Heritage Impact Assessment for the proposed heightening of a consented wind turbine from 35m to 45m at Howns Farm, near Consett, Co. Durham

Archaeo-Environment for The Shaws, Howns Farm

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Summary

This heritage impact assessment provides an assessment of the potential effects on the historic environment of the heightening by ten metres of an already consented wind turbine at Howns Farm near Consett in Co. Durham. Planning permission was granted to erect a 35m high wind turbine on a pasture field on the farm in early 2012, but the applicant now wishes to extend the turbine height to 45m. The application includes a site entrance, access track, hard standing and transformer. This report sets out to assess the impact of the turbine if it is extended to 45m in height on the setting of heritage assets. It does not cover any physical impact on archaeological remains on the site as this was previously dealt with as part of the earlier planning application and no further information has been requested by the County Council.

The proposed turbine is located in an enclosure field which is little altered from the 19th century, and which is bounded by gappy unmaintained hedgerows. The field pattern to the north is more altered with some merging of field boundaries and then, only two fields to the north, the land is largely reclaimed from the Consett Iron Works whose fingers of industry nearly reached Howns Farm. To the south of the proposed turbine site, the rate of change on the historic landscape is much slower and the dispersed settlement pattern and enclosure field boundaries have survived to a greater extent. As the proposed heightened turbine is located at the point where the landscape has undergone more rapid change since the 19th century, it sits in an area of reclaimed industrial/rural fringe which is less sensitive to further change and so the proposal will have an acceptable level of impact on the historic landscape character.

There are five listed buildings within 2km of the proposal. Two of these are the farm buildings at High Knitsley which have no identified special interest extending as far as the turbine site c.800m away. Similarly, Christ Church Consett, listed grade II, is separated from the turbine site by intervening development and topography, and has no heritage interest which extends to nearly 2km away.

Howns Gill Viaduct (Grade II*) and a railway accommodation arch for the Knitsley Road, have associations with the historic railway network and these associations also extend to a number of non designated heritage assets such as Hownsgill Caves and the site of the workers’ cottages and inclines below the viaduct. The viaduct’s special architectural interest will be unaffected, but there is some limited impact on its artistic appreciation. Historic images of the viaduct are mostly taken from the gorge where the graceful arches are best.
appreciated (and where it was safest to admire the structure when still in use) and such views will be entirely unaffected by the proposal. However from the top of the viaduct, where a number of recreational routes now take advantage of the disused railway line, there will be views across to the turbine site and to more distant constructed wind farms. However these views will not diminish our understanding of the viaduct or its associations with the railway heritage. However the installation of suicide fencing will have an impact on the appreciation of such views.

Beyond 2km there is little that has the grandeur or prominent landscape position that is likely to be adversely affected by the proposal. There are two landscaped parklands partly within the ZTV at Woodlands and Greencroft, but they are of local importance and not designated. Their significance does not include designed views which include the proposed turbine. At Woodlands, the significance does include associations with the scheduled Roman aqueduct and Thomas White, but these associations will not be affected. The presence of such plantations at Woodlands (and indeed at Greencroft), screen the grounds from the outside world and so the heightened turbine will not affect their significance.

The nearest scheduled monument is part of the Roman aqueduct used at Woodlands and this in turn links to Lanchester Roman fort. Its significance is largely based on its archaeological interest which will be unaffected.

Two Conservation Areas appear in the ZTV, but in reality Blackhill is not visible due to intervening development and Iveston’s views towards the turbine are so distant and across distant urban development, that it has no impact on the architectural interest of the village which is mainly to be found in the plan form and topographic position within the landscape. In terms of key views from the village, it is the nearer views that are more important on the east and the distant views to the west – away from the turbine site.

Other sites beyond 5km have been assessed because of their hilltop positions or high level of designation. St Andrew’s on Greymare Hill for example has a view across the distant landscape towards the proposed turbine, but this is across an existing array of turbines which are far closer and larger. The scheduled remains at Muggleswick may also have a distant view, but this is across Castleside and trees on the field boundaries nearby effectively screen out these distant views.

The proposal therefore has no adverse effect on the setting of any of the heritage assets within a 10km radius.
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Report author: Caroline Hardie, Archaeo-Environment Ltd
Fieldwork: Caroline Hardie and Niall Hammond, Archaeo-Environment Ltd

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1.0 Introduction

1.1 This heritage impact assessment provides an assessment of the potential effects on the historic environment of an application (1/2012/0510), to heighten from 35 to 45 metres an already consented wind turbine at Howns Farm near Consett in Co. Durham (1/2011/0569/DM). The turbine is located at NZ 10338 49254.

