

Appendix 11

Landscape and Visual Amenity

Proposal

The applicant has undertaken an assessment of the landscape and visual amenity of the site and area within a 5km radius. As part of the EIA an assessment has been undertaken of the impacts of the proposal on the landscape and visual effects. It concludes there would be no significant landscape effects although there would be very localised direct change due to the development temporarily altering a very small proportion of the local character area during construction of the well pad but no effect during other phases. The visual findings conclude there would be significant adverse visual effects arising during the drilling, hydraulic fracturing and flow testing phases. Seven of the principal viewpoints would experience significant adverse visual effects. Six of these are residential receptors within and one with a recreational viewpoint. No significant adverse visual effects were judged to occur on any receptor more than 930m from the site during any phase of the project.

The Preston New Road site is currently in agricultural use and is surrounded on all sides by agricultural pasture and arable fields. The field boundaries in the area are formed by native hedgerows, wire and timber fencing, largely without mature trees except for around farms and individual properties. Hedgerows line the local roads at a height of 1.5 – 1.8m. There are numerous field ponds and minor drainage ditches following field boundaries. The land surrounding the site is generally undulating sloping towards Carr Bridge Brook shallow valley north of the site and Preston New Road to the south at an elevation of around 14m OAD. Land rises to the north east to the nearest settlements of Little Plumpton at approximately 25m AOD and Great Plumpton at 35m AOD. The nearest residential properties are those located along Preston New Road to the south. There are two registered Historic Park and Gardens on the edge of the 5km radius study area. There are six conservation areas none of which are in close proximity to the site. There are 27 listed buildings the closest of which is 1.5km away from the site and no of which have an intervisibility with the site. The nearest protected tree is 700m away on Preston New Road. The site is not covered by any national landscape designations. There are no public footpaths near the site.

In terms of landscape impact, the development would require the removal of approximately 30m of hedgerow and individual trees along the frontage to Preston New Road and the lowering to 1m of a further 245m length of hedgerow to form the visibility splays at the site access. A further 100m of hedgerow would be lowered to provide access to the western most connection to the gas grid.

The compound and access road would be surfaced with tarmac / hardcore which would form the base for the equipment to be used for the exploration operations. The soils stripped from the area of the compound would be used to form mounds up to 4 metres in height. The site would be secured by 4m high weld mesh fencing located on the outside of the perimeter bunds which would also extend along the length of the access road. The applicant also proposes screen planting immediately adjacent to the fencing to provide additional landscaping.

A number of shipping containers (single storey in height) to provide for storage of equipment, workshops and office / site welfare would be required and which would be readily seen from Preston New Road. The main elements of the development in terms of visual impact would be the drilling rig which would be up to 53m in height depending on the type of rig used, various cranes used for assembly of the rig and other equipment, a well services rig of 36m height, two sand storage silos each 15m in height and two flare stacks of around 10m in height. Not all of these elements would occur at the same time but the worst case from a visual impact perspective would arise when the drilling rig is being used in combination with the 36m high rig associated with the initial flow testing. This would occur for approximately four, three month periods over the duration of the development.

Mitigation measures are proposed in the form of 4m bunds around the well pad, landscaping around the well pad to help filter views, allowing hedgerows to grow taller, minimisation of light spill, gap filling in existing hedgerows.

It is concluded there would be no cumulative effects from other developments proposed or committed that would have a significant impact on visual amenity. The land is of moderate agricultural quality and it is concluded that there would be no significant effects on farming practices.

Policy

The NPPF states that the planning system should contribute to and enhance valued landscapes and that developments should include appropriate landscaping. Policy DM 2 of the Lancashire Minerals and Waste Local Plan states that development for minerals operations will be supported where it can be demonstrated to the satisfaction of the mineral planning authority that all material environmental impacts can be eliminated or reduced to acceptable levels. The policy requires that proposals should make a positive contribution towards factors such as landscape character.

Policies SP2 and EP11 of the Fylde Local Plan relate to development in country side areas and building design and landscape character.

Summary of consultee comments and Representations

LCC Landscape: Focusing on a 2.0km radius from the centre of the application site, the elements of the development which have the most potential for creating significant landscape and visual impacts are drilling, hydraulic fracturing and flow testing operations which involve the use of a drilling rig (up to 53m high), fracturing rig, well services rig and flare stacks.

