



**Ebberston Moor - Knapton
Gas Pipeline,
Ebberston,
North Yorkshire**

DESIGN AND ACCESS STATEMENT

August 2013

**BARTON
WILLMORE**
PLANNING/DESIGN/DELIVERY

Contents

- 01** Introduction
- 02** Site and Surroundings
- 03** Project Design
- 04** Policy Framework
- 05** Design Context and Principles
- 06** Conclusion

This Design and Access Statement has been prepared by **Barton Willmore LLP** on behalf of the Applicant **Viking UK Gas Limited** (hereby referred to as the “Applicant”). Viking UK is a subsidiary of Third Energy Holdings Limited, an energy company with a comprehensive approach to the development and production of its existing portfolio of gas reserves in the UK.

The planning application which has been submitted to North Yorkshire County Council (NYCC) and the North York Moors National Park Authority (NYMNP) under the Town and Country Planning Act 1990 as amended by the Planning and Compulsory Purchase Act 2004 seeks full planning permission for the exploitation of conventional hydrocarbon resources only, for the production of energy, including: gas production from the existing Ebberston Moor ‘A’ Well Site; and construction of a 15.3 km long 8” diameter steel underground pipeline from Ebberston Moor ‘A’ Well Site to the existing Knapton Generating Station (KGS). The purpose of the planning application (known as “the Ebberston Moor-Knapton Gas Pipeline”) is to deliver natural gas and condensate from Ebberston Moor ‘A’ Well Site to KGS where it will be used as a fuel-gas to generate electrical power. These activities are collectively referred to hereafter as the “Proposed Development”.

This document explains the thought process behind the design and indicates how through good design the scheme can be delivered in a sustainable manner ensuring social, economic and environmental considerations and objectives are fully met.

This document has been prepared in accordance with the requirements of Guidance on Information Requirements and Validation (Communities and Local Government, 2010) and the guidance set out in Design and Access Statements: How to write, read and use them (CABE, 2006).

Guidance provided by CABE on Design and Access Statements states:

“You should think of the statement as telling the story behind the scheme as it is presented in the planning application. Do not think of it as a chore, the statement is your opportunity to show that decisions you have made are not guesswork but based on an understanding of the real world as it affects the application site. A good design statement will therefore increase support for your proposal.” (CABE, 2006)

The Statement is a tool to explain and justify the design and access principles and concepts on which a development proposal is based and on how these are reflected in individual aspects of a scheme.

In accordance with the guidance this Design and Access Statement has the following function and purpose:

- ❑ To provide information on the Proposed Development in terms of its composition, design, access and movement;
- ❑ To explain and justify the design and access principles and concepts on which the development proposal are based and to explain how these are reflected within the scheme;
- ❑ To provide a description of the key issues resulting from the site assessment; and
- ❑ To evaluate how this has informed the design of the proposed form of development.

Having regard to the above, this Statement is structured as follows:

- ❑ **Section 2:** Site and Surroundings
- ❑ **Section 3:** Project Design
- ❑ **Section 4:** Policy Framework
- ❑ **Section 5:** Design Context and Principles
- ❑ **Section 6:** Conclusions

The Application Site, as shown on **Figure 2.1**, is located within the North York Moors National Park and Ryedale District.

The Application Site includes two key elements as described below:

- ❑ The Ebberston Moor 'A' Well Site; and
- ❑ The pipeline corridor between Ebberston Moor 'A' Well Site and the KGS.

Site Context

The existing Ebberston Moor 'A' Well Site and northern extent of the gas pipeline corridor is located to the west of Ebberston Common on the eastern edge of Dalby Forest before passing through the southern extent of the forest. From the Ebberston Moor 'A' Well Site, the pipeline corridor follows a general north east-south west alignment and runs through a section of the Dalby Forest in the National Park. It then follows a general north-south alignment through Stonygate Moor before crossing the A170 and passing between the villages of Allerston and Wilton. The corridor continues southwards to the west of Yedingham. The pipeline corridor then continues across agricultural land before crossing the River Derwent, the railway between York and Scarborough and terminating at KGS where it connects into the existing facilities. The northern extent of the Application Site including the Ebberston Moor 'A' Well Site is located within a mix of woodland and agricultural land while the majority of the southern section of the pipeline corridor is located within agricultural fields in the Vale of Pickering.

Site Description

Ebberston Moor 'A' Well Site as shown on Figure 2.1 is located within the North York Moors National Park. The Site is surrounded to the north, west and south by mature forestry plantation. The eastern boundary of the Site is defined by Ebberston Common Lane. Beyond Ebberston Common Lane to the east, the land comprises farmland with hedge and fence lined grazing fields.

Ebberston Moor 'A' Well Site, as shown on Figure 2.1, currently contains a 0.66 ha area of flat bare ground (drilling platform), an existing borehole with an associated wellhead (Ebberston Moor – 1 well) and a well cellar adjacent to the wellhead in the centre of the well site. Soil bunds of between 2m and 4m in height are located

between the drainage ditch and perimeter fence along the western and southern perimeter of the well site. In total, the area of the well site including the bunds is 1.2 ha.

The nearest communities to the well site are the small, loosely defined farming community of Langdale End (4.25km to the north-east) and the more compact forestry community of Low Dalby (4.75km to the south-west).

Existing built development in this area is limited and typically restricted to isolated farm buildings set within pockets of established woodland. The nearest residential development is Ebberston Common Farm located approximately 270 metres to the southeast of the well site.

The pipeline as shown on Figure 2.1 working width corridor is up to 30m wide and 15.3 km long. The total area of the pipeline corridor is 46.56 ha. The northern extent of the pipeline route is located within the elevated plateau of the Dalby Forest, on the southern slopes of the North York Moors National Park. From here it passes down a prominent escarpment, and beyond through a network of woodland, tree belts and hedgerow bounded fields south towards the Vale of Pickering. It crosses beneath the A170 road and continues through the Vale of Pickering, where it crosses flat, large and open fields bordered by ditches and hedgerows until it reaches KGS.

A detailed description of the Site and Surroundings is provided in the accompanying ES and Planning and Sustainability Statement.