1.2 Historic environment is a broad inclusive term for all aspects of the environment which have been created intentionally or fortuitously by human action over previous centuries and which by its historic, archaeological, architectural or artistic interest has a level of significance. Each individual component of the historic environment such as an archaeological site or historic building is known as a heritage asset (HA).

1.3 The application site is part of Howns Farm, located to the north east of the Howngill Viaduct and south of Howngill Industrial Estate, near Consett, County Durham. The turbine is located approximately equidistant between Consett town centre and Castleside, and sandwiched between the road linking The Grove to Knitsley and the Lanchester Valley Walk.

![Figure 1. Site location (Not to scale). Turbine location within red circle. © Crown copyright 2013. All rights reserved. Licence number 100042279.](image)

1.4 Planning permission was granted to erect a 35m high wind turbine on a pasture field on the farm in early 2012 (1/2011/0569/DM), but the applicant now wishes to extend the turbine height to 45m. The application includes a site entrance, access track, hard standing and transformer. This report sets out to assess the impact of the turbine if it is extended to 45m in height on the setting of heritage assets. It does not cover any direct impact on archaeological remains on the site as this was previously dealt with and no further information has been requested by the County Council.
1.5 The terminology used in this report is derived from the National Planning Policy Framework (NPPF) published by the Department for Communities and Local Government (DCLG) in 2012, hence the use of terms such as *significance* is particular to this report, and should not be confused with terms such as *significant impact* as utilised in EIA regulations. Terminology used in this chapter is defined where required.

1.6 The aim of this assessment is to identify heritage assets within the study area, to describe that which is significant about them, and then to identify how the proposed development will impact on that significance both directly from physical factors such as developing the site, and indirectly on areas of significance such as setting relating to heritage assets within and beyond the development boundary.

1.7 All heritage assets have a level of importance, ranging from those which are locally valued to those of regional or national importance. Some of these have been formally designated as scheduled monuments, listed buildings or conservation areas, or included on registers of battlefields or historic parks and gardens. Within the study area heritage assets of all levels of importance are considered in this assessment but the impact of the proposed development upon designated assets (or those currently undesignated but of demonstrably equal significance), is likely to be greater than on none designated assets due to the higher sensitivity of the former. In determining the acceptability of the development the weighing of benefits to wider environmental and economic factors over any loss of heritage significance is a factor for consideration.

1.8 The importance of a heritage asset should not be confused with its significance. Importance concerns the asset’s relative merits when compared to other assets of a similar type and may reflect its rarity, or excellent survival. Importance may be graded as nationally, regionally or locally important and for the highest ranked sites warrant designation such as a listed building or scheduled monument. Significance is how any heritage asset, whether designated or not, may be understood and is a measure of the asset in terms of its historic, archaeological, architectural or artistic interest. The significance of any asset is likely to be shared unequally between these categories, but identification of what makes it significant is an essential step to assessing any impacts upon it from a development proposal.

2.0 Planning Context

2.1 The government’s policy on development and the historic environment is set out within the NPPF which was published on 27 March 2012, replacing all previous Planning Policy Statements. Prior to the publication of the NPPF, the previous policy on the historic environment was contained in PPS 5 (2010) and supplemented by a practice guide produced by English Heritage, ‘PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide (2010)’. The government and English Heritage have not formally agreed a methodology to meet the NPPF, but the Practice Guide which was originally published with PPS5 has not been
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withdrawn. Therefore the approach to assessing significance in this document follows the approach outlined in the original PPS5 practice guide.

2.2 The central theme of the NPPF is the ‘presumption in favour of sustainable development’, set out in twelve core land-use planning principles which underpin both plan-making and decision-taking. Although matters relevant to the historic environment are scattered throughout these principles, particularly design, urban and countryside policies, it is the section on Conserving and Enhancing the Historic Environment which specifically supersedes PPS 5, whilst following that document’s significance-led approach to decision-taking.

2.3 Within the NPPF, the overall approach to making planning decisions requires an understanding of the significance of a heritage asset before decisions are made relating to the future management of that asset. The government’s objectives in paragraph 128 of the NPPF state that applicants should be required to describe the significance of any heritage assets affected including any contribution made by setting. Significance is defined as the value an asset has because of its heritage interest, while defining heritage interest as architectural, archaeological, historic or artistic interest.

2.4 The NPPF states that heritage assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance. Three key factors are identified to be taken into account by LPAs when considering planning matters affecting heritage assets:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- the desirability of new development making a positive contribution to local character and distinctiveness.

