiple deeper Jurassic formations including limestone members of the Kimmeridge layer enabling flow testing to begin in 2016.
- 154 The need for hydrocarbon appraisal at Horse Hill Wellsite was proven under planning permission reference RE16/02556/CON (dated 1 November 2017) which involves the retention of the existing wellsite for an appraisal programme of the HH-1 well, and further drilling operations involving drilling a sidetrack well (HH-1z) and a second borehole (HH-2), and subsequent flow testing for hydrocarbons. The applicant advises that the appraisal permission (ref. RE16/02556/CON) was implemented in June 2018 and on 10 September 2018 they declared the discovery of oil to be commercially viable. They state that this has changed the status of the wellsite from being one of appraisal to one that is capable of supporting production and brings forward new development and operational needs that will require new consents.
- 155 Accordingly the applicant has submitted this application seeking planning permission to retain the existing Horse Hill wellsite to carry out the production of hydrocarbons from the target reservoirs of the Kimmeridge Limestones and Portland Sandstones. The proposal involves the carrying out of further drilling operations for four new wells and a water injection well to be clustered on the existing well pad and a 0.72 hectare extension to the site, east of the existing well pad and north of the internal access track, for the construction and operation of a process, storage and loading facility. The applicant proposes the development will be carried out over five phases. A planning consent for a period up-to 25 years is being sought to allow sufficient time for construction activity of Phase 1, the drilling activities of Phase 2, twenty years of production within Phase 3, followed by decommissioning and restoration of the site in phases 4 and 5 respectively.
- 156 The applicant states that, taking account of the geological structures, the discovery of hydrocarbons and a range of other constraining factors, the retention of the existing wellsite for its continued use is considered to be the best environmental option minimising the scope for likely adverse environmental impacts.
- 157 The Government does not seek to differentiate between the size or stage of projects, instead the aim is to maximize the potential of the UK's conventional oil and gas reserves

in an environmentally acceptable manner. Maximisation of potential would include consideration of even relatively small fields.

- 158 As explained earlier in this section above, the National Planning Policy (NPPF) on minerals, which includes onshore oil and gas, recognises that minerals are a finite natural resource and can only be worked where they are found. The policy also recognises that it is important to make best use of them [minerals] to secure their long-term conservation and that minerals are essential to support sustainable economic growth and our quality of life. The NPPF paragraph 209 (b) states that when planning for on-shore oil and gas development, local planning authorities should clearly distinguish between the three phases of development (exploration, appraisal and production) and should address constraints on production and processing within areas that are licensed for oil and gas exploration or production. Following appraisal operations, the applicant is now proposing a programme for the production of commercially viable hydrocarbons at the wellsite.

Conclusion on Need

- 159 As can be seen from Government policy and guidance above, the Government makes it clear that oil and gas remains an important part of the UK's energy mix. Policies recognise the continuing importance of fossil fuels but aim to manage reliance on them, their potential environmental effects and the risks associated with security of supply. While the Government manages the transition to a low carbon energy mix this will mean that oil and gas remain key elements of the energy system for years to come (especially for transport and heating). Based on the UK Governments current policy, it is also recognised that the proposed development would not be in conflict with the Government's climate change agenda.
- 160 Government policy is set out within the NPPF, the Annual Energy Statement, the Government's Energy Security Strategy, the White Paper and BEIS statistics recognises that there is a need to maximise indigenous oil and gas resources both onshore and offshore. Officers are required to give significant weight to this.
- 161 Policy MC12 of the SMPCSDPD 2011 requires consideration to be given to the identification and use of the proposed site. In this regard, the proposal involves the retention and use of an existing site, previously selected as the best environmental option for the exploration and appraisal stages of hydrocarbon development taking into account of the geological structures to be targeted, for the production of hydrocarbons. The applicant states that in September 2018 they declared the discovery of oil at the Horse Hill prospect to be commercially viable. It is therefore appropriate that identified reserves of on shore hydrocarbons are properly husbanded to make a valuable contribution by maximising energy recovery of indigenous supplies and contribute to the UK's energy sector and energy security. The proposal is for a mineral development that, whilst the development period being sought is for 25 years, this nevertheless is considered a temporary development, and the site would be required to be cleared and restored upon cessation of operations secured by appropriate planning conditions.
- 162 This leads Officer's to conclude that on the basis of Government guidance there is a national need for the development subject to the proposal satisfying other national policies and the policies of the Development Plan. This is considered further under individual issues later in the report.

HIGHWAYS, TRAFFIC & ACCESS

Surrey Minerals Plan Core Strategy Development Plan Document 2011(SMPCSDPD 2011)

Policy MC15 -Transport of Minerals

Reigate and Banstead Core Strategy 2014

Policy CS17 – Travel options and accessibility

Reigate and Banstead Borough Local Plan 2005 (RBBLP 2005)

Policy Mo5 – Design of Roads within New Development.

Policy Mo6 – Service Provision within New Development

- 163 The proposal seeks to retain the existing wellsite access onto the rural road known as Horse Hill (D332). The increase in traffic and congestion from the proposed HGV movements to the site and the impacts on local traffic and safety of other road users, such as horse riders, cyclists and pedestrians caused by HGV movements, have been the aspect of this proposal that has given rise to the leading local objection. Further concerns have been raised on suitability and condition of Horse Hill to carry HGV traffic and the impacts likely protestor activity will have on local traffic movements, such as when slow walking HGVs accessing the site.
- 164 The SMP2011 recognises that one of the most significant impacts of mineral working in the county, and the one that usually causes the most public concern, is the lorry traffic generated from transporting the minerals. The plan goes on to say the nature of the market in Surrey means that lorries are used for transportation in the overwhelming majority of cases as this is the most cost effective means of transport. But as a consequence lorries also contribute to overall traffic congestion. Para 7.9 states that it is important to ensure the effects of traffic generated by mineral development on local communities, the environment and the local road network, are carefully considered. Para 7.10 goes on to state that the movement of minerals by road should as far as possible be confined to the motorway and primary route network with attention being given to the routeing of vehicles between the proposed development and the motorway and primary route network.
- 165 Policy MC15 (Transport of Minerals) of the SMPCSDPD 2011 states that applications for mineral development should include a transport assessment of potential impacts on highway safety, congestion and demand management and explore how movement of minerals within and outside the site will address issues of emissions control, energy efficiency and amenity. 'Mineral development involving transportation by road will be permitted only where:
- (i) there is no practicable alternative to the use of road-based transport that would have a lower impact on communities and the environment;
 - (ii) the highway network is of an appropriate standard for use by the traffic generated by the development or can be suitably improved; and
 - (iii) arrangements for site access and the traffic generated by the development would not have any significant adverse impacts on highway safety, air quality, residential amenity, the environment or the effective operation of the highway network.'
- 166 Reigate and Banstead Local Plan Core Strategy 2014 (RBLPCS 2014) strategic Policy MCS17: Travel options and accessibility states that the Council will work with Surrey County Council, the Highways Agency, rail and bus operators, neighbouring local authorities and developers to: 1) manage demand and reduce the need to travel by directing development to accessible locations in the borough; 2) improve the efficiency of the transport network by delivering improvements to the road network to meet all street users' needs, enhance accessibility along key corridors and accommodate the forecast increase in journeys; and 3) facilitate sustainable transport choices by requiring the provision of transport assessments for proposals which are likely to generate significant amounts of movement.
- 167 Reigate and Banstead Borough Local Plan 2005 (RBBLP 2005) contains two relevant transportation policies. Saved Policy Mo 5 (Design of Roads within New Development) of the RBBLP 2005 seeks to 'ensure that the arrangements for access and circulation are appropriate to the type of development proposed and the area in which it is located and do not aggravate traffic congestion, accident potential or create environmental disturbance in the vicinity. Where feasible, the number of access onto major roads will be reduced.' Access arrangements must be to approved standards and not cause an

increase in danger to road users and pedestrians. The traffic aspects of a development are to be evaluated both in relation to the internal layout of the new development and the effect of the completed development on the existing highway network. Saved Policy Mo 6 (Service Provision within New Development) states that provision for loading unloading and turning of service vehicles within the curtilage of a proposed development will normally be required.

- 168 Government policy on promoting sustainable transport is set out in the National Planning Policy Framework (NPPF). At paragraph 111, the NPPF states that all developments that will generate significant amounts of movements should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed. It also explains that when considering development proposals, it should be ensured that: safe and suitable access can be achieved by all users; and any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable level. The NPPF also explains that development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts would be severe
- 169 The application is accompanied by a Transport Statement (TS) and an assessment of the Traffic effects are contained in the Environmental Statement submitted in association to the application.

The Development

- 170 Access to the wellsite is via the existing already constructed site access on Horse Hill and internal private access track originally approved as part of the exploration planning application reference RE10/2089. Some minor modifications for widening the internal track were approved under the appraisal planning permission reference RE16/02556/CON granted in November 2017. The internal access road is laid to stone chip surface and laid to tarmac at its junction with Horse Hill. The provision for loading unloading and turning of service vehicles is within the curtilage of the development. The applicant proposes the previously approved site access on Horse Hill is to be retained and provided with visibility splays of 2.4m x 160m in both directions.
- 171 The development period being sought is for 25 years and the development is divided into five phases briefly summarised as:
- Phase 1 – involves well site modifications and new construction works;
 - Phase 2 – to be split into 4 activities which includes the mobilisation and demobilisation of equipment to facilitate initial workover operations for HH-1/1z and HH-2 wells, the mobilisation and demobilisation of the drilling rig and drilling of 4 new hydrocarbon wells (HH-3 to HH-60 and 1 water reinjection well);
 - Phase 3 – involves 4 stages comprising; installation of production equipment, production of oil, maintenance workovers and sidetrack drilling;
 - Phase 4 – comprises the plugging, abandonment and decommissioning of the wells; and
 - Phase 5 – is for the final phase which involves restoration and aftercare of the site.
- 172 The applicant proposes the maximum HGV movements to the site per day across all five phases will be no more than 32 movements (16 HGV arrivals and 16 HGV departures out). The applicant anticipates it is during the early production stage of Phase 3 that will generate the envisaged peak of 32 HGV daily movements and will last approximately 4 months. The potential traffic according to the phase of the development is set out below.

Table 1 Anticipated Number of Vehicles and Vehicle Movements by Phase.

Phase	Work Stage	Estimated Duration	Maximum No. of total daily HGV movements (in/out)
Phase 1	Well Site Modifications and New Construction Works	3 Months	20 movements per day
Phase 2	Well Management and Drilling	17 Months	20 movements per day
Phase 3	Installation of Production Equipment	4 Months	6 movements per day
	Production	4 Months	32 movements per day
		24 Months	24 movements per day
		48 Months	16 movements per day
		60 Months	8 movements per day
		104 Months	4 movements per day
	Workover	1 Month	20 movements per day
Sidetrack Drilling	3 Months	20 movements per day	
Phase 4	Decommissioning	5 Months	20 movements per day
Phase 5	Restoration and Aftercare	2 Months	20 movements per day

- 173 The applicant proposes the largest and most onerous HGV vehicle required at the site movements include vehicles numbers required for construction traffic and to transport plant and equipment to the site. The numbers of HGVs include movements for workover rig or drilling rigs to be brought to and from the site. The HGV numbers also provide for road tanker movements associated to the production of oil at the site.
- 174 HGV movements over all work stages would be limited 0800 – 1830 Mondays to Fridays; and 0900 – 1300 Saturdays; and on no other days.
- 175 The applicant states that staff trips to the site will be made by cars, vans/small LGVs, motorcycles or minibuses. They advise that the maximum number of staff on site will vary across the different phases, though as a worst-case scenario the numbers of light vehicle movements will be a total of 52 movements (26 in and 26 out).
- 176 The applicant proposes all light vehicle and HGV parking will take place within the site and no parking on external network will result from the proposals.
- 177 Both the local Salfords and Sidlow Parish Council and neighbouring Charlwood Parish Council have concerns of road safety issues caused by large HGVs and impacts on other road users from the proposal. The Norwood Hill Residents echo these views and have further concerns the development will cause significant increase in traffic on Horse Hill and concerns with HGV traffic at the junction of Horse Hill with the A 217.
- 178 Local objection to the application have expressed concern of the numbers of proposed HGV's using Horse Hill, which they consider to be unsuitable for HGV traffic. Concerns have been raised that site HGV traffic will be a safety issue to other road users (motorist, horse riders, cyclist, and pedestrians) and damage the road surfaces on Horse Hill.

Further road safety concerns have been raised with site HGV's using the junction of Horse Hill and the A217 and an increase in traffic at the junction which may cause accidents. Local residents have also raised concerns protester activity will cause traffic delays on Horse Hill and also prevent access to properties.

- 179 In their assessment of the application the County Highway Authority (CHA) notes this application is seeking to maintain site operations beyond the time frame already permitted for a further 25 years. The CHA also notes that the site already benefits from a number of previous approvals, the most being reference RE16/02556/Con which imposes conditions for controlling daily HGV movements to and from the wellsite. The CHA however considered there to be some shortcomings with the transport information submitted for the application. The CHA considered that for this application and the more intensive operations proposed and longer time period sought, that insufficient justification had been provided to demonstrate why an increase of up-to 32 (for 4 months) and up-to 24 (for 24 months) two way HGV movements is being sought for the production stage of the development (during Phase 3). The CHA also raised concern with a potential swing-out manoeuvre performed by large HGV's entering the site access.
- 180 In response to the concerns of the CHA, in May 2019 the applicant submitted information in connection to the increase in vehicle movements being sought in the updated Transport Statement for this next element of works (contained in document ref: HHDL-HH-PS and E-V1 – Appendix G dated 30 November 2018).
- 181 The CHA has reviewed the amplifying highway detail and in their latest response to the application (June 2019) advised that they considers that this application generally conforms to the previous approved submission (RE16/02556/CON), just with an increase in HGV movements to reflect the next stage of extraction. The CHA also notes the application proposes the same hours of vehicle movements as currently permitted which would be between the hours of 8am to 6.30pm on weekdays and 9am to 1pm on Saturdays with no HGV movements on a Sunday.
- 182 In conclusion the CHA considers that the impact connected to the development can be safely and adequately accommodated on the highway network and consistent with the previous approved operations. The CHA therefore raises no objection to the application subject to conditions, with amendment to the restriction in numbers of daily HGV movements for a temporary increase in the total numbers during the production stage (Phase 3) of the stage of the development.
- 183 The local Salfords and Sidlow Parish Council have advised that if planning permission is approved they request conditions are imposed which includes a several highways conditions including restricting the numbers of HGV movements, site access and vehicle routing. None of the other technical consultees to the application have raised objection to the proposal on highways grounds.

Conclusion on Highways, Traffic and Access

- 184 The Horse Hill wellsite currently operates under an appraisal stage planning permission reference RE16/02556/CON. The impacts of HGV vehicle movements from the development on the local road network have been previously assessed considered acceptable for the previous application ref. RE16/02556/CON and earlier exploratory stage application ref. RE10/2089. The applicant now seeks to retain the existing wellsite for the production stage for a period of 25 years.
- 185 The County Highway Authority raises no objection to the proposal in terms of the number of vehicle movements proposed, the capacity of the highway network, on highway safety and the access to the application site, provided the recommended conditions be attached to any planning permission.

- 186 Taking all the above matters into account Officers consider that from a traffic, access, highway capacity, and safety point of view the proposal is acceptable. Accordingly, Officers do not consider that the proposal conflicts with Policy MC15 (Transport of Minerals) of the SMPCSDPD 2011, RBLP CS 2014 Policy CS17, and RBBLP 2005 saved Policies Mo 5 (Design of Roads within New Development) and Policy Mo 6 (Service Provision within New Development).

ENVIRONMENT & AMENITY

Surrey Minerals Plan Core Strategy Development Plan Document 2011 (SMPCSDPD 2011)

Policy MC12 Oil and Gas Development

Policy MC14 Reducing the Adverse Impacts of Mineral Development

Policy MC17 Restoring Mineral Workings

Policy MC18 Restoration and Enhancement

Reigate and Banstead Local Plan Core Strategy 2014 (RBLPCS 2014)

Policy CS2 Valued Landscapes and the Natural Environment

Policy CS10 Sustainable Development

Reigate and Banstead Local Plan 2005 (Saved Policies)

Policy Pc 2D Potential SNCI's

Policy Pc3 Woodland

Policy Pc4 Tree Protection

Policy Ho10 Noise

Policy Ut4 Flooding

Introduction

- 187 There can be a wide range of potential environmental impacts associated with mineral development. Policy MC14 of the SMPCSDPD2011 states that mineral development will be permitted only where a need has been demonstrated and the applicant has provided information sufficient for the mineral planning authority to be satisfied that there would be no significant adverse impacts arising from the development. The policy sets out a number of criteria which, when determining a planning application for minerals development, should be considered in terms of any potential impacts. The criteria in the policy relevant to this planning application are: i) noise, dust, fumes, vibration, illumination; ii) flood risk, water quality and land drainage; iii) the appearance, quality and character of the landscape and any features that contribute to its distinctiveness; iv) the natural environment and biodiversity; v) sites of archaeological interest and structures of historic interest and their setting; vi) the rights of way network; vii) the use of land and soil resources; viii) the need to manage the risk of bird strike to aircraft; and ix) cumulative impacts arising from the interactions between mineral developments, and between mineral and other forms of development.
- 188 With regards to oil and gas development paragraph 5.37 of the SMPCSDPD2011 recognises there are three separate phases of development, comprising exploration, appraisal and production. Applications for exploratory wells will be need to consider locating sites to minimise intrusion, controlling vehicular activity and vehicle routing, and controlling noise and light emissions from drilling rigs especially during night-time operations. These issues are then expected to be considered afresh under subsequent appraisals.
- 189 At paragraph 5.39 the SMPCSDPD2011 explains that the final phase of the development is the production phase if appraisal identifies that a viable oil or gas field exists. Specific issues on the location of the well heads will have been considered during the earlier phases, but what is more critical at this stage are the additional above ground facilities that are associated with production.
- 190 Policy MC12 of the SMPCSDPD2011 states that planning applications for drilling to appraise potential oil or gas fields will only be permitted where the need to confirm the

nature and extent of the resource, and potential means of its recovery, has been established. Well sites, including the re-use of wellheads used at the exploratory stage, should be located such that there are no significant adverse impacts.