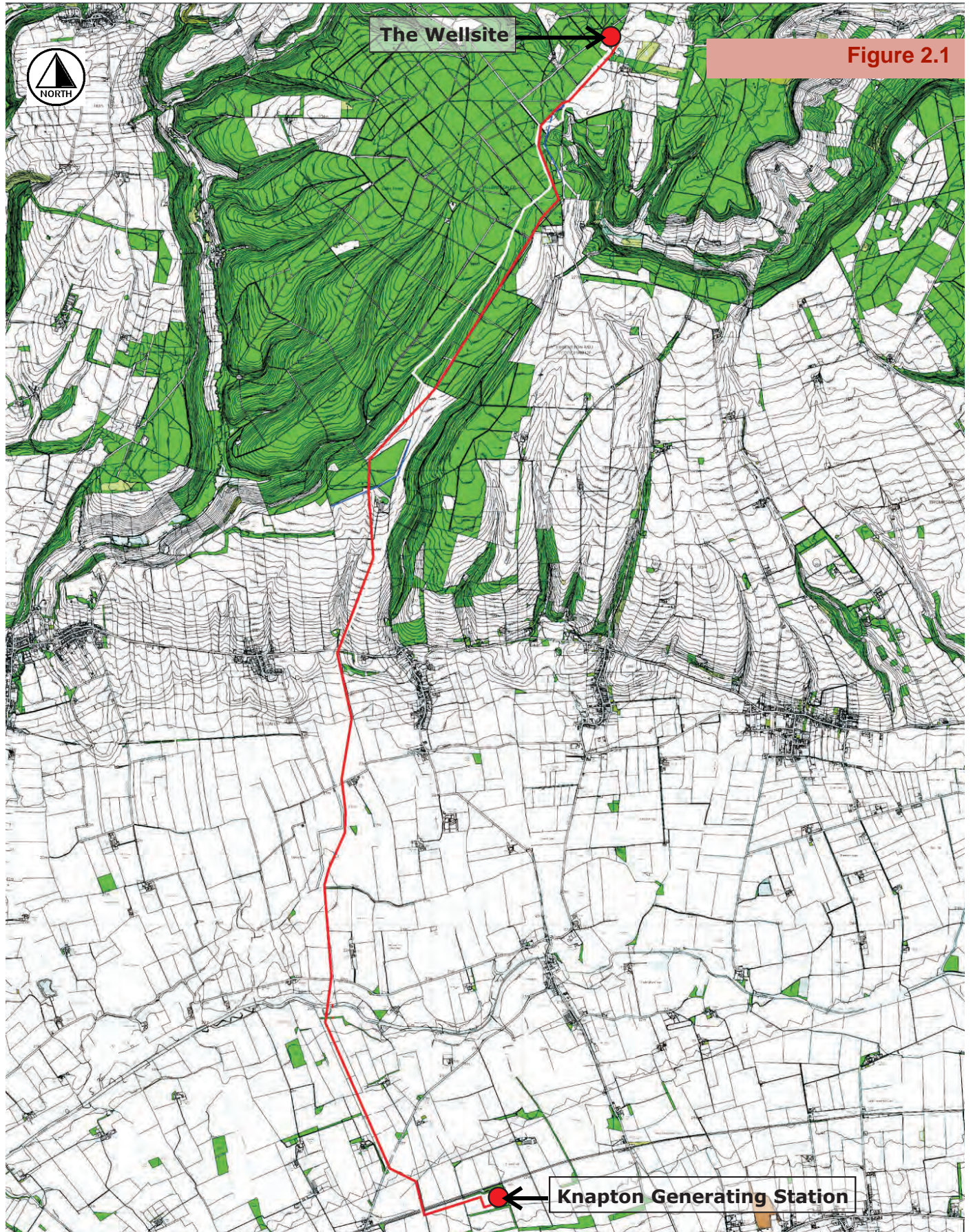


Figure 2.1

The Proposed Development is described in Chapter 4 of the Environmental Statement which accompanies the planning application. In order to understand how the design process has been followed, the Design and Access Statement also includes a description of the principal uses and the amount of development which is being applied for.

The Proposed Development seeks planning permission to carry out the following activities:

- ❑ Gas production from the Ebberston Moor 'A' Well Site; and
- ❑ Construction of one 8" diameter steel underground pipelines from the existing Ebberston Moor 'A' Well Site to deliver gas and associated liquids to the KGS at East Knpton where the natural gas will be used as fuel-gas to generate power.

The existing well site will be developed to allow for gas production as shown in **Figure 3.1**. It is anticipated that the volume of gas to be produced will be up to 15 million standard cubic feet per day (mmscf/d). In order to facilitate the construction and development of the Proposed Development, the following facilities listed below will be required:

- ❑ Construction compound;
- ❑ Lay down area for pipes;
- ❑ Workforce facilities – messing catering and offices;
- ❑ Security cabin;
- ❑ Parking spaces;
- ❑ Potable water tank; and
- ❑ 1MW natural gas fuelled electric generator.

The main equipment at Ebberston Moor 'A' Well Site will include:

- ❑ Gas well;
- ❑ Water disposal well;
- ❑ Site office;
- ❑ Fire water tank (50 cubic metres);
- ❑ Pipeline pig trap area;
- ❑ Water separator building;
- ❑ Gas fired heater;
- ❑ Water storage tank; and
- ❑ 1 MW Gas generator.

The gas, produced water and condensate will flow from

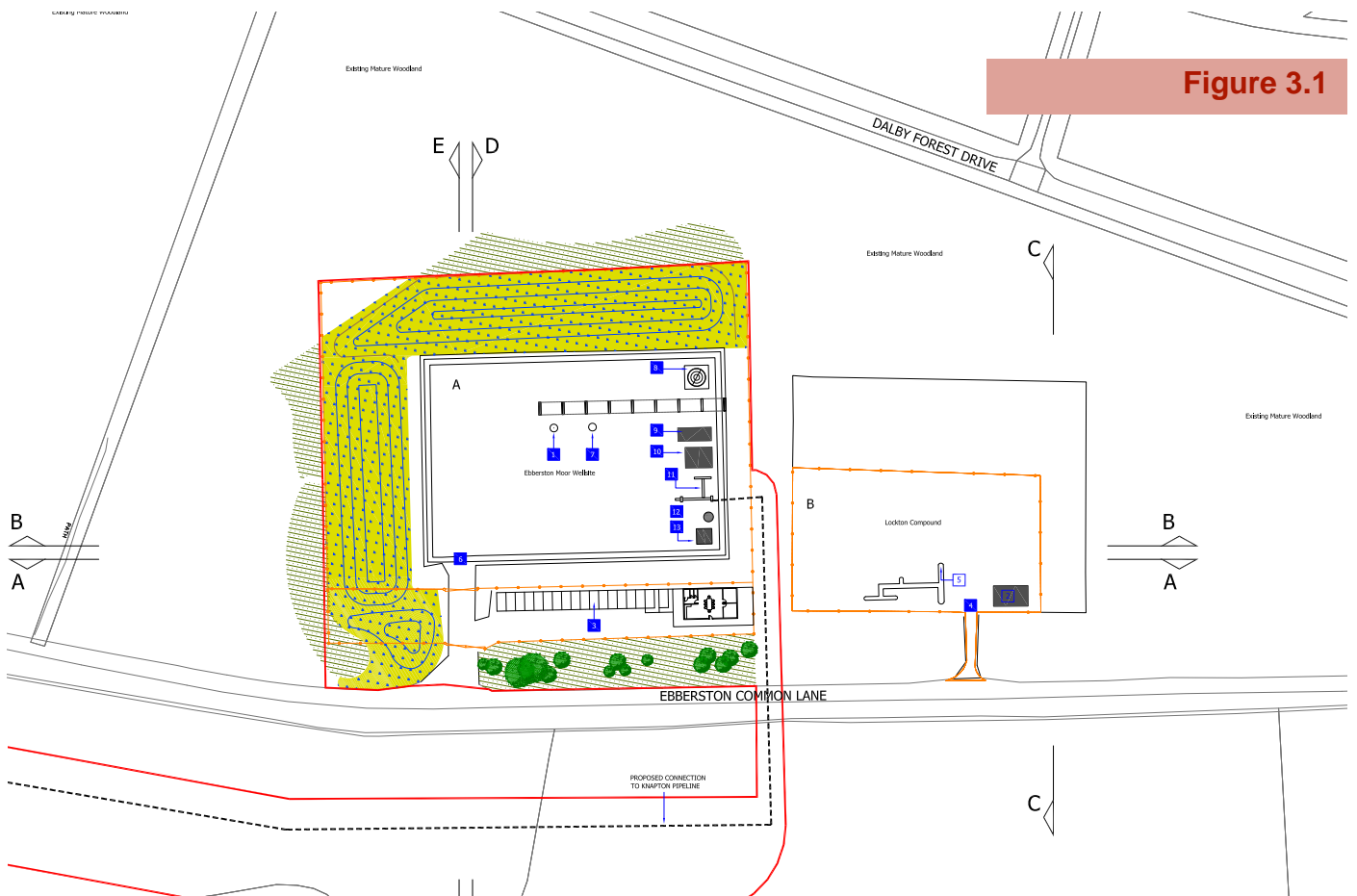


Figure 3.1

the well head on the Ebberston Moor 'A' well site through a flow line, into the three phase separator. The inlet separator will operate at the pipeline pressure with the rate of flow limited by the energy generating capacity at KGS. The three-phase wellhead separator will then separate the gas and condensate from the produced water, before transfer of the gas and condensate along the pipeline to the KGS. The wellhead pressure will provide the driving force for the liquid and gas flow. Pig launchers will allow the pipelines to be inspected and/maintained but will not be used during normal operation.

Pipeline from Ebberston Moor 'A' Well Site to KGS

The proposed length of the pipeline route is 15.3 km. One underground 8" diameter pipeline will be constructed from Ebberston Moor 'A' Well Site to KGS to transport gas and hydrocarbon condensate. The pipeline will be accompanied by a fibre optic cable within the construction working width.

The 8" diameter steel pipeline 15.3 km in length with a design pressure 100 barg, together with a fibre optic cable, will be laid from the Ebberston Moor 'A' Well Site to KGS using an open trench for the majority of the length. However, where crossing scheduled monuments, the railway, the River Derwent and major roads, auger boring, directional drilling or alternative suitable installation techniques where appropriate will be used to limit surface disturbance. The pipeline will be constructed in accordance with relevant national design codes, BS PD 8010-1-Code of Practice for Pipelines – Steel Pipelines on Land, 2004, and IGE/TD/1 Ed 4 – Steel Pipelines for High Pressure Gas Transmission, 2005.

KGS

The gas and condensate will be separated after arriving at KGS using existing facilities at the KGS. The gas will be used as fuel-gas to generate power while the condensate will be collected and then transported off site by tanker for appropriate disposal.

National Planning Policy

The Planning, Sustainability and Need Statement which accompanies the Planning Application sets out in detail the relevant National Planning and Energy policy framework and the policies in the Development Plan, which comprises, the North Yorkshire Minerals Local Plan, the Ryedale Local Plan and the North York Moors National Park Core Strategy and Development Policies.