2.5 Para 132 of the NPPF places ‘great weight’ on the conservation of historic assets when considering the impact of proposed development, and requires clear and convincing justification of any harm or loss. It is clear that substantial harm to or loss of Grade II listed buildings or designated parks & gardens should be exceptional, and substantial harm to designated heritage assets of the highest significance (Grade I, II*, SM), should be wholly exceptional.

2.6 The consideration of the contribution of setting to the significance of heritage assets is referred to on several occasions in the NPPF where setting is defined as ‘The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral’.
2.7 Further guidance pertinent to this study regarding setting was produced by English Heritage in 2011, ‘The Setting of Heritage Assets’. The guidance notes that consideration of setting is necessarily a matter of informed judgement, and identifies its role as making sure this takes place within a clear framework and is as transparent and consistent as possible. In this study setting is therefore considered with this document in mind while addressing how it contributes to the significance and understanding of the various heritage assets in question. It should be clearly noted that visibility is not a sole consideration in determining setting.


2.8 The act allows for the designation and protection of individual historic buildings which may be listed at varying grades of importance. In addition the 1990 act also provides protection under section 66 for the setting of listed buildings.


2.9 This act allows for the identification, designation and protection of individual and associated groups of archaeological monuments. It places great controls on actions affecting the sites themselves but does not specifically afford protection of the setting of such monuments.

Development Plan/ Local Plan Policies.

2.10 A number of historic environment related policies have been saved from District Local Plans and where there are no relevant policies, the National Planning Policy Framework will apply.

2.11 Policy EN1 of the Derwentside Local Plan relates to development in the countryside which will only be permitted where it benefits the rural economy, helps to maintain or enhance landscape character. Proposals should be sensitively related to existing settlement patterns and to historic and landscape resources.

2.12 Policy EN7 on the Protection of Historic Parklands This sets out to protect the character of a number of named parklands, some of which are within the ZTV of this proposal, namely: Greencroft Park and Woodlands Hall. Policy EN13 covers development within Conservation Areas, but does not cover development outside their boundaries which might have an effect of their special character.

2.13 Policies EN17-18 cover alterations, extensions to listed buildings and demolition of listed buildings but do not cover impact on their settings and so are not relevant to this report. Policy EN19 covers the protection of sites and settings of Ancient Monuments and Archaeological Features and this is relevant to this proposal with the nearest scheduled monument being 3.8km away.

3.0 Methodology

3.1 The following section describes the method used for identifying and assessing the historic environment assets potentially affected by the proposed development.
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3.2 The following methodology was agreed in scoping with the conservation officer at Durham County Council.

3.3 The overall historic landscape character of the vicinity of the turbine is first of all identified and assessed in order to gauge the sensitivity of the landscape to change. This is done by comparing the current field and settlement pattern to that portrayed on historic mapping. A landscape which has undergone considerable change is considered to be less sensitive than a landscape which has retained much of its historic character and features.

3.4 The next stage is to assess the impact on individual heritage assets and their settings. This assessment does not consider the direct physical impact on heritage assets by the turbine and its associated access route because this was considered for the earlier 35m application and no further details have been requested by the County Council.

3.5 All heritage assets were collated within a radius of 2km of the proposed turbine and all designated heritage assets within 10km through a search of the Durham HER and various on line databases. A number of HAs were scoped out as they were not considered to be affected by the proposal in any way as they were outside the zone of theoretical visibility (ZTV), were too distant or due to intervening modern development. (For example the significance of a listed milestone on the side of the A68 2km away will not be affected by the proposed turbine as its significance is limited to the structure itself and its association with the road). Any remaining assets were then assessed for their designatable quality (not all nationally important heritage assets are designated), relevant significance and the impact of the development proposal on that significance.

3.6 This assessment used source material including the designation documentation, the Historic Environment Record, historic OS mapping, on-line sources including Google Earth and secondary source material which is cited in the bibliography. Those sites which required further investigation to confirm the level of impact were visited. The fieldwork was carried out in January on a typical winter’s day with light showers, some mist and poor visibility at times, interspersed with sun shine and good visibility.

Significance.

3.7 Significance for each asset as previously noted and in line with earlier PPS5 guidance which is still current, is addressed under the aspects of Historic, Archaeological, Architectural and Artistic interest as defined in the NPPF and the PPS5 Practice Guidance. The level and extent of this interest is also considered and to what extent the surroundings contribute towards that significance. Having established the nature and extent of the asset’s significance within the ZTV, the impact on its significance by the proposal is assessed.
4.0 Historic landscape character

4.1 Although Historic Landscape Characterisation has been carried out for Durham it is not currently available as part of an HER search. Therefore the County Council’s own landscape strategy available on line has been used combined with an assessment of historic landscape character based on 1st and 2nd edition OS mapping and aerial photography.

