

# LANDSCAPE AND VISUAL IMPACT ASSESSMENT

## YORK POTASH EXPLORATORY BOREHOLE

'KNAGGY HOUSE' SITE  
(WINDMILL HILL) REV A



28 January 2013

**DSA** Environment + Design Ltd  
The Warehouse  
Fleeman Grove  
Nottingham  
NG2 5BH

**Initial Issue**            **10 December 2012**

Revised                      28 January 2013

Produced by                DSA Environment + Design Ltd

Checked by                 David Singleton

All images taken by:

DSA Environment + Design  
The Warehouse,  
Fleeman Grove,  
West Bridgford,  
Nottingham,  
NG2 5BH





## **CONTENTS**

1.	METHODOLOGY & INFORMATION SOURCES	page 4
2.	BASELINE SITE DESCRIPTION	page 7
3.	LANDSCAPE CHARACTER	page 8
4.	DEVELOPMENT DESCRIPTION	page 11
5.	PLANNING POLICY	page 12
6.	POTENTIAL LANDSCAPE & VISUAL EFFECTS	page 13
7.	ASSESSMENT OF VIEWPOINTS	page 14
8.	CONCLUSIONS	page 24

## **APPENDICES**

A.	APPROACH AND METHODOLOGY FOR ASSESSMENT	page 26
B.	DSA 0840 951 LOCAL LANDSCAPE CHARACTER	page 35
C.	DSA 0840 953 VIEWPOINT LOCATIONS	page 36

## I. STUDY METHODOLOGY & INFORMATION SOURCES

I.1.1 A Landscape and Visual Impact Assessment of the proposed development has been conducted encompassing the "Guidelines for Landscape and Visual Impact Assessment" (GLVIA) published by the Landscape Institute and the Institute of Environmental Management and Assessment 2002, and "Landscape Character Assessment. Guidance for England and Scotland" (LCA) published by the Countryside Agency and Scottish National Heritage, 2002.

I.1.2 These documents do not provide a prescriptive approach but identify principles and good practice. The methodology is described below and is based on this approach.

I.1.3 The GLVIA states that "Landscape impact assessment, in common with any assessment of environmental effects, includes a combination of objective and subjective judgements, and it is therefore important that a structured and consistent approach is used. It is necessary to differentiate between judgments that involve a degree of subjective opinion (as in the assessment of landscape value) from those that are normally more objective and quantifiable".

I.1.4 The GLVIA also states, "Landscape and visual assessments are separate, although linked, procedures. The landscape baseline, its analysis and the assessment of landscape effects all contribute to the baseline for visual assessment studies. The assessment of the potential effect on the landscape is carried out as an effect on an environmental resource, i.e. the landscape. Visual effects are assessed as one of the interrelated effects on population".

I.1.5 Viewpoints have been selected for their representative coverage of potential landscape and visual impacts, in accordance with the guidelines stated above. Locations of the viewpoints can be seen in Appendix C.

I.1.6 A more detailed and complete description of the approach to landscape and visual impact assessment, as set out by the above guidelines, can be found in Appendix A.

## I.2 LANDSCAPE EFFECTS

I.2.1 Landscape effects derive from changes in the physical landscape, which may give rise to changes in its character and how this is experienced. This may in turn affect the perceived value ascribed to the landscape. The description and analysis of effects on a landscape resource relies on the adoption of certain basic principles about the positive (or beneficial) and negative (or adverse) effects of change.

I.3.1 Due to the inherently dynamic nature of the landscape, change arising from a development may not necessarily be significant. Visual effects relate to the changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to these, and to the overall effects with respect to visual amenity.

## I.3 PROCESS

I.3.1 Assessment, design and potentially management are part of an iterative process. An iterative approach enables site planning and detailed design to be informed by the ongoing assessment. The amended proposals then feed back into the assessment process, until a preferred solution is reached.

I.3.2 The application prepared by York Potash Limited elaborates on how this has been done.



## 1.4 MITIGATION OF ADVERSE EFFECTS

1.4.1 The purpose of mitigation is to avoid, reduce and where possible remedy adverse effects arising from the development. Mitigation is thus not solely concerned with 'damage limitation' but may also consider measures that could compensate for residual effects.

1.4.2 Mitigation measures are generally more effective if they are designed as an integral part of the iterative process referred to above.

## 1.5 ASSESSMENT

1.5.1 Following the baseline landscape studies, the assessment stage includes the systematic identification of potential impacts, prediction of their magnitude and assessment of their significance. In the context of landscape and visual assessment, the term landscape character is used. This refers to the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how this pattern is perceived. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement and creates the particular sense of place of different areas of the landscape.

1.5.2 The degree to which a particular landscape type or area can accommodate change arising from a particular development, without detrimental effects on its character, will vary with existing land use, the pattern and scale of the landscape, visual enclosure or openness of views, distribution of visual receptors and the scope for mitigation which would be in character with the existing landscape. This is known as the sensitivity or capacity of the landscape resource. Variations of these characteristics within the local landscape and within the site need to be identified.

1.5.3 There is no standard methodology for the quantification of the magnitude or scale of landscape effects. However, it is generally based on the scale or degree of change to the landscape resource, the nature of the effect and its duration.

## 1.6 RECEPTORS

1.6.1 The sensitivity of visual receptors and views will be dependent on the location and context of the viewpoints and the expectations and occupation or activity of the receptor.

1.6.2 The most sensitive receptors may include users of outdoor recreational facilities (especially including public rights of way), whose attention or interest may be focused on the landscape, communities (where the development results in changes in the landscape setting or valued views enjoyed by the community) and occupiers of residential properties with views affected by the development.

1.6.3 The least sensitive receptors are likely to be people at their place of work, or engaged in similar activities, such as users of roads, whose attention may be focused on their work or activity and who therefore may be potentially less susceptible to changes in the view.

1.6.4 The magnitude or scale of visual change is described by reference to the scale of change in the view, the degree of contrast or integration of any new features, the duration and nature of the effect, the angle of view, the distance of the viewpoint and the extent over which the changes would be visible.

1.6.5 Scale of change in the view would be assessed with respect to the loss or addition of features and changes in its composition. This includes the proportion of the view occupied by the proposed development. In the degree of contrast or integration, consideration might include changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture. The duration and nature of the effect would include consideration of whether temporary or permanent, intermittent or continuous.

1.6.6 The angle of view is considered in relation to the main activity of the receptor.

NYMNP  
30 JAN 2013

## 2. BASELINE DESCRIPTION

2.1 The proposed application site is located in the North York Moors National Park, roughly 2.5km southeast of the village of Sleights and 2km south of the village of Sneaton. The application site measures roughly 1.5 hectares.

2.2 The site will be located in the northwest of what is currently an arable field on the east side of the B1416, on Windmill Hill some 600m west of Knaggy House Farm. The site's OS grid reference is NZ 894 059 and it lies at an elevation of approximately 200m AOD. Access to the site is proposed along the eastern boundary of the north western field of Doves Nest farm to meet the existing access road, for a previous drilling platform, off the B1416.

2.3 The site lies within the Landscape Character Area 'Coast & Coastal Hinterland (4b) Whitby - Cloughton', with the nearest change in character type being 100m west over the B1416 road where it becomes 'Moorland'. For details of Landscape Character please see section 3.2.

2.4 The site is one of many areas within 'Coast & Coastal Hinterland' that are generally elevated, and therefore tend to be prominent from a distance.

2.5 The area surrounding the site is not generally publicly accessible, unlike nearby 'Moorland'. Public access is available close to the site via minor roads, bridleways and footpaths. These frequently have flanking hedges or plantations.

2.6 The North York Moors National Park, particularly the large areas of 'access land' within it, is extremely popular with recreational users and it has numerous footpaths and trails. Two rights of way pass close to the site. The closest is a bridleway joining the B1416 some 300m south west. Some 400m to the north a footpath crosses east to west from Sneatonthirpe to the B1416.