The justification for the proposed development in terms of the relevant land use, siting and design policies is set out below.

The National Planning Policy Framework (NPPF) was published in March 2012 and sets out the government's planning policies for England and how these are expected to be applied. The NPPF places the emphasis on approving applications unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits. The principle objective of the NPPF is the presumption in favour of sustainable development which means having equal regard to social and environmental factors and economic growth.

Paragraph 142 of the NPPF covers minerals development and stresses the essential role that minerals play in supporting sustainable economic growth and quality of life. The Framework seeks to ensure that there is 'sufficient supply of material to provide the infrastructure, buildings and energy and goods that the Country needs'. The NPPF also acknowledges that 'minerals are a finite resource' and can only be worked where they are found'.

Paragraph 115 of the NPPF states that 'great weight should be given to conserving landscape and scenic beauty in National Parks'. Paragraph 116 states that 'planning permission should be refused for major developments in these designated areas except in exceptional circumstances and where it can be demonstrated they are in the public interest. Consideration of such applications should include an assessment of:

- The need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- The cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way; and
- Any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

Local Planning Policy

North Yorkshire Minerals Local Plan (1997)

When determining a minerals application Policy 4/1 of the Local Plan states that where appropriate the proposal should satisfy the following criteria:

- a) the mineral deposit on the application site has been fully investigated;
- b) the siting and scale of the proposal is acceptable;
- c) the proposed method and programme of working would minimise the impact of the proposal;
- d) landscaping and screening has been designed to effectively mitigate the impact of the proposal;
- e) other environmental and amenity safeguards would effectively mitigate the impact of the proposal;
- f) the proposals and programme for restoration are acceptable and would allow a high standard of restoration to be achieved;
- g) a high standard of aftercare and management of the land could be achieved;
- h) the proposed transport links to move the mineral to market are acceptable; and any cumulative impact on the local area resulting from the proposal is acceptable.

Policy 7/7 of the Local Plan states planning permission for the development of oil or gas reserves as yet undiscovered will only be granted where the development utilises existing available surface infrastructure or pipelines.

Policy 7/9 of the Local Plan states that proposals for the development of oil or gas resources which are likely to involve the bulk transport of material by road will only be permitted where developers can demonstrate that non-road transport is not feasible and that traffic generated will not have an unacceptable impact on local communities.

North York Moors National Park Core Strategy and Development Policies

The Proposed Development partly falls within the administrative control of the North York Moors National Park Authority.

Under Core Policy C 'Natural Environment, Biodiversity and Geodiversity' all developments, projects and activities will be expected to:

- a) Provide an appropriate level of protection to legally protected sites and species;
- b) Maintain, and where appropriate enhance, conditions for priority habitats and species identified in the North York Moors Local Biodiversity Action Plan;

- c) Maintain and where appropriate enhance recognised geodiversity assets;
- d) Maintain and where appropriate enhance other sites, features, species or networks of ecological or geological interest and provide for the appropriate management of these;
- e) Maximise opportunities for enhancement of ecological or geological assets; and
- f) Mitigate against any necessary impacts through appropriate habitat creation, restoration or enhancement on site or elsewhere.

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; and
- There is or will be sufficient infrastructure capacity to accommodate the demand generated by the development.

North York Moors National Park Authority Design Guide Supplementary Planning Document

NYMNPA Supplementary Planning Document Design Guide Part 5 New Agricultural Buildings was adopted on 21 February 2013. The Design Guide has acted as an informative when considering the design/materials of the buildings within the Proposed Development. It should be noted that the facilities are not intended for agricultural use but due to the sensitive nature of the site within a National Park, the form and materials will need to correspond with the surroundings. Therefore the 'agricultural vernacular' that is common in this area has been identified as the adopted theme for the various major components.

The Design Guide states that it is important to ensure that development proposals respect their context and are sensitively designed to protect and enhance the intrinsic character and local distinctiveness of the Park's

landscape. The Guide states in general design guidance that:

- Subject to operational requirements, the impact of a new structure can be reduced by locating it in close proximity to existing buildings within an existing group. Rarely will it be acceptable to locate an isolated free-standing structure within open countryside;
- Dark colours (dark green, brown, black or dark grey) are generally more acceptable as they complement the natural environment throughout the seasons and the different characteristics of daylight during the year;
- The range of materials on one building should be limited since too many contrasting finishes can create a cluttered appearance and the use of traditional materials should be considered;
- Chose materials which are appropriate to the climate and which will weather well over time; and
- Spaced vertical boarding known as 'Yorkshire Boarding' is functional, sustainable and usually more attractive than steel or concrete.

The aim of this Section is to explain and justify the design and access principles and concepts on which the development proposal is based.

The context to the project design is provided by:-

- ❑ The existing well site;
- ❑ Pipeline construction;
- ❑ Operational needs;
- ❑ The site context having particular regard to its landscape and surroundings; and
- ❑ Planning policy and sustainability considerations.

Use

The Proposed Development seeks planning permission for gas production from one wellhead at the existing Ebberston Moor 'A' Well Site, in addition, the construction of a 15.3 km long 8" diameter steel underground pipeline from Ebberston Moor 'A' Well Site to the existing Knapton Generating Station to deliver natural gas and condensate from where it will be used as a fuel-gas to generate electrical power.

The design of the Proposed Development has largely been determined by the existing Ebberston Moor 'A' well site. The precedent for using Ebberston Moor 'A' Well Site has already been established with the well site having been in operation. In terms of the site's planning history, the well site was first approved in 2006 and extended in 2008. A further permission was granted to retain the existing well site in 2011. Planning permission was then granted by the NYMNP on 18 June 2013 to drill a side track from the existing well within Ebberston Moor 'A' Well site and the drilling of up to two additional appraisal boreholes. The purpose of the appraisal wells is to help determine the commercial potential of the Ebberston Moor gas field and to commercially de-risk any future potential development of the gas field.

Alternative locations for the well site were considered as part of the original planning permission for the drilling of an exploratory borehole at Ebberston Moor (Application Number NYM/2005/0254/FL).

A study area with a 1 km radius from the existing Ebberston Moor 'A' Well Site was considered for investigating the potential for alternative well sites, as a well site within this area would potentially target the discovered gas accumulation within Ebberston Moor Gas Field with a reasonable chance of success. However there were no suitable alternative sites in evidence and any alternative site within a 1 km radius would still fall within the North York Moors National Park boundary.

Environmental considerations including visual impact, proximity to sites of archaeological importance and ecological constraints have also been taken in identifying the location of the Proposed Development. Ebberston Moor 'A' Well Site sits on level ground at the top of a plateau in a remote location in the North York Moors National Park which is well screened. Mature coniferous forest surround the Site to the west, south and north; to the east screening is provided by a narrow strip of vegetation and soil bunds that were installed prior to previous drilling and testing on the well site.

For the reasons stated above, the proposed use is considered consistent with the development plan policies, the existing operations carried out at the site and the local landscape character.

Pipeline Route

Alternative methods of treating the gas produced on the Ebberston Moor 'A' Well Site have been considered within the Design and Evolution chapter of the ES. The preferred option as per this planning application is to pipe and use natural gas as fuel at KGS.

A number of potential pipeline routes have been explored between Ebberston Moor 'A' Well Site and KGS. Penspen Limited was appointed in June 2012 by Viking UK Gas Limited to identify potential pipeline corridors between Ebberston Moor 'A' Well Site and KGS. The route corridors were identified as a "band of interest" up to 1 kilometre in width with the proposed route as the centreline, having taken into account major constraints, such as population areas, topography, scheduled or designated sites, major road and rail crossings.

One of the objectives of the study was to determine route corridor options and show why some route corridors have been disregarded for the optimum route corridor recommendation.

A number of criteria were adopted to determine the possible route of the pipeline. The chosen routes sought to avoid, as far as possible, any significant environmental designations, archaeological assets, local authority future developments and engineering features. Whilst current local plans were studied, no meetings or discussions took place with any third parties who may have had an interest in the route.

The route corridors avoided potentially difficult construction areas whilst seeking to minimise the distance between the Well Site and the KGS. The Penspen Report took the start of the pipeline as the proposed location of the Lockton 2 Well Site, approximately 1 km north of the Ebberston Moor Well Site.

As far as practicable, routes avoided running closely parallel to high density traffic routes, railways or overhead high voltage cables.

Site reconnaissance from public rights of way (i.e. “vantage point surveys”) was undertaken to support this process, verify the locations and determine the extent of constraints in order to confirm the route corridor options identified.