4.2 The proposed development site lies within the coal valleys broad character area, the key characteristics of which (in historic landscape terms) are:

- Sub-regular field patterns of old enclosures bounded by thorn hedges. Occasional regular Parliamentary enclosures.
- Variable woodland cover - open in places but wooded elsewhere with ancient oak-birch woods in narrow denes and along watercourses, and blocky conifer plantations on valley sides.
- Mining towns and villages are scattered across the valleys connected by a well-developed road network. Most of these have a core of 19th century terraced housing of brick or stone and welsh slate surrounded by estates of post-war public housing. Settlement edges are often abrupt or fringed by allotment gardens, pony paddocks and industrial land. This settlement pattern overlies and largely obscures an older network of small agricultural villages that survives in the more rural upper valleys. These older villages often have a core of buildings of local stone set around a central village green, such as Iveston. There are occasional small parklands, mostly associated with 19th century country houses.
- The valley landscape has been heavily influenced by coal mining although much of its legacy has been removed by land reclamation in recent years. Some elements of the industrial landscape remain - notably railway lines, tramways, small waste heaps and old coke ovens and in this area Howns Gill Viaduct. Land reclamation and opencast coal mining have had a substantial impact on the more settled parts of the landscape where extensive tracts of land have been worked and restored to agriculture or forestry. Reclaimed or restored land is often relatively featureless or lacking in maturity.
- There are occasional ornamental parklands, but most are associated with 19th century houses and do not have extensive designed views as one might expect in earlier parklands.
- A strongly rural landscape in places but with a ‘semi-rural’ or urban fringe quality in its more settled areas.

4.3 The immediate area within which the turbine sits is on the edge of the urban area associated with Consett and includes land which consisted of regular enclosure patterns in the early 19th century. The proposed turbine will sit within a hedge lined field which retained its shape in the 19th century but was altered in the 20th. The

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1 http://www.durhamlandscape.info/Pages/CoalfieldValley.aspx [accessed 8.1.13]
4.4 As the increasing industrialisation of the area took over and the railways cut swathes across the landscape, fields were gradually merged and hedgerows lost, perhaps to accommodate the increasing industrialisation of agricultural practices. The land was already exploited for coal and stone, but this was restricted to fairly small scale drifts and larger quarries within Howns Wood and had little impact on overall landscape character.

4.5 However from the 1840s, Consett was transformed from a relatively small village to a major steel and iron works established by the Derwent Iron Company particularly from the 1860s. Today, the margins of Consett (industrial units) are only c.250m from the turbine site, but in the intervening years the landscape has undergone some radical transformation. By the 1860s there were over 18 furnaces, rolling mills, coke ovens and foundries at Consett. The company continued to expand even in the depression of the 1920s when a new mill and furnaces were built. By the late 19th century the steelworks extended to only a little over 300m north of the turbine site and was serviced by railways that cut across the landscape to the immediate north of the development site. Coke ovens were erected to the north east along with quarries, washing sheds and workers’ housing. By 1945, the steelworks were only two fields distant from the turbine site. The steelworks were closed in 1980 and the land reclaimed largely for housing and light industry.

4.6 Throughout these changing times, the one constant was Howns Wood to the south. Being located in a deep dene, it was too difficult to fell the majority of the trees and so they survived and while the woods were used for small scale coal mining (OS 2nd ed 1897), a substantial quarry (plate 2), and the gorge was bridged by a graceful Victorian railway viaduct, its overall character has survived to the present day. The field within which the turbine sits has retained its overall form and south of the railway line, the pre-industrial settlement pattern of dispersed farmsteads has remained for the most part. However the urban sprawl is today creeping towards this patch of less-change from the north and the west.

4.7 The proposed turbine therefore sits on the very boundary of two opposing zones of change. To the north, the landscape has undergone considerable change in the last two hundred years with the loss of the pre-industrial settlement pattern; field boundaries and industrialisation has come and gone, to be replaced with increasing housing and light industry. To the south, the landscape has seen a much slower rate of change with the retention of the wooded denes, the dispersed agricultural settlement pattern and enclosure field pattern.
Plate 1 (left). The field boundary on the north side of the development site and adjacent to the road at Howns Gill is now gappy and consists of self seeded trees – the hedges being replaced by post and rail fencing.