2.7 Public rights of way can be seen on the drawing in Appendix C.

2.8 The surrounding area is generally well settled, with scattered farms and occasional small villages and hamlets. Sneaton village lies some 2km north of the proposed site, with the outskirts of Whitby, Sleights, some further to the north west.

2.9 A feature of the southwest corner of 'Coast & Coastal Hinterland', local to the site, are the well-established shelter belts and plantations, such as the plantation on Windmill Hill and Haxby Plantation.



### 3. LANDSCAPE CHARACTER

#### 3.1 NATIONAL CHARACTER

3.1.1 In a national context, the site lies within the Character Area 25, 'North Yorkshire Moors and Cleveland Hills' as described in the Natural England Character Map.

3.1.2 The key characteristics of the North Yorkshire Moors and Cleveland Hills are:

- Upland plateau landscape underlain mainly by sandstone and mudstone of Middle Jurassic age, and in the south, calcareous sandstone and limestone of Upper Jurassic age, with areas of undulating land arising from deposits of glacial till, sand and gravel.
- Plateau dissected by a series of dales, often broad and sweeping, but with steep-sided river valleys in places, and floored by Lower Jurassic shales. Extensive areas of heather moorland on plateau and hills, creating a sense of space, expansiveness and openness.
- Arable landscape to south and east, but part still on elevated, sweeping plateau and hills.
- Sparsely settled, with population concentrated in the dales and around the fringes.
- Valley landscapes characterised by predominantly pastoral farming with clear demarcation between the enclosed fields, farms, settlements and the moorland ridges above. The transition is often marked by bracken fringes.
- Panoramic views over moorland ridges, dales, surrounding lowland vales and the sea.
- Extensive areas of coniferous plantations, especially on the Tabular Hills in the south-east and Hackness north of Pickering; with remnant areas of predominantly ancient semi-natural woodland occurring mainly on valley side slopes, on escarpments and fringing hills.
- Traditional stone walls and hedgerows enclosing fields in the dales and lower fringing farmland - now often replaced by fences.
- Farms and villages built of predominantly rubble limestone or dressed sandstone, with red pantile or slate roofs.
- Distinctive and dramatic coastal landscapes with high cliffs, small coves and bays, coastal towns and fishing villages.
- Rich archaeological heritage from many different periods, especially on the high moorland plateau.

3.1.3 Additionally, the North York Moors National Park Authority (NYMNPA) has carried out further, more detailed landscape character assessment. This can be found in the 'North York Moors National Park Landscape Character Assessment 2003', and is examined in section 3.2 below.





### 3.2 LOCAL

3.2.1 From the North York Moors Landscape Character Assessment, the site lies within the local landscape designation 'Coast and Coastal Hinterland', specifically, Landscape Character type '4b:Whitby - Cloughton'.

3.2.2 The characteristic features of the local landscape character type as defined by the National Park Authority are:

- Rolling coastal and coastal hinterland area, rising to a height of 233m on Howdale Moor, underlain by Deltaic sandstones and mudstones with soft Lias mudstones and Cleveland ironstones in deeper valleys and on more low lying parts of coast overlain by deposits of boulder clay which give rise to intensive farming. Coastal areas are designated as part of the North Yorkshire and Cleveland Heritage Coast.
- In the south the area is defined mainly by the moorland edge or the edge of Harwood Dale Forest to the east, the moorland overshadowing the area and creating pinch points to the east of Robin Hoods Bay and at Stoupe Brow, where it extends to within 500m of the coast
- Elevated area allowing long distance views across the area and out to sea.
- Spectacular and rugged crumbling cliffs of sandstone, shale, limestone and ironstone, towering to a maximum height of 150m at Ravenscar, have been affected by collapses on a large scale, which in places has resulted in a broad undercliff resting on the harder rocks below.
- Wide wave cut platforms are features of the coastline and sand or sand/shingle areas are relatively infrequent. The cliffs and foreshore at Robin Hoods Bay expose Redcar mudstone, the beds of which sweep round the bay in a broad arc. Coastal protection measures are necessary in a number of locations.
- The cliffs are of considerable botanical interest with habitats ranging from dry heath and bracken, to scrub, woodland and wet flushes. Herb rich grassland covers the open crags. The cliffs are home to variety of nesting seabirds including Fulmar, Herring Gull, Kittiwake and Cormorant and are renowned for their geological and fossiliferous exposures
- The area is drained by a series of steeply incised and winding minor becks which flow towards the coast, or in the north towards the River Esk. Waterfalls occur along the becks and sometimes where the becks meet the sea, e.g. at Hayburn Wyke. The steep valley sides are frequently lined with deciduous woodland, much of which is ancient semi-natural woodland.
- Inland from the coast, mixed arable and pasture farmland (for cattle, sheep and horses) is interspersed by plantations, shelterbelts and mainly Victorian farmhouses, marked by groups of trees. Close to the character area's inland edge, a number of medium sized mixed and coniferous plantations have been established, e.g. Haxby Plantation at Sneaton and on the side of Cloughton Moor. Small areas of scrub and upland moor/bracken mosaic occur.
- Regular fields of recent enclosure are divided by a mixture of closely trimmed hedgerows, neat stone walls of regular bedded sandstone and fences, with occasional trees, often stunted and wind blown, creating a bleak and open appearance. Elsewhere, the wooded valleys and settlements are flanked by small and irregular fields and a higher proportion of mature hedgerows that lend a sense of time depth to the area. A distinctive pattern of strip fields occurs to the north of Robin Hoods Bay.

- Robin Hood's Bay is a focal point for visitors to the area; the cluster of red roofed buildings perched one above the other, with a labyrinth of passageways and steps are crowded into a breach in the cliffs. The upper parts of the village has a mixture of red brick Victorian houses and more recent development.
- At Raven Hall, the remains of an early speculative venture to promote the area as a seaside resort has resulted in a pattern of streets and a few houses which surround a square within the open cliff top location. A cliff top hotel is a prominent feature here.
- The busy A171 crosses part of the character area, frequently in an elevated and open location and has a significant intrusive effect on the area. Elsewhere a network of B roads and winding minor lanes link settlements.
- A disused railway between Scarborough and Whitby, now a cycle track, runs close to the coast and the Cleveland Way follows the cliff top. Camping and caravan sites, car parks and equestrian centres are numerous.
- Old brickworks, jet and alum quarries within the cliffs, now partly concealed by vegetation, add cultural interest to the area, including the remains of the Peak Alum Works at Ravenscar.
- Ancient remains include Bronze Age barrows and cairns, often in large clusters, and Iron Age cross ridge dykes.
- Detractors include masts south of Whitby and at Ravenscar, the traffic associated with the A171, the overhead electric line supported on pylons to the north of Sneaton, scattered modern suburban style development and prominently sited caravan sites. The loss of field boundaries has also detracted from the area.

3.2.3 The local landscape character assessment notes pressures for change in this area. Some of those of developments similar to the proposed are:

#### Negative Pressures for Change

- Telecom and mobile phone masts (Medium pressure/ High significance on landscape character)
- Wind Turbines, overhead power lines (Low pressure/ High significance on landscape character)
- Highway related changes including road and bridge improvement, kerbing, parking controls, signage and lighting ( High pressure/ High significance on landscape character)
- Increasing traffic (High pressure/ High significance on landscape character)
- Reduction in tranquility/ solitude (Medium pressure/ Low significance on landscape character)
- Loss of dark skies (Medium pressure/ Medium significance on landscape character)

3.2.4 To the south of the site is the 'Moorland' local landscape character area. Some 800m west lies the 'Central Valley' local landscape character area.

3.2.5 Landscape Character drawing 0840 901 shows character types, see Appendix B.

NYM/DA  
30 JAN 2013

#### 4. DESCRIPTION OF DEVELOPMENT

4.1 Design details of the drilling rig, similar to the type that would be used at the exploratory borehole are provided in the Planning Supporting Statement. The rig operation would be similar in length to others previously consented in the area, being around for approximately 11 weeks.