Three route option corridors were selected based on industry standard pipeline route design definition criteria, and a site reconnaissance survey carried out on each route option during June 2012. The overall corridor for the route options is restricted due to the proximity along the A170 of local communities, such as Thornton-le-Dale in the west, Allerston and Ebberston in the central corridor and Snainton to the east. These existing constraints and the possibility of further development expansion limit the viable options to the three main route options which are considered in Table 5.1 below:

- Route Option A – Western Alignment
- Route Option B – Central Alignment
- Route Option C – Eastern Alignment

Table 5.1: Advantages and Disadvantages of the Alternative Pipeline Routes

Route Options	Advantages	Disadvantages
Western Alignment (Route A)	<ul style="list-style-type: none"> • If a new natural gas pipeline to the NTS from a treatment plant at the KGS is to be implemented, this option would permit the incorporation of the pipeline in a shared easement for a distance of about 4km. 	<ul style="list-style-type: none"> • This route option is dictated by the northern section which essentially follows the route of the existing LTZ 450mm diameter gas distribution pipeline through Ebberston Low Moor Forest. The route would potential cross sensitive environmental resources and receptors such as archaeology and has the potential to have adverse environmental effects. However small diameter pipelines laid in the existing corridor should be possible. • The route option would potentially adversely affect forestry activities.
Central Alignment (Route B)	<ul style="list-style-type: none"> • This route option avoids conflict with forestry elements. • If a new natural gas pipeline to the NTS from a treatment plant at the KGS is to be implemented, this option would permit the incorporation of the pipeline in a shared easement for a distance of about 4km. 	<ul style="list-style-type: none"> • This route option crosses an area of archaeological features in the northern section. • In the south it is similar to and runs parallel to the Western Alignment, across environmental sensitive features such as the River Derwent flood plain, which possibly offers habitat to invertebrates

Eastern Alignment (Route C)

- This route option avoids conflict with forestry elements.
- In the south it takes a different route to the previous options and limits the crossing of the River Derwent flood plain to a minimum.
- This route option crosses an archaeological feature in the northern section.

The Penspen Report calculated Routes A and B to be 14.2 km whilst Route C was slightly longer at 15.0 km. The study found that the three routes had little difference between them. The principal engineering challenges were in the northern part of the pipeline route, which was common to all three route options. The section from the Well Site through the Dalby Forest lies close to the existing LTZ gas pipeline and therefore construction methods and working areas would be constrained.

Option A was found to have no obvious advantages over B and C, but did have the drawback that the length running along the LTZ easement was greater. Options B and C were of similar length, but C had one fewer road crossing. Inspection on the ground found that the slopes adjacent to the only major road crossing on these routes, the A170, were less pronounced on Option C, and the problems associated with side slopes were not as apparent for Option C as they were for Option B. It was also noted that the crossing of the only river associated with the route, the River Derwent, was narrower for Option C.

The Study found that if a pipeline was required to be constructed to carry conditioned gas from Knapton to the NTS line, Route Option B would provide the shortest alignment for a shared corridor.

The Study concluded that there is little to choose between Option B and Option C, either of which is acceptable. If it was not proposed to construct a new conditioned gas export line, Option C was marginally preferable. However if it is required to retain provision for a potential gas export pipeline, Option B provided the best opportunity for a shared corridor. On this basis Option B was recommended for selection. The report added that detailed routing will be required, once access to the land has been formally agreed, to establish the precise alignment throughout the route length, and specifically at key locations such as the A170 road crossing and the River Derwent crossing.

The Applicant's long term intention is to construct a gas pipeline from the KGS to the NTS. Consequently, Route B was chosen as the preferred route. The Applicant proceeded to identify those landowners and tenants who had an interest in the land along Route B (the Central Alignment) in order to agree access agreement for survey

work. Figure 5.1 identifies landowners along the proposed route between the Ebberston Moor Well Site and the KGS.

During negotiations with the various landowners and tenants along Route B, it became clear that a number were strongly opposed to allowing any access for environmental surveys to be undertaken. Discussions and meetings took place over some months but it was not possible to agree access across a number of landowners. The Penspen report did not take into account landownership issues and, in particular, the willingness of landowners to grant access rights to a pipeline crossing their land. Subsequently it was found that some of the landowners associated with the recommended 'Central Alignment' route were unwilling to agree to the pipeline crossing their land. Accordingly, it was necessary to realign the pipeline route to reflect landowner sensitivities. Consequently, the decision was taken to identify a different alignment which avoided those particular landowners.

As a result, a variation of the 'Western Alignment' has formed the basis for the chosen pipeline route. Figure 5.2 shows the initial pipeline route and the land ownership. The route evolved as a result of ongoing negotiations with landowners, the outcome of environmental assessments and walk-over surveys and the need to take account of existing and permitted pipelines, notably the LTZ pipeline between Pickering and Whitby and the Ryedale Gas Project pipeline between the Ebberston South Well Site and the proposed gas processing facility at Hurrell Lane, Thornton-le-Dale. Figures 5.3 and 5.4 show how the route has evolved as a result of these factors.

The chosen route (Figure 5.5) avoids crossing ponds with potential for great crested newts. However, it will need to cross Givendale Rigg, a Scheduled Monument close to Givendale Head Farm. The effects of crossing the Scheduled Monument will require mitigation in order to avoid an adverse effect. The construction activities associated with the pipeline will potentially affect forestry activities which will be minimised through appropriate mitigation measures. The impacts associated with the Proposed Development and the appropriate mitigation measure are discussed in more detail in the accompanying ES.