- 191 At the strategic level the RBLPCS2014 recognises a commitment by the Council to ensure that future development in the borough is achieved in a sustainable way. Policy CS10 (Sustainable development) sets out in ten points a list of criteria that development proposal should consider in order to be considered sustainable. Of the ten criteria relevant to this proposal development will 1) make efficient use of land, giving priority to previously developed land; 2) respect the character of the local area; 4) protect the green fabric of the borough; 5) be designed to minimise pollution, including air, noise and light and to safeguard water quality; and 10) be located to minimise flood risk and manage flood risk through the use of SuDS.

Landscape and Visual Impact

- 192 The impacts on landscape and visual amenity for the construction, operation and use of wellsite were considered acceptable when the planning permissions were granted in 2012 (exploration) and 2017 respectively. This application concerns itself with the production stages of on-shore oil and gas development. The applicant has submitted a Landscape and Visual Appraisal (LVA) to accompany the application.
- 193 National policy set out in the NPPF looks to the planning system to contribute and enhance the natural and local environment by protecting and enhancing valued landscapes and recognising the intrinsic character and beauty of the countryside.
- 194 Policy MC14 of the SMP2011 criteria (iii) seeks to protect the appearance, quality and character of the landscape.
- 195 The RBLPCS 2014 Policy CS2 (Valued Landscapes and the natural environment) sets out several points to consider for protecting and enhancing the boroughs green fabric. The Policy CS2 advocates that the Surrey Hills Area of Outstanding Natural Beauty (AONB) will be provided with the highest level of protection, with the same principles being applied to the Areas of Great Landscape Value (AGLV) acting as an important buffer to the AONB and to protect the views from and into the AONB. The Policy CS2 then states that Sites of Special Scientific Interest (SSSIs), Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and ancient woodland will be protected for their biodiversity value and where appropriate enhanced. The RBLPCS 2014 Policy CS10 states development will protect and enhance the green fabric, and respect and contribute to the boroughs green infrastructure network.
- 196 RBBLP 2005 Saved Policy Pc4 (Tree Protection) states that trees, individually or in groups, areas or woodlands make a particularly valuable contribution to the visual amenity of the Borough. Emphasis is given to the retention of existing trees when considering applications and the protection during the construction period is highlighted. More than 'one for one' replacement for lost trees is sought by the policy.
- 197 The activity and movement associated with the development would involve disturbance in some degree to the landscape during the life of the development. The application site extends to some 2.8 hectares in area and consists of the existing 2.08 hectare HH-1 wellsite, including the well pad and approximately 250 m long access track to Horse Hill (road). The topography of the application site is generally flat at c.69m AOD. Beyond the site to the north and west the land rises to ridgeline approximately 1km from the site boundary. The ridgeline continues to 5km and beyond. To the south and east ground levels remain predominantly flat. There are no natural water features within the site although there are two ponds within woodland to north. The site is not subject to any designations relating to landscape quality.

- 198 The application proposes to retain the existing well pad and access for the drilling of an additional four new hydrocarbon wells, one production water reinjection well, and the subsequent installation of six surface mounted pumps. It is proposed to extend the well site to the east, for construction of a hydrocarbon processing, storage and transportation facilities, resulting in temporary redevelopment of a further 0.72ha of agricultural land. The application states the process and storage area will be lower (at approximately 65.5m AOD) than the adjacent well pad to achieve a zero-net cut and fill and reduce the visual impact of the facilities. The proposal includes retention of the existing 3m high soil bund constructed along the northern edge of the well pad compound which provides some visual screening.
- 199 The application identifies that eight category U and one category C groups of trees will require partial removal. The application also states that existing 2.5m high security fencing is to be extended to enclose the new storage and process facilities. There are 2.5m high security gates at the site entrance at Horse Hill to be retained and new 1.8m high boundary fencing is to be installed along the sites road frontage.
- 200 Representations received on the application have raised concerns regarding the impacts that will be caused by the development on the local landscape. The local Salfords and Sidlow Parish Council have objected on the grounds the location and setting of the development are inappropriate and that lighting will be harmful to the area which includes residential, recreational and sensitive business uses. The Norwood Hill Residents have objected also raising concern that the development damages the natural amenity of the area and the development involves industrialisation of the countryside from the area.
- 201 Local residents, in particular to the north of the application site, have raised concern that there are some open views and existing vegetation, which loses leaf during the winter months, does not sufficiently screen the activities of the site from nearby residents at selected viewpoints. A further leading concern of objection has also been raised on the potential impacts of lighting from the site on local residents, especially from site illumination and at night time. Some of the local residents suggest that additional screening to the site must be provided to screen the site from the nearby properties and businesses should the application be permitted.
- 202 The Environmental Impact Assessment (EIA) Scoping Opinion issued by SCC for the application in October 2018 stated that *“having taken account of the scale of identified site and the context in which it is set, the impacts that would arise from the scheme could be appropriately addressed through a standalone landscape and visual appraisal.”* As such a full Landscape and Visual Assessment (LVIA) was not considered necessary.
- 203 To accompany the planning application the applicant has submitted a Landscape and Visual Appraisal (LVA). The LVA purpose is to identify the baseline conditions of the site and its surrounding area and provide an assessment of effects (such as lighting and visual) predicted to arise from the development on the baseline conditions. The applicant states the appearance of the proposed development is by ‘by design’, this being a consequence of its specific engineering structure and function. The County Landscape Consultant has assessed the applicants LVA and considers that the methodology is appropriate to the level of assessment undertaken and appropriately adheres to best practice guidelines, as set out in the *‘Guidance for Landscape and Visual Impact Assessment – Third Edition’* and other guidance documents.
- 204 Following initial advice received from the County’s Landscape Consultant (CLC) and County Ecologist, in May 2019 the applicant submitted outline proposals for site restoration principles. Then in July 2019 in response to comments from the CLC, the applicant submitted further detail in respect of the LVA to clarify points raised for Nomenclature and Landscape Assessment.

- 205 The HH-1 wellsite is found in a rural area within the 'Dorking to Hookwood Low Weald Farmland' Landscape Character Area (LCA) which forms part of the Lower Weald Farmland Character Type, as defined in the Surrey Landscape Character Assessment (2015). The well site compound is located within a field which has woodland or mature hedgerows on all four boundaries. The site access track runs through woodland and then alongside the southern boundary of a field. Either side of the site access is the woodland belt where it fronts Horse Hill. The field in which the access track and wellsite compound are located is found to the north of the hedgerow dividing the field from Footpath 414
- 206 Officers note that the wellsite is not situated on land that is covered by, or adjacent to, any areas of local, national or higher-level nature conservation designations or any areas of local or national level landscape designations, though is situated with the Metropolitan Green Belt. There are however sites of ecological importance in the vicinity with Crutchfield Copse Site of Nature Conservation Importance (SNCI) located 1.1km to the northeast, Eldophs Copse Local Reserve some 1.8 m to the northeast, Glovers Wood Site of Special Scientific Interest (SSSI) 3 km distant and the Rowgarden Wood Ancient Woodland approximately 330m to the north west of the application site.
- 207 During the life of the development rigs and cranes and associated plant and equipment, and office and storage units will be required on site. The drill rig derrick would be the tallest piece of equipment and likely be up-to 37 metres in height are proposed to be used at the site. For oil production a range of equipment is to be installed in the process facility such as storage tanks, an enclosed ground flare, generators and other ancillary development. Within the well pad will be installed surface mounted pumps to the wellheads. The maximum height of all equipment would up-to 6 metres. Across all phases of the development the site will be accessed by HGV's delivering plant, machinery and materials, and tanker movements once the site is in production. The development is to consist of five phases covering the operation and restoration of the site.
- 208 The County Landscape Consultant (CLC) advised in their initial February 2019 advice letter that the application site is located within the countryside and Green Belt but sits outside the Surrey Hills Area of Outstanding Natural Beauty (AONB). The AONB is located to the north-west of the site at approximately 2km and as such the CLC advises the AONB would not be directly impacted by the development. The CLC however recommended the applicant assessment of landscape and Visual Effects requires some clarification to avoid ambiguity. The CLC also provided recommendation, that due to the intensification of the works, the previously approved general principles of restoration will need to be revised and agreed to ensure they remain fit for purpose. In addition the CLC also advised that given the assumed 25-year period for which planning permission was sought a planning condition is recommended requiring the approved restoration principles are reviewed before restoration works begin on site.
- 209 In response to Officers advice provided in respect of landscape and restoration, in June 2019 the applicant submitted a new site restoration plan revised to cover the enlarged site area. The restoration after uses will remain the same where the site would be returned to a mix of agricultural grassland and woodland. The applicant also provided detail of an outline landscape and restoration plan which provides principles for site restoration techniques, soil handling sustainable drainage, landscape planting and ecological enhancement and aftercare and management. Then in July 2019 the applicant provided a response letter to clarify the submitted LVA assessment of landscape and visual effects of the development.
- 210 Following the submission of the clarifying and amending/clarifying landscape, visual and restoration detail the CLC provided further advice in August 2019. The CLC considers that the site is to be located within a well wooded landscape which together with the field hedges and Horse Hill ridgeline restrict the visual effects of the site in the wider landscape and that the main adverse effects of the development are to the south. The CLC advised that the greatest visual impacts from the development are on a small number of

residential properties in close proximity and on users of the footpath of the Footpath 414. The CLC has advised that they agree with the applicants LVA conclusion which states that as the development is temporary, albeit for 25 years, it does not have an overbearing influence on the amenity of these receptors and is restricted to a small number of residential receptors and short length of Footpath 414, therefore the proposed development is acceptable in landscape and visual terms.

- 211 In respect of site restoration, the CLC notes the outline detail submitted and has recommended that a planning condition be imposed requiring the submission and approval of a detailed landscape and ecology management plan (LEMP) prior to the restoration commencing.
- 212 Trees and woodlands make a valuable contribution to the visual amenity of a locality and Saved Policy Pc4 of the Reigate & Banstead Local Plan 2005 emphasises the importance of the retention of trees and the adequacy of their protection during site construction. The applicant proposes one tree of category C (of low quality and value) adjacent the access track that will require removal in order to install the proposed new gatehouse. The applicants survey also identifies eight trees of category U (of poor quality and value) within the woodland area that are in such condition that they cannot realistically be retained as living trees in the context of the current land use. From a landscape and visual point of view the CLA has not raised concern with the felling of the trees and no comments have been received from the Arboriculturist. (Further assessment of trees can be found later in the Ecology section of this report)
- 213 The visual impact of artificial lighting on the night sky is an issue in rural areas and there is lighting associated with the drill site compound, as drilling would take place 24 hours a day. Local residents have objected to the development raising concern of the visual impact that light emissions from the site will cause at night time. As set out above the applicant proposes the impact of lighting would be limited by minimised by downward, shrouded and directional lighting to minimise light spill. The existing woodland will also assist in diffusing light from the development. However, there would be some high-level spot lights occasionally seen from the workover rigs
- 214 The vegetation surrounding the site would provide substantial screening, particularly at the lower level, although high level lighting (including a red aircraft warning light) on the drilling or workover rig will be noticed above the vegetation canopy. The applicant has submitted lighting information which has been assessed by the County's Lighting Consultant (CLC). The CLC has advised that they consider the lighting proposal for the application to be satisfactory and has not raised objection to the proposals. Neither the County Landscape Consultant nor the County Ecologist have objected to the lighting proposals for the site. (Further assessment of site lighting can be found in the later Lighting section in this report).

Conclusion on Landscape and Visual Impact

- 215 Officers recognise that the proposal involves the retention of the existing wellsite of which the landscape and visual impact have previously been considered acceptable. The proposal also involves an extension the east of the site for creation of a process and storage area. Officers note that the extension area will be set down at a lower height than the adjacent well pad and will be positioned closer to screening of the adjacent woodland area to the east of the site to Horse Hill (road). Officers further recognise that it will be the presence of tall structures on site the tallest being a 37m high drill rig derrick and also lighting that give rise to the greatest significant visual impact. Officers acknowledge that while the proposal seeks planning permission for 25 years, the presence of tall structures on the site would be temporary and for short periods of time whilst drilling or workover operations are carried out and the equipment then demobilised and removed from the site. Beyond this whilst the site in production (20 years) the tallest structures present on site would have a maximum height of no greater than 6 metres. The County Landscape

Consultant has assessed the landscape and visual impact of the development and advised they concur with the applicants LVA conclusion that the development is acceptable in landscape and visual impact terms.

- 216 The applicant has considered the issue of lighting impacts from the development. The greatest impact of lighting would be from the drill rig derrick and associated equipment in use at night time. While in production the main lighting will be for security and health and safety and situated below the level of the woodland canopy. The County Lighting Consultant has not raised any concerns against the applicants lighting proposals. The County Landscape Consultant has not raised concern of impacts from site lighting.
- 217 Based on the above and given that the CLC raises no objection, Officers therefore consider the proposal acceptable in terms of SMPCSDPD 2011 Policy MC14 subject to the recommended conditions.

Ecology and Biodiversity

- 218 As outlined above, Policy MC14 of the SMPCSDPD 2011 (Reducing the Adverse Impacts of Mineral Development) requires consideration to be given to the natural environment including biodiversity. It states that mineral development will be permitted only where a need has been demonstrated and sufficient information has been provided for the mineral planning authority to be satisfied that there would be no significant impacts arising from the development. A number of issues are identified in 10 points including iv) the natural environment, biodiversity and geological conservation interests. Policy MC12 (Oil and Gas Development) states that exploratory drilling will only be permitted where the MPA is satisfied that the site has been selected to minimise adverse impacts on the environment. Minerals working can bring opportunities for enhancement. Policy MC18 (restoration and enhancement) states that the MPA will encourage and work with mineral operators and landowners to deliver benefits such as enhancement of biodiversity interests.
- 219 Policy CS10 of the RBLPCS 2014 states that development will respect the ecological heritage of the borough and be designed to minimise pollution, including air, noise and light, and safeguard water quality.
- 220 Saved Policy Pc3 of the RBBLP 2005 (Woodlands) seeks to retain Ancient Woodland but also states that the Borough Council will seek to retain all existing woodlands and actively promote a larger extent of woodland by encouragement of appropriate planting. There will be a general presumption in favour of the planting of broadleaf species. Saved Policy Pc4 of the RBBLP 2005 (Tree Protection) emphasises the importance of the retention of trees and the adequacy of their protection during site construction. The policy requires compliance with the latest arboricultural and silvicultural standards in respect of any tree works or development near to trees.
- 221 Species conservation protection is provided for in legislation both at the European and national level and there are various levels of protection afforded to a range of species. The presence of a protected species is a material consideration in determining planning applications.
- 222 The Habitats Directive is transposed into national law in England by means of the Conservation of Habitats and Species Regulations 2010 and Wildlife and Countryside Act 1981 (as amended) that implements the Birds Directive (1979) and the Bern Convention (1979). Under the Act, the law protects all wild birds, their nests and eggs, with some rare species afforded special protection. Although originally protection was developed to prevent egg stealing and cruelty to wild birds, its modern interpretation also relates to the activities of land managers and developers. Further legislation is afforded by the Natural Environment and Rural Communities (NERC) Act (2006), the Countryside and Rights of Way Act 2000 (as amended), the Wild Mammals Protection Act 1996 and the Protection of Badgers Act 1992.

- 223 Government policy on ecology and biodiversity at paragraph 170 of the NPPF requires the planning system to contribute and enhance the natural environment by minimising impacts on biodiversity and providing net gains to biodiversity where possible. Paragraph 175 of the NPPF sets out a number of principles to be considered when determining planning applications in order to conserve and enhance biodiversity. These principles, which are relevant to this proposal, include if significant harm from a development cannot be avoided or mitigated then the proposal should be refused; opportunities to incorporate biodiversity in and around development should be encouraged; and that planning permission which would result in the loss or deterioration of irreplaceable habitats (such as ancient woodland and veteran trees) should be refused. Paragraph 180 sets out that planning decisions should ensure new development is appropriate for its location and mitigate and reduce to a minimum potential adverse impacts resulting from noise from the development; and limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.
- 224 The NPPF should be read in conjunction with the Government Circular: 'Biodiversity and Geological Conservation- Statutory Obligations and their Impact within the Planning System', (Circular 06/05).
- 225 Potential Sites of Nature Conservation Importance (pSNCI) have been identified in the RBBLP 2005, two of which are to the north east of the proposed site. Saved Policy Pc 2D (Potential SNCI's) states that development affecting potential SNCIs will only be permitted if it can be demonstrated that it will not materially harm the nature conservation value or wildlife interest of the sites or the need for the development outweighs the harm. Both pSNCIs are found to the north east of the application site and are divided from the site by the road Horse Hill and a distance of some 400 m and 930 m respectively. The closest pSNCI abuts Horse Hill though as it is located north of the site access, would not be affected by vehicles accessing or travelling to the drill site.
- 226 Ecology and biodiversity have been assessed in detail under the previous planning applications for exploration and appraisal stages of on-shore hydrocarbons at Horse Hill wellsite.
- 227 This proposal involves the retention of the existing wellsite, including an extension to the east of the site for a process and storage area, for the production stage of on-shore hydrocarbons. The application is seeking planning permission for a period of 25 years to carry out oil production activity at Horse Hill well site. Once oil production has ceased, the well site will be restored to its former land uses comprising a mix of agricultural grassland and woodland. The restoration proposals for the well site are assessed in a later section of this report.
- 228 Ecology was scoped out of the Environmental Impact Assessment. However, the applicant states that it was considered necessary to assess the potential impacts of the development on ecological features as a precaution, and given that protected species have previously been recorded in close proximity to the site. Accordingly the applicant has submitted an ecological appraisal report to accompany the application.
- 229 The submitted ecology appraisal advises that a number of desk studies, habitat and protected species surveys have been undertaken at the well site in recent years in support of the previous planning applications (for exploration and then appraisal stage). A summary of the most recent surveys includes a Phase 1 habitat survey in 2016, a great crested newt survey in 2017 and an updated badger survey and a preliminary roost assessment for bats undertaken in early 2018.
- 230 The appraisal has assessed Habitats applicable to the site. The key habitat areas are summarised as hardstanding, standing water (ditch and pond), semi improved grassland, deciduous woodland, species-poor hedgerow and improved grassland. The appraisal also provides assessment of Protected Species relevant to the application to the site. The

protected species have been identified as Bats – roosting, Bats – foraging and commuting, Dormouse, Badgers Great Crested Newts and Reptiles. Of the species identified mitigation is to be proposed for Great Crested Newts and reptiles.