4.2 The rig comprises a tapering tubular steel tower of lattice construction with a maximum height of 33m above surrounding levels. The drilling rig is light grey in colour, intended to minimize visual impact. This is the same as previous rig applications.

4.3 The rig will be lit at night to facilitate 24 hour site operations by means of fluorescent strip lights mounted at various heights on the rig, and a masthead light that has a red strobe effect. The rig lighting would be operational throughout the period of drilling.

4.4 The site would be contained by a topsoil mound (up to 5m high) around the perimeter of the platform and formed from the stripped topsoil.

4.5 The site will have a number of ancillary buildings and small structures. These will be for the storage of equipment such as drill pipe, generators and chemical tanks in addition to site offices, pumps and trailers. The maximum height of any of these units will be approximately single storey.

4.6 Access into the site would be from the south joining to a new entry onto the B1416 (applied for in a previous drilling platform application). This would involve the removal of a short section of existing hedgerow along the northern side of the site. Trees in the existing wood would remain unaffected.

## 5. POLICY

5.1 Relevant national policy is largely found in PPS 7 (2004) Sustainable Development in Rural Areas'. The Government's main objectives for rural areas are summarized within six key principles, including:

(vi) New building development in the open countryside away from existing settlements, or outside areas allocated for development in development plans, should be strictly controlled; the Government's overall aim is to protect the countryside for the sake of its intrinsic character and beauty, the diversity of its landscapes, heritage and wildlife, the wealth of its natural resources and so it may be enjoyed by all.

(vi) All development in rural areas should be well designed and inclusive, in keeping and scale with its location, and sensitive to the character of the countryside and local distinctiveness.

5.2 The North York Moors National Park Authority covers minerals in 'Core Policy E' within its Local Development Framework (2008). The main policies relevant are:

Minerals extraction or the re-working of former quarries will be permitted where:

- It is of a scale appropriate for its location in the National Park and is for meeting a local need for building stone.
- There are no suitable sources of previously used materials to meet the identified need.
- Any waste materials from extraction will be re-used or recycled wherever possible.
- A scheme for restoration and after-use of the site based upon protecting and enhancing the special qualities of the National Park forms an integral part of the proposal.

5.3 Development Policy I 'Environmental protection' states:

To conserve and enhance the special qualities of the North York Moors National Park, development will only be permitted where:

- It will not have an unacceptable adverse impact on surface and ground water, soil, air quality and agricultural land.
- It will not generate unacceptable levels of noise, vibration, activity or light pollution.
- There will be no adverse effects arising from sources of pollution which would impact on the health, safety and amenity of the public and users of the development.
- Land stability can be achieved without causing unacceptable environmental or landscape impact.
- There is or will be sufficient infrastructure capacity to accommodate the demand generated by the development.

5.4 Further details of relevant policy can be found in the Planning Supporting Statement.



## 6. POTENTIAL LANDSCAPE AND VISUAL EFFECTS

### 6.1 POTENTIAL LANDSCAPE EFFECTS

6.1.1 The development proposal includes the removal of topsoil and subsoil which will be used to create temporary screening bunds around the site and a large spoil mound. Therefore there would be an immediate, but temporary loss of the agricultural land which formerly existed on the site.

6.1.2 Mitigation proposals include measures to return the landscape to its former use. The soil would be returned once all site equipment has been removed. It is anticipated this effect would only be temporary and of low magnitude; being fully reversible.

### 6.2 POTENTIAL VISUAL EFFECTS

6.2.1 It is anticipated that the main effects of the development will be visual impact as a result of the large scale of the drilling rig (33m in height) and the engineered character of it, and the ancillary buildings.

6.2.2 In size and scale the rig will resemble an electricity pylon and may be seen from some distance. The compound will be fenced.

6.2.3 The rig will be grey in colour to minimize its visual presence against the skyline, as it would be seen from some of the viewpoints.

6.2.4 The rig will also be illuminated at low level after dark. Lights on the rig will be cowled and at low level. This is to support 24 hour drilling work and achieve the 6 month drilling schedule, as described in the Planning Supporting Statement.

6.2.5 There will also be a red aircraft warning at the top of the rig.

6.2.6 The extended access track to this particular drill rig would increase the duration for which traffic movement would be seen as it passes through the northern field of Doves Nest farm, increasing the visual impact of the rig.

6.2.7 Visual impact of the rig will be dependant on the height of the rig in relation to the position of the viewpoint and the distance of the viewpoint from the site and orientation relative to the ancillary buildings.

6.2.8 Visual impact will also depend on any intervening features/characteristics in the landscape, including hedgerows, trees, plantations, topography and settlements.

Table 1

**VIEWPOINT 1**

From bridleway 500m from the A169, looking Northeast.

Distance to Site 3200m

*Photograph*



**Baseline Visual Assessment** This viewpoint is representative of many views from within this area of open access moorland, Views off this bridleway are open over the neighbouring central valley. The distinct changes in land use create a contrast midway through the view changing from moor to agricultural fields and woodland creating the distant horizon. Electricity pylons dominate the view.

**Receptor type and Sensitivity** **Landscape:** Local landscape type 'Moorland 1(b): Central & Eastern'. High sensitivity

**Visual:** Recreational walkers, cyclists and horseriders Medium sensitivity

**Nature of Change** The area for the drill rig is on the horizon. The change of use is uncharacteristic fo the area. From this viewpoint the neighbouring belt plantation that flanks the B1416 would screen the base of the operation, with only the top of the drill rig cresting the horizon. From this distance however the appearance of the drill above the horizon would be much less noticable than the existing electricity pylons that run across it. The drill rig would be illuminated at night increasing its visual presence, and the red aircraft warning light would be clearly seen also.

**Magnitude of Change** **Landscape:** Low  
**Visual:** Low

NYMNP  
30 JAN 2013

**Mitigation Measures** It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.

**Summary of Assessments (Landscape)** **Sensitivity:** High  
**Magnitude:** Low  
**Overall Effect:** Moderate Adverse (short term & temporary)

**Summary of Assessments (Visual)** **Sensitivity:** Medium  
**Magnitude:** Low  
**Overall Effect:** Slight Adverse (short term & temporary)

Table 2

**VIEWPOINT 2**

From bridleway within open access land, looking East.

Distance to Site 2600m

Photograph

NYMNP  
 30 JAN 2013



*Baseline Visual Assessment*

The view from this bridleway/footpath junction within the area of open access land is extremely open across the valley towards an area covered with agricultural fields, woodland and scattered farm buildings. Ugglebarnby Moor can be seen, on the top of the hill, forming some of the horizon some 2.6km away. The pylon line shown in VPI lies to the west (behind VP2).

*Receptor type and Sensitivity*

**Landscape:** Local landscape type 'Moorland' I(b) Central & Eastern  
High sensitivity

**Visual:** Recreational walkers, cyclists. Occasional farm vehicles.  
Medium sensitivity

*Nature of Change*

The area for the drill rig is behind the plantation trees on the horizon. The base of the operation would be completely screened by the belt plantation that runs alongside the B1416. The long distance of this view would lessen the visual effects of the rig. The rig would crest the horizon and would be illuminated at night increasing its visual presence, and the red aircraft warning light would be clearly seen also.

*Magnitude of Change*

**Landscape:** Low

**Visual:** Low

*Mitigation Measures*

It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.

*Summary of Assessments (Landscape)*

**Sensitivity:** High

**Magnitude:** Low

**Overall Effect:** Moderate Adverse (short term & temporary)

*Summary of Assessments (Visual)*

**Sensitivity:** Medium

**Magnitude:** Low

**Overall Effect:** Slight Adverse (short term & temporary)

Table 3

### VIEWPOINT 3

From Blue Bank Car Park, off the A169, noted for views, looking East.

Distance to site 2800m

*Photograph*



*Baseline Visual Assessment*

The Blue Bank Car Park is a noted tourist viewpoint. Views are open and extend across the Littlebeck valley. The surrounding landscape is covered in a mosaic of fields and woodlands, with scattered farm buildings. Ugglebarnby Moor can just be seen forming part of the horizon.