It is recommended that additional photomontages for viewpoints 3, 6 and 10 to a prescribed methodology are submitted as the submitted images do not reflect the true scale of the proposed development, with the rig appearing approximately 3x smaller than it will in reality.

The site falls within the County Council's Coastal Plain landscape character type and The Fylde landscape character area, which are characterised by rural farmland,

hedgerows, shelter belts and field ponds, slightly undulating topography, long views across the landscape and a strong sense of openness. The application site has these landscape characteristics along with some significant landscape detractors including electricity pylons, the M55 and the A583.

A detailed assessment of the potential impacts and significance on the landscape and receptors, taking account of the development site and area landscape characteristics has been undertaken with the following summarised observations:

- Major significance on views from The Gables and Plumpton Hall.
- Moderate to major significance on the local landscape character and views from Preston New Road, Staining Wood Farm, Plumpton Lane and Moss House Lane.
- Minor significance on landscape fabric and the views from Westby Road and Great Plumpton.
- Negligible to minor significance on the character type and area, landscape amenity and the views from Little Plumpton, Peel Road, Ballam Road and Westby.
- Negligible significance on the landscape value of the site and wider landscape.
- No significant cumulative effects with the proposals at Roseacre.

The assessment of the proposal has also taken account of the effects of time, with regard to the duration of the landscape effects, and has also taken account of mitigation proposals which will reduce the impact of low level site structures.

The proposed development would have some temporary but reversible localised landscape and visual effects of moderate-major significance. However, these are not considered to significantly affect the overall character of the Coastal Plain Landscape Character Type or The Fylde Landscape Character Area. In addition, the likely effects of the development proposals on the landscape's value and fabric would not be significant and, there would be no significant cumulative effects. For these reasons, the overall temporary effects of the proposals are deemed to be acceptable in landscape terms.

The applicant's options for mitigating the most significant localised effects are limited due to the height of the drill well (potentially 53m), characteristics of the receiving landscape and the 3 year operations period which does not leave enough 'growing time' for planting to have any significant impact. So, whilst there is much about the proposals which could be deemed acceptable in landscape terms, especially in the context of the wider landscape, the applicant needs to address the likely significant localised effects to ensure that overall, this form of temporary industrial development is successfully assimilated into the rural landscape. The most appropriate way of achieving this would be through implementation of the additional mitigation measures outlined above.

It is concluded that significant localised landscape and visual effects are unavoidable although there is scope to further mitigate the likely effects by reducing the height of the drilling rig to a maximum of 35m; finish the drilling and fracturing rigs in a more

suitable colour than red/white as proposed and to finish the various cabins and other temporary buildings in a more appropriate colour than blue as proposed.

With regard to the further information an assessment of the likely landscape and visual effects of the proposed noise mitigation measures has been carried out.

The applicant has reduced the drilling rigs height from a maximum of 53m down to a maximum of 35m and selected a more appropriate colour scheme for the surface finish of some of the development's temporary structures, i.e. the solid acoustic barrier around the well pad and visible part of the rig. Collectively, these changes would have a limited beneficial mitigating effect on views of the proposed drilling, hydraulic fracturing and flow testing operations. The drilling rig would be less dominant in views, be more in keeping with the scale of existing landscape features and appear less conspicuous when viewed against the skyline, especially on cloudy days. It would still be appropriate for a consistent surface finish colour scheme for all of the various cabins and temporary buildings given the sensitivity of the landscape and concerns expressed by the local community, to 'camouflage' the proposed temporary structures as much as possible. The proposals as amended would have no significant impact on public rights of way in the area which are situated away from the site and views from them are heavily filtered by existing topography and vegetation. Levels of landscape tranquillity would not significantly alter due to the reduction in noise levels.

The proposed changes identified would be beneficial in landscape terms. The landscape and visual effects would likely be reduced – just – from a previously predicted **moderate-major** level of significance to a more **moderate** level which is lower but still significant in planning terms. The proposed changes would have no implications on previous conclusions that the proposed development would not significantly affect the overall character of the Coastal Plain Landscape Character Type or The Fylde Landscape Character Area.

The temporary reversible effects of the revised proposals are considered to be acceptable in landscape terms.

The Campaign to Protect Rural England: No objection subject to conditions requiring mitigation measures for landscape and visual amenity.....