- 231 The assessment advises that the proposed development will involve in small change in the footprint of the existing site through creation of the process and storage area (approximately 0.52 of a hectare). The extension will result in the loss of a small area of semi-improved grassland (formally under agricultural cultivation), situated between the existing well pad and woodland area to the east. The report states that Great Crested Newts (GCNs) have been identified breeding in two ponds within 250m of the sites and may therefore be present in grassland habitat to be impacted. Therefore mitigation is proposed which will follow development previously consented. An existing amphibian exclusion fence along the access track is to be retained to minimise risks to GCN's. This mitigation would also be applicable to grass snake and slow worm which have been recorded grassland habitats including the topsoil storage bund surrounding the well site.
- 232 The ecological appraisal states that there are no adverse effects predicted on any statutory or non-statutory sites. Embedded mitigation is incorporated into the design of the proposed development to minimise the risk of surface water pollution, lighting disturbance and noise impacts beyond the well site during the workover, drilling and production phases of the development. The application states that as a consequence no significant adverse effects on foraging nocturnal animals such as bats or badgers present in the surrounding habitats area predicted. The assessment identifies that further mitigation may be required during the restoration phase with updated baseline surveys for these species may be necessary in the appropriate season prior to commencing site restoration.
- 233 Further, the appraisal advises that a range of embedded mitigation is already incorporated into the current use of the wellsite. This includes a surface water drainage scheme which is controlled by Environment Agency permit. Further measures are in place to control noise levels and controlled by planning condition. The proposal states that similar lighting would be comparable to that currently used although the new process and storage will mean lighting will be closer to the woodland. The appraisal advises that lighting is controlled by the use of downward directional lighting and lighting impact has been assessed through a separate Lighting Impact Assessment.
- 234 The local Salfords and Sidlow Parish Council have objected to the application raising concern of devastation and impact on the environment that may be caused by the development.
- 235 The Norwood Hill residents object to the proposal raising concerns that the effects of noise, light, gas emissions and human industrial activity are never conducive to wildlife health, maintenance or reproduction. Representations received on the application have objected to the proposal
- 236 Natural England has been consulted on the application and has no comments to make in respect of designated sites, though has not assessed this application for impacts on protected species. Instead NE has advised that the local planning authority seeks specialist ecological or other environmental advice when determining the environmental impacts of the development proposed.
- 237 The County Ecologist (CE) has assessed the application and the accompanying ecological appraisal. The CE considers the submitted Aecom ecological report to be comprehensive and that there are minimal ecological impacts from the development proposed as these were addressed as part of the planning application for the exploratory stage for the well site. The CE noted that no restoration scheme had been submitted for the application and such a scheme will need to be provided and secured by planning condition.

- 238 The CE has provided additional recommendations. The CE advises that, given the longer duration of this development, a planning condition should be imposed on any new consent requiring an ecological survey to be carried out in the ecological survey season prior to restoration. The reason is to ensure this information can inform the final restoration, but also ensure the restoration work itself will not adversely impact habitats and species, especially great crested newts. The CE further notes a planning condition is imposed on the current appraisal planning permission (ref.RE16/02556/CON) which requires five bat and five Schwegler boxes provided under the exploration planning permission (RE10/2089) to be retained on site and maintained. In order to comply with the requirements of the Conservation of Habitats and Species Regulations (2017) and to protect species of conservation concern the CE has requested a similar condition is brought forward under any new consent.
- 239 The Surrey Wildlife Trust have commented that the proposal would appear to have minimal impacts on biodiversity of its immediate (expanded) site footprint which has been thoroughly researched for the submitted ecological impact assessment. However, the Trust has queried the provisions of biodiversity net gain from the proposal in-line Government planning policy of the NPPF. Officers acknowledge this point. The provision of a biodiversity net gain would follow on with enduring afteruses of the site once the well site is decommissioned and restored. The Development Plan policy will require a high quality restoration scheme for this mineral development proposal. The applicant has submitted an outline restoration scheme with the application and planning conditions can be imposed requiring a detailed restoration scheme to be submitted and approved in advance of the site restored. Officers further consider it would be appropriate to incorporate a requirement for biodiversity net gain to be demonstrated as part of long term ecology and management plan (LEMP) required by planning condition imposed on any new consent if permission is granted.

Conclusion on Ecology and Biodiversity

- 240 Having regard for the conservation of biodiversity and taking account of the views of Natural England, the Surrey Wildlife Trust and the County's Ecologist and Biodiversity Manager, Officers consider that the proposal would not give rise to a significant adverse impact on the local ecology. The application incorporates mitigation and measures for the protection of species and furthermore a restoration scheme can provide for conserving biodiversity and net gain which can be secured by condition. Officers consider that based on the advice received, and that subject to the imposition of conditions, the ecological impact aspect of this application complies with the requirements of the Development Plan Policies MC12 and MC14 of the SMPCSDPD 2011 and saved Policy Pc4 of the RBBLP 2005 and does not conflict with national planning policy and guidance set out in the NPPF and nPPG.

Noise and Vibration

- 241 This proposal is for the production phase of hydrocarbon extraction. The production stage takes place following exploration and appraisal when the existence for oil and gas has been proved to be commercially viable. The proposal will involve 24 hour drilling operations and the mineral planning authority will need to be satisfied that the drilling and associated operations can achieve appropriate levels, particularly in terms of night time noise.
- 242 Unwanted sound may have an adverse effect on the environment and on the quality of life enjoyed by individuals and communities. The NPPF at paragraph 180 states that planning decisions should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.

- 243 The nPPG also provides specific guidance on determining the impact of noise for a mineral development proposal. Paragraph 019 (Noise for Minerals) states that those making mineral development proposals should carry out a noise impact assessment which should identify all sources of noise and, for each source, take account of the noise emission, its characteristics, the proposed operating locations, procedures, schedules and duration of work for the life of the operation and its likely impact on the surrounding neighbourhood.
- 244 At paragraph 021 (Noise for Minerals) the planning guidance sets out what are considered to be appropriate noise standards for mineral operators for normal operations, being a noise limit that does not exceed the background noise level (LA90, 1h) by more than 10dB during normal working hours. The paragraph recognises that where it will be difficult not to exceed the background level by more than 10dB(A) without imposing unreasonable burdens on the mineral operator, the limit should be set as near that level as practicable. Although, in any event the total noise from the operations during normal working hours should not exceed 55 dB(A) LAeq, 1h. For night time noise these limits should be set so as to reduce to a minimum any adverse impact and should not exceed 42dB (A) LAeq, 1h at a noise sensitive property.
- 245 Paragraph 022 of the nPPG (Noise for Minerals) recognises that there may be particularly noisy short term activities during site preparation and restoration work such as soil stripping, the construction and removal of soil storage mounds and aspects of site road construction and maintenance. In these cases, a temporary daytime noise limit is recommended of 70dB(A) LAeq 1h (free field) for periods of up to 8 weeks in a year at specified noise-sensitive properties to facilitate essential site preparation and restoration work
- 246 One of the ten issues identified in Policy MC14 in the SMPCSDPD 2011 (Reducing the Adverse Impacts of Mineral Development) is i) noise, dust, fumes, vibration, illumination, including that related to traffic generated by the development. Para 6.10 of the Plan recognises that factors such as proximity of the proposed development to housing, schools or other sensitive land uses and the topography of the site and surrounding area alongside the location of plant on site, should be taken into account. Policy MC12 (Oil and Gas Development) states that drilling boreholes for appraisal of oil or gas will only be permitted where the MPA is satisfied that the site has been selected to minimise adverse impacts on the environment.
- 247 Surrey has produced its own 'Guidelines for Noise and Vibration Assessment and Control (the Guidelines) dated March 2019. These Guidelines echo the approach set out in the NPPF and nPPG. The Guidelines specifically address oil and gas related development and recognises the three stages of onshore oil and gas, exploration, appraisal and production. This application is for the production stage and the Guidelines advise that the production phase normally involves the drilling of a number of wells which may be wells used at the sites of exploratory and/or appraisal phases of hydrocarbon development the Guidelines further advise that associated equipment such as processing facilities or temporary storage tanks are also likely to be required and may remain operational for many years. Ongoing maintenance would be required, along with Well workovers to maintain production levels.
- 248 The Guidelines advise that there are a number of activities within onshore oil and gas developments which will require assessment include:
- site investigation and preparation including the construction of access roads and delivery of plant and materials
 - well pad construction
 - well set-up and testing
 - drilling (vertically and horizontally, as required)
 - pumping and flow back recovery equipment

- hydrocarbon extraction and on site processing
 - flaring (over range of gas flows)
 - well maintenance
 - service and import/export movements; and
 - wells de-commissioning and site restoration.
- 249 The Guidelines explain that offsite vibration effects associated with the above are expected to be minimal and further consideration should only be necessary if particular sources with high vibration levels may be required as for some seismic equipment. The Guidelines also recognise that oil and gas developments may involve 24-hour drilling and that noise control from temporary sources is of the utmost importance at night time. Drilling is a temporary operation, although it is continuous and will normally be the only noise output from the development at night. In order to limit noise at night time the Guidelines stipulate a maximum night time noise limit of 42dB LAeq at a nearest noise sensitive property which echoes the standards set in paragraph 021 (Noise for Minerals) of the nPPG.
- 250 The Policy CS10 of the RBLPCS 2014 states that new development will be designed to minimise noise pollution. RBBLP 2005 Saved Policy Ho 10 (Noise) states that the Borough Council will have regard to the Surrey Noise Guidelines. The policy is particularly aimed at new noise sensitive development and seeks to ensure that new development is sited and designed to minimise the effect of noise on them.
- 251 The site is located on part of an arable field, located to the west of Horse Hill. The site is situated within a rural area approximately 3.1 km directly west of Horley town centre, 2.3 km northeast of the village of Charlwood and 1.6 km northwest of the village of Hookwood. Gatwick Airport is located approximately 2.2 km southwest of the site and access is from Horse Hill, which runs north from the A217 junction at Hookwood. The site will increase from 2.08 hectares to approximately 2.8 hectares with the additional land use being directly to the east of the existing well site.
- 252 The site is bounded by farmland on all sides with patches of woodland to the east, northwest and southwest. The nearest residential properties are at Wrays Farm, located approximately 300m east of the wellsite but only 50m from the site access track. Other residential properties are located to the southeast, located approximately 250m from the site access track and to the north, approximately 300 m from the wellsite. In addition, the Lomond Equestrian Centre is located approximately 160 m to the south of the wellsite and a public right of way (Footpath 414) is located along the northern end of the adjacent field to the south of the access track and wellsite.
- 253 Norwood Hill residents have expressed concern with regard to noise issues. The development involves 24 hour drilling and they suggest site used generators have caused noise problems and need to be quieter. Salfords and Sidlow parish Council have commented that they support the views of Norwood Hill residents. Public objection to the application have also raised concern noise impacts will have on local residents homes, wildlife and recreation.
- 254 The EIA Scoping Opinion report sets out that the EIA should include an assessment of the noise impacts of the proposed development, with a particular focus on the question of night-time noise arising from the well site and from traffic generated by the facility. It is expected the assessment of traffic noise should cover all phases of the development except phase 5.B (aftercare)
- 255 The applicants submitted Environmental Statement includes a Noise Impact Assessment chapter. In July 2019 the applicant submitted a noise technical document as 'other information' in respect of the Town and Country EIA Regulations 2017 to clarify comments made by the County Noise Consultant.

- 256 The applicant's assessment details the assessments carried out to identify the potential significant effects in relation to the noise from the development and details proposed mitigation to reduce noise to acceptable levels. The applicant states that in relation to on-site generated noise, the following phases of the development have been assessed:
- Phase 1: Well Site Modifications and New Construction Works
 - Phase 2: Well Management and Drilling
 - Phase 3: Production and Well Management
- 257 The noise assessment states that the effect of road traffic noise as a result of site generated vehicles has been assessed at both the nearest residential receptors and also at nearby recreational receptors. The applicant's noise assessment states that it is considered that no adverse effects as a result of vibration would result from the above activities and therefore this element has been scoped out of the assessment.
- 258 Noise from the development will be associated with site construction works at the beginning and end of the development when the site is decommissioned and restored, and from workover or drilling operations across the operational phases. There will also be associated traffic movements across the different stages of works. Drilling would be a constant activity meaning 24 hour operations at the site.
- 259 Noise is a leading concern raised by objectors to the application. Particularly to local residents who have objected to the proposals for 24 hour operations especially at night time.
- 260 The applicant states that baseline noise surveys have been carried out at the site in October 2016 and October 2017 where measurements have been carried out at four noise monitoring locations representative of the nearest noise sensitive receptors (NSR) to the well site.
- 261 The applicant states predicted noise levels arising from the development have been assessed at eight nearest noise sensitive receptors being: High Trees Court (321m), Wrays Farm House (368m), Five Acres (411m), The Bungalow (426m), Pheonix Lodge (549m), Brittleware Farm (781m), Rushmeads Cottages (457m), and Rowgardenswood (623m).

Wellsite Modifications and New Construction Works

- 262 The applicant states that construction activity will only be carried out during the daytime period and the predicted construction noise levels would be up to LAed,t 48dB during the daytime period in the worst case and no construction would be carried out during the night time period.

Well Management and Drilling

Workover

- 263 The applicant states that workover operations may need to be carried out to the already permitted wells HH-1 and 1z, and HH-2 to make them suitable for production. The applicant states that for the predicted noise levels at night time for workover operations the noise modelling results indicate that of the nearest NSRs, the calculated noise level High Trees Court is stated as 41 dB and at Wrays Farmhouse the operational noise is 40dB. The applicant states this is below the 42dB night-time noise level limit advised in the Planning Practice Guidance for Minerals operations.

Drilling and Flare

- 264 The applicant states that drilling would be carried out to establish four new hydrocarbon well and one water reinjection well. Sidetrack drilling may also be required at a stage of production to reposition the wells. The applicant's noise assessment states that the predicted night time drilling noise would be a maximum of 42 dB at the nearest NSR and therefore would not exceed the 42dB potential night time noise level limit suggested by the PPG-M. The flow of gas to the flare during drilling would be unlikely to exceed that which occurred during appraisal and therefore flare noise during drilling would be no greater than it was during appraisal.

Production

- 265 The noise assessment identifies that the predicted night-time noise levels during production would be a maximum of 39 dB at the nearest NSR. The applicant therefore considers that noise levels from production at night-time will be below the threshold for all receptors and that there would be no adverse noise effects. The applicant also proposes that during the production phase of the development workover operations maybe required at a frequency of typically every four to five years. In addition to this the applicant proposes that occasional sidetrack drilling may also be required to increase flow rates and increase production. The applicant considers the combined noise from either workover or drilling, and production activities four or five years into the production phase may potentially exceed the recommended 42dB night-time noise level by 1dB at some receptors for short periods.

Site abandonment, decommissioning and restoration

- 266 The applicant predicts the noise levels during abandonment, decommissioning and restoration would be the same level as during site construction works.

Road Traffic Noise

- 267 The applicant states a baseline traffic survey was carried out in January 2017 in relation to the previous application for appraisal testing and drilling and the data obtained is considered to be valid for the purpose of the road traffic noise assessment for this application. From the applicant's highway surveys, the baseline traffic flows (one-way movements) measured on Horse Hill for a typical eighteen-hour daytime period (06:00-00:00) are stated as 3283 vehicles and the percentage change including the development would be 1.5% in Phase 2 and 1.9% in Phase 3. The applicant predicts this level of change would result in a negligible increase in noise levels and below 1dB, and therefore well below the level that is considered distinguishable. The County Noise Consultant has recommended that a condition is imposed that limits HGV movements to no more than 20 HGVs per day (total of 40 movements) and restricted to the hours of 0800 and 1830 Monday to Friday, 0900 and 1300 on a Saturday and no movements at any other time.

Noise impacts on recreational assets

- 268 The applicant has assessed likely effects on recreational receptors. The applicant has identified the nearest recreational to the wellsite as being the footpath running along the southern boundary of the wellsite. They state that the noise modelled for each stage of the development indicates that along the 200m stretch of footpath adjacent to the site operational noise is in the range of 50-60dB. The footpath is also of a transient use. The applicant's assessment concludes that the potential effects of operational noise on the footpath would be negligible.
- 269 The County Noise Consultant (CNC) notes the site is currently operating under an appraisal planning permission (ref.RE16/02556/CON) which contains a number of planning conditions to limit the hours and noise levels of operations at the wellsite. In

concluding their assessment the CNC does not raise objection to the proposal subject to a range of recommendations for conditions to control noise. As with the previous appraisal and exploration stage the recommendations include limiting hours of operation for construction activity and noise level limits; recognising drilling activity involves 24 hour operations and applying noise level limits for daytime and night time operations; acoustic controls for plant equipment and machinery; and a condition restricting the hours of HGV movements. The CNC has also recommended a pre-commencement condition requiring approval of a Noise Monitoring Plan.

Conclusion on Noise

- 270 Local parish councils, residents, and amenity and action groups have expressed concern over noise from the development.
- 271 Noise from the development has previously been assessed for appraisal and exploration stages and considered acceptable subject to a range of conditions. This application seeks planning permission for the final production stage of on-shore hydrocarbons. The development will involve further drilling operations. The County Noise Consultant has assessed the application and is satisfied with applicant's noise proposal subject to conditions. No other technical consultees have raised concern on the grounds of noise.
- 272 In view of the advice from the County Noise Consultant, Officers are of the view that noise can be dealt with by way of conditions limiting daytime and night time noise and requiring the submission of a noise monitoring plan prior to the implementation of the development. On this basis it is considered acceptable noise levels can be achieved and maintained by planning condition, and considered that the application meets the requirements of the Development Plan Policies MC12 and MC14 of the SMPCSDPD 2011, and RBBLP 2005 Saved Policy Ho 10, and does not conflict with national planning policy and guidance set out in the NPPF and nPPG regarding noise.