*Receptor type and Sensitivity*

**Landscape:** Local landscape type, on the border between 'Moorland' I(b) Central & Eastern and 'Central Valley 8(b) Lower Eskdale  
High/Medium sensitivity

**Visual:** Frequent motorists, 90 degrees to direction of travel, some stopping and parking.  
Medium sensitivity

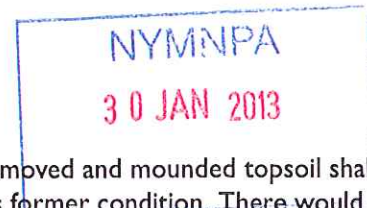
*Nature of Change*

The introduction of a drill rig site would be uncharacteristic for the area. The base of the operation and ancillary buildings would be completely screened by the belt plantation that flanks the B1416. The distance of this view from site will lessen the visual impact. The tall nature of the drill will mean it would crest the horizon. The rig will be illuminated at night, increasing its visual presence, and the red aircraft warning light will be clearly seen also.

*Magnitude of Change*

**Landscape:** Low

**Visual:** Low



*Mitigation Measures*

It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.

*Summary of Assessments (Landscape)*

**Sensitivity:** High/ Medium

**Magnitude:** Low

**Overall Effect:** Moderate/ Slight Adverse (short term & temporary)

*Summary of Assessments (Visual)*

**Sensitivity:** Medium

**Magnitude:** Low

**Overall Effect:** Slight Adverse (short term & temporary)



Table 4

**VIEWPOINT 4**

From the B1416, looking East.

Distance to site 500m (to main drill platform, access track meets the B1416 here)

*Photograph*

<i>Baseline Visual Assessment</i>	The view from here is very open as it looks past the end of the belt plantation that flanks the B1416. Distant views over the northern field of Doves Nest Farm and out to sea are available. The small groups of trees and some wooden pylons add some vertical presence to an otherwise flat view. The plantation on Windmill Hill forms part of the horizon to the left of the view.
<i>Receptor type and Sensitivity</i>	<p><b>Landscape:</b> Border between local landscape types 'Moorland 1(b): Central &amp; Eastern' and 'Coast and Coastal Hinterland 4(b): Whitby - Cloughton' High/ Medium sensitivity</p> <p><b>Visual:</b> Frequent local, tourist and agricultural vehicles close proximity High/ Medium sensitivity</p>
<i>Nature of Change</i>	The introduction of a drill rig would be very uncharacteristic for the area. The plantation and landform would screen part of the base of the operation and ancillary buildings, but the uncharacteristic mounding around the site boundary would be noticeable from here. The trees on Windmill Hill provide screening from the B1416 further north. The extended access track would allow the site traffic to be clearly seen for a longer period along the edge of this northern field and join the B1416 at the position of this viewpoint. The drill will be illuminated at night, increasing its visual presence, and the red aircraft warning light would be clearly seen.
<i>Magnitude of Change</i>	<p><b>Landscape:</b> High</p> <p><b>Visual:</b> High</p>
<i>Mitigation Measures</i>	It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.
<i>Summary of Assessments (Landscape)</i>	<p><b>Sensitivity:</b> High/ Medium</p> <p><b>Magnitude:</b> High</p> <p><b>Overall Effect:</b> Very Substantial/ Substantial Adverse (short term &amp; temporary)</p>
<i>Summary of Assessments (Visual)</i>	<p><b>Sensitivity:</b> High/ Medium</p> <p><b>Magnitude:</b> High</p> <p><b>Overall Effect:</b> Very Substantial/ Substantial Adverse (short term &amp; temporary)</p>

Table 5

## VIEWPOINT 5

From near Parkdown Bungalow on Knaggy House track, looking Southwest.  
Distance to site 800m

Photograph



<i>Baseline Visual Assessment</i>	<p>The view from the track (private) leading from the B1416 to two dwellings, including Knaggy House Farm (some 300m further east). The view shows an open nature of views across neighbouring fields, with neglected, gappy hedgerow boundaries to the south. The presence of Windmill Hill plantation creates a close and elevated horizon line. An existing pylon line is noted within the view to the south.</p>	
<i>Receptor type and Sensitivity</i>	<p><b>Landscape:</b> Local landscape type 'Coast &amp; Coastal Hinterland 4(b): Whitby - Cloughton' Medium sensitivity</p> <p><b>Visual:</b> Close to residences of Knaggy House Farm and Parkdown Bungalow High sensitivity</p>	
<i>Nature of Change</i>	<p>The change of use from pasture to drill rig would be uncharacteristic for the immediate area. The 33m high drill would be visible from this close viewpoint, only 800m away, cresting the horizon. The trees and vegetation in the foreground, breaking up the horizon, would lessen the effects of a thin drill. The drill will be illuminated at low level at night, slightly increasing its visual presence with a potential residual glow, but the red aircraft warning light would be clearly seen.</p>	
<i>Magnitude of Change</i>	<p><b>Landscape:</b> High</p> <p><b>Visual:</b> High</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="color: blue; font-weight: bold;">NYMNP</p> <p style="color: red; font-weight: bold;">30 JAN 2013</p> </div>
<i>Mitigation Measures</i>	<p>It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.</p>	
<i>Summary of Assessments (Landscape)</i>	<p><b>Sensitivity:</b> Medium</p> <p><b>Magnitude:</b> High</p>	<p><b>Overall Effect:</b> Substantial Adverse (short term &amp; temporary)</p>
<i>Summary of Assessments (Visual)</i>	<p><b>Sensitivity:</b> High</p> <p><b>Magnitude:</b> High</p>	<p><b>Overall Effect:</b> Very Substantial Adverse (short term &amp; temporary)</p>

Table 6

**VIEWPOINT 6**

From footpath running near Knaggy House Farm, looking South.

Distance to site 1500m

NVA/1006  
 30 JAN 2013

*Photograph*



*Baseline Visual Assessment*

This view is from one of the few footpaths that run north of the proposed site in an area of rolling topography and scattered plantations. The view is over arable fields with Windmill Hill Plantation and hedge belts forming the horizon line. The open character of the fields and hedgelines draw the eye to the horizon

*Receptor type and Sensitivity*

**Landscape:** Local landscape type 'Coast & Coastal Hinterland 4(b): Whitby - Cloughton'. Medium sensitivity

**Visual:** Very occasional recreational walkers. The route appears not to be well used. Low sensitivity

*Nature of Change*

The change from agricultural field to drill rig site is uncharacteristic. Due to the local topography the majority of the site and ancillary buildings would be well screened from view, leaving only the top of the 33m high drill rig to break the horizon. The land to the north has few public rights of way and is not open access. The drill rig would be lit at low level at night, slightly increasing its visual presence, through a residual glow. The red aircraft warning light would be easily seen.

*Magnitude of Change*

**Landscape:** Medium/ Low

**Visual:** Medium

*Mitigation Measures*

It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.

*Summary of Assessments (Landscape)*

**Sensitivity:** Medium  
**Magnitude:** Medium/ Low

**Overall Effect:** Moderate/ Slight Adverse (short term & temporary)

*Summary of Assessments (Visual)*

**Sensitivity:** Low  
**Magnitude:** Medium

**Overall Effect:** Slight Adverse (short term & temporary)

Table 7

**VIEWPOINT 7**

From near Whitby Laithes (bridleway junction with footpath)

Distance to site 5000m

*Photograph*



*Baseline Visual Assessment*

The view from Whitby Laithes is open. The Windmill Hill ridge forms the skyline for a substantial area around Whitby Laithes, though this is some 5km distant. An existing telecommunications mast and industrial estate off the A171 are prominent in views generally in the area.