Figure 5.1

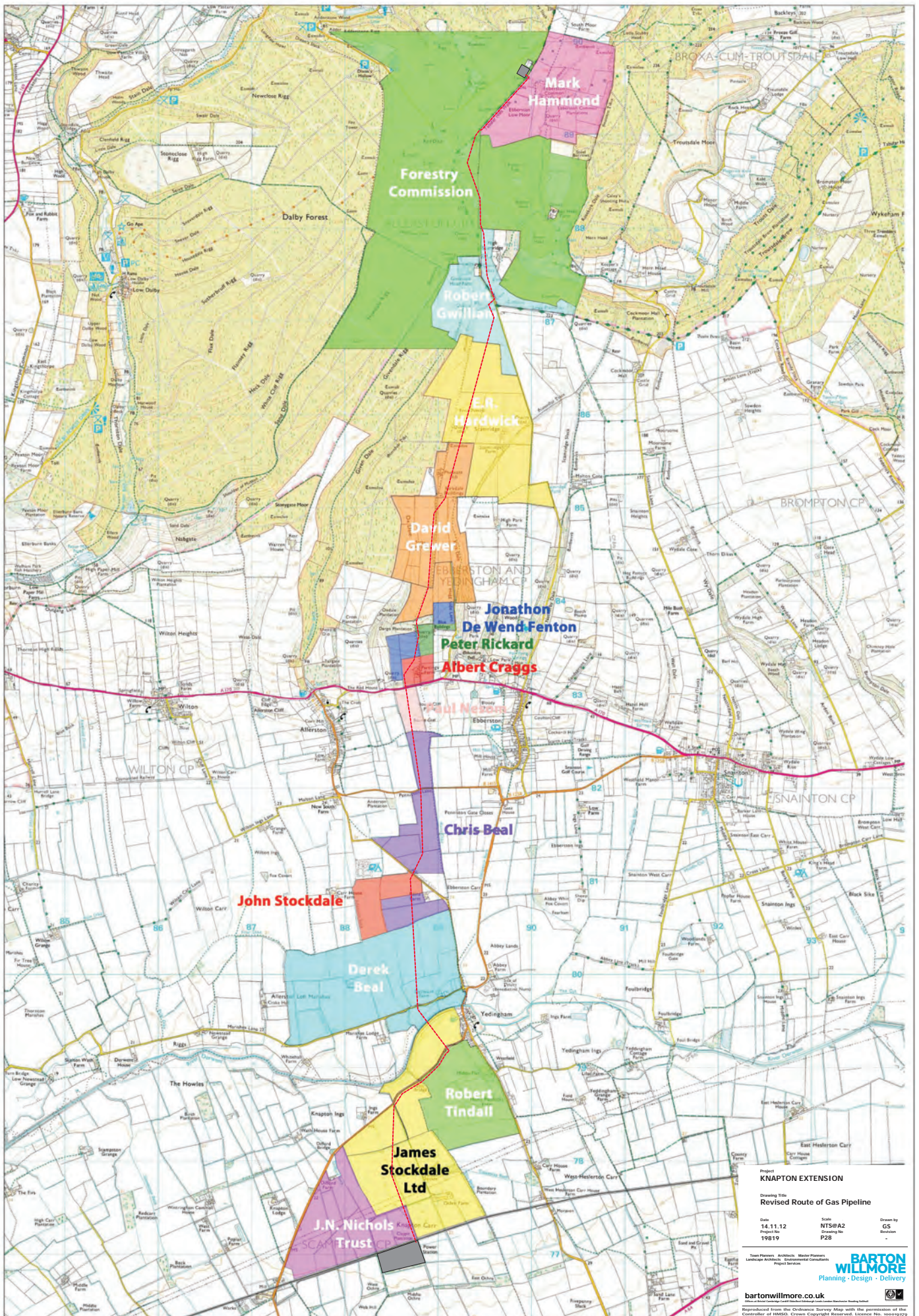


Figure 5.2

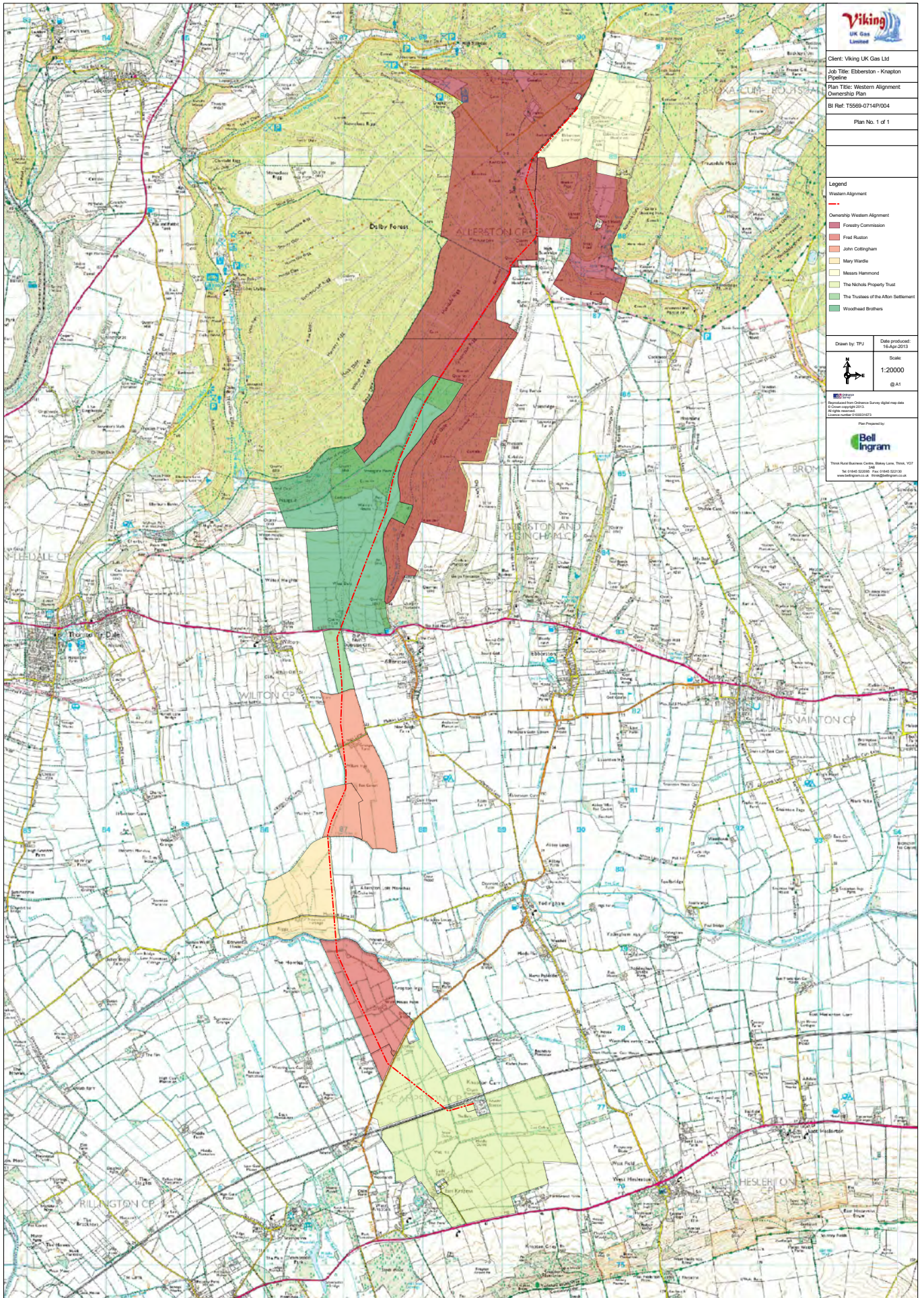


Figure 5.3

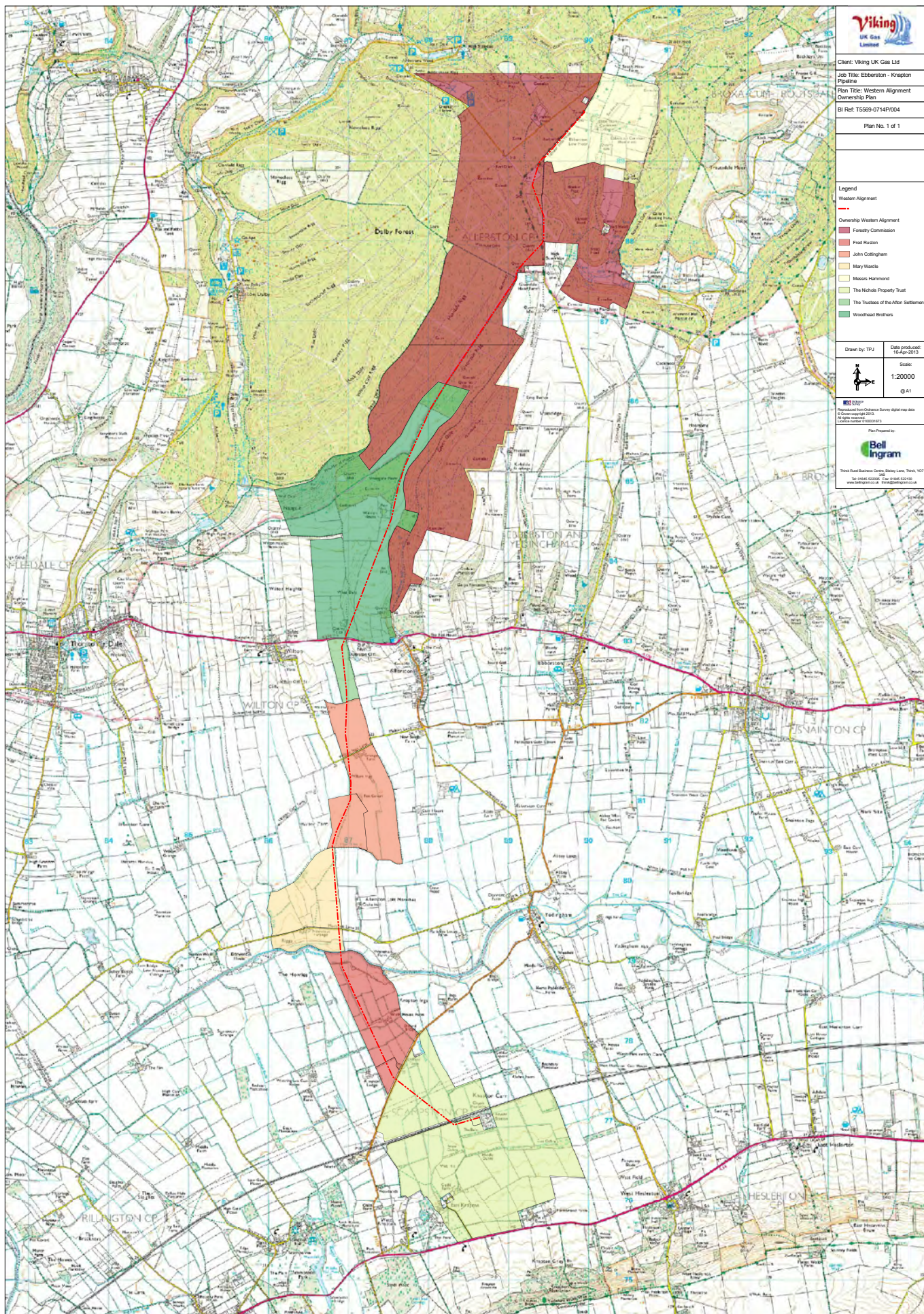


Figure 5.4

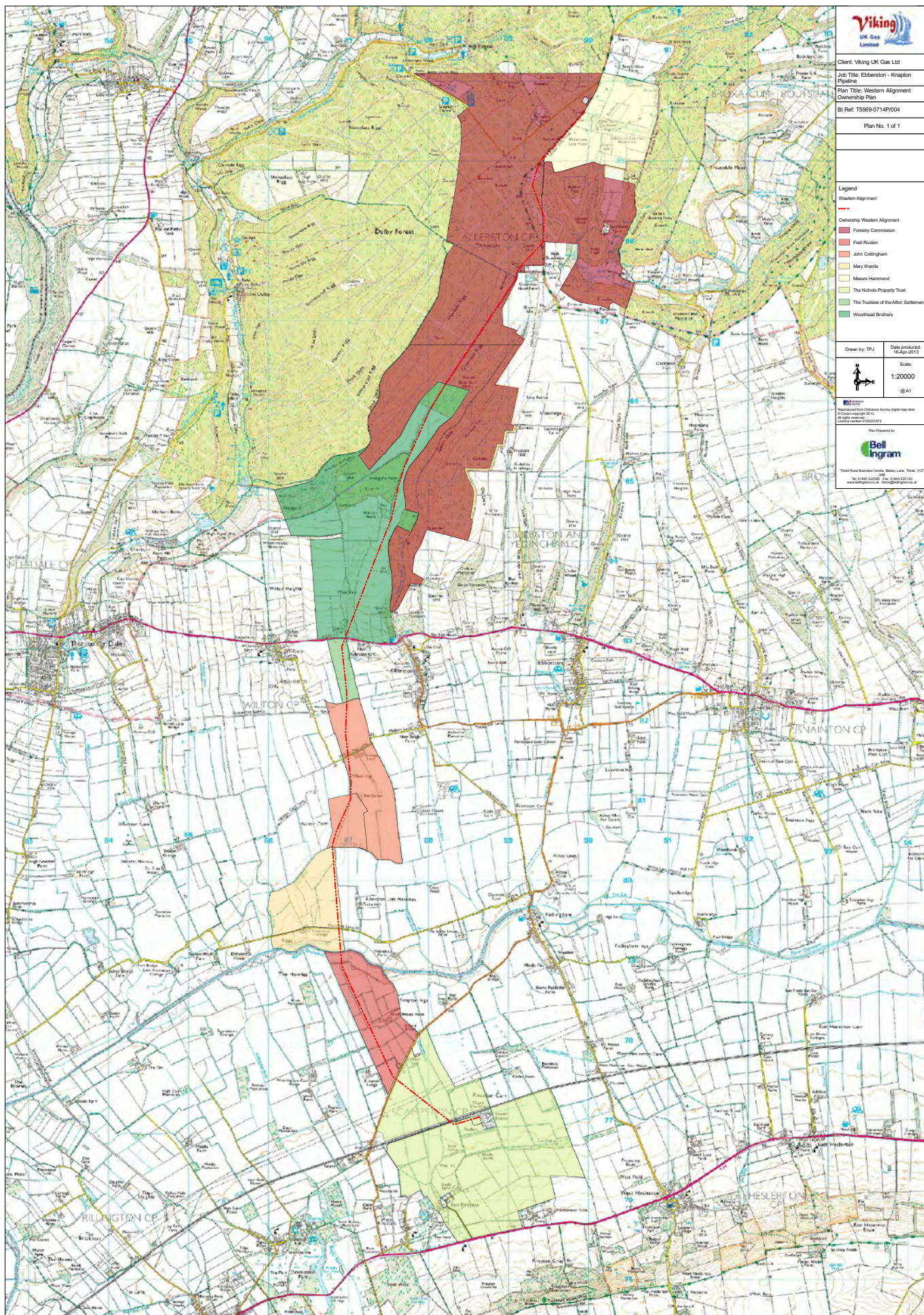