Lighting

- 273 The HH-1 wellsite is located within a predominantly rural area where the impact of artificial lighting on the night sky can be an issue. There are limited direct views into the site due to surrounding mature woodland and hedgerow cover. In addition a soil bund is constructed to the north of the compound.
- 274 The combined operational phases of the development (Phases 1-3) are anticipated to take up to 13 months, based on worst case scenario. During the operational phases the site would be operational 24 hours a day and therefore to meet health and safety regulations lighting will be necessary during the hours of darkness. To avoid obtrusive light it is important that the lighting scheme is sensitive and well designed to avoid the problems of sky glow, glare and light trespass
- 275 Illumination is one of the issues identified under policy point i) in Policy MC14 in the SMPCSDPD 2011. The policy states that potential impacts related to 'i) noise, dust, fumes, vibration, illumination, including that related to traffic generated by the development', should be considered. Policy CS10 of the RBLPCS 2014 requires development to be designed to minimise light pollution.
- 276 Paragraph 180 of the NPPF states planning decisions should ensure that new development is appropriate for its location taking into account likely effects of pollution on health, living conditions and natural environment. In doing so they should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

- 277 The nPPG at paragraph 002 recognises that some proposals for new development, but not all, may have implications for light pollution and sets out guidance for considering adverse impacts of light pollution on nearby buildings, wildlife and the environment.
- 278 Guidance notes by the Institution of Lighting Professionals for the reduction of obtrusive light (2011) set out guidance on controlling light to avoid light pollution. The guidance states obtrusive light is a form of pollution and may also be a nuisance. The guidance goes on to state that care should be taken when selecting luminaires to ensure appropriate products are chosen to reduce the upward spread of light so that it is near to and above the horizontal to reduce spillage and glare to a minimum. The guidance advises that the angle of light should not be greater than 70 degree angle in order to avoid any potential glare. In accordance with this guidance note, the relevant zone for this site would be E2: Rural low district brightness. For proposals within the E2 zone, the guidance sets out limitations of lux levels as follows:

Environmental Zone	Sky Glow ULR [Max %] (upward lighting)	Light Intrusion (into windows) Ev [lux] (maximum & should take into account existing light intrusion)	
		Pre-curfew	Post-curfew
E2	2.5	5	1

- 279 There are nearby residential properties to the wellsite to the north, east and south. The nearest being approximately 320m distant north and situated on higher ground.
- 280 Local residents have expressed their concern in respect of lighting, based on experiences from the previous drilling of exploration and appraisal activity. They also comment that the site would increase light pollution of the area generated by Gatwick Airport.
- 281 The applicant has included a lighting impact assessment in the ES. The applicant states that the assessment considers the various lighting proposals associated with each phase. However, only the lighting associated with the drilling work has been modelled as this is considered to have the greatest potential for adverse lighting impacts. They advise that the modelled scheme of lighting is considered to be representative of a reasonable worst-case scenario and provides a benchmark for development of the final lighting scheme.
- 282 Given the rural location of the site where existing light levels are low, Officers recognise that the illumination of the site at night will give rise to some impact on local amenity. Salfords and Sidlow Parish Council have objected to the application raising concern light pollution will be harmful to the area, on neighbouring properties, business activities and wildlife.
- 283 The applicant states that it is considered standard practice to develop a final lighting scheme post planning consent. Accordingly an indicative outline scheme has been adopted for the purposes of this environmental lighting assessment. They advise that the modelled lighting for the drilling rig, including its associated equipment is based on lighting already used with other rigs and associated equipment.
- 284 The development will require artificial lighting for safe passage and working, and security and amenity during periods of reduced light. A steady state 200cd obstruction warning light is required to be installed at the top of the drilling derrick, or other such potential lighting to cranes.
- 285 The applicant states the scheme of outline lighting has been set out on application drawing ref: SK-03 Pre-mitigation Scheme of lighting. As a summary the lighting plan identifies luminaire requirements for flood lighting on the well pad (drilling/workover operations), bulkhead lamps to cabins, storage containers and equipment, and luminaires for passageway or security lighting. Further lighting is identified for the drill rig derrick. The

applicant advises that for the derrick lighting in some instances mounting heights are assumed based on similar equipment.

- 286 The applicant has assessed the likely significant effects of light-spill, glare and sky-glow for the five phases of the development at thirteen nearby residential receptor locations.
- 287 To address adverse effects of lighting impacts the applicant proposes mitigation with the aims of:
- optimisation of luminaire aiming
 - minimising the task illuminance level
 - minimising luminaire uplift angles
 - optimising luminaire mounting heights
 - optimisation of luminaire types and light distributions
 - the use of dusk-to-dawn controls
 - the use of presence detection systems
- 288 The applicant's assessment concludes that with mitigation in place there would be negligible adverse effects to the residential or human receptors in respect of light spill, glare and sky-glow generated by the development.
- 289 The County Lighting Consultant (CLC) has assessed the applications lighting proposals and commented that they note a lighting impact assessment (LIA) has been undertaken and a comprehensive report has been submitted as part of the Environmental Statement. The LIA details the impact of proposed lighting during the life of the development and describes all mitigating measures to reduce the impact of the lighting installed to the site in terms of spillage, glare and sky-glow. The CLC notes lighting plots have been submitted detailing anticipated lux contours and information on the drawings includes details of the luminaires, mounting heights, aiming angles and lamp sources. The CLC considers that the levels indicated and spillage are deemed acceptable. The CLC further comments that the Planning Statement and Environmental Report recognise the site's proximity to Gatwick Airport and the measures required to be undertaken to protect air traffic by the installation of steady-state red aviation obstruction lighting to drilling rigs. The CLC has advise that they are satisfied with the information provided and do not expect there to be any issues of light pollution or nuisance glare from the development, therefore raises no objection.
- 290 The adjacent Mole Valley Environmental Health Office comments that the applicants lighting plan suggests acceptable levels of light disturbance.
- 291 The applicant proposes that given the height of either the 37m rig mast or cranes and the site's proximity to Gatwick Airport, it would also be necessary to have a red aircraft warning light on top of the mast. Gatwick Airport safeguarding has been consulted on the application subject to their recommendations covered in the section further below.
- 292 No other technical consultees have raised concern on the grounds of lighting impacts.

Conclusion on Lighting

- 293 Any assessment has to be proportional to the nature and scale of the development proposed. It is acknowledged that additional lighting in this rural location will give rise to some impact on local amenity, however Officers recognise that lighting is essential for, operational, health and safety, and security reasons. The greatest impacts of lighting would be during drilling operations which Officers recognise would be for only temporary periods. The County Lighting Consultant has raised no objection to the lighting proposal. As such Officers consider that, subject to detailed lighting scheme to be agreed, as proposed by the applicant, and secured by planning condition, the lighting impact from the development can be adequately controlled and would ensure lighting would not have an unacceptable impact on amenity. Officers therefore consider that the proposal does not

conflict with the Development Plan Policy or national guidance with regard to lighting set out in SMPCSDPD 2011 Policy MC14.

Air Quality

- 294 The primary driver for air quality management is the protection of human health, but it can also be an issue to the natural environment for wildlife habitats and vegetation. Dust and air quality are material considerations and should be taken into account when considering planning applications.
- 295 The NPPF at paragraph 170 states that the planning decisions should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from air pollution. Paragraph 180 adds that that decisions should ensure new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.. The NPPF further states at paragraph 181, that planning decisions should ensure that any new development in an AQMA is consistent with the local air quality action plan. Reigate and Banstead Borough Council have declared a number of AQMAs in borough for annual mean nitrogen dioxide. The application site does not lie within an AQMA and the nearest is located over 2km to the southeast of the site in Horley.
- 296 The nPPG provides guidance on how planning can take account of the impacts of new development on air quality. The nPPG (Air Quality) at paragraph 005 states “whether or not air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to generate air quality impact in an area where air quality is known to be poor. They could also arise where the development is likely to adversely impact upon the implementation of air quality strategies and action plans and/or, in particular, lead to a breach of EU legislation (including that applicable to wildlife).”
- 297 The UKs objectives for air quality are set out in the UKs National Air Quality Strategy (Defra, 2007), which provides air quality standards and objectives for key air pollutants, which are designed to protect human health and the environment. The Air Quality Strategy establishes limit values for concentrations in outdoor air of major pollutants harmful to public health and the environment including particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO2). The UKs established limit values are numerically identical to the EU Air Quality Directive. For the protection of habitats and species the EUs Habitats Directive is transposed into English Law in the ‘The Conservation of Habitats Species Regulations 2010’ and ‘Wildlife and Countryside Act 1981’ and ‘Rights of Way Act 2000.’
- 298 Policy MC14 of the SMPCSDPD seeks to ensure that no significant adverse impacts arise from development in relation to the amenities of local residents and the environment. The policy requires consideration of such issues as dust, fumes, illumination, including that related to traffic as issue i). The Reigate and Banstead Local Plan Core Strategy (2014) does not contain specific development management policy for air quality decisions but does set out strategic objectives in Policy CS10 that states development will be designed to minimise air pollution.
- 299 Guidance on air quality for planning is published in the EPUK/IAQM “Land Use Planning and Development Control: Planning for Air Quality” 2017 document. The guidance recognises that all new development will have emissions associated with them and therefore will have the potential to have associated adverse impacts. It is these impacts that require quantification and evaluation in the form of an Air Quality Assessment alongside the ability to assess the significance of those impacts. Para 6.2 of the document advises that where a development requires an Air Quality Assessment this should be

undertaken using an approach that is robust and appropriate to the scale of the likely impacts.

- 300 The closest residential properties to the site access are those associated with Wray Farm House which is approximately 50 m from the access but approximately 370 m from the well pad to the east. To the south east is the property of Five Acres approximately 410m from the well pad, and to the north are the properties of High Trees Court approximately 320m from the well pad. The wellsite is some 1.8 km distant from the Eldophs Copse Local Nature Reserve and over 3KM from Glovers Wood Site of Special Scientific Interest.
- 301 The applicant submitted an air quality assessment dated November 2018 in support of the application. The applicant's assessment explains that as part of the planning and permitting process it is necessary to assess the dispersion of releases to atmosphere associated with the proposed operations to determine their impact on ambient concentrations of important pollutants around the local area. In particular, impact at locations of permanent human habitation and sensitive nature conservation sites in the context of attainment of applicable environmental standards requires assessment.
- 302 The applicants states the main sources of pollutant releases during site operations will be from the use of diesel fuel in on-site stationary engines and construction and transport vehicles and from the combustion of produced natural gas to generate electricity.
- 303 The drilling phase of the project is highly energy intensive and is the activity with the greatest pollutant release. Maximum pollutant process contributions occur during the drilling phase of the project. This phase, while being of around 15 months duration is relatively short in comparison to the overall project duration of around 21 years, during most of which air quality impact is insignificant. They state that maximum pollutant process contributions from the site operations are localised and occur within the well site boundary. Beyond the site location the maximum process contributions reduce significantly with distance.
- 304 The applicant states the neighbouring residential locations, where frequent and long term human exposure might be expected, all pollutant process contributions were considered insignificant based on Environment Agency assessment criteria and unlikely to threaten ambient air quality standard attainment. Further the process contributions from drilling impacting the AQMA (Horley) are considered insignificant.
- 305 The County Air Quality Consultant has reviewed the applicant's air quality assessment undertaken by SOCOTEC UK Ltd dated 8 November 2018 and notes that the assessment has considered:
- construction Impacts
 - road traffic impacts; and
 - impacts of emissions from the proposed flare, generators and water heaters

Construction Impacts – Dust

- 306 The application involves the retention of the already constructed wellsite and site access at Horse Hill. The proposal involves an element of new construction works for the creation of a process and storage area to east of the existing well pad. This will involve the stripping of soils to be placed in a soil storage bund to create a level plateau, followed by construction of concrete containment bunds and the installation of impermeable membrane. Further construction works would be required for well modifications including the installation of new drill cellars for the four new wells and water re-injection well. Vehicle movements would be involved with well site modifications and construction operations.

- 307 The CAQC comments that the applicant has undertaken a construction dust risk assessment using the IAQM (2014) Guidance on the assessment of dust from demolition and construction.
- 308 The assessment determines that the risk, before the implementation of mitigation, is low at properties and human-health receptors and negligible at ecological receptors. The CAQC has advised it is their opinion the applicant has used the correct assessment method and that the CAQC agrees with the findings of the assessment. The CAQC further adds that the applicant has identified some mitigation measures to control dust impacts within the submitted air quality assessment. In respect of the construction impacts –dust the CAQC has advised they agree that the effect is not likely to be significant and the implementation of the mitigation measures is not critical.

Vehicle Emissions

- 309 The development proposal is spread across five phases and there will be HGV vehicle movements associated with each phase. The applicant proposes that HGV movements across the five phases would not exceed a maximum of 20 HGV movements (10 in and 10 out) per day, with an exception occurring during Phase 3 of the development where up-to a maximum of 32 HGV movements (16in and 16 out) are anticipated for up to approximately 17 weeks; and up-to a maximum of 24 HGV movements (12 in and 12 out) per day for a period of up to 104 weeks.
- 310 The CAQC comments that the applicant has compared the number of vehicle trips generated by different construction and operational phases of the development with the threshold criteria set out in the Highways Agency (now Highways England) Design Manual for Roads and Bridges (DMRB) guidance for requiring an air quality assessment.
- 311 The applicant has not undertaken an assessment of vehicle-related emissions as the threshold criteria are not exceeded. The CAQC has commented that they agree that there is no necessity to assess vehicle-related emissions and that that they are satisfied the impacts are likely to have a negligible effect.

Impacts of emissions from flaring, generators and water heaters

- 312 The applicant states that the main sources of pollutant releases during site operations will be from the use of diesel fuel in on-site stationary engines, construction and transport vehicles during the initial construction, final restoration, and drilling phases, and from the on-site combustion of produced natural gas for generation of electricity.
- 313 IAQM 2017 Land-Use Planning & Development Control: Planning For Air Quality guidance highlights data available from Defra and local monitoring studies as potential sources of information for establishing baseline air quality. The CAQC notes that the applicant has assessed the Defra mapped pollutant concentrations for the study area. The applicant states that Reigate and Banstead Borough Council undertakes both automatic and non-automatic air quality monitoring although the nearest stations are approximately 2 km away from the well site in Horley which is within the nearest AQMA. The CAQC notes that the applicant has assessed the Defra mapped pollutant concentrations for the study area and identified nearest local monitoring stations and used Defra mapped concentrations to inform the background concentrations for the assessment. The CAQC advised they are satisfied with this approach.
- 314 The applicant states that the Environment Agency provides a methodology for assessing the impact and determining the acceptability of emission to atmosphere on ambient air quality for human health and nature conservation areas and for deposition to ground. They explain there are two stages of assessment. A screening assessment (where the ambient impact of releases to atmosphere may be estimated) and if a release can be demonstrated to be insignificant it may be screened out. Where this is not possible, then a

further detailed assessment is required based on atmospheric modelling which considers factors such as meteorology, release conditions, and locations of sensitive receptors. The applicant states that for this assessment all potential releases have been assessed using a detailed modelling approach.

- 315 The CAQC commented that the applicant's assessment has been undertaken using the Atmospheric Dispersion Modelling System that models a wide range of buoyant and passive releases to atmosphere either individually or in combination. In addition the applicant has also undertaken some sensitivity testing using the United States AERMOD model. The CAQC has advised that an appropriate model has been used in the assessment. In addition, the applicant's selection of meteorological data obtained from Charlwood is considered an appropriate site from which to take meteorological data from based on its proximity to the site. The CAQC further notes the modelling considers terrain and surface roughness and building wake effects. In respect of identified Receptors, the CAQC has modelled a 1 km by 1km area grid of receptors at 10m spacing. In addition a total of 213 receptors have been identified of which 37 are residential and the CAQC considers this represents a broad spread of receptors

Human Health

- 316 The CAQC explains that modelling output is normally presented to show the Process Contribution (PC), the ambient or background concentration and the Predicted Environmental Concentration (PEC). The PEC is calculated as the sum of the PCs and the ambient concentrations. The PC and the PEC (if necessary) are then compared with the relevant Environment Agency Environmental Assessment Level (EAL) to determine whether the impacts can be screened out. The CAQC has determined the screening limit based on Environment Agency screening criteria. Where the PC as percentage of the EAL exceeds the Screening Limit, the identified impact can be screened out as not having a significant effect.
- 317 The applicant states maximum pollutant process contributions from the site operations are localised and occur within the well site boundary. Beyond the location of the maximum process contributions reduce significantly with distance.
- 318 The nearest receptor to the site boundary is Footpath 414. The CAQC notes that the applicant has undertaken further analysis of the proportion of NO_x that is likely to be NO₂ at the footpath using Janssen conversion rates. The CAQC notes the resultant Predicted Environmental Concentration suggest that the relevant EALs will be met at the footpath.
- 319 In respect of significance of the air quality impact of process contributions at residential the assessment explains the significance of the impact of the maximum process contributions of the substances assessed is classified as negligible at the nearest residential location (High Trees Court and the Courtyard), with exception of nitrogen dioxide which is classified as moderate. Though the applicant explains that a 'moderate' impact is the worst case assessment and is likely to only occur during the drilling phase of the development which is scheduled for 60 weeks. For all periods outside of the drilling phases, in particular the 20 year production phase (Phase 3) the impact is classified as negligible for all pollutants across all residential locations.
- 320 With regard to ecology, the CAQC agrees that the results of the modelling indicate that the air quality impacts at Edolph's Copse Local Nature Reserve and the Mole Gap to Reigate Escarpment Special Area of Conservation are not likely to have significant effects.
- 321 The Environment Agency have advised that they raise no objection to the application, adding that they will comment further on air quality at the environmental permitting stage which will require the applicant to provide specifications for the flare and other plant contributing to air emissions on site for the separate permitting regime.

Conclusion on Air Quality

- 322 There are three elements in relation to air quality that this proposal could result in significant adverse impacts: site construction and deconstruction works (dust); emissions from the flare and similar equipment; and emissions from the traffic accessing the application site.
- 323 The CAQC has assessed the applicant's air quality assessment and advised that they are satisfied that the applicants air quality impacts have been assessed using appropriate methodology and the effects are not considered significant.
- 324 Following the advice received from the CAQC and EA that no other statutory and technical consultees have raised objection, Officers are satisfied, subject to the recommended condition, that the proposal meets the requirements of the Development Plan Policy MC14(i) of the SMP2011 and does not conflict with Government Policy and Guidance with regard to air quality.