Plate 2 (left). Quarry in Howns
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Figure 2 (above). 1st ed OS map dating to the 1860s showing an enclosed landscape relatively recently divided by the growth of the railway network. The deep dene of Howns Wood cuts across the landscape necessitating the viaduct. At this stage Consett has not yet extended southwards towards the proposed heightened turbine but land to the north is being quarried.

Figure 3 (above). By 1897 (2nd ed OS map) some additional railway lines merge to the north west of the proposal site and there is a merging of some of the fields resulting in the loss of field boundaries to the north.
Figure 4 (above). The landscape in 1945 showing the extent to which the iron and steel works extended towards the turbine site (in yellow). The field in which the turbine is proposed is subdivided and has yet to be bisected by the farm access track.

Figure 5 (above). The landscape today. Evidence of industrialisation is being removed to be replaced with housing and some small scale industrial use. Spoilt tips and quarries have been removed from the north of the site and field boundaries have been rationalised (photo: Google Earth)

4.8 The skyline has also undergone considerable transformation, but the natural rise in ground levels and the tree cover to the north would have restricted views to the ironworks before 1980 from the turbine site. Even from the top of the viaduct, the Consett Ironworks would have been shielded from view.
Today skyline features include two radio masts in the area – two of which are lit at night with five red lights extending to their full height. These are Humber Hill and the Burnhope TV Transmitter and cellular masts. There are also wind turbines visible at Tow Law and Kiln Pit Hill, both some distance away.

Those aspects of the historic landscape character which are considered to be of significance are therefore as follows:

The historic landscape within which the heightened turbine will sit is therefore a landscape of change, but the rate of change is far greater to the north. Landscapes of change are normally considered to be less sensitive to further change than a historic landscape which has retained many of its historic features intact. Therefore development north of the Lanchester valley railway branch line is less likely to have an impact on the significance of this historic landscape than development to the south of it. Given that the area has been widely exploited for industrial use and has had a number of vertical features in the landscape over the last century including other wind turbines, then the increased height of the Howns Farm turbine is not considered to have an unacceptably adverse impact on historic landscape character.
5.0 **Heritage assets within a 2km radius of the proposed turbine.**

5.1 There are five listed buildings within 2km of the proposed turbine which are also within or partially within the ZTV. These are Howns Gill Viaduct (Grade II*), an Accommodation Arch under the former railway (Grade II); High Knitsley Farmhouse and Barn to the west (both Grade II) and Christ Church in Consett (Grade II).

5.2 One scheduled monument is within a 2km radius, namely part of the Roman aqueduct which fed Lanchester Roman fort (this is considered in more detail under the section covering assets between 2 and 5km away).

5.3 The southern tip of Blackhill conservation area just extends into the 2km radius from the proposal site.

5.4 There are a further six non designated heritage assets in the ZTV which have been assessed.

*Figure 6. Scheduled Monuments in relation to the ZTV. Most are outside; the nearest is the earthwork remains of the aqueduct which fed Lanchester Roman fort. © Crown copyright 2013. All rights reserved. Licence number 100042279.*
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Figure 7. Conservation Areas (in purple) and their relationship to the ZTV (green areas suggest that turbine tips will be visible, but this assumes no trees or intervening development, so is a worse case scenario). Half of Iveston CA (to the right) is within the ZTV, but only a small tip of the south of Blackhill (centre). © Crown copyright 2013. All rights reserved. Licence number 100042279.

Figure 8. Heritage assets within 2km of the proposal (green areas suggest visibility where there is no built environment or tree cover). © Crown copyright 2013. All rights reserved. Licence number 100042279.
Figure 9. Parks and gardens in relation to the ZTV (parks shown in yellow). There is only one recorded parkland within the ZTV on the HER, the non-designated parkland at Woodlands. Greencroft Park is recorded in the Local Plan as a locally designated park, but is not recorded as such on the HER and so is not shown here – it is located 5.6km to the east of the turbine and is partly in the ZTV © Crown copyright 2013. All rights reserved. Licence number 100042279.