Westby-with-Plumptions Parish Council: Express concern to the visual impact of the site.

Many of the representations received object to the visual impact of the site and the potential impact of long term development and the cumulative impacts of more sites. The objections are summarised as follows:

- Fracking wells are only viable for a short number of years, this development will open the way for hundreds across the Fylde with untold environmental damage.
- Potential for 1000's of well pads across the Fylde if these are approved, reports suggest a need for 80 to 33,000 wells to exploit the Bowland Shale.
- Fylde will become industrialised with thousands of wells feeding the south.

- Once interest rates rise, the development will fail and leave damage to environment and landscape for future generations to clear up.
- The proposal will destroy/degrade/permanently damage the beautiful Lancashire/Fylde countryside by industrialisation and traffic.
- Inappropriate development in the greenbelt.
- Application is contrary to Policies SP2, SP5 and EP11 as it is not in keeping with the landscape character due to its character and appearance.
- The development will be a blight/blot/scar on the rural landscape and will get worse when in full production, turning area into an industrial zone.
- The visual impact from the M55 motorway and the A583 will promote an industrial image and deter tourists
- A 53m high rig will have a significant landscape impact and is inappropriate and unnecessary in this area
- The tall structures will be on site for approximately 29 months and will be a third of the size of Blackpool Tower
- The title page image is misleading as it shows a 30m rig and not a 53m rig
- Staining Wood properties will suffer the highest impact on visual amenity but they are not shown in the ES photo montage.
- The new access road and hedgerow changes are not minor landscape changes.

Assessment

The County Council produced a landscape character assessment as part of the Lancashire Structure Plan which has been retained for development control purposes. The assessment defines the key features of each landscape character tract and identifies forces for change and policy to preserve landscape character. The site is located within the Fylde Coastal Plain landscape character tract, the key features of which include the large arable fields giving long views over the landscape, areas of semi natural woodland along brooks and watercourses and meandering rural lanes. The assessment identifies that communications masts and other prominent developments will be particularly prominent on local skylines.

In terms of landscape impact, it is important to recognise that the proposal is for a temporary exploration site for a period of approximately four years after which the site would be restored unless the appraisal stage demonstrates the commercial viability for exploitation and for which a further planning permission would be required. Whilst there would be landscape impacts arising from the development, very few natural features such as trees or and therefore it should be possible to restore the site boundaries to their existing condition. The long term impacts on landscape should therefore be minor

The development would have some impact on the character of Preston New Road mainly from the removal and reduction in height of hedgerow on both sides of the road and from the construction of the new access road and security fencing. This would have an urbanising impact but only for a limited length and following completion of the development, the access and hedgerows could be reinstated to their existing condition.

The earth mounding up to 4m in height combined with the screening provided by the existing hedgerows would also mitigate some of the visual impacts of the development including the perimeter fencing, site buildings and the items of plant and equipment that are below four metres in height. The applicant is also proposing to undertake planting around the boundaries of the site. However, it is considered that this would only make a limited contribution to the landscaping of the site given the small areas of land proposed and the lack of time for any planting to mature.

The main visual impacts would arise from the drilling rig and other tall items of plant required to drill the borehole and undertake the fracturing operations. Due to the height of these elements the visual mitigation provided by bunding and existing natural features would be limited and therefore the rig would be a highly visible feature especially given the flat landscape of the area. However, the visual impacts arising from the tallest elements of the plant would be intermittent over the four year period of the development as it is likely that the drilling rig would be removed from site after each borehole is completed.

With regard to the further information an assessment of the likely landscape and visual effects of the proposed noise mitigation measures has been carried out.

The applicant has reduced the drilling rigs height from a maximum of 53m down to a maximum of 35m and selected a more appropriate colour scheme for the surface finish of some of the development's temporary structures, i.e. the solid acoustic barrier around the well pad and visible part of the rig. Collectively, these changes would have a limited beneficial mitigating effect on views of the proposed drilling, hydraulic fracturing and flow testing operations. The drilling rig would be less dominant in views, be more in keeping with the scale of existing landscape features and appear less conspicuous when viewed against the skyline, especially on cloudy days. It would still be appropriate for a consistent surface finish colour scheme for all of the various cabins and temporary buildings given the sensitivity of the landscape and concerns expressed by the local community, to 'camouflage' the proposed temporary structures as much as possible. The proposals as amended would have no significant impact on public rights of way in the area which are situated away from the site and views from them are heavily filtered by existing topography and vegetation. Levels of landscape tranquillity would not significantly alter due to the reduction in noise levels.