Water Environment & Geotechnical Issues

- 325 The application proposal involves the retention and modification of the existing Horse Hill (HH-1) well site compound to accommodate up to six oil production wells and one produced water reinjection well; and a well site extension area to the east of the of the well pad to house equipment for oil processing and storage, and a road tanker loading area
- 326 The HH-1 wellsite is on the southern side of Horse Hill which is outside the indicative floodplain of any water body. The River Mole the most significant water feature in the area is over a kilometre from the site. The nearest main river, known as Spencer's Gill is found approximately some 600 m to the southeast, and at its closest point, Deanoak Brook flows to some 1.5 km north west of the site. The wellsite is located on weald clay, which forms the sequence known as the (Cretaceous) Wealden Group beds. The Wealden Group is underlain by a large thickness of Jurassic strata which incorporates the target formations of the Portland sandstone and Kimmeridge Limestones. The site does not lie in a Groundwater Source Protection Zone. A leading issue of public objection to the proposal is of the impacts the development will have on groundwater issues
- 327 SMPCSDPD 2011 Policy MC14 under point ii) seeks to ensure that the potential impact from the development on flood risk, water quality and land drainage are considered, including opportunities to enhance flood storage. Policy MC12 states that commercial production of oil or gas will only be permitted where it has been demonstrated that the surface/ above ground facilities are the minimum required and there are no significant adverse impacts associated with extraction and processing, including processing facilities remote from the wellhead, and transport of the product.
- 328 RBLPCS Policy CS10 requires new development to be designed to minimise flood risk and safeguard water quality. A presumption against new development in areas liable to flood is set out in Policy UT4 of the RBBLP 2005.
- 329 Local parish councils, residents and action groups have raised concern that drilling and construction of the wells may lead to pollution of groundwater. That the storage and use of chemicals on the well pad, and the process area, may lead to surface water pollution and further impact ground water supplies, human health and wildlife.

- 330 The application site lies within Flood Zone 1 and as it is greater than 1ha the applicant has submitted a Hydrogeological and Flood Risk Assessment (HFRA) as part of the application Environmental Statement.
- 331 The application site does not lie within a Groundwater South Protection Zone. The closest water bodies are two small ponds found within the woodland area north of the access track. The northernmost pond is some 175 m from the proposed access track and the central pond is some 90 m from the track. There are several ditches within the woodland area but no watercourses, which are immediately adjacent, or pass through the site. The closest main river is Spencer's Gill found approximately 600 m south of the site but the approximate 5 m change in level between the river and the application site provides a high level of fluvial flood protection to the site.
- 332 As set out in the NPPF, the main principle with regard to flood protection is that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at high risk. At paragraph 163 the NPPF states that when determining planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, planning applications should be supported by a site specific flood risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (applying the sequential and exceptions tests as applicable) it can be demonstrated that: within the site the most vulnerable development is located in areas of lowest flood risk: the development is appropriately flood resistant and resilient; it incorporates sustainable drainage systems, unless there is clear evidence this would be inappropriate; any residual risk can be safely managed; and safe access and escape routes are included where appropriate.
- 333 The application site lies within Flood Zone 1. As the proposal is for minerals working and processing (but is not sand and gravel) it would be classified as less vulnerable as outlined in Table 2: Flood Risk Vulnerability Classification in the NPPG. Consequently, in accordance with Table 3:Flood risk vulnerability and flood zone 'compatibility' of the NPPG which sets out what development is acceptable within flood zones 1,2,3a and 3b, the proposed development is therefore acceptable in Flood Zone 1.
- 334 The site is underlain by the Weald Clay Formation. The applicants has consulted with the local Strategic Flood Risk Assessment (SFRA). The SFRA historical records identifies no flooding at the site. The applicant notes the SFRA records show flooding at the town of Horley as a result of river flooding. The applicant states that with this in mind the overall risk of fluvial flooding to the site is considered to be very low. In respect of flooding from surface water the applicant states that Environment Agency flood mapping data identities the site to be generally at low risk from surface water flooding.
- 335 The applicant proposes to retain existing well site and site drainage. The Environment Agency and the Lead Local Flood Authority (Surrey County Council) have assessed the applicants FRA and site surface water management proposals.
- 336 The applicants HFRA states the aim of the drainage scheme on the existing well site is to attenuate and control rainfall-runoff. The existing site is fully lined with an impermeable membrane, topped with a stone surface, which is continuous through to a perimeter interceptor ditch. This impermeable membrane protects surface water and ground water from any site leakages or potential spills from the development operations. The interceptor ditch serves the purpose for collecting all drainage from the well pad footprint. An approximate 290m long earth bund, that acts containment, has been constructed on the outside of the ditch. Any rainfall onto the well site compound and bund area is directed into the interceptor ditch and then under gravity, via an outfall pipe and oil bypass separator into a gravel swale beyond the bunded compound which would then be discharged to an existing field dyke to the south of the wellsite. Isolation valves are

installed both upstream and downstream of the separator to allow full isolation of the site and separator for maintenance.

- 337 The applicant proposes that the well site extension area will comprise a separate drainage system to the existing well site area. They state that primary containment will be provided by equipment and secondary containment is to be provided by concrete bunds and a HDPE liner will be installed beneath the extension area to provide tertiary containment.
- 338 The applicant states that the entire site drainage system has been designed to retain runoff from a 1 in 100 year storm, with 10% climate change allowance.
- 339 The County Geotechnical Consultant (CGC) notes that the proposed site drainage is split into two parts. The retention of the existing wellhead area and existing site drainage (as set out above) and a new process and storage area that will have a slightly different surface water drainage system. The new process and storage compound is divided into separate areas with two self-contained drainage systems: one for areas where risk of contamination is high and another for areas with lower risk of contamination.
- 340 With regards to the high risk areas the CGC notes this consists of paved areas and a piped system whereby run-off is diverted into an interceptor where oil is removed and taken off site by road tanker. The water is then automatically pumped to an on-site Produced Water Tank for re-use. The CGC further notes a penstock will be employed to divert any spillages into the oily system when tankers are being loaded
- 341 In respect of the lower risk of contamination areas the CGC notes that it is proposed to drain into a high voids ratio granular sub-base layer below the site access road. This acts as attenuation storage for extreme events and drains into a filter drain adjacent the access road. This system has a flow control to restrict flows to the equivalent green field run-off rate. The flow control then discharges to full retention oil interceptor and then to a drain outside the bunded site area.
- 342 The CGC further notes the entire site drainage system has been designed to retain runoff from a 1 in 100 year storm, with 10% climate change allowance and considers that proposed site drainage detail meets guidance and that the calculations are satisfactory .
- 343 Surrey County Council as the Lead Local Flood Authority has been consulted on the application. They comment that they have reviewed the surface water drainage strategy for the proposed development and assessed it against the requirements under the NPPF, its accompanying PPG and Technical Standards. The LLFA have advised that they are satisfied that the proposed drainage scheme meets the requirements for government policy for sustainable drainage and recommend planning permission be granted in respect of drainage matters. However, the LLFA has recommended that should planning permission be granted that suitably worded conditions are applied to ensure that the SuDS Scheme is properly implemented and maintained throughout the lifetime of the development.
- 344 In respect of surface water pollution the applicant states that the site is situated in a sub-catchment of the River Mole. The catchment is drained by field drains and natural streams including Spencers Gill to the south of the site. The field drains are fed predominately by surface water with a small element of groundwater component. They further state that the field drains drain to an unnamed stream to the south of the site; this stream flows eastwards, joining Spencers Gill approximately 0.7 km southeast of the site. Spencers Gill flows to the east and joins the River Mole. The site is not within Source Protection Zone (SPZ) the nearest being 5.4 km away to the north.
- 345 The site drainage is designed as a containment drainage system. The applicant states that surface water collecting in the site drainage system will be attenuated and only clean

water will be discharged to a local watercourse, and at a rate not exceeding the greenfield runoff rate. Any contaminated water would be removed by road tanker to an Environment Agency approved facility. Any clean waters to be discharged from the site itself would be controlled by an Environment Agency Water Discharge Permit. The Environment Agency has assessed the proposal. The EA advised in their February 2019 response letter that they raise no objection to the application in principle though have recommended a planning condition requiring further approval of scheme to manage surface water. The reason for the recommendation is that the EA consider the application had not clearly outlined the current or proposed design of the surface water management system, nor the agreed ways of operating, and contained some ambiguity between the application documents detailing surface water management for the site.

- 346 The CGC did however comment that details of the construction and maintenance of the HDPE membrane had not been provided and therefore recommended full detail drawings are submitted to demonstrate that containment will be ensured through the site.
- 347 In response to the comments raised in July 2019 the applicant submitted further information in respect of the construction and maintenance of the HDPE membrane. The CGC considers that sufficient details has now been provided for the construction of the membrane. In respect of detail for routine inspection and maintenance of the membrane the CGC notes the applicant's comments and considers this detail could be incorporated into a planning condition requiring approval of a Construction and Environmental Management Plan (CEMP). The EA commented that the additional geotechnical detail submitted in July 2019 by the applicant will overlap with the environmental permitting regime and the EA will assess this detail at the time of the EP application.

Groundwater

- 348 As set out in paragraph 170 of the NPPF the planning system should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from water pollution. The NPPF supporting guidance also informs that a number of issues exist, of which groundwater pollution control is one, which are covered by other regulatory regimes and mineral planning authorities should assume that these regimes will operate effectively.
- 349 In 2014 a deviated exploratory borehole (HH-1) was drilled at the Horse Hill wellsite that targeted reservoir units of the Portland Sandstone and Kimmeridge Limestone formations. The recorded top formations of the Portland Sandstone are at a depth of approximately 540m below surface and the Kimmeridge Limestones begin at depth of approximately 667m below surface.
- 350 Under the current planning permission (RE16/02556/CON) HH-1 is in use for extended well testing. Further drilling operations under the permission involve drilling a sidetrack of the HH-1 well (the HH-1z) to target the Kimmeridge Limestone and drilling of a second well (HH-2) which the applicant proposes to target the Portland formations.
- 351 For this application the applicant proposes the development will comprise two wells targeting the Portland sandstone and four wells targeting the deeper Kimmeridge Limestones, and one water reinjection well returning to the Portland. No wells are proposed at a depth lower than the Kimmeridge formation which has an approximate bottom vertical depth of 1120m. Following completion of the well operations the wells would be plugged and abandoned in accordance with industry best practice and the site cleared and restored during Phase 5 the final stage of the development.
- 352 Objectors to the application have expressed concerns the drilling operations are a proposal for hydraulic fracturing, a process that could pollute the fresh water environment and disrupt the underlying geology with a risk of land instability or cause possible earthquake. Hydraulic fracturing or 'Fracking' is associated with 'unconventional' sources

of gas such as shale gas and coalbed methane. For clarification, the applicant is not applying for unconventional gas development but is seeking planning permission for conventional drilling and hydrocarbon appraisal for oil and does not seek permission for, or require the use of hydraulic fracturing.

- 353 The planning application has been accompanied by a Hydrogeological Risk Assessment (HRA). The HRA will also form part of an application for a separate Mining Waste Permit for the wellsite that will be considered by the Environment Agency (EA). The Environment Agency and County's Geological/Geotechnical Consultant have both been consulted on the planning application
- 354 The HRA advises that the application site is not situated within an Environment Agency Source Protection Zone (SPZ). The nearest EA mapped SPZ is located 5.4km to the north of the site. The site is within the EA Drinking Water Safeguarding Zone: West Thames for drinking water for restrictions on a number of pesticides, nitrate, Benzo-A-Pyrene and levels of turbidity. There are no licensed abstractions within a 3km radius of the site, the closest licensed abstraction being approximately 5km southeast of the site.
- 355 The HRA advises that the hydrogeology at the Horse Hill well site is dominated by surface water and shallow groundwater which historically provided small amounts of groundwater for local water supplies. The low permeability Weald Clay Formation is present directly beneath the site which separates the shallow groundwater system from deeper water bearing formations. The HRA advises that beneath the Weald Clay Formations are the Tunbridge Wells Sand Formation and Ashdown Formation which have the potential to contain groundwater for industrial or other uses. Then further below are situated the target formations of the Portland Sandstone and Kimmeridge Limestones.
- 356 The previous planning applications for exploration and appraisal established that the HH-1 and HH-2 wells will be drilled, cemented and cased though any potential sensitive groundwater formations. The drilling of these boreholes would involve drilling down through the Wealden Beds which includes aquifers of secondary importance, although such formations would be too deep for groundwater supply. Similar to the HH-1 and HH-2 boreholes, the applicant proposes the additional boreholes required for the production stage will be cased off and cemented to protect freshwater-bearing formations.
- 357 Similarly to the previous stages, the applicant proposes water based muds would be used to a depth of 540 metres below ground level. Oily based muds will only be used below this depth. Blow out preventers would be fitted to prevent uncontrolled movement minimise the risk of any pressurised fluids reaching the surface.
- 358 The applicants HRA states that hydrogeological risks to identified groundwater and surface water receptors relating to potential adverse effects to water quality have been assessed following established methodologies taking account of Environment Agency technical guidance. The HRA concludes that the risk assessment shows there are very low, or no residual risks to identified receptors during all phases of the development.
- 359 The Environment Agency (EA) has assessed the application and raises no objection to the proposal for production stage, subject to a condition requiring surface water management scheme. The have commented that the applicant will require an environmental permit for the site. The EA advise that they will comment on the technical detail once the permit application is made. The permit application will need cover the site drainage, drilling muds and chemical use, waste management, and Control of Major Accident Hazards (COMAH). The EA further advised that the have no objection in principle to the applicant's proposal for re-injection of produced water and site surface water back into the Portland Formation provided it is for production support. An environmental permit application for re-injection will be required and supported by appropriate site specific conceptual models, hydrogeological risk assessment of risks to groundwater, and details for proposed mitigation measures. The permit application will

also need to provide detail for groundwater monitoring of any aquifer units in the first 400m below ground level which, in this case, will include monitoring the Tunbridge Well Sand and Ashdown secondary aquifers.

- 360 The County Geotechnical Consultant has reviewed the application. In their assessment the CGC queried the applicant's assessment in respect of groundwater protection, private water supplies and groundwater supplies.
- 361 In July 2019 in response to the CGC comments the applicant provided clarifying detail. The applicant advised that in respect of assessment of private groundwater supply a further field verification exercise may be warranted as part of environmental permitting process. The applicant also clarified the depth of the thin sandstone bands within the Weald Clay which maybe water bearing. The groundwater levels within the weathered top of the Weald Clay Formations are expected to be in the region of 3 meters below ground level. The applicant also clarified that for the avoidance of doubt the proposed development will include the installation of groundwater monitoring boreholes and that a scheme of surface water and groundwater monitoring will be agreed and confirmed as part of the EA permitting process.
- 362 In their review of the additional detail submitted the CGC has advised they are satisfied with the applicant's clarification of the further groundwater protection matters subject to a pre-commencement planning condition.
- 363 In their original assessment of the application the CGC also provided further recommendation based on the detail submitted, that additional ground investigation work identified by the applicant, further detail of the land stability assessment and all geotechnical design is also to be addressed through a pre-commencement planning condition or conditions. The CGC also noted that in respect of the original construction for the exploratory wellsite a conditions was required in relation to pre and post development geotechnical soil testing. The CGC has recommended that a similar condition should be imposed for the extension area to establish baseline ground condition and the in respect of decommissioning to ensure there has been no pollution impact on the underlying ground. Within the application and in their response to issues raised the applicant has acknowledged recommendations for pre-commencement planning conditions.
- 364 Oil and gas wells are regulated under the Offshore Installations and Wells (Design and Construction, Etc) Regulations 1996. Part IV applies to both on and offshore wells. There is a duty to reduce risk by ensuring the exploratory well is well designed, constructed, equipped, operated, maintained, suspended and abandoned. The drilling would have to meet the strict safety code of the Borehole Site and Operation Regulations 1996 enforced by the Health and Safety Executive (HSE). Prior to any drilling taking place, the applicant would be required to provide the HSE with details of how the well would be drilled in a safe manner, including a demonstration that the risk of release of fluids are as low as reasonably practicable. Details of the casing, tubing and blow-out prevention would all be included. The Health and Safety Executive has been consulted on the planning application. The HSE does not comment specifically on the detail of a planning application but instead sets out as standing advice.
- 365 The HSE has reviewed the application and commented that the operator will be expected to submit detail of the design and construction of a well, and provide notice before work commences. Neither Thames Water or Sutton and East Surrey Water have commented on this application.
- 366 Based on the above and the advice received, Officers consider adequate protection to groundwater pollution has been provided by the applicant and that the CPA can rely on other regulator regimens of the EA permit operating effectively in accordance with the requirements set out in the NPPF.

Conclusion on Water Environment and Geotechnical Issues

367 The Environment Agency, the Health and Safety Executive, Sutton and East Water Surrey Water and the County's Geotechnical Consultant were all consulted on the application. None of the statutory consultees have raised objection to the development. The EA further advises the development will be subject to pollution controls of a separate Mining Waste Permit that also takes into consideration other environmental issues such as air quality, noise and vibration as part of the permitting process. Taking into account the views of these consultees and the mitigation measures incorporated into the proposed development, Officers do not consider that the development would pose any significant risk of pollution to the surrounding environment and are satisfied that should planning permission be granted, of any issue not covered by the regulatory control regimes, can be controlled by way of planning conditions. Officers therefore consider that the proposal satisfies the requirements Policy MC12 and Policy MC14 of the SMPCSDPD 2011 and saved Policy UT4 of the RBBLP 2005.

Archaeology and Heritage

368 The proposed wellsite is not located in, or close to, a Conservation Area, Historic Park or Garden, or structures of architectural or historic interest.

369 The NPPF sets out government policy for conserving and enhancing the historic environment. At paragraph 189 it states that in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, the local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field assessment.

370 Policy MC14 of the SMPCSDPD 2011 (Reducing the Adverse Impacts of Minerals Development) requires that when determining planning applications for mineral development the potential impacts in relation to the historic landscape, sites or structures of architectural and historic interest and their settings, and sites of existing or potential archaeological interest or their settings, to be considered (point v).

371 In paragraph 3.38 of the RBBLP 2005 it is recognised that finds can be made unexpectedly in the course of development and cites mineral extraction as one such development. Saved Policy Pc8 states that where large-scale developments occur outside known Areas of High Archaeological Potential, archaeological assessment will be required.

372 The County's Archaeological Officer has assessed the application and commented that this application involves an extension to the previous (appraisal stage) application area which was subject to a Heritage Desk-Based Assessment prepared by Cotswold Archaeology. The Archaeological Officer notes this assessment assessed the potential impact of the development on both the built heritage of the area as well as the potential for below ground archaeological remains and concluded that there will be no significant designated heritage assets in the vicinity and that the below ground archaeological potential of the site is low.

373 The Archaeological Officer has advised that the assessment remains valid for the current application area and he is therefore satisfied there is no requirement for any further archaeological work as a consequence of this application.