5.5 **Howns (Hownes) Gill Viaduct**

This grade II* structure is located between 659m and 785m to the SW of the proposed turbine. It was originally built for the Stockton and Darlington Railway in 1857-58 in order to carry wagons over what was the greatest obstacle on the railway line – the Howns Gill gorge. Before its construction, freight on the Stanhope & Tyne Railway was lowered and raised on inclines by stationary steam engines built in 1834 and this long process restricted the number of wagons which could cross the gorge in an hour to twelve (Hoole 1986, 190). The viaduct is 700 feet long and follows a 12 arch design constructed using three million white firebricks. The top, 53m above the gorge, is fenced with attractive cast iron railings which are particularly distinctive and reflect the graceful arches below. It was designed by Thomas Bouch who also designed a number of other graceful viaducts in the region; Howns Gill is described...
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as ‘the region’s finest’ by Pevsner (1990, 132). In the late 19th century it was part of the LNER railway line (Annfield Plain Branch) which passed over the North East Railway Lanchester Branch Line; it now forms part of the Sea to Sea cycle route and is in the process of being topped with an intrusive, but life saving fence to help deter potential suicide victims from jumping the 53m drop (BBC Tyne and Wear 1/8/12).\(^2\)

This fence is necessarily tall, curves over at the top and will have horizontal steel wires running between each stanchion. It will restrict views of the cast iron railings and have an impact on the quality of views from the top of the viaduct. It will probably have less impact on views of the viaduct from below because of the viaduct’s considerable height. The ZTV suggests that the viaduct is outside the ZTV but this is based on ground levels in the gorge, not the top of the viaduct and so the turbine will be visible from the top of the viaduct.

Plate 4 left above). (anti) Suicide prevention fencing in the process of being erected on the Howns Gill Viaduct.

Plate 5a & 5b, below left and right: Howngill viaduct from the west looking towards the turbine site. The turbine would not be seen from here due to the steep sides of the gill. 5b Right: Views from the top of the viaduct across Bouch’s cast iron railings towards the turbine site before the erection of suicide prevention fencing

Architectural interest.
The significance of the viaduct is primarily its architectural interest and graceful form which was typical of Thomas Bouch. The tall arches are referenced in the cast iron

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railings which top it and which feature in many contemporary images from the viaduct. However this architectural interest will not be affected.

Historic interest
It has historic associations with the rest of the railway line, the nearby accommodation arch (also listed, see below), the site of the earlier inclines and the site of the Hownsgill cottages (now destroyed) which housed the workers who operated the inclines before the viaduct was built. It also has historic associations with Thomas Bouch and the origins of the railways. These historic associations will not be affected.

Archaeological interest
The viaduct has some limited archaeological interest for the information it contains on its construction and some interest for the associated remains of the inclines, engines and cottages which date from 1834 and which are now reduced to below ground (and below tree) remains. This interest will not be affected.

Artistic interest
Its graceful form does however feature in many contemporary and historic photographs which are almost entirely taken from the ground below where its form can best be appreciated. From this ground level, the proposed turbine would not be seen so it would not impinge on these popular view points. No historic paintings have been found which include the viaduct.

However 53m above the gorge, the view from the top of the viaduct will include a view of parts of the turbine, although the tree cover will restrict these views (the ZTV is based on bare ground and assumes no tree cover). There are also views of more distant wind farms at Tow Law and Kiln Pit Hill from here. While still in use prior to the 1960s, opportunities to take photographs from the top of the viaduct were clearly limited, but more recently the track bed along the top has been used by a number of national and local recreational routes and has led to many contemporary photographs being taken of the views. Many of these include the delicately arched cast iron railings which run along the top. The turbine will now feature in contemporary views just as previous industrial structures have come and gone. However the installation of suicide prevention fencing has had a more obtrusive effect on the views from the viaduct and will have a greater impact on the structure’s artistic interest.

Conclusion
In summary, the architectural, archaeological and historic interest of the viaduct will be unaffected by the heightening of the consented turbine. There will be no impact on the artistic interest of the viaduct from its most popular historic viewpoints in the gorge below, but there will be some limited impact on more contemporary views from the top of the viaduct. However this impact will be tempered with the already constrained views resulting from the safety fencing and the intervening tree cover.
5.6 Accommodation arch under the former railway for Knitsley road (LB UID 350552)

This accommodation arch is listed Grade II and is located 484m to the west of the proposed heightened turbine. The former Knitsley road runs below it and the top forms part of the Waskerely Way and the Consett to Sunderland Railway Path. It was probably designed by T.E. Harrison, consultant engineer to R. Stephenson, for the Stanhope and Tyne Railroad between 1832-4. The embankment formerly led from the Hownes Gill incline which was replaced in 1858 by the viaduct (see above). The turbine will be visible from the top of the arch, but views from the road will be limited by tree cover.

Architectural interest
Its architectural interest is its form; namely the tall round narrow arch with

Plate 6. Left: the viaduct, possibly in 1858 for its opening (above). The earlier cradle incline can still be seen below. Below: with a passenger train.