*Receptor type and Sensitivity*

**Landscape:** Local landscape type 'Coast & Coastal Hinterland 4(b):Whitby - Cloughton'  
Medium sensitivity

**Visual:** Tourist holiday caravans, occasional vehicles, some walkers. Open distant views  
Medium sensitivity

*Nature of Change*

The change of use from field to drill rig is somewhat uncharacteristic although masts and industrial development is present in the landscape. The majority of the drill rig itself and buildings would be hidden by Windmill Hill plantation. The top of the rig would crest the skyline. Distance would reduce the effects. The rig would be illuminated at low level at night, slightly increasing its visual presence. The red aircraft warning light would be clearly seen.

*Magnitude of Change*

**Landscape:** Low

**Visual:** Low



*Mitigation Measures*

It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.

*Summary of Assessments (Landscape)*

**Sensitivity:** Medium

**Magnitude:** Low

**Overall Effect:** Slight Adverse (short term & temporary)

*Summary of Assessments (Visual)*

**Sensitivity:** Medium

**Magnitude:** Low

**Overall Effect:** Slight Adverse (short term & temporary)

Table 8

## VIEWPOINT 8

From the A171 and Moor to Sea cycle route north of Hawsker, looking southwest.  
Distance to site 3600m

### Photograph



### Baseline Visual Assessment

This viewpoint is reasonably typical of a suite of views along the A171 through Hawsker. Views are often restricted by intervening buildings and vegetation. The mosaic of fields and woodland blocks breaks up the rolling topography that extends out to a distant horizon.

### Receptor type and Sensitivity

**Landscape:** Local landscape type 'Coast & Coastal Hinterland 4(b):Whitby - Cloughton'  
Medium sensitivity

**Visual:** Frequent vehicleless dwellings  
High/ Medium sensitivity

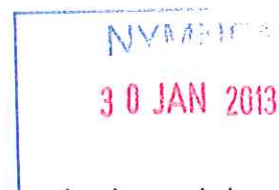
### Nature of Change

The change of use from field to drill rig is very uncharacteristic for the immediate area. Windmill Hill plantation would partly screen the base of the drill rig along with all ancillary buildings, leaving the 33m high drill rig protruding above the tree line and skyline. The drill would be illuminated at night, increasing its visual presence, and the red aircraft warning light would be clearly seen also.

### Magnitude of Change

**Landscape:** Low

**Visual:** Low



### Mitigation Measures

It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.

### Summary of Assessments (Landscape)

**Sensitivity:** Medium

**Magnitude:** Low

**Overall Effect:** Slight Adverse (short term & temporary)

### Summary of Assessments (Visual)

**Sensitivity:** High/ Medium

**Magnitude:** Low

**Overall Effect:** Moderate/ Slight Adverse (short term & temporary)

Table 9

**VIEWPOINT 9**

From Moors above Sneatonthorpe looking west.

Distance to site 2800m

*Photograph*



*Baseline Visual Assessment*

Sneatonthorpe lies in an incised valley. Views are generally not available from the village but are occasionally from the road through and surrounding paths where hedges are lower or orientation is right. The views show the beginnings of the Sneatonthorpe Beck valley covered in a mosaic of agricultural fields and woodland blocks that is characteristic of the area.

*Receptor type and Sensitivity*

**Landscape:** Local landscape type 'Moorland: I(b) Central & Eastern'  
High sensitivity

**Visual:** Local vehicular traffic, some recreational walkers and cyclists.  
Medium sensitivity

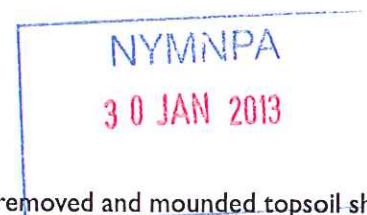
*Nature of Change*

The change of use from field to drill site would be uncharacteristic for the area. The base of the rig and ancillary buildings would be obscured by the 5m high soil mounds surrounding the site. The local topography would screen some of the soil mounds also, leaving only the top of the drill rig protruding. The rig will be illuminated at night, greatly increasing its visual presence, especially from such an open viewpoint. The red aircraft warning light will also be easily seen.

*Magnitude of Change*

**Landscape:** Medium/ Low

**Visual:** High/ Medium



*Mitigation Measures*

It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.

*Summary of Assessments (Landscape)*

**Sensitivity:** High  
**Magnitude:** Medium/ Low

**Overall Effect:** Substantial/ Moderate (short term & temporary)

*Summary of Assessments (Visual)*

**Sensitivity:** Medium  
**Magnitude:** High/ Medium

**Overall Effect:** Substantial / Moderate Adverse (short term & temporary)

Table 10

**VIEWPOINT 10**

From Robin Hoods Bay Road (A171), junction with minor road to Robin Hoods Bay looking west.

Distance to site 3200m



Photograph



<i>Baseline Visual Assessment</i>	From this viewpoint a distant, open view is achievable over three different landscape character areas; Moorland, Coast and Coastal Hinterland and Central Valley (in the far distance). Haxby Plantation and Windmill Hill form the horizon above the 'mosaic' of agricultural fields in the valley.
<i>Receptor type and Sensitivity</i>	<p><b>Landscape:</b> Local landscape type 'Moorland: I (b) Central &amp; Eastern' High sensitivity</p> <p><b>Visual:</b> Frequent vehicles. View angle different to most directions of travel. Medium/ Low sensitivity</p>
<i>Nature of Change</i>	The change of agricultural field to drill rig is uncharacteristic for the area, but the base of the operations would be screened by the 5m soil mounds which would better blend into the woodland backdrop from this view. The top of the rig itself would be visible and would break the horizon line. The movement of site traffic along the access road would be visible, but would resemble that already present along the B1416. The drill would be illuminated at night, increasing its visual presence, and the red aircraft warning light will be clearly seen. This view is at 90 degrees to the main direction of vehicular travel so most views will be of short duration. the exceptions are walkers using the moors and drivers pulling out of this junction, on the minor road to the small village of Fylingthorpe.
<i>Magnitude of Change</i>	<p><b>Landscape:</b> Medium</p> <p><b>Visual:</b> Medium</p>
<i>Mitigation Measures</i>	It is proposed that following completion of the drilling, all removed and mounded topsoil shall be replaced across the site and the landscape restored to its former condition. There would be no overall change to levels or drainage. The rig itself would be painted pale grey to reduce its colour contrast against the sky.
<i>Summary of Assessments (Landscape)</i>	<p><b>Sensitivity:</b> High</p> <p><b>Magnitude:</b> Medium</p> <p><b>Overall Effect:</b> Substantial Adverse (short term &amp; temporary)</p>
<i>Summary of Assessments (Visual)</i>	<p><b>Sensitivity:</b> Medium/ Low</p> <p><b>Magnitude:</b> Medium</p> <p><b>Overall Effect:</b> Moderate/ Slight Adverse (short term &amp; temporary)</p>

## 8. CONCLUSIONS

8.1 A landscape and visual impact assessment has been carried out using the 'Guidelines for Landscape and Visual Impact Assessment 2nd Ed. (2002)' on the proposed temporary drill rig site at 'Knaggy House' close to Windmill Hill Plantation.

8.2 The site lies within the North York Moors National Park and its landscape character therefore is of national significance.

8.3 The National Park covers a large area and within it there are many different Landscape Character Types (LCT). These have been assessed as part of the North York Moors Landscape Character Assessment (2003) which has been used in this assessment. The most widespread and distinctive LCT is the Moorland itself, which attracts large numbers of visitors.

8.4 The site lies within the local character area 'Coast & Coastal Hinterland', specifically LCT '4(b) Whitby - Cloughton'. The site's character is typical of this area as it lies in one of the many agricultural fields that form a mosaic across the area.

8.5 The site does not lie within the Moorland, but there are numerous views of the site from this LCT. The Coastal areas, unlike the Moorland, are not open access land, which greatly restricts locations from where the site is likely to be seen within this character area. The settlement of Sneaton lies roughly 2km to the north and Sneatonthorpe around 1700m east.