Conclusions on Archaeology and Heritage

- 374 The County's Archaeological Officer has raised no objection to the proposal and taking account of the scale, location and nature of the development, Officers do not consider that the proposal would give rise to any adverse impact in relation to the historic landscape, sites or structure of architectural and historic interest and their settings, and sites of existing or potential archaeological interest or their settings. Accordingly, Officers are of the view that the proposal meets the requirements of the Development Plan policy with regard to SMPCSDPD 2011 Policy MC14 and RBBLP 2005 Policy Pc 8.

Restoration

- 375 The application site falls within a rural area within the Green Belt and the proposed development would temporarily affect both agricultural land and woodland. On the cessation of the exploration, the applicant proposes to return the land to its former use.
- 376 The importance of securing a good quality restoration is central to the consideration of mineral working and associated proposals. The provision of timely restoration and aftercare at mineral sites is sought by paragraph 144 of the NPPF which states that such activities should be carried out at the earliest opportunity to high environmental standards through the application of appropriate conditions.
- 377 SMLPCSDPD Policy 17 (Restoring Mineral Workings) states that mineral working will be permitted only where the MPA is satisfied that the site can be restored and managed to a high standard. The restored site should be sympathetic to the character and setting of the wider area; and capable of sustaining an appropriate after-use. The policy goes on to reiterate the view given in MPG7 that mineral works should be completed at the earliest opportunity. A detailed scheme of how the land will be restored and managed should be agreed with the MPA. Advice on restoration is also contained within the Surrey Minerals Plan 2011 Supplementary Planning Document (SPD) entitled Mineral Site Restoration.
- 378 The applicant states that a planning consent for a period of up to 25 years is being sought to allow sufficient time for the construction activity of phase 1, the drilling activity of Phase 2. Twenty years of production within Phase 3 followed by decommissioning and restoration of the site in phases 4 and 5 respectively.
- 379 At the first time of submission the applicant stated that no detailed restoration planning had been done for his application as the host environment is likely to change over the 20-years of production. However they provided general detail that in principle the site would be restored to its former afteruses comprising a mix of woodland and agricultural pasture and brief outline detail for soil cultivation, sustainable field drainage, restoration planting and enclosure, ecological enhancement and aftercare.
- 380 Officers acknowledge that a restoration scheme has been approved for the site in relation to the appraisal stage planning permission (Ref.RE16/02556) under which the site currently operates. Whilst Officers noted the general level of restoration detail, an outline restoration proposal would be required for submission for this application, revised to cover the proposed enlarged site area, to meet the requirements of development plan policy. The County Ecologist noted no restoration scheme has been submitted and one is needed as one was required of for the previous (appraisal) application. The County Landscape Consultant considered that an outline restoration scheme would need to be revised and agreed to ensure this remains fit for purpose. In addition given the 25-year period for which planning permission may apply the CLC recommended that condition be imposed so that the restoration principles be reviewed and approved prior to the commencement of restoration works.
- 381 Following concerns raised by the County Landscape Architect and County Ecologist and comments of Officers, in May 2019 the applicant submitted restoration detail byway of a

site restoration plan drawing amended to cover the enlarged area, and an outline landscape and restoration plan seeking to demonstrate that the site can be restored and managed to a high standard.

- 382 Following further consultation the CLC commented the principle for restoring the site to a mixture of woodland and agricultural grassland have been provided. They note the restoration and landscape proposal include planting locations and general species specifications, along with tree protection and natural regeneration areas. The CLC has however recommended specific detail for species planting including individual specimen tree sizes and aftercare and management detail to manage planting failure and any replanting would need to be agreed. The CLC further recommended a condition should be imposed required approval of a detailed Landscape and Ecology Management Plan, particularly given the potential longevity (25 years) of the development.
- 383 The County Ecologist has advised that as this is a long term development, the recommendation is that a Landscape and Ecology Management Plan is required to take account of the changes mentioned above and that in the survey season prior to restoration, the species surveys, ie badgers, reptiles and great crested newts are repeated to ensure the restoration takes account of the requirements of these species, both of which can be secured by condition.
- 384 The CE also recommended in response to concerns raised that the issue of achieving biodiversity net gain is best addressed by requiring it to be specifically included in the LEMP to be secured by planning condition.
- 385 There have been no technical objections from other statutory consultees for restoring the application site back to agriculture grassland and woodland uses.

Conclusion on Restoration

- 386 It is proposed to restore the site to a mixture of agricultural grassland and woodland after use. Both agricultural and woodland are uses compatible with the site's Green Belt status and the restoration has the potential to provide limited ecological enhancements. Officers do not consider there is any reason to believe that that site cannot be restored to a beneficial afteruse, which is sympathetic to the character and setting of its locality. Officers consider that the timings and the details of final restoration and aftercare can be controlled by condition. Accordingly, Officers consider that the proposal would not conflict with the relevant national guidance and would comply with the Development Plan SMPCSDPD 2011 Policy MC17.

OTHER ISSUES

Health and Safety and Fire Risk

- 387 Objectors to the application have expressed concern that the nature of the operations at the site carries a risk of fire or explosion that will endanger local resident's lives, the wildlife and the environment. Local residents are concerned that no details of any emergency action plan have been provided.
- 388 As part of the application the applicant has submitted a major accident and disaster risk assessment. Matters of health and safety and fire risk are enforced by the Health and Safety Executive (HSE) and would have to meet the strict safety code of the Borehole Site and Operation Regulations 1995 and other regulatory regimes of the EA and OGA. The HSE has been consulted on the application and provided their standing advice. The EA have commented that due to the classification and quantity of oil stored on site, an application of the Control of Major Accident Regulations 2015 (COMAH) will need to be considered. Where COMAH applies, a Hazardous Substance Consent would be required from the local planning authority to ensure compliance with the Planning (Hazardous

Substances) Regulations 2015. The Surrey and Fire Rescue Service have also been consulted on the application. It raises no objection and has provided advice in respect of compliance with building and fire regulations.

- 389 As set out within the NPPF, the County Planning Authority should not be concerned with the processes or emissions from a proposal and should assume the appropriate regime, i.e. the Hazardous Substances Consent in consultation with the HSE, will operate effectively. Given the HSE nor the Surrey Fire and Rescue have objected to the proposal Officers consider the matters raised would be adequately dealt with by the Hazardous Substances regime.

High Pressure Pipelines

- 390 A high pressure petroleum pipeline is known to pass in the vicinity of the wellsite that could be impacted by the proposed development, particularly from vibration during operations. The high- pressure pipeline while routed close by the site beyond the south west corner travelling south easterly, does not pass through the site and is not buried at depth. As with previous applications the British Pipelines Agency (BPA) has been consulted and does not raise any objection. An informative is recommended advising the applicant that when planning any works to check with the BPA, if necessary for written acceptance, before starting works.

Airport Safeguarding

- 391 The wellsite is found some 3.3 km north of Gatwick Airport. The development will involve tall structures being brought to the site byway of drilling rigs and cranes. The applicant states the tallest structure brought to the site would be a drill rig which has a maximum height 37m. The Gatwick Airport Safeguarding (GAS) were consulted on the application. GAS have said that no part of the development should exceed a height of 104.35m AOD because development exceeding this height would penetrate the Obstacle Limitation Surface (OLS) surrounding Gatwick Airport and endanger aircraft movements and the safe operation of the aerodrome which should be limited by condition.
- 392 In addition, an informative is recommended to inform the operator that cranes used on site are to conform to the requirements of the British Standard Code of Practice for the safe use of cranes in close proximity to an aerodrome.
- 393 The GAS have also requested a condition requiring submission of a landscaping scheme so as to avoid endangering the safe movement of aircraft and the operation of Gatwick Airport through the attraction of birds and increasing the bird hazard risk of the site.

METROPOLITAN GREEN BELT

Surrey Minerals Plan Core Strategy Development Plan Document 2011 (SMPCSDPD 2011)

Policy MC3 - Mineral Development in the Green Belt

Policy MC17 – Restoring mineral workings

Policy MC14 – Reducing the adverse impacts of mineral development

Reigate and Banstead Core Strategy 2014

Policy CS3 – Green Belt

Reigate and Banstead Borough Local Plan 2005 (RBBLP 2005)

Policy Co1 setting and Maintenance of the Green Belt

- 394 Horse Hill wellsite is located within the Metropolitan Green Belt where policies of restraint apply. National planning policy with regard to Green Belt is set out within the NPPF which at paragraph 133 states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open: the essential characteristics of the Green Belts are their openness and their permanence. Paragraph 134 then sets out five purposes of

the Green Belt. Of these five, the only one directly relevant to this application is the third, pertaining to assist in safeguarding the countryside from encroachment.

- 395 Green Belt policy guards against inappropriate development. The NPPF states at paragraph 143 that “inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances”. The NPPF requires at paragraph 144 that substantial weight is given to any harm to the Green Belt and that very special circumstances will not exist unless the potential harm other to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.
- 396 Minerals can only be only be worked where they are found and a feature of such development is that it is reversible through restoration and a temporary activity. Paragraph 146 of the NPPF sets out that certain forms of development need not be inappropriate development provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land within Green Belt. One of these forms of development is mineral extraction. When determining planning applications paragraph 205 of the NPPF states that local planning authorities should give great weight to the benefits of mineral extraction, and in granting planning permission ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety and provide for restoration and aftercare of mineral workings at the earliest opportunity to be carried out to high environmental standards, through the application of conditions, where necessary.
- 397 Policy MC3 (Spatial Strategy – mineral development in the Green Belt) of the SMPD 2011 states that mineral extraction in the Green Belt will only be permitted where the highest environmental standards of operation are maintained and the land restored to the beneficial after-uses consistent with Green Belt objectives within agreed time limits. The Policy MC3 also recognises that proposals in the Green Belt for mineral development other than extraction and primary treatment will only be permitted where the applicant has demonstrated that very special circumstances exist to outweigh the harm by reason of inappropriateness and any other harm. Policy MC17 goes on to state that mineral working will only be permitted where the mineral planning authority is satisfied that the site can be restored and managed to a high standard.
- 398 Strategic Policy CS:3 Green Belt of the RBLP CS 2014 states that a robust and defensible Green Belt will be maintained to ensure that the coherence of the green fabric is protected and future growth is accommodated in sustainable manner. At (2) Policy CS:3 it adds that planning permission will not be granted for inappropriate development in the Green Belt unless very special circumstances clearly outweigh the potential harm to the Green Belt. RBLP 2005 saved Policy Co 1 (Setting and Maintenance of the Green Belt) has a presumption against development that is inappropriate to the Green Belt unless justified by very special circumstances. The policies lists a developments where permission will be granted, policy criteria (b) informs that such a development is 'the carrying out of an engineering or other operation or the making of any material change in the use of land provided that it maintains the openness of the Green Belt and does not conflict with the purposes of including land in it.'
- 399 Given the site's Green Belt location it is necessary to consider whether the proposed development would maintain high environmental standards during operation and whether the restoration of the site can be achieved to a good standard and will provide an acceptable afteruse consistent with Green Belt objectives. Much of the consideration of whether high environmental standards could be maintained and whether an appropriate and acceptable restoration can be achieved has been covered in above sections of the report. Where there is need for a mineral and the site can be well restored and harm otherwise controlled acceptably by design or mitigation, then development can be considered to accord with Green Belt policy.

- 400 The applicant is applying for planning permission for the production stage of on shore oil and gas exploration. The applicant states that a planning consent for a period of up to 25 years is being sought to allow sufficient time for the construction activity of phase 1, the drilling activity of Phase 2. Twenty years of production within Phase 3 followed by decommissioning and restoration of the site in phases 4 and 5 respectively.
- 401 Activity at the site would involve movement of plant, vehicles and materials, and ground works and activity associated with the mobilisation of the site would be noticeable.
- 402 A mobile crane or 32m high workover rig or 37m high drilling rig and associated equipment will be mobilised and demobilised to and from the site depending on the work stage for workover operations, drilling and sidetrack drilling. When either rig is on site it would be seen in the landscape from certain locations during the day and during night hours as the rig and site would be lit.
- 403 Aside of vehicle movements on the access track and site access the development is concentrated on the well pad and adjacent oil process and storage area.
- 404 When drilling or workover operations take place the 37m high drilling rig and associated 7m high substructure will be largest plant situated on the well pad. Portable offices and accommodation and store building will be positioned around the well pad.
- 405 A range of equipment is proposed for the processing area such as separators, pumps and water storage tanks and ground flare. The oil storage plant comprises seven tanks, each with a capacity of 1300 barrels. Oil would be transferred from the tanks to the tanker loading area by above ground pipes. Four gas-to-power generators are to be installed on the south east corner of the processing area within enclosed compound, containing ancillary equipment, transformers, oil tanks and a control unit and a control room. The generators convert produced gas to electricity which will be used to power the site with excess power being fed into the national grid. Two fire water tanks each with a capacity of 225 cubic meters area to be positioned on the eastern boundary of the processing area.
- 406 Given the scale and duration Officers recognise the development will have a moderate impact on openness.
- 407 The applicant is applying for a twenty five year period to accommodate the production operations before the site is then decommissioned, cleared and restored.
- 408 The activities taking place on site would have a temporary impact on openness, and the constructed site itself would also have a temporary impact on openness of the Green Belt. However, while the production operations cover a prolonged period compared to exploration and appraisal, provided there is adequate provision for clearance of the site and restoration, this is a temporary use of land, and therefore preserve the openness of the Green Belt.
- 409 Local objectors have suggested that the development is industrialising the Green Belt. Elsewhere, local parish councils, residents, amenity and action groups say the development is inappropriate in the Green Belt, particularly given the site access with Horse Hill.
- 410 The HH-I wellsite was originally identified as a site suitable for exploration following a site selection process. The nPPG at paragraph 120 (Minerals) states that when determining applications for phases subsequent to the exploratory phase, the fact that exploratory drilling has taken place on a site is likely to be material in determining the suitability of continuing to use that site only insofar as it establishes the presence of hydrocarbon resources.

- 411 Nevertheless, the Government places considerable importance for oil and gas as mineral resource. The NPPF at paragraph 203 makes clear that minerals are a finite natural resource, and can only be worked where they are found, therefore best use needs to be made of them to secure their long-term conservation.
- 412 Distance is a factor that limits drilling, even if drilling directionally, and is subject to constraints in terms of the geology and the geometry of the well trajectory. The proposal involves production from the identified target formations of the Portland Sandstone and Kimmeridge Limestone following on from appraisal and exploration. The proposal also involves drilling 4 further production wells and one water re-injection well to be drilled on the existing well pad adjacent to HH-1 and HH_2 wells to target the Portland Sandstone and Kimmeridge Limestone. For these reasons the applicant considers it is necessary to retain the existing site. The existing site access on Horse Hill was previously selected as most safe and suitable location for an access to the site and the County Highway Authority raises no objection to the retention of the site access subject to the conditions in the Highways section above.
- 413 There will be some views of the drilling rig because of its height, although the lower and middle parts of the rig and the site itself will be mostly screened from view by woodland and topography. The greatest potential adverse effect is to users of the nearby rights of way to the west of the site, extending to the route that follows parallel to the site southern boundary where glimpses of the wellsite and moving vehicles are likely to be visible on the western section of the access track. While the drillsite, and plant and equipment with their industrial characteristics would be located in a rural area, and would involve some limited harm to the visual amenities of the Green Belt whilst the site was operational, it is considered that the scale and temporary nature as a mineral development would not give rise to any significant adverse impact. All the equipment and portable buildings would be used in association with the mineral working.
- 414 Officers recognise that mineral working is a temporary activity and the site would be restored to an agricultural and woodland use once hydrocarbon operations have ceased. The site would then return to fulfilling the objectives of land within the Green Belt.

Green Belt Conclusion

- 415 Officers consider there is no reason to believe that the site could not be well restored to the proposed after-uses, which are uses consistent with Green Belt objectives. Where recommended by consultees, planning conditions would be required to ensure that high standards are maintained. The need for the production of the hydrocarbon resource has been demonstrated in the sections above and that high environmental standards would be achieved and the site well restored. Technical consultees have considered the proposal and their views are set out in detail in earlier sections of the report. Where recommended by consultees, planning conditions would be required to ensure that the high standards are maintained. Given the temporary and reversible nature of the development and the absence of any other harm, Officers consider that the proposal is not inappropriate development and does not conflict with the Development Plan or national guidance with regard to Green Belt policy set out in the NPPF and Guidance, SMPD 2011 Policy MC3, Strategic Policy CS:3 Green Belt of the RBLP CS 2014, and RBLP 2005 saved Policy Co 1.

HUMAN RIGHTS IMPLICATIONS

- 416 The Human Rights Act Guidance for Interpretation, contained in the Preamble to the Agenda is expressly incorporated into this report and must be read in conjunction with the following paragraph.

- 417 It is recognised there would be some slight temporary adverse impacts in terms of amenity from visual, noise and lighting disturbance from drilling and workover activity during the main operational stages of the development. Officer's view is that during the site preparation and the restoration stages the impacts from the development would be negligible. Nevertheless, it is Officer's view that the scale of any potential impacts are not considered sufficient to engage Article 8 or Article 1 and that potential impacts can be mitigated by planning conditions. As such, this proposal is not considered to interfere with any Convention right.
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CONCLUSION

- 418 This application is for the final production stage of onshore oil and gas development proposed at the existing Horse Hill wellsite at Hookwood, near Horley Surrey. The proposed development seeks commercial production of the oil accumulations of the target Portland Sandstone and Kimmeridge Limestones reservoir units identified and appraised during the previous exploratory and appraisal stages
- 419 The development is spread across 5 phases. The applicant states that a planning consent for a period of up to 25 years is being sought to allow sufficient time for the construction activity of Phase 1, the drilling activity of Phase 2, Twenty years of production within Phase 3 followed by decommissioning and restoration of the site in phases 4 and 5 respectively.
- 420 Government policy makes it clear that oil and gas remains an important part of the UK's energy mix. Policies recognise the continuing importance of fossil fuels but aim to manage reliance on them, their potential environmental effects and the risks associated with security of supply. While the Government manages the transition to a low carbon energy mix this will mean that oil and gas remain key elements of the energy system for years to come (especially for transport and heating). Government policy is set out within the NPPF, the Annual Energy Statement, the Government's Energy Security Strategy the White Paper and BEIS statistics and recognises there is a need to maximise indigenous oil and gas resources both onshore and offshore.
- 421 Production is the final step in the process of on-shore hydrocarbon development. Officers consider that given the production function of the development, it is not in conflict with the Government's policy and climate change agenda. Once production ceases the site would be cleared, the soil returned and the site restored to agriculture and woodland sustainable uses. This leads Officer's to conclude that on the basis of Government guidance there is a national need for the development subject to the proposal satisfying other national policies and the policies of the Development Plan.
- 422 Onshore drilling is a temporary but intensive activity which includes some 24 hour activity and under SMPCSDPD 2011 Policy MC12 the MPA should be satisfied that well sites, including the re-use of wellheads used at the exploratory stage, should be located such that there are no significant adverse impacts. The proposed site falls within the Weald Basin and minerals can only be worked where they are found.
- 423 Concerns have been raised drilling will cause potential groundwater and environmental impacts. The exploratory wellsite (HH-1) location was determined by the geological structure the applicant intends to explore and the choice of above ground sites are constrained by a number of factors that include geological, operational, environmental and amenity factors. The applicant now seeks production from the oil accumulations discovered in the Portland Sandstones and Kimmeridge Limestones. On the basis of the information submitted by the applicant and advice of technical consultees, Officers conclude that the proposed location represents the best viable option for the proposed appraisal operations in terms of practicality and technical grounds.