Plate 7. Listed accommodation arch below former railway
Archaeo-Environment Ltd for The Shaws, Howns Farm

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voussoirs under the parapet with block coping and commemorative round iron braces. The flanking retaining walls on each side have plain flat coping and end in low rectangular piers. This architectural form will not be affected.

Historic interest

Its historic interest is in its association with the railway and the road and with Harrison and Stephenson. None of the associations will be affected.

Plate 8. Left: views from the top of the accommodation arch towards the turbine site and views from the front of the accommodation arch towards the turbine site

Archaeological interest

Its archaeological interest is limited to any information on its construction which might be obtained from any exploration of its form and this will not be affected.

Artistic interest

There is no evidence that it is of any artistic interest.

Conclusion

The significance of this listed structure will be unaffected by the heightening of the turbine.

5.7 Barn west of High Knitsley Farmhouse and High Knitsley Farmhouse (LB UID 64957, 350562)

Both buildings are Grade II. The farmhouse is located 830m to the south east and the barn 793m to the south east. They are dealt with together because they clearly form a group. The farmhouse and barn are 18th century in date and form part of a group of farm buildings enclosed within a low stone farmyard wall. They are both part of a wider group of farm buildings which together with the broader enclosed agricultural landscape can be considered to be their setting.

Architectural interest

The farmhouse’s architectural interest is in its double pile linear range form with stone slate roof, window and door detailing, gable end dovecot and gable end relationship to the road. The principal elevation of the house faces away from the turbine site. The barn’s architectural interest is in its agricultural character which includes window and door detailing including vent slits, stone slate roof, cast iron water tabling and simple unadorned form. It is not designed to have views in any particular direction, but is
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instead designed purely for agricultural purposes and faces towards the other farm buildings. This architectural interest will not be affected.

Plate 9. High Knitsley farmhouse and barn.

Archaeological interest
The farmhouse's archaeological interest is the evidence of its two phased construction (three if 20th century alterations are included) and any evidence on site of earlier farm buildings. The barn’s archaeological interest is in the two distinct phases of building and the evidence of blocked openings. This interest will be unaffected.

Historic interest
Their historic interest is their association with the other farm buildings, the wider hedge lined enclosure field pattern and possibly in their topographic relationship to the road, Knitsley Burn and the woods. These associations will be unaffected.

Artistic interest
There is no evidence that it is of any artistic interest.

Conclusion
This attractive group of farm buildings are self contained within a distinctively separate part of the historic landscape divorced from the turbine site by Knitsley Wood and gill. Nothing of significance will be affected by the proposed heightening of the turbine.

5.8 Christ Church, Church Street, Consett (LB UID 443598)
This church is located 1.76km north of the development and is listed grade II. It was built in 1886, designed by J. A. Cory in a Neo-Norman style (Pevsner 1990, 132). Although it is included within the ZTV, it is clear that views of the turbine cannot be seen from the church because of intervening development and the windows along the aisles are of stained glass and positioned above head height. It does have a tower over the west door which may have been added in 1873, but the top level of
the tower is fitted with vents rather than windows and so no views outwards are intended.

Long distance views of the church which might be obstructed by the heightened turbine do not appear to exist as the tower is too low. The skyline in the area already has two radio masts which are lit at night and there is a mobile phone mast next to the church tower. The impact on the church is therefore not considered further here.

5.9 **Blackhill Conservation Area.**
The most southerly tip of Blackhill Conservation Area is 1.94km north of the proposed heightened turbine, although most of the Conservation Area is outside the ZTV.

*Architectural and artistic interest*
This conservation area includes a formal suburban area centred around Laburnum Avenue and enclosed by a ‘grid iron’ street pattern and a cemetery. The tree lined boulevard like street pattern is of particular interest as its particular attention to symmetry and the way that views are terminated by distinctive buildings. Consequently the views along the streets within the conservation area are of particular note. As the name implies, the conservation area is on a hill and so long distance views are possible, but intervening tree cover and development would suggest that views of the turbine site are not possible. Those views highlighted in the conservation area appraisal are to the north (towards the Northumberland hills) and west from the cemetery and park (DCC2009, 21).

The spire of St Aidan's Church in particular and St Mary’s Church to the west and outside the conservation area, play an important role in views from within the conservation area and of views towards the conservation area from beyond. Although they are not especially high spires, they do stand out because so much of the surrounding housing stock is two storey. However the appraisal has identified no views or vistas from within the conservation area to the south beyond the conservation area; indeed the very layout of the street pattern ensures that views
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along streets are terminated; until 1980 such views southwards would have been towards Consett's Ironworks and it is therefore no surprise therefore that such views were cut off by distinctive buildings. Nor has it identified views from the south back to Blackhill as being important (DCC 2009, 35). Further fieldwork suggests that views from the south towards Blackhill are not possible even from Hows Gill Viaduct. Historically, views north towards Blackhill from other areas would have been across slagheaps, quarries and via chimneys and other industrial buildings.