8.6 The rig site can be seen from a relatively large number of points nearby, due to this LCT's flat, open character and the high density of minor roads and public rights of way. The landscape impact of the development will be noticeable because of its nature; it is tall and uncharacteristic of the Coast & Coastal Hinterland LCT, although a number of masts are visible in the LCT.

8.7 Some views are obtainable from close to the site, where the significance of the impact of the rig will be substantial and adverse. Nearby mature plantations (Windmill Hill especially and also Belt Plantation along the B1416 and Haxby Plantation/Whinny Wood) act as screens for majority of the site.

8.8 The local area has many public rights of way, with views being obtainable from a number of them (majority only being able to see the very top of the rig). Of note is the Moor-to-Sea cycle route. Some views would be available from a relatively short stretch of this around Sneatonthorpe.

8.9 The visual impact of the development has been assessed to be *moderate and adverse*, chiefly because of the size and form of the drilling rig itself, but also the extended access route along a large open field. The large steel structure will contrast with the visual character of the area, but in many instances it is partially or fully screened by plantation woodland. Many of the achievable views are from a long distance away, generally over 1km, reducing the rig's visual presence.

8.10 The landscape impacts have been assessed to be *substantial/moderate and adverse*. The landscape character will be adversely affected where the site can be seen or where it is apparent there are uncharacteristic works taking place in the landscape as a result of mechanical activity, lighting or artificial soil mounding for example. The associated site buildings and extended access track also contribute to the overall adverse impact.

8.11 The combined effects are *substantial/moderate and adverse overall*, however it must be considered that the development is temporary and will be apparent for only around 11 weeks in total. Once drilling has been completed, all visual evidence of the development will be removed and the effects of the mast in particular, will have disappeared completely.



8.12 It is anticipated that following mitigation measures, removal of all site material and restoration back to arable farmland, the effects on landscape will be reversed.

8.13 The removal of a short portion of the existing hedgerow is necessary for the site access. The site access should be constructed to minimise damage.

8.14 The hedgerow removed can be replaced with similar species. It is anticipated that this can be secured by planning condition.

8.15 The short term and temporary nature of the development means that all adverse impacts will be removed providing vegetation is replaced as indicated above. The exploratory borehole development would therefore accord with guidance set out in PPS7 (2004) Sustainable Development in Rural Areas and as a temporary and entirely reversible development would not conflict with National Park Policy or Guidance.

NYM/1000  
30 JAN 2013

## APPENDIX A

NYMIND  
30 JAN 2013

### YORK POTASH PROJECT EXPLORATORY BOREHOLE/SHAFT PLATFORM

### APPROACH and METHODOLOGY FOR THE ASSESSMENT OF LANDSCAPE AND VISUAL EFFECTS

#### INTRODUCTION

The assessment process aims to establish the following:

- A clear understanding of the site and its wider landscape setting, identifying its landscape character, value and sensitivity to the development proposed;
- the nature of the development proposals and or any mitigation measures
- the potential direct and indirect impacts of the proposals on the landscape resource (i.e.. landscape elements and character)
- the potential impacts on visual receptors
- conclusions concerning the residual effects of the development proposal

The process follows a standard approach:

- Establishment of existing baseline conditions i.e. the character, quality and value of the landscape resource, and preliminary identification of the type and location of visual receptors;
- Description of the proposal including any preliminary measures included to mitigate potential impacts;
- Assessment of the sensitivity of the landscape resource and of visual receptors to the development as proposed;
- Identification of potential impacts on the existing baseline i.e. on the landscape resource and on visual receptors through desk study and through field appraisal;
- Prediction/quantification of changes to the existing baseline i.e. the magnitude of effects and assessment of their significance on the landscape resource and on visual receptors;
- Identification of further mitigation and/or enhancement measures if practicable.

The approach and methodology used in this assessment are based on a synthesis of guidance offered by a range of sources, tailored to the requirements of the project. The following publications are of particular relevance:

- 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA) (Landscape Institute and the Institute of Environmental Management and Assessment, second edition 2002.);
- The Guidelines for Environmental Impact Assessment (2004) Institute for Environment Management and Assessment;
- 'Landscape Character Assessment: Guidance for England and Scotland', (Countryside Agency and Scottish Natural Heritage 2002);
- Landscape Character Assessment Guidance for England and Scotland: Topic Paper 6 – Techniques and Criteria for Judging Capacity and Sensitivity Countryside Agency (now Natural England) / SNH

Landscape and visual effects of development are key aspects for assessment through the EIA process. Landscape and visual effects are assessed through separate but linked procedures. The assessment of potential impacts on the landscape concern effects on an environmental resource i.e. the landscape. This underpins the assessment of visual effects, which are assessed as an interrelated effect on populations.

GLVIA advise at page 12 that;

“Landscape effects derive from changes in the physical landscape, which may give rise to changes in its character and how it is experienced. This may in turn affect the perceived value ascribed to the landscape. The description and analysis of effects on a landscape resource relies on the adoption of certain basic principles about the positive (or beneficial) and negative (or adverse) effects of change in the landscape. Due to the inherently dynamic nature of the landscape, change arising from a development may not necessarily be significant. Visual effects relate to changes that arise in the composition of available views as a result of changes to the landscape, to people’s responses to the changes, and to the overall effects with respect to visual amenity.”

## ASSESSMENT OF THE LANDSCAPE BASELINE

The assessment of the landscape baseline draws upon a desk study of previously published regional and local studies and on fieldwork within the local area. It considers the individual elements and features that make up the landscape and their value and importance, and the characteristics that derive from individual elements or combinations of elements that make a particular contribution to the character of an area. It also analyses the way in which these elements combine in distinctive and recognizable patterns of landform, land cover land use and built development to create the character of the landscape. These represent landscape receptors that may be directly or indirectly affected by the proposal. Any special value or importance ascribed to the landscape and particular cultural and ecological interests and associations etc should also be established.

### Landscape Character Assessment and Evaluation

Analysis of the baseline information enables descriptions to be prepared of the existing landscape character of the site and surrounding area, including a classification, as appropriate, of the landscape into distinctive types or areas which share common features and characteristics. This may take account of or adapt from other landscape character assessments prepared for the area.

The relative value of a landscape needs to be considered as part of the assessment process. Assessment of landscape quality currently combines judgements concerning the physical state/strength of landscape structure, character/intactness of a landscape, together with judgements on the condition or state of repair of individual features or elements that contribute to character. However other considerations may also be of relevance such as distinctiveness, sense of place, appropriateness of management, and the presence of features worthy of conservation. Landscape value is concerned with the relative value or importance attached by the community or by society as a whole to different landscapes, which expresses national or local consensus, because of its quality, special qualities (such as scenic beauty, tranquillity, wildness, cultural and ecological associations).

A landscape of high quality is frequently also a highly valued landscape. However it is important to recognize other possibilities, including landscapes of lower quality in a broad context that may be highly valued locally. ‘Landscape Character Assessment: Guidance for England and Scotland’ (2002) contains current Countryside Agency / Scottish Natural Heritage advice as follows:

‘In a policy context the usual basis for recognizing certain highly valued landscapes is through the application of a local or national landscape designation. Yet a landscape may be valued by different communities of interest for many different reasons without any formal designation, recognizing for example, perceptual aspects such as scenic beauty, tranquility or wilderness; special cultural associations; the influence and presence of other conservation interests; or the existence of a consensus about importance, either nationally or locally’.

Landscape quality and value are among the factors that feed in to the subsequent evaluation of the sensitivity of a landscape to accommodate change arising from a particular development, without detrimental effects on character. Landscape sensitivity is discussed further below.

### Sensitivity of the Landscape Resource

The sensitivity of the landscape resource to the proposed development will vary with existing land use, the pattern and scale of the landscape, visual enclosure/openness of views and distribution of visual receptors, the scope for mitigation that would be in character with the landscape, and the value placed on the landscape by local communities and by society in general. Evaluation of sensitivity will reflect the quality, value, contribution to landscape character of key elements or characteristics of the landscape, and the extent to which they can be replaced or substituted.