The proposed changes identified would be beneficial in landscape terms. The landscape and visual effects would likely be reduced – just – from a previously predicted **moderate-major** level of significance to a more **moderate** level which is lower but still significant in planning terms. The proposed changes would have no implications on previous conclusions that the proposed development would not significantly affect the overall character of the Coastal Plain Landscape Character Type or The Fylde Landscape Character Area.

The temporary reversible effects of the revised proposals are considered to be acceptable in landscape terms.

A further visual impact would be from the lighting used as part of night time working. During the drilling operations, the site would be operational on a 24 / 7 basis for a

period of around 5 months for the initial borehole and 3 months for the subsequent 3 boreholes where lighting would be required on the rig and around many ground structures. The site is in a very rural area and therefore at present experiences very little light pollution. Whilst it may be possible to reduce the impacts of lighting by shielding and appropriate direction, the lighting required during the drilling operations is still likely to be a particularly noticeable impact in this area but only during the limited period of drilling operations (see lighting assessment Appendix 12).

With regard to the concerns of the parish council and those representations received, the proposal must be considered on its merits and not on the basis of cumulative impacts with any future developments. The development is for a temporary period and would not lead to the industrialisation of the Fylde in its independence and it cannot be assessed against possible future developments. Policy DM 2 of the Lancashire Minerals and Waste Local Plan states that development for minerals operations will be supported where it can be demonstrated to the satisfaction of the mineral planning authority that all material environmental impacts can be eliminated or reduced to acceptable levels. The policy requires that proposals should make a positive contribution towards factors such as landscape character. The development is temporary in nature and would not have a long term impact or be permanent enough to make a positive contribution to the landscape. It is considered that whilst the impacts could not be eliminated they could be reduced to acceptable levels for a limited period.

The site does not fall within the Green Belt and Policy SP5 of the Fylde Local Plan is not relevant. Whilst the proposal would be contrary to Policy SP2 minerals can only be worked where they occur and in this case would be for a temporary period in the scale proposed. Policy EP11 relates to new development and the need for it to be in keeping with the landscape character types. The proposed development due to its temporary nature and nature of development cannot be designed in a way to meet the requirements of this policy. The structures would be significant in scale, most particularly the height of the proposed drill rig and associated illumination. However, whilst the drill rig would be present over an extended period, it would not be there at all times which contribute to reducing the visual impact. It is acknowledged that the nearest properties at Staining Wood and Fox Chase would see the site, but they are located to the south of Preston New Road which is illuminated and some distance away from the site and the hedgerows and screening mounds would provide some visual mitigation.

In summary, given the undulating and open nature of the landscape, the development would have some significant landscape impacts but only for a limited period and in the main restricted to locations near to the site, in particular properties at Staining Wood and Fox Chase and from Preston New Road. The development would not affect any conservation areas, listed buildings or protected trees. It would not require the removal of any significant existing landscape features and therefore any landscape change would not be of a permanent nature. The development is therefore considered acceptable in terms of landscape impacts. However, it is considered that any planning permission should be subject to conditions relating to the colour of the drilling rigs and other equipment, the design and location of the perimeter landscaping mounds, the colour and design of fencing, lighting design and

control and details of the restoration and aftercare of the site to include the replanting of any hedgerows that are removed and restoration.

Conclusion

It is concluded that the proposal would generate significant localised landscape and visual impacts and which would be unavoidable due to the nature and duration of the proposal. However, whilst the duration is over an extended period of time, it would still be temporary. Mitigation measures are proposed and the drilling rig has been reduced to a height of 35m and which could be controlled by condition; the colour of the drilling and fracturing rigs, flare stack and various cabins and other temporary buildings could similarly be controlled by condition. Subject to such conditions it is considered that the proposal would not be contrary to Policy D2 of the Lancashire Minerals and Waste Local Plan and whilst it could be seen as contrary to Policy EP11 of the Fylde Local Plan, the proposed development, due to its nature for a temporary period it could not be designed in a way to meet the requirements of this policy.