- 424 The wellsite would be well-screened by the surrounding hedgerows, woodland and topography. Nevertheless the top section of the 37m high drilling rig would be visible above the vegetation during the period it would be on the site from certain points. While the rig would be visible during the daytime Officers conclude this would be of limited visual impact. However it will be necessary for the rig and site to be lit at night time to meet health and safety regulations. Local residents have expressed concern of the impacts on properties from the proposed lighting which would increase during winter. The County Lighting Consultant considers the lighting proposals to be a minimal scheme, although to ensure adequate mitigation of likely adverse impacts to nearby receptors has recommended a condition for a detailed lighting scheme. Given the temporary nature and degree of impact, Officers do not consider that either the rig or the development as a whole would have a significant adverse visual impact or that the harm is so great to justify refusing the proposal on the grounds of visual impact and that light intrusion can be controlled as far as practicable by condition.
- 425 Concern has been raised on ecology. The applicant has carried out a number of ecological surveys including surveys of protected species.
- 426 The Surrey Wildlife Trust have commented that the proposal would have minimal impacts on biodiversity though noted the ecology assessment had not provided for biodiversity net gain in accordance with the NPPF. The County Ecologist is satisfied with the applicants ecological and biodiversity assessment subject to a condition requiring a Landscape and Ecology Management Plan (LEMP), adding that biodiversity net gain can be incorporated in the recommended LEMP. The County Landscape Consultant has also recommended a requirement for a LEMP.
- 427 During the period of extended well testing and drilling operations the site would operate 24 hours a day and noise from drilling operations would be audible particularly at night although noise impacts can be controlled. Local residents have expressed concern of noise from the development at night time. Norwood Hill Residents' and Salfords and Sidlow Parish Council both raised a concern of sudden noise, particularly to horses at the neighbouring Equestrian or nearby properties.
- 428 The County Noise Consultant (CNC) notes the planning conditions imposed on the existing appraisal consent (RE16/02556/CON) to control noise. The CNC has assessed the applicants noise assessment for this application which they consider to be satisfactory and recommended similar conditions to protect residential amenity/ and or other noise sensitive facilities. The recommendations cover noise level limits and hours for construction activity; noise limits for drilling and production for both daytime and night time level limits; acoustic controls on plant, equipment and machinery; and hours of operation for vehicle movements. The CNC has also recommended the submission of a Noise Monitoring Plan. In addition, of the drilling operations that may give rise to sudden noise is the process of pipe tripping, where drilling pipes are manually handled and may contact one another. Officers are recommending the hours at which tripping takes place is controlled by condition to the daytime period. In view of the advice of the County Noise Consultant, Officers are of the view that any likely adverse impact from noise can adequately be controlled.
- 429 Concerns have been expressed that the proposal involves fracturing and that pollution of the main water supply in the area along with issues of land instability could occur from drilling operations and from chemicals used. This application is for conventional oil and gas exploration and technical consultees have carefully reviewed the proposal and the mitigation measures incorporated into the proposed development for hydrological and geotechnical impacts. The potential impact on air quality has also been considered, both in terms of traffic emissions and emissions from the wellsite. In view of the advice received Officers do not consider that the development would pose any significant risk of pollution or stability issue to the surrounding environment and are satisfied that should

planning permission be granted, those issues not covered by control regimes, can be controlled by way of planning conditions.

- 430 Highway and traffic implications of the proposal have been a leading local concern, potential protester activity from the previous stages, leading to traffic delays and restriction to access of properties. There are no practical options to move the materials and equipment to or from the site by any other method of transportation. Whilst the development would not be a particularly large traffic generator in total numbers, there would be an increase in HGVs using Horse Hill over the period of the development. Having assessed the development proposal the Highway Authority has concluded that the local highway network in the vicinity of the site could accommodate the traffic associated with the use and that the proposal would not be detrimental to highway safety provided the recommended conditions are imposed. Otherwise, Officers consider traffic related matters should not give rise to any significant adverse environmental impacts.
- 431 The views of technical consultees have been reported under individual issues earlier in the report. There is no reason to believe that high environmental standards cannot be maintained during the period of activity proposed. Consideration has been given to whether any adverse environmental impacts can be appropriately mitigated and Officers consider that the planning conditions recommended relating to the protection of the local environment are suitable.
- 432 The application site is located in the Metropolitan Green Belt where mineral related development need not be inappropriate development provided that high environmental standards are maintained and the site is well restored. The applicant has provided an outline restoration landscape and restoration plan to return the current agricultural and woodland uses which would ensure the site is absorbed back into the local landscape and both these uses are compatible with the site's Green Belt status. Officers consider the submission of detailed landscape and restoration scheme prior to site restoration work commencing may be secured by condition.
- 433 The development offers opportunities to increase biodiversity value through maintaining a provision of bat and bird boxes within the woodland, and a scheme for protecting great crested newts and other ecological mitigation measures. Further biodiversity net gain may be incorporated into a Landscape and Ecology Management Plan recommended by the County Ecologist. There is no reason to believe that that site cannot be well restored to a beneficial afteruse, which is sympathetic to the character and setting of its locality and therefore Officers consider that the proposal is acceptable in terms of Green Belt policy.
- 434 The activity associated with constructing operation at the beginning and end of the development and undertaking drilling production would give rise to some temporary impact on amenity especially when considering the rural nature of the locality. Nevertheless, mineral working is a temporary activity, albeit covering a 25 year period. The concerns of local residents are acknowledged and have been carefully considered. On the basis of the responses received from technical consultees, assessing national policy and development plan policy matters and taking into account need, Officers consider that with the imposition of appropriate conditions where necessary the proposed development for the production stage at the existing wellsite would not give rise to significant unacceptable environmental or amenity impacts and may therefore be permitted.

RECOMMENDATION

The recommendation is to **PERMIT** application RE18/02667/CON subject to the following conditions:

Conditions:

Approved Documents

- The development hereby approved shall be carried out in all respects in accordance with the following plans/drawings:

Title	Drawing No	Date
Location Plan	ZG-HHD-HH-PROD-PA-01	Nov 2018
Area of Sub-surface Borehole Deviation & Area of Extraction	ZG-HHD-HH-PROD-PA-02	Nov 2018
Existing Layout Plan - Composite	ZG-HHD-HH-PROD-PA-03	Nov 2018
Existing Layout Plan 1 of 3 - Existing Well Site	ZG-HHD-HH-PROD-PA-04	Nov 2018
Existing Layout Plan 2 of 3 - Woodland	ZG-HHD-HH-PROD-PA-05	Nov 2018
Existing Layout Plan 3 of 3 - Woodland to Adopted Highway	ZG-HHD-HH-PROD-PA-06	Nov 2018
Existing Sections (Looking North + Looking West)	ZG-HHD-HH-PROD-PA-07	Nov 2018
Proposed Layout Plan: Construction Mode 1 of 3 - Existing Well Site and Process & Storage Area	ZG-HHD-HH-PROD-PA-08	Nov 2018
Proposed layout plan: Construction Mode (2 of 3) Woodland	ZG-HHD-HH-PROD-PA-09	Nov 2018
Proposed layout plan: Construction Mode (3 of 3) Woodland to Adopted Highway	ZG-HHD-HH-PROD-PA-10	Nov 2018
Proposed Sections: Construction Mode (Looking North + Looking West)	ZG-HHD-HH-PROD-PA-11	Nov 2018
Proposed Layout Plan: Drilling Mode - (HH3) (Most Southerly Well)	ZG-HHD-HH-PROD-PA-12	Nov 2018
Proposed Sections: Drilling Mode - (Looking North + Looking West)	ZG-HHD-HH-PROD-PA-13	Nov 2018
Proposed Layout Plan: Drilling Mode - (HH6) (Most Northerly Well)	ZG-HHD-HH-PROD-PA-14	Nov 2018
Proposed Sections: Drilling Mode - (Looking North + Looking West)	ZG-HHD-HH-PROD-PA-15	Nov 2018
Drilling Rig Section – Rig 28 (37m high)	ZG-HHD-HH-PROD-PA-16	Nov 2018

Drilling Rig Section – Rig 51 (38m high)	ZG-HHD-HH-PROD-PA-17	Nov 2018
Proposed Layout Plan: Production Mode 1 of 4 - Existing Well Site & Process and Storage	ZG-HHD-HH-PROD-PA-18	Nov 2018
Proposed Layout Plan: Production Mode 2 of 4 - Process & Storage Area	ZG-HHD-HH-PROD-PA-19	Nov 2018
Proposed Layout Plan: Production Mode 3 of 4 - Woodland	ZG-HHD-HH-PROD-PA-20	Nov 2018
Proposed Layout Plan: Production Mode 4 of 4 - Woodland to Adopted Highway	ZG-HHD-HH-PROD-PA-21	Nov 2018
Proposed Sections: Production Mode (Looking North + Looking West)	ZG-HHD-HH-PROD-PA-22	Nov 2018
Proposed Layout Plan: Decommissioning Mode	ZG-HHD-HH-PROD-PA-23	Nov 2018
Proposed Sections: Decommissioning Mode (Looking North + Looking West)	ZG-HHD-HH-PROD-PA-24	Nov 2018
Proposed Layout Plan: Restoration & Aftercare Mode - Composite	ZG-HHD-HH-PROD-PA-25	Nov 2018
Proposed Layout Plan: Restoration & Aftercare Mode 1 of 3 - Existing Well Site & Process and Storage Area	ZG-HHD-HH-PROD-PA-26	Nov 2018
Proposed Layout Plan: Restoration & Aftercare Mode 2 of 3 - Woodland	ZG-HHD-HH-PROD-PA-27	Nov 2018
Proposed Layout Plan: Restoration & Aftercare Mode 3 of 3 - Woodland to Adopted Highway	ZG-HHD-HH-PROD-PA-28	Nov 2018
Proposed Sections: Restoration & Aftercare Mode (Looking North + Looking West)	ZG-HHD-HH-PROD-PA-29	Nov 2018
Proposed Boundary Enclosure Fencing - Sections	ZG-HHD-HH-PROD-PA-30	Nov 2018
Proposed Access Gate - Plan & Sections	ZG-HHD-HH-PROD-PA-31	Nov 2018
Existing Planning Permission Boundary Plan (SCC REF: 2016/0189)	ZG-HHD-HH-PROD-PA-32	Dec 2018
Restoration Site Area	ZG-HHD-HH-PROD-PA-33	May 2019
Process & Storage Area – HDPE Membrane Layout Plan	ZG-HHD-HH-PROD-PA-34	June 2019
Process & Storage Area – HDPE Membrane Anchoring Detail (1 of 4)	ZG-HHD-HH-PROD-PA-35	June 2019
Process & Storage Area – HDPE Membrane	ZG-HHD-HH-PROD-PA-36	June 2019

Anchoring Detail (2 of 4)		
Process & Storage Area – HDPE Membrane Anchoring Detail (3 of 4)	ZG-HHD-HH-PROD-PA-37	June 2019
Process & Storage Area – HDPE Membrane Anchoring Detail (4 of 4)	ZG-HHD-HH-PROD-PA-38	June 2019

- From the date that any works commence in association with the development until the cessation of the development/ completion of the operations to which it refers, a copy of this permission including all documents hereby approved and any documents subsequently approved in accordance with this permission, shall be available to the site manager, and shall be made available to any person(s) given the responsibility for the management or control of operations.

Commencement

- The development hereby permitted shall be begun before the expiration of three years from the date of this permission. The developer shall notify the County Planning Authority in writing within seven working days of the commencement of the implementation of the planning permission.

Time Limits

- The development hereby permitted shall cease no later than 25 years from the date of the implementation of the planning permission referred to in Condition 3 above or the depletion of the reservoir, whichever is the sooner. All buildings, plant and machinery (both fixed and otherwise) and any engineering works connected therewith, on or related to the application site (including any hard surface constructed for any purpose), shall be removed from the application site and the site shall be fully restored to a condition suitable for agriculture and woodland in accordance with the details set out in Condition 26. Notwithstanding this, any plant or equipment required to make the site safe in accordance with the OGA requirements at the time and agreed with the County Planning Authority, may remain in position.
- Prior written notification of the date of commencement for each phase of development works (Phases 1-5) hereby approved shall be sent in writing to the County Planning Authority not less than seven days before such commencement.

Hours of Operation

- With the exception of drilling, production, workovers, extended well tests (EWTs) and short-term testing, no lights shall be illuminated nor shall any operations or activities authorised or required by this permission, take place other than during the hours of:-

0800 to 1830 hours on Monday to Friday
0900 to 1300 hours on Saturday

Apart from the exceptions referred to above, there shall be no working at any time on Sundays, Bank Holidays, Public or National Holidays.

Limitations

- Notwithstanding any provision to the contrary under Schedule 2 Part 17 (Class A and B) of the Town and Country Planning (General Permitted Development Order) 2015 or any subsequent Order,

(a) no plant, building or machinery, whether fixed or moveable, other than those permitted by this application, shall be erected pursuant to the said permitted development rights, on the application site;

(b) no lights or fences other than those permitted by this application shall be installed or erected at the application site.

Highways & Access

8. **Prior to the commencement of the development** hereby permitted a revised and updated Transport and Traffic Management Plan shall be submitted to and approved in writing by the County Planning Authority, to include details of:
- (a) Evidence to demonstrate that large HGV movements will no longer be required to swing out into the opposite carriageway to access the site and care to be taken in connection to vulnerable road users on Horse Hill, and that this arrangement will be managed and maintained for the duration of works. To include details on how the improved gate management protocol is being introduced, to manage the arrival of HGVs over each Phase of works;
 - (b) programme of works for each phase, to include the identified peak HGV vehicle movements;
 - (c) measures for traffic management by phase at the access on Horse Hill and at the Horse Hill/A217 junction, taking into account the number and size of the HGVs (see part a);
 - (d) provision of boundary hoarding behind any visibility zones, subject to any amendments that may be required to the access in preventing swing out movements;
 - (e) HGV deliveries and hours of operation;
 - (f) inclusion of vehicle routing to reflect those previously agreed, this information should also include any layby/waiting locations for vehicles on route to the site;
 - (g) measures to prevent the deposit of materials on the highway;
 - (h) before, during and after construction condition surveys of the highway between the site and the A217 and a commitment to fund the repair of any damage; caused by the development (timings of these surveys can be agreed with SCC, but must reflect the 25 year operation now being sought);
 - (i) in the event that protestors delay HGVs accessing the site, contingency measures to prevent vehicles queuing back from Horse Hill onto the A217 and to maintain access for local residents and businesses.
- For avoidance of doubt this should be a standalone and separate document that can be easily referenced and updated as required. Only the approved details shall be implemented during the duration of the development.
9. All HGVs shall enter and exit the site to/from the south east via the Horse Hill/A217 junction.
10. There shall be no more than a total of 20 HGV movements (10 in and 10 out) to or from the, site in any one day for the duration of the works being sought.

The exception to this restriction being during Phase 3 Production where:

- (a) A total of 32 HGV movements (16 in and 16 out) may be permitted to or from the site in any one day for a period of 4 months; and
- (b) A total of 24 HGV movements (12 in and 12 out) may be permitted to or from the site in any one day for a period of 24 months.

The site operator shall maintain accurate records of the number of HGVs accessing and egressing the site daily and shall make these available to the CHA on request.

Noise

11. **Prior to the commencement of the development** hereby permitted a noise monitoring plan (NMP) shall be submitted to and approved in writing by the County Planning Authority (CPA), taking into account the noise limits set in Conditions 12-14. The NMP shall include a methodology for undertaking noise surveys, with the results of the monitoring reported to the CPA within 14 days of monitoring. Should the site fail to comply with the noise limits, within 14 days of notification of any breach of the noise limits, the applicant shall submit a scheme for the approval in writing to attenuate noise levels to the required level which shall be implemented within 7 days of the CPA issuing approval for the scheme, or the source of noise shall cease until such a scheme is in place.
12. For temporary operations, such as site preparation, enabling and construction, between 08:00 hours and 18:30 hours Monday to Friday, and between 09:00 hours and 13:00 hours Saturdays, the noise levels shall not exceed 65 dB LAeq,1h (façade).
13. For operations other than temporary, including production, workover, drilling, flaring and testing, the daytime (08:00 hours to 23:00 hours) noise levels shall not exceed 48 dB LAeq,1hr (freefield). At all other times (night-time 23:00 to 08:00), the noise levels shall not exceed 42 dB LAeq,1hr (freefield).
14. Between the hours of 1830 to 0800 inclusive, no tripping shall be undertaken, nor shall casing be cemented except in cases of emergency.
15. All plant and machinery shall be adequately maintained and silenced in accordance with the manufacturer's recommendations at all times.

Lighting

16. **Prior to the commencement of the development** hereby permitted, a detailed Lighting Scheme for the development hereby permitted, shall be submitted to and approved in writing by the County Planning Authority.

The lighting scheme shall include:

- (a) Details of the height and location of all lights including details of all lamps sources confirming lumen output for each lamp type.
- (b) Assessment of the spread and direction for both spill and confirmation of %sky glow of all lighting proposed and methods of any shielding that is deemed necessary to reduce light Spill outside of the site boundary.
- (c) Confirmation of the illumination levels of the work areas including all access ways and general circulation spaces, specified in lux. This shall take the form of a detailed isolux contour plan drawing.
- (d) Vertical illumination levels shall be confirmed where applicable to residential properties that are adjacent to the site. We would suggest this is modelled using software such as Dialux, Relux or Lighting Reality.
- (e) The times when the proposed lighting will be illuminated.