The sensitivity of landscape receptors reflects a combination of landscape quality and value. Current advice suggests that landscape quality is based on judgements about the physical nature of the landscape and its state or condition, including the degree to which it may be regarded as intact from visual, ecological and functional perspectives. For example, a landscape of distinctive character in which patterns of elements and features are largely intact is considered to be of higher quality and consequently of higher sensitivity than one in which key features have been disrupted or lost, or where features have been introduced that are considered detrimental to inherent character.

Sensitivity is not absolute but is likely to vary according to the existing landscape, the nature of the proposed development and the type of change being considered. The revised 'Guidelines: Landscape and Visual Impact Assessment' (GLVIA) note at paragraph 7.16 that 'the determination of the sensitivity of the landscape resource is based upon an evaluation of each key element of the landscape likely to be affected. The evaluation will reflect such factors as its quality, value, contribution to landscape character, and the degree to which a particular element or characteristic can be replaced or substituted.'

The document Landscape Character Assessment Guidance for England and Scotland: Topic Paper 6 – Techniques and Criteria for Judging Capacity and Sensitivity (Countryside Agency (now Natural England) /SNH) provides further guidance on the assessment of sensitivity.

Landscape value is concerned with the relative value attached to different landscapes, and is often associated with a landscape designation. 'Landscape Character Assessment: Guidance for England and Scotland' (2002) contains current Countryside Agency / Scottish Natural Heritage advice as follows:

'In a policy context the usual basis for recognising certain highly valued landscapes is through the application of a local or national landscape designation. Yet a landscape may be valued by different communities of interest for many different reasons without any formal designation, recognising for example, perceptual aspects such as scenic beauty, tranquillity or wilderness; special cultural associations; the influence and presence of other conservation interests; or the existence of a consensus about importance, either nationally or locally'.

The higher the value of a landscape resource (in its own right as a component of character; or in terms of designation) the higher its level of sensitivity.

The level of sensitivity assessed for individual landscape receptors reflects a particular combination of quality, value, and contribution to landscape character as evaluated for each individual receptor. The following descriptors are intended to indicate the overall approach to the classification of relative landscape sensitivity:

#### High sensitivity landscapes

e.g. Internationally designated/ recognized landscape/ feature important / highly valued components of the landscape or landscapes of particularly distinctive character and without detracting features, vulnerable to relatively small changes

#### High/Medium sensitivity landscapes

e.g Nationally designated / recognised landscape /feature. Strong landscape structure, distinctive characteristics, patterns, balanced combinations of landform and land cover with some detracting features and tolerant of some change

#### Medium sensitivity landscapes

e.g County/locally designated/ recognized landscape/ feature

Recognisable landscape structure, characteristics, patterns and combinations of landform and land cover moderately valued characteristics with some detracting features and reasonably tolerant of changes

#### Medium/Low sensitivity landscapes

e.g Non designated landscape but locally valued components/ features

Weak landscape structure, partly degraded with frequent detractors and potentially tolerant of significant changes

#### Low sensitivity landscapes

Eg Non designated landscape, very weak or degraded structure, extensive detracting features and tolerant of substantial change

In terms of landscape character, judgements concerning the likely sensitivity of the local landscape to the changes which would result from the development, and its ability or capacity to accommodate the development, derive from the assessments made of landscape character, quality and value. Consideration must therefore be given to the capacity of the site and the wider landscape to accommodate the development. Landscape Character Assessment: Guidance for England and Scotland' (2002) contains current Countryside Agency / Scottish Natural Heritage advice as follows:

'Landscape capacity refers to the degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character, or overall change of landscape character type. Capacity is likely to vary according to the type and nature of change being proposed.'

The revised 'Guidelines: Landscape and Visual Impact Assessment' (GLVIA) published jointly by the Institute of Environmental Assessment and the Landscape Institute note at 2.28 that 'landscapes vary in their capacity to accommodate different types of development. Sensitivity is thus not absolute but is likely to vary according to the existing landscape, the nature of the proposed development and the type of change being considered.'

## ASSESSMENT OF EFFECTS

Development has potential to affect the landscape and visual resource in three main ways. These are:

- the direct physical effect that the development would have on the fabric of the site, such as the removal of trees, walls or other landscape elements
- the effect that the development would have on the landscape character of the site and surrounding area due to changes that would occur in the composition of the landscape as a result of the presence of the development. The changes or impacts are assessed in relation to identified landscape character types and designated areas and features of landscape value; and
- the effect that the development would have on views from within the study area, including changes that would occur in the composition and character of the view. The changes or impacts are assessed in relation to the viewpoints identified within the study area, which have been selected to represent a range of location types and viewing distances.

This approach to assessment of effects on the landscape involves the identification of the likely landscape effects of the development proposals and prediction of their likely magnitude or level of impact according to descriptive criteria. The likely magnitude or level of effect is considered in relation to the sensitivity of the landscape to the development as proposed. This enables conclusions to be drawn concerning the overall significance of the effects, including whether they may be regarded as equivalent to likely significant effects i.e. significant or not significant when discussed in terms of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. Different criteria are used to assess sensitivity and magnitude of change in respect of landscape effects and visual effects. These are described below.

## LANDSCAPE EFFECTS

Two main types of potential landscape effects are considered:

- Effects on landscape fabric, that is the direct impacts of the development on the physical fabric of the landscape through losses of or additions to the range of elements (eg forestry, pasture, trees, hedgerows) that together make up the landscape;
- Effects on landscape character, that is the indirect effects of the development on the character, quality and value of the landscape resource and the way in which it is experienced. Effects occur due to changes in the composition of the landscape as a result of the presence of the development, and are assessed in relation to identified landscape character types and designated areas and features of landscape value.

NYMNP

30 JAN 2013

### Magnitude of Effects

As GLVIA notes (paragraph 7.19), there is no standard methodology for quantifying the scale or magnitude of relative effects on the landscape. However assessments are usually based on consideration of the scale or degree of change in the landscape resource, the nature of the effect and its duration. The criteria used in this assessment to assess magnitude of predicted effects on the landscape resource are set out below:

#### High

Major alteration to or loss of key landscape features or elements of the baseline that are important to character; introduction of features/elements totally uncharacteristic or uncharacteristic of the area

#### High/Medium

Major alteration to or loss of one or more key landscape features or elements of the baseline that are important to character resulting from the development, introduction of features/elements substantially uncharacteristic of the area

Medium Noticeable alteration to or loss of one or more key landscape features or elements of the baseline that are important to character; introduction of features or elements that are not substantially uncharacteristic of the area

Medium/Low Minor alteration to or loss of one or more key landscape features or elements of the baseline that are important to character; introduction of features or elements that are characteristic or not uncharacteristic of the area

Low Very minor alteration to or loss of to one or more key landscape features or elements of the baseline that are important to character; introduction of features or elements that are characteristic or uncharacteristic of the surrounding landscape

Assessment of Significance

The assessment of significance of effects on landscape fabric and on landscape character is based on the combined consideration of all of the factors considered in assessing the sensitivity of the receptor and the magnitude of change upon it. For physical effects on landscape fabric, this includes the value and quality of the landscape element, the extent to which it would be altered or removed, and the potential for/appropriateness of mitigation. For indirect effects on landscape character, the factors considered include quality, value, and existing landscape character; physical separation (intervening distance) between the development and the receptor and the extent to which the receptor would be affected. The following matrix is a graphic representation of the approach to assessment of significance based on a combined consideration of the sensitivity of the receptor and the magnitude of change upon it. The matrix is a general guide to the assessment process; it should not be regarded as prescriptive. Those effects judged by the assessor to be of 'very substantial', very substantial– substantial', 'substantial' or 'substantial moderate' significance may be regarded as analogous with 'likely significant impacts' as referred to in the Environmental Impact Assessment (England and Wales) Regulations 1999.