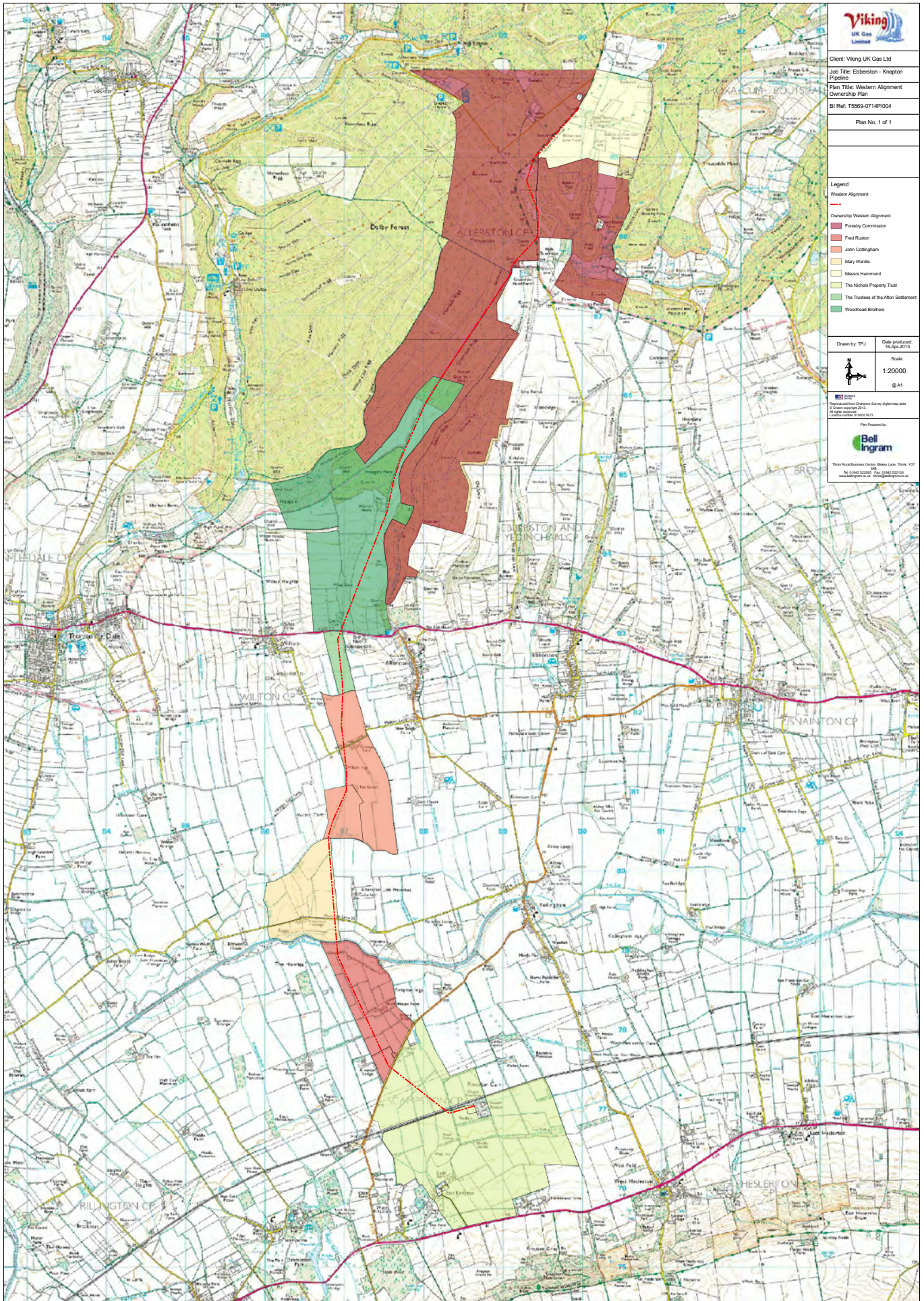


Figure 5.5



The considerations and constraints within the application site which have influenced the design evolution of the Proposed Development are set out in detail in Table 5.2.