(f) Confirmation that none of the installed flood lighting luminaires are tilted from horizontal any greater than 15 degrees.

(g) Confirmation that all rig linear luminaires are installed inward and downward facing.

The lighting shall be installed and operated in accordance with the approved Lighting Scheme. The applicant shall confirm that all lighting required for operations and maintenance will be locally switched and manually operated, on an 'as required' basis, and that the luminaires over the cabins/ stores doors will be controlled by presence detection with a manual override.

17. Obstacle lights shall be placed as close as possible to the top of the drill rig. These obstacle lights must be steady red lights with a minimum intensity of 200 candelas. Lights must be visible from all directions and illuminated at all times. Unserviceable lamps must be replaced as soon as possible after failure and in any event within 24 hours.

18. No part of the development hereby permitted shall exceed 104.35m AOD.

Contamination

19. **Prior to the commencement of the development** hereby permitted a Construction Environment Management Plan (CEMP) for the construction works of the process, storage and tanker area shall be submitted to and approved in writing by the County Planning Authority. The CEMP shall apply to the construction of such works that include (but not limited to):

- Quality Assurance Plan (CQA Plan) for the: perimeter bunding; the earthworks engineering; retaining structures; containment membrane design and its sealing; pavements and floor slabs (including foundation layers); structure foundations; including geotechnical assessment and design methodology;
- Monitoring systems, including testing, inspection and maintenance protocol, including the groundwater monitoring wells.

20. On completion of the construction works of the process, storage and tanker area, and prior to its use, a verification report shall be submitted to and approved in writing by the County Planning Authority. The verification report should include:

- Details that demonstrate compliance with the CEMP;
- Justification for any changes or deviations from the agreed plan;
- The results and location plans of all field and laboratory testing, including certificates of compliance, and inspection records;
- 'As-built' plans and sections of the works;
- Any other site-specific information considered relevant to proving the integrity of the construction works.

21. Prior to the construction of the process and storage area, and tanker loading facility a Pre-Development Baseline Geochemical Testing Report shall be submitted to and approved in writing by the County Planning Authority.

The pre-development baseline geochemical testing methodology shall comprise as a minimum the following:

- The collection of soil samples on the exposed soil formation after the process and storage area and tanker loading facility compound has been excavated to the final formation level, in a grid pattern (not greater than 20 m spacing). This shall be carried

out prior to the laying of the membrane and placement of the compound crushed rock hardstanding, slabs or foundations at the commencement of construction;

- The locations and elevations of the sampling locations shall be recorded accurately;
 - The methodology shall set out the range of potential contaminants to be tested for, relevant to the proposed works, test methods, and limits of detection.
 - Details of the testing laboratory to be used and the accreditation status for each test.
22. Prior to the commencement of restoration earthworks post development geochemical inspection and testing shall be carried out across the whole development site and access road areas including the drilling / wellsite compound, and the resultant report on the suitability of soils shall be submitted to and approved in writing by the County Planning Authority. The report shall present details of:
- The results of geochemical analysis of soil samples collected from the exposed soil formation adjacent to the same sampling point locations as adopted for the Pre-development baseline geochemical testing after removal of the infrastructure and before the replacement of any restoration soils.
 - Comparison of the laboratory results for the pre and post development phases.
 - If contamination is identified, a contaminated land risk assessment and if necessary full particulars of a strategy for the design and implementation of any remediation required shall be included in resultant report.
23. Prior to the commencement of restoration earthworks post development, upon completion of any remediation, a verification report shall be submitted to and approved in writing by the County Planning Authority.

Surface water management

24. **Prior to the commencement of the development** hereby permitted details of the design of a surface water drainage scheme shall be submitted to and approved in writing by the County Planning Authority. The design must satisfy the SuDS Hierarchy and be compliant with the national Non-Statutory Technical Standards for SuDS, NPPF and Ministerial Statement on SuDS. The required drainage details shall include:
- a) Evidence that the proposed solution will effectively manage the 1 in 30 & 1 in 100 (+10% allowance for climate change) storm events, during all stages of the development (Pre, Post and during), associated discharge rates and storage volumes shall be provided using a maximum discharge rate of 4.2 l/s.
 - b) Detailed drainage design drawings and calculations to include: a finalised drainage layout detailing the location of drainage elements, pipe diameters, levels, and long and cross sections of each element including details of any flow restrictions and maintenance/risk reducing features including the proposed HDPE membrane to be incorporated into the construction of the well site (silt traps, inspection chambers etc.).
 - c) Details of how the drainage system will be protected during construction and how runoff (including any pollutants) from the development site will be managed before the drainage system is operational.
 - d) Details of drainage management responsibilities and maintenance regimes for the drainage system.

e) A plan showing exceedance flows (i.e. during rainfall greater than design events or during blockage) and how property on and off site will be protected.

25. Prior to the first occupation of the development, a verification report carried out by a qualified drainage engineer must be submitted to and approved by the Local Planning Authority. This must demonstrate that the drainage system has been constructed as per the agreed scheme (or detail any minor variations), provide the details of any management company and state the national grid reference of any key drainage elements (surface water attenuation devices/areas, flow restriction devices and outfalls).

Soils

26. All topsoil and subsoil shall be permanently retained on the site for subsequent use in restoration. No soils or soil making material for use in the restoration shall be brought onto the site, unless required by an approved site remediation scheme.

Ecology & Biodiversity

27. An ecological survey will be carried out in the survey season immediately prior to restoration and the results used to amend, if necessary, the final restoration. The survey will be conducted following the best practice guidance at that time.
28. The five bat and five bird Schwegler type woodcrete boxes provided under planning permission ref. RE10/2089 dated 16/10/12 shall be retained on site and maintained.

Restoration

29. Twelve months prior to the decommissioning and restoration of the application site a detailed Landscape and Restoration Plan shall be submitted to the County Planning Authority for approval in writing. The Landscape and Restoration Plan shall include details of:

- (a) the excavation, storage and reinstatement of soils to ensure the survival of the of the existing seed bank;
- (b) planting specification including details of species, planting sizes and proposed numbers/quantities/seed mix & application as appropriate;
- (c) the reinstatement of the access track.

The plan as approved shall be carried out in full.

30. Twelve months prior to the decommissioning and restoration of the application site, a detailed Landscape and Ecology Management shall be submitted for the approval in writing of the County Planning Authority, which shall take into account the survey mentioned above and that in the survey season prior to restoration, the species surveys, i.e. badgers, reptiles and great crested newts are repeated to ensure the restoration takes account of the requirements of these species. In addition a programme for the implementation of the restoration, monitoring and aftercare provision for the enhancement of biodiversity (biodiversity net gain) focusing on native species and the results of the pre-commencement ecological surveys, whilst taking into account the use of the land for agricultural grassland and woodland.

Aftercare

31. Twelve months prior to the decommissioning and restoration of the application site, an aftercare scheme requiring such steps as may be necessary to bring the land to the required standard for the use of agriculture and woodland shall be submitted to the County Planning Authority for approval in writing. The Aftercare Scheme shall include:

- (a) the Strategic Aims and Objectives for the Site and the identified land use within it for the five year Aftercare period;
- (b) detailed requirements and proposals for both hard and soft landscape elements;
- (c) details of field drainage;
- (d) details for the provision of an annual meeting between the applicant and the County Planning Authority;
- (e) details of an annual programme to be provided no later than two months prior to the annual Aftercare meeting.

The submitted scheme shall specify the steps to be taken and the period during which they are to be taken. The scheme shall be implemented and maintained for a period of five years from the completion of restoration, strictly in accordance with the approved details.

Reasons:

1. For the avoidance of doubt and in the interests of proper planning.
2. For the avoidance of doubt and in the interests of proper planning.
3. To comply with Section 91(1)(b) of the Town and Country Planning Act 1990 as amended by Section 5(1) of the Planning and Compulsory Purchase Act 2004.
4. To enable the County Planning Authority to exercise planning control over the operation so as to minimise the impact on local amenity and to ensure the prompt and effective restoration to comply with Schedule 5 paragraph 1 of the Town and Country Planning Act 1990 and Surrey Minerals Plan 2011 Policy MC17.
5. To enable the County Planning Authority to exercise planning control over the operation so as to minimise the impact on local amenity to comply with Surrey Minerals Plan 2011 Policy MC14.
6. To enable the County Planning Authority to exercise planning control over the operation so as to minimise the impact on local amenity and to ensure the prompt and effective restoration to comply with Schedule 5 paragraph 1 of the Town and Country Planning Act 1990 and Surrey Minerals Plan 2011 Policy MC14.
7. To safeguard the environment and protect the amenities of the locality in accordance with the terms of the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policies MC3, MC12 and MC14; and Reigate and Banstead Local Plan Core Strategy 2014 (RBLPCS 2014) Policy CS10.
8. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policies MC15 of the Surrey Minerals Plan Core Strategy 2011; and the Reigate and Banstead Core Strategy 2014 Policy CS17 and saved Policy Mo5 and Policy Mo6 of the Reigate and Banstead Local Plan 2005.
9. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policies MC15 of the Surrey Minerals Plan Core Strategy 2011; and the Reigate and Banstead Core Strategy 2014 Policy CS17 and saved Policy Mo5 and Policy Mo6 of the Reigate and Banstead Local Plan 2005.
10. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policies MC15 of the Surrey Minerals Plan Core Strategy 2011; and the Reigate and Banstead Core Strategy 2014

Policy CS17 and saved Policy Mo5 and Policy Mo6 of the Reigate and Banstead Local Plan 2005.

11. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policy MC14.
12. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policy MC14.
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15. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policy MC14.
16. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policy MC14.
17. Permanently illuminated obstacle lighting are required on the development to avoid endangering the safe movement of aircraft and operation at Gatwick Airport.
18. Development exceeding this height would penetrate the Obstacle Limitation Surface (OLS) surrounding Gatwick Airport and endanger aircraft movements and the safe operation of the aerodrome.
19. To ensure that the works maintain the required level of environmental protection and land stability.
20. To ensure that the works are constructed as designed and maintain the required level of environmental protection and land stability.
21. For the management of land, earthworks, foundation and retaining works stability and safety during and on completion of the works in accordance with NPPF (February 2019) Paragraphs 170, 178 and 179.
22. To demonstrate that there has been no long term contamination of the near surface natural soils at the site as a result of the development and to ensure the site can be suitably restored in accordance with the terms of the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policies MC12 and MC14.
23. For environmental protection and pollution control ensuring that no potential or actual soil, soil gas or groundwater contamination legacy remains on site after decommissioning.
24. To ensure the design meets the national Non-Statutory Technical Standards for SuDS and the final drainage design does not increase flood risk on or off site, and to ensure protection of groundwater and surface water from activities at the site.
25. To ensure the Drainage System is constructed to the National Non-Statutory Technical Standards for SuDS.
26. To prevent loss or damage of soils and to ensure that the land is restored to a condition capable of beneficial afteruse to comply with the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policies MC14 and MC17.

27. To comply with the requirements of the Habitat Regulations 2017 and to protect species of conservation concern in accordance with the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policy MC14.
28. To comply with the requirements of the Habitat Regulations 2017 and to protect species of conservation concern in accordance with the Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policy MC14.
29. To secure restoration to the required standard and assist in absorbing the site back into the local landscape in compliance with Schedule 5 paragraph 2 of the Town and Country Planning Act 1990 and Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policies MC3, MC14 MC17
30. To secure restoration to the required standard and for protecting and enhancing biodiversity and assist in absorbing the site back into the local landscape in compliance with Schedule 5 paragraph 2 of the Town and Country Planning Act 1990 and Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policy MC17, and in accordance with NPPF (February 2019) Paragraph 174 (b).
31. To secure restoration to the required standard and assist in absorbing the site back into the local landscape in compliance with Schedule 5 paragraph 2 of the Town and Country Planning Act 1990 and Surrey Minerals Plan Core Strategy Development Plan Document 2011 Policies MC3, MC14 MC17.

Informatives:

1. Details of the highway requirements necessary for inclusion in any application seeking approval of reserved matters may be obtained from the Transportation Development Planning Division of Surrey County Council.
2. Notwithstanding any permission granted under the Planning Acts, no signs, devices or other apparatus may be erected within the limits of the highway without the express approval of the Highway Authority. It is not the policy of the Highway Authority to approve the erection of signs or other devices of a non-statutory nature within the limits of the highway.
3. The developer is reminded that it is an offence to allow materials to be carried from the site and deposited on or damage the highway from uncleaned wheels or badly loaded vehicles. The Highway Authority will seek, wherever possible, to recover any expenses incurred in clearing, cleaning or repairing highway surfaces and prosecutes persistent offenders. (Highways Act 1980 Sections 131, 148, 149).
4. Section 59 of the Highways Act permits the Highway Authority to charge developers for damage caused by excessive weight and movements of vehicles to and from a site. The Highway Authority will pass on the cost of any excess repairs compared to normal maintenance costs to the applicant/organisation responsible for the damage.
5. If proposed site works affect an Ordinary Watercourse, Surrey County Council (SCC) as the Lead Local Flood Authority should be contacted to obtain prior written Consent. More details are available on the SCC website.
6. If proposed works result in infiltration of surface water to ground within a Source Protection Zone the Environment Agency will require proof of surface water treatment to achieve water quality standards.
7. 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.

8. 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 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.
9. Given the nature of the proposed development it is possible that a crane may be required during its construction. We would, therefore, draw the applicant's attention to the requirement within the British Standard Code of Practice for the safe use of Cranes, for crane operators to consult the aerodrome before erecting a crane in close proximity to an aerodrome. Gatwick Airport requires a minimum of four weeks notice. For crane queries/applications please email gal.safeguarding@gatwickairport.com The crane process is explained further in Advice Note 4, 'Cranes and Other Construction Issues', (available from <http://www.aoa.org.uk/policy-campaigns/operations-safety/>)
10. The proposed works are in close proximity to a high-pressure petroleum pipeline system and BPA wish to ensure that any works in the vicinity of the pipeline are carried out in accordance with our safety requirements (www.linewatch.co.uk).
11. In determining this application the County Planning Authority has worked positively and proactively with the applicant by: entering into pre-application discussions; scoping of the application; assessing the proposals against relevant Development Plan policies and the National Planning Policy Framework including its associated planning practice guidance and European Regulations, providing feedback to the applicant where appropriate. Further, the County Planning Authority has: identified all material considerations; forwarded consultation responses to the applicant; considered representations from interested parties; liaised with consultees and the applicant to resolve identified issues and determined the application within the timeframe agreed with the applicant. Issues have been raised with the applicant including impacts of and on noise/traffic/surface water and geotechnical/landscape/ecology/visual impact and addressed through negotiation and acceptable amendments to the proposals. The applicant has also been given advance sight of the draft planning conditions and the County Planning Authority has also engaged positively in the preparation of draft legal agreements. This approach has been in accordance with the requirements of paragraph 38 of the National Planning Policy Framework 2019.

CONTACT

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BACKGROUND PAPERS

The deposited application documents and plans, including those amending or clarifying the proposal, responses to consultations and representations received as referred to in the report and included in the application file and the following:

Government Guidance

[National Planning Policy Framework](#)

[Planning Practice Guidance](#)

The Development Plan

[Surrey Minerals Plan Core Strategy Development Plan Document \(DPD\) 2011](#)

[Surrey Minerals Plan Site Restoration Supplementary Planning Document \(SPD\) 2011](#)

Reigate and Banstead Local Plan Part 1 Core Strategy July 2014
 Reigate and Banstead Borough Local Plan 2005 (saved policies)

Other Documents

The application documents and plans, including those amending or clarifying the proposal included in the application file, 9 November 2011 committee report and planning permission ref RE10/2089 dated 16 January 2012.

- [Annual Energy Statement Department for Energy and Climate Change \(DECC\) 2010](#)
- [Annual Energy Statement DECC 2013](#)
- [Annual Energy Statement DECC 2014](#)
- Energy White Paper 'Meeting the Energy Challenge' 2007 Department of Trade and Industry (DfT) ([2007 Energy White Paper](#))
- Energy Security Strategy the White Paper 2012
- UK Government [The Carbon Plan: Delivering our low carbon future' December 2011](#)
- [Low Carbon Transition Plan: the national strategy for climate and energy](#) 2009 DECC
- [UK Renewable Energy Roadmap](#) DECC July 2011
- [Energy Security Strategy 2012](#) Department for Energy and Climate Change (DECC) November 2012
- Department for Business, Energy and Industrial Strategy (BEIS) Digest of UK Energy Statistics July 2018 ([Digest 2018](#))
- Department for Business, Energy and Industrial Strategy (BEIS) Digest of UK Energy Statistics July 2017 ([Digest 2017](#))
- [UK Energy in Brief 2018](#)
- [UK Energy in Brief 2017](#)
- [Mineral Planning Factsheet 2011 \(Onshore Oil and Gas\)](#) Department for Communities and Local Government (DCLG) and British Geological Society (BGS)
- Reigate and Banstead Local Plan Part 2 Development Management Regulation 18 [Consultation document](#) August 2016
- Guidelines for Landscape and Visual Impact Assessment Third Edition 2013 Landscape Institute and Institute of Environmental Management and Awareness (IEMA)
- [Surrey Landscape Character Assessment \(2015\)](#)
- [Department for Communities and Local Government Circular 06/2005 Biodiversity and Geological Conservation- Statutory Obligations](#)
- [Surrey County Council Guidelines for Noise and Vibration Assessment and Control March 2019](#)
- The Design Manual for Roads and Bridges' volume 11
- [Guidance Notes](#) by the Institution of Lighting Professionals for the reduction of obtrusive light (2011)
- UK [National Air Quality Strategy \(Defra, 2007\)](#)
- EPUK/IAQM [Land Use Planning and Development Control: Planning for Air Quality 2017](#)
- Institute of Air Quality Management (IAQM): [Guidance on the assessment of dust from demolition and construction 2014](#)
- BS5837:2012 '*Trees in Relation to Design, Demolition and Construction*'
- Bat Conservation Trust's [Good Practice Guidelines for Bat Surveys](#)
- [The Natural Environment and Rural Communities \(NERC\) Act \(2006\)](#)
- UK [Offshore Installations and Wells \(Design and Construction, Etc\) Regulations 1996](#) (SI 1996 No.913)
- [Borehole Site and Operation Regulations 1995](#) (SI 1995 No.2038)
- [Environmental Permitting \(England and Wales\) Regulations 2016](#) (SI 2016 No.1154)