		Magnitude of Change				
		High	High/Medium	Medium	Medium/Low	Low
Receptor Sensitivity	High	Very Substantial	Very Substantial/Substantial	Substantial	Substantial/Moderate	Moderate
	High/Medium	Very Substantial/Substantial	Substantial	Substantial/Moderate	Moderate	Moderate/Slight
	Medium	Substantial	Substantial/Moderate	Moderate	Moderate/Slight	Slight
	Medium/Low	Substantial/Moderate	Moderate	Moderate/Slight	Slight	Slight/Negligible
	Low	Moderate	Moderate/Slight	Slight	Slight/Negligible	Negligible

VISUAL EFFECTS

Potential visual effects concern the effects that the development may have on views from within the study area, including changes that would occur in the composition and character of the views of visual receptors such as local residents and those viewing the site from roads, amenity locations and other recreational resources in the vicinity. Visual effects have been predicted by reference to the likely appearance of the development in the landscape using computer generated photomontages of the proposed development when viewed from the selected viewpoints, and field assessment of the local landscape.

The approach to assessment of visual effects involves the identification of the likely effects of the development proposals on views and prediction of their likely magnitude or level of impact according to descriptive criteria. The likely magnitude or level of effect is considered in relation the sensitivity of the visual receptor to the development proposal. This enables conclusions to be drawn concerning the overall significance of the impacts, including whether such impacts may be regarded as equivalent to likely significant effects when discussed in terms of the Environmental Impact Assessment (England and Wales) Regulations 1999.

## Magnitude of Effects

There is no standard methodology for quantifying the scale or magnitude of visual effects. GLVIA advises at paragraph 7.36 that in evaluating visual effects, the magnitude of visual change is described by reference to the scale of change in the view, the degree of contrast or integration of any new features, the duration and nature of effects, the angle of view in relation to the main activity of the receptor, viewing distance and the extent of the area over which changes would be visible

The factors that influence the visual effects of development fall into five main categories. These are:

- The attributes of the landscape in which the development is sited i.e. the presence or absence of landscape features and the scale /enclosure of the landscape within the field of view;
- The design (including materials) and siting of the development itself;
- The atmospheric conditions prevalent at the time of viewing;
- The distance of the viewer; and
- The perceptions of the viewer.

There is general agreement that the visual impact of development reduces with increasing viewing distance. The magnitude of visual impact at any given distance will vary according to a range of factors, including the scale and massing of the development, the presence of other features in the view that draw the eye, and the extent to which views of the development from the viewpoint in question are obstructed or filtered by intervening landform or by landscape elements such as trees, woodlands, hedgerows or by built structures. Atmospheric conditions may also affect the extent to which a development may be visible in the view. Comments concerning visibility conditions and viewing distance reflect the following Meteorological Office guidance 1:

### Visibility Conditions Visibility distance bands:

Thick Fog	0m to 199m
Very Poor	1000m to 1700m
Poor	1800m to 3500m
Moderate	3600m to 7km
Good	8km to 17km
Very Good	18km to 35km
Excellent	35km plus



The relationship between viewing distance and field of view is an important consideration, and one that affects the proportion of a field of view that is occupied by a development in relation to other features. As distance increases, the relative size of the development reduces and a broader area is viewed in which peripheral landscape features occupy more of the view and so compete for the attention of the viewer.

The criteria used in this assessment to assess magnitude of predicted visual effects are set out below:

#### High

Major permanent/long term change in the existing view, change very apparent involving high level of change in character and composition of baseline i.e. pre-development view

#### High/Medium

Major-medium permanent/long term change in the existing view, change apparent involving high – medium level of change in character and composition of baseline i.e. pre-development view

#### Medium

Medium permanent/long term change in the existing view, change noticeable involving medium level of



change in character and composition of baseline i.e. pre-development view

#### Medium/Low

Medium-minor permanent/long term change in baseline i.e. predevelopment view change will be distinguishable involving medium-low level of change in character and composition of baseline i.e. pre-development view

#### Low

Minor permanent/long term change in baseline i.e. predevelopment view - change will be distinguishable from the surroundings whilst composition and character of view, although altered will be broadly similar to pre-change circumstances.

#### The Sensitivity of Visual Receptors

The sensitivity of visual receptors varies according to the location and context of the viewpoint, the expectations and occupations or activity of the receptor and the importance of the view (GLVIA paragraph 7.31). These factors may be expressed in terms of:

- The value of the view/viewpoint – which reflects the intrinsic character and scenic qualities of its location and context. Where recognised through the designation of an area (such as a National Park or AONB), value is increased, while the presence of detracting features in a view will generally reduce value. Higher value view/viewpoints are likely to be more sensitive to change;
- The importance of the viewpoint – as indicated by some form of recognition, for example as noted in a guide book, marked on a map or indicated on the ground by a sign or other visible feature. The provision of facilities eg seating, parking, footpath may also indicate a location of higher importance. Views gained from locations where people gather in the outdoors may also be of higher importance.
- The nature of the viewer and their expectations, occupations and activities when experiencing the view. High sensitivity viewers/viewpoints include those where the attention of users may be focused on the landscape eg from public rights of way and other outdoor recreational facilities, and from residential properties. Viewers in cars and trains are considered to be of relatively lower sensitivity due to the transient moving nature of the view

The levels of sensitivity assessed for individual visual receptors reflect a particular combination of these factors as evaluated for individual receptors. Views from residential properties have been included in the 'high' sensitivity category for the purposes of impact assessment as they represent an important aspect of the visual amenity of local people. However the key issue is whether the proposal would unacceptably affect amenities and the existing use of land and buildings that ought to be protected in the public interest.

The following descriptors are intended to indicate the overall approach to the classification of the relative sensitivity of visual receptors:

#### High sensitivity visual receptors

residential properties, public rights of way and other outdoor recreational facilities where the attention of users may be focussed on the landscape.

#### High/Medium sensitivity visual receptors

minor roads, lanes by users travelling through the local area at slower speeds.

#### Medium sensitivity visual receptors

'A' and 'B' roads routes by users travelling through or past the local area at speed; outdoor sporting and recreational facilities; outdoor working environments.

#### Medium/Low sensitivity visual receptors

Motorways and trunk roads

Low sensitivity visual receptors  
 industrial plants, working environments (indoor), prisons



**Assessment of Significance**

The assessment of significance of visual effects is based on the combined consideration of all of the factors considered in assessing the sensitivity of the receptor and the magnitude of change in the view. The following matrix is a graphic representation of the approach to assessment of significance based on a combined consideration of the sensitivity of the receptor and the magnitude of change upon it. The matrix is a general guide to the assessment process; it should not be regarded as prescriptive. Those effects judged by the assessor to be of 'very substantial', very substantial– substantial', 'substantial' or 'substantial-moderate' significance may be regarded as analogous with 'likely significant impacts' as referred to in the Environmental Impact Assessment (England and Wales) Regulations 1999. Effects of 'moderate' significance have some potential to represent 'likely significant impacts' depending on local circumstances.

		Magnitude of Change				
		High	High/Medium	Medium	Medium/Low	Low
Receptor Sensitivity	High	Very Substantial	Very Substantial/Substantial	Substantial	Substantial/Moderate	Moderate
	High/Medium	Very Substantial/Substantial	Substantial	Substantial/Moderate	Moderate	Moderate/Slight
	Medium	Substantial	Substantial/Moderate	Moderate	Moderate/Slight	Slight
	Medium/Low	Substantial/Moderate	Moderate	Moderate/Slight	Slight	Slight/Negligible
	Low	Moderate	Moderate/Slight	Slight	Slight/Negligible	Negligible

**Cumulative Effects**

Cumulative landscape and visual effects are those that result from additional changes to the landscape or to visual amenity caused by the proposal in conjunction with other developments. Generally, the approach to assessment of cumulative effects is the same as for the assessment of site specific landscape and visual effects, in that the significance of landscape and visual effect is determined by assessing the sensitivity of the landscape or visual receptor; and the magnitude of change. The resulting level of effect may be described as 'not significant' or 'significant' in terms of the EIA regulations.