Category	Sensitive Receptor/Land Use
Residential/Buildings	<ul style="list-style-type: none"> • Settlements including: <ul style="list-style-type: none"> - Scamridge; - Allerston; - Yedingham; - Wilton and - Knapton. • Individual properties including: <ul style="list-style-type: none"> - South Moor Farm; - Jingleby Thorn; - Ebberston Common House; - High Scamridge; - Givendale Head Farm; - Warren House Farm; - The Elms; - Low Farm; - Newstead Grange; - Wath House Farm; - Elm Tree Farm; - Grange Farm; and - Cliff Edge Farm.
Ecological Features	<ul style="list-style-type: none"> • Troutsdale and Rosekirk Dale Fens SSSI; • Nabgate SSSI; • River Derwent SAC and SSSI; • North York Moors SSSI, SAC and SPA; • Eller's Wood and Sand Dale SAC and SSSI; and • Flora and fauna within the Assessment Site and its vicinity.
Cultural Heritage	<ul style="list-style-type: none"> • Scheduled Monuments; • Listed Buildings; and • Archaeology.
Landscape and Views	<ul style="list-style-type: none"> • North York Moors National Park; • Wolds and Fringe of Moors Areas of High Landscape Value; • Dalby Forest; • Trees and hedgerows within and surrounding the Assessment Site; and • Views towards the Assessment Site.
Water Resources	<ul style="list-style-type: none"> • Ditches, drains, streams and the River Derwent within the Assessment Site; • Corallian aquifer;
Transport Infrastructure	<ul style="list-style-type: none"> • Vehicles, pedestrians and cyclists using local highway infrastructure including: <ul style="list-style-type: none"> - Ebberston Common Lane; - Ebberston Lane; - A170; - Wilton Ings Lane;

	<ul style="list-style-type: none"> - Marishes Lane; - B1258 Malton Road; - Unmarked roads; - Dalby Forest Drive; - Tabular Hills Walk; and - Public Rights of Way.
Noise	<ul style="list-style-type: none"> • Ebberston Common Farm; • South Moor Farm; and • Jingleby Thorn.
Air Quality	<ul style="list-style-type: none"> • Bridestones; • High Farm; • South Moor Farm; • Bickley Gate Farm; • Troutsdale Lodge; • Ebberston Common House; • Manor House; • Broad Head Farm; • Hern Head House; • High Scamridge Farm; • Stoneclose Campsite; and • Jingleby Thorn.

Table 5.2: Key Considerations and Constraints

The construction working width for the pipeline will be 30m across as shown on **Figure 5.6**. The working corridor will be required to allow for the laying down of pipe work, the movement of construction vehicles and the use of machinery required for the construction of the pipeline. The cross section for the pipeline and its working corridor is shown on **Figure 5.7**. The working width has been set at 30m to minimise the impact upon the surrounding landscape and the National Park.

During construction of the pipeline, lengths of pipe will be strung out along the line parallel to the proposed trench. The pipes will then be welded together to make a continuous pipeline with all the welds subject to inspection and non-destructive test. Once construction has been completed, a 10m easement will be maintained during the operational lifetime of the proposed pipeline for maintenance purposes.

Topsoil and subsoil will be stripped and left in individual rows along the edge of the construction working corridor to be distributed on completion of the construction activities.

A trench will be excavated to a depth sufficient to provide in excess of 1m cover of the pipe. The depth of the pipeline has been set at 1m to avoid any modern farm machinery potentially striking the pipeline. The pipeline will be lowered into the trench using side boom tractors or equivalent plant. The trench will then be backfilled with the excavated subsoil.

The final cover of topsoil will be crowned over the pipeline to account for future settlement. The topsoil will then be ploughed back into the rest of the field in due course.

Amount

The total site application area is 47.76ha of which 17.27ha is in the National Park and 30.49ha lies outside of the National Park.

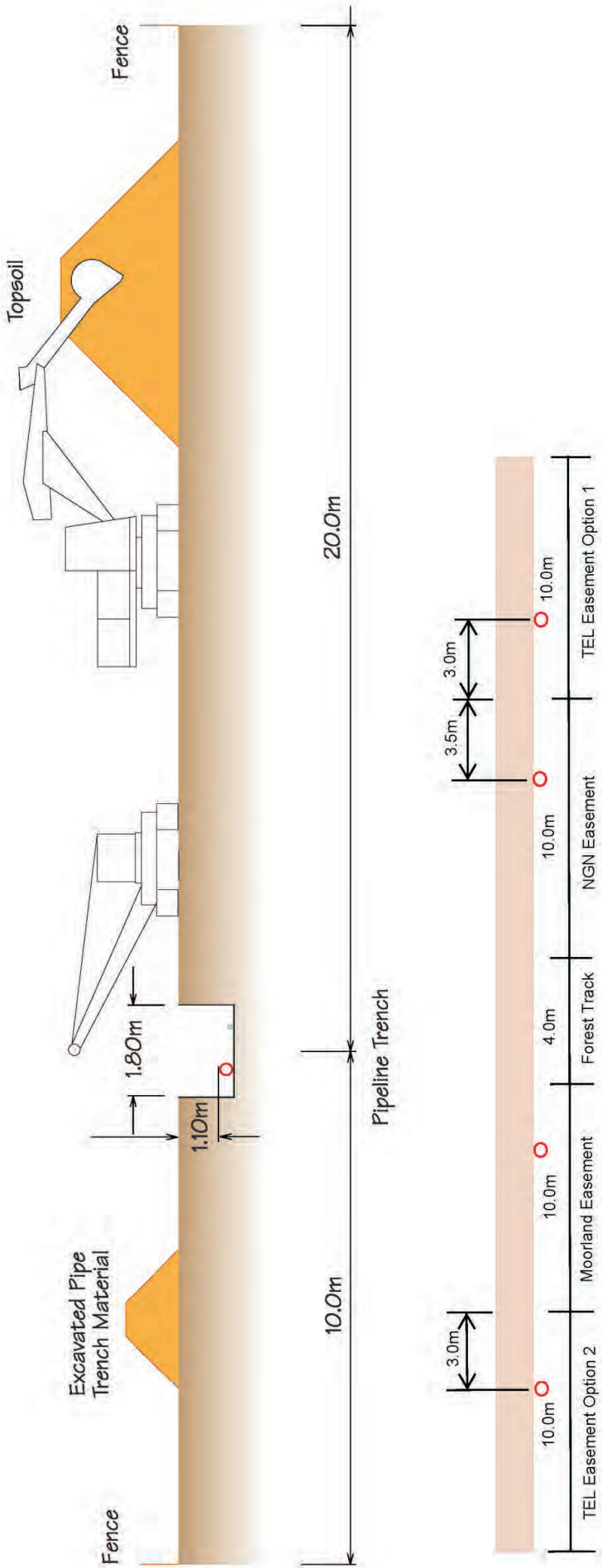
The main components which form the Proposed Development together with their corresponding areas are listed below:

- The existing Ebberston Moor 'A' Well Site – 1.20ha; and
- The proposed pipeline from the Ebberston Moor 'A' Well Site to the KGS – 46.56ha.

In addition, the following structures/buildings together which also form part of the Proposed Development with their corresponding floorspaces are provided listed below:

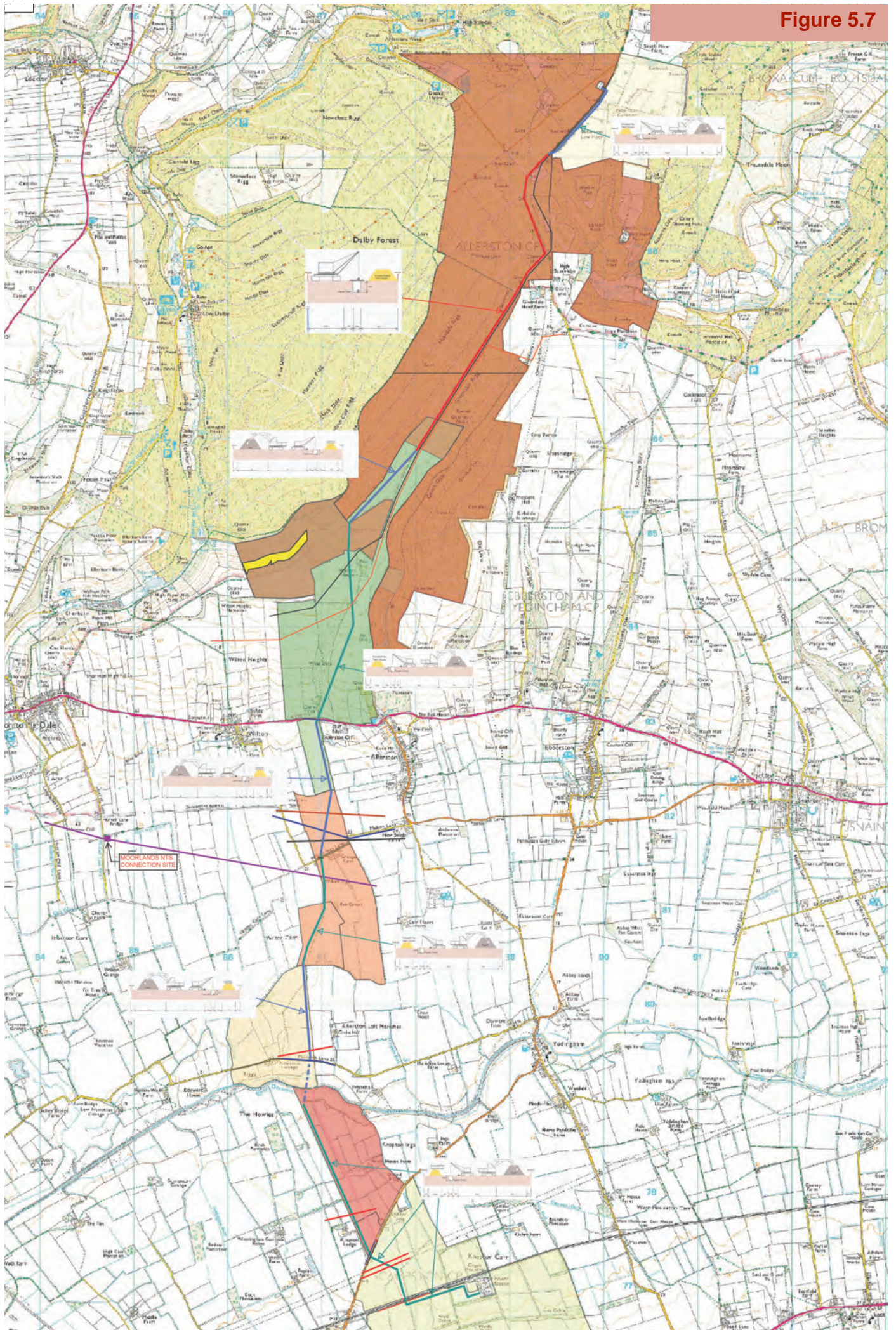
- Site Office – 112m²
- Inlet Separator – 35.5m²
- Gas fired heater – 31.3m²
- Water storage tank – 37.9m²

Figure 5.6



DALBY FOREST TRACK EASEMENT CONFIGURATION

Figure 5.7



The proposed layout of the structures/buildings are as indicated on the 'Proposed Site Layout' drawing.

Layout

The layout of the Proposed Development is dictated by the existing Ebberston Moor 'A' website as a result of the existing facilities and structures already present.

The well site was designed so that if future planning permission for use of the well site is secured, the Applicant could construct a gas pipeline to connect Ebberston Moor 'A' Well site with Knapton Generating Station with minimal changes to the layout of the well site.

The existing well site is well screened on three sides; the south west, north west and north east by existing coniferous forest; to the east screening is provided by soil bunds that were installed prior to previous drilling and testing on the well site.

Scale

The scale of the Proposed Development reflects its purpose and intended generating capacity. The approximate heights of the main building/structures are set out in **Table 4.3** below:

Site Office	3.5m
Inlet Separator	1.8m
Gas fired heater	1.8m
Water storage tank	4.8

Appearance

The North York Moors National Park Design Guide Part 5 'New Agricultural Buildings' has provided the design informative for The Proposed Development. Where possible the Guide has been taken into consideration to inform the appearance to ensure the form and materials chosen harmonise the structures within the surroundings.

Site Office	<p>Single storey mono-pitch structure.</p> <p>Brick/stone base plinth. Inner skin with linear tray or composite panel. Outer timber weather boarding layer with vertical joints to reflect Yorkshire Boarding. Roofs to comprise of profiled cladding system in dark grey. Proposed windows and doors in aluminium system finished in grey.</p>
-------------	---

Inlet Separator	Galvanised base coat with a grey or dark brown finish to the enclosure.
Gas fired heater	Galvanised base coat with a grey or dark brown finish to the enclosure.
Water storage tank	Galvanised base coat with a grey or dark brown finish to the enclosure.

Landscaping

The landscape strategy for the Proposed Development has been designed with particular consideration to the topography, landscape and ecological constraints and opportunities identified on the Application Site.

It is considered that the Proposed Development will not change the character of the existing Ebberston Moor 'A' Well Site as it already functions as a gas well site. In addition, the landscape effects resulting from the pipeline are limited to loss of field boundary hedgerows and any associated trees along its 30m working corridor. Once operational the only above ground elements of the Proposed Development will be contained within the well site which is enclosed by the Dalby Forest and as such screens views from within close proximity.

The landscape objectives for mitigating the effects of the Proposed Development are as follows:

- Retention of existing hedgerows and woodland between the boundary of the well site and Ebberston Common Lane to keep an established screen between activity within the well site and adjacent sensitive receptors, all trees to be retained will be protected in accordance with BS5837:2012 - Trees in Relation to Construction;
- Restoration of the agricultural landscape, through which the pipeline route passes once the pipeline has been completed to equivalent quality to that prior to construction; and
- Establishment of the landscape proposals at an early stage of the construction phase where possible -i.e. reinstate hedgerows and field boundaries immediately following construction.

Please refer to the Landscape Strategy Plan for comprehensive details of the existing planting to be retained, removed, and proposed.

Access & Movement

Access to Ebberston Moor 'A' Well Site is from the A170 via Ebberston Lane and Ebberston Common Lane. Access to the pipeline route is from the local road network including: A170; B1415 Penniston Lane; Allerston Lane; Marishes

Lane and B1258 Malton Road where the pipeline route crosses these roads.

Whilst no long-term road closures are envisaged, short-term closures may be required in order to establish and remove large items of building plant and to allow modifications to the roads and their junctions to occur especially when the pipeline is construction underneath them.

In order to minimise the amount of construction vehicles using the public highway, the following factors will be considered:

- Re-use and recycling of construction materials;
- Control of wastage;
- Description of permitted routes for transit of materials, avoiding sensitive areas;
- Shared materials delivery opportunities;
- On demand ordering;
- Phased delivery times throughout the working day; and
- Car sharing for operatives.

All construction traffic entering and leaving Ebberston Moor 'A' Well Site will be closely controlled and will enter via Ebberston Common Lane. Vehicles accessing the pipeline corridor will be controlled and will only be able to access it from designated controlled access points. Vehicles travelling to and from the Site will travel via designated routes, which will have previously agreed with NYCC, NYMNPA and other relevant authorities and bodies prior to construction commencing.

Site operatives will be encouraged to car share if transport is not provided by the employer. Car parking arrangements for site operatives within or adjacent to the work compound and laydown areas will be enforced in order to avoid uncontrolled parking on public highways.

Eighteen car parking spaces are already provided at Ebberston Moor 'A' Well Site which will be retained and used during the Proposed Development.

The Design and Access Statement describes the components and factors which have directly influenced the design of the Proposed Development. It describes the proposed elements of the planning application, including the amount of development proposed, the use and the scale of equipment proposed to be located.

The relevant design and access policies contained within both national planning policy guidance and statements and in the Development Plan are set out in Chapter 2. The Proposed Development is discussed against these policies to determine the compatibility of the proposal.

The Design and Access Statement should be read in conjunction with the Planning Statement, the Environmental Statement, the Statement of Community Involvement and the Safety Report.

The Proposed Development forms part of a sustainable energy supply for the UK. It assists in ensuring that the UK has a long-term sustainable energy supply that reduces reliance on the import of gas with its financial and political uncertainties.

The estimated reserves at the well site are expected to generate relatively large amounts of gas up to 15 mmscfd. The produced gas will make a small but important contribution to the need for gas in future years

Extensive consultation has been undertaken with North York Moors National Park Authority and relevant statutory consultees to ensure that the Environmental Impact Assessment assesses all known likely environmental effects arising from the Proposed Development. The Environmental Statement concludes that the Proposed Development will not have a significant adverse environmental effect, subject to the implementation of appropriate mitigation measures.

**Ebberston Moor - Knapton Gas Pipeline,
Ebberston, North Yorkshire**

Barton Willmore LLP

Elizabeth House
1 High Street
Chesterton
Cambridge
CB4 1WB
www.bartonwillmore.co.uk

Tel:



Fax:

Project Ref:	19819/A5/Reports/ Design & Access Stmt	19819/A5/Reports/ Design & Access Stmt
Status:	Draft	Final
Issue/Rev:	01	02
Date:	July 2013	August 2013
Prepared by:	J Bailey/G Simkins	J Bailey/G Simkins
Checked by:	P Foster	P Foster

Date: August 2013

Copyright

The contents of this document must not be copied or reproduced in whole or in part without the written consent of Barton Willmore LLP

Reproduced from the Ordnance Survey Map with the permission of the Controller of HMSO. Crown Copyright Reserved. Licence No. 100019279..

All Barton Willmore stationery is produced using recycled or FSC paper and vegetable oil based inks.