A search of historic images of Blackhill suggests that the most photographed spot historically is the park. Old postcards or photographs feature Durham Road with the Northumberland hills beyond, the churches and the park. The artistic interest of the Blackhill Conservation Area is therefore restricted to the careful symmetry laid out by the Consett Iron Company and the deliberate termination of views by distinctive buildings; the clever use of open green space and the internal views down streets and of the church spires. It may also include views towards the Northumberland hills which act as a backdrop to the settlement. However these will not be affected by the proposal.

Plate 11. Views from the park towards the church
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Plate 12. Blackhill in the 1970s with heavy industry dominating views beyond the houses

Plate 13. Blackhill from slagheaps to the south and the Northumberland hills beyond (undated). The proposed turbine would be c1.5km behind the photographer.

**Historic interest**

The layout of the residential streets appears to have been designed by the Consett Iron Company for workers’ housing in 1882-3 and is largely unaltered. This means that the area is of historic interest because of its association with the town’s industrial heritage. However this historic interest will be unaffected.
Archaeological interest
As Blackhill owes its existence to the start of iron and steel working in the area, there is little archaeological interest apparent (one farm existed before the settlement was created). The only sites recorded on the HER relate to listed buildings, coal mining and quarrying. The conservation area is therefore of limited archaeological interest and this will not be affected by the proposal.

Conclusion
Given that only a small part of the Conservation Area is within the ZTV and that historically views towards Blackhill from the south have not been important, and that no views from within the Conservation Area towards the south have been identified as being important in the conservation area appraisal, then the heightened turbine will have no adverse effect on the area’s special interest.
6.0 Non-designated assets within 2km of the proposed heightened turbine (and within the ZTV)

6.1 HER 2241. The Howens, Templetown

The property or tenement known as ‘The Howens’ was known to belong to the Burnop family and in 1690 was sold to the Baker family. They held the property until 1877 when it was purchased by the Consett Iron Company (HER 2241). The property was known as Hown's Farm from at least the mid 19th century (1st ed OS map); it is located 490m south west of the proposed heightened turbine and is now used for static caravans, has a cafe a bunk barn and has a photo-voltaic array panel in an adjacent field.

Figure 10. Howns Farm on the 1st ed OS map c.1860 (left) and 2nd ed OS map c. 1897 (right). The turbine site is marked with a pink dot.

The farmyard has been through considerable change since the mid 20th century. At its core there are still some historic buildings visible from the road but these are surrounded by modern buildings and farmyard machinery and detritus which make it difficult to appreciate any significance. Historically, it sits within a landscape of change, having been surrounded by railway lines in the 19th century and more recent changes in farming practice.

Plate 14. Howns Farm in 1945 (left) and 2009 (right) showing the extent to which any historic buildings have become surrounded by modern buildings. The heightened turbine would be located 496m to the east and be separated from the farm by a former railway line. (Images from Google Earth)
Architectural interest
The architectural interest of this site is now limited to the historic buildings at its core. These will be unaffected by the proposed heightening of the turbine.

Historic interest
This site is of historic interest because of the archival evidence associated with its long history and the ability to track its ownership over at least four centuries. It also has historic associations with assets in the surrounding landscape such as the Hown’s Quarry which is linked to the farm by a path in the 19th century, the site of a well to the east which was also linked to the farm; the farm’s access road and the enclosure fields which surround it. Access to fields beyond the 19th century railway lines was made possible with various access or accommodation arches below the railways; one of which is listed, and so these also have some historic associations with the farm. However none of the historic associations will be affected by the heightening of the turbine.

Archaeological interest
The farm’s archaeological interest is likely to be limited to any vertical archaeology apparent in the extant historic buildings and the ground on which the farm sits. The two 19th century OS maps show the farm changing from two separate groups of buildings to one U-shaped group and it is likely that some evidence can be found of this change on site. This interest will not be affected by the proposal.

Artistic interest
The farm is of no artistic interest.

Conclusion
The farm sits within a landscape of change and has itself undergone considerable change. It is separated from the turbine site by a woodland already in place in the 19th century and the former railway line which sits on an embankment. The modern farmyard buildings and evidence of other recent uses already detract
from the historic interest of this site and so the heightening of the turbine will have no adverse effect on the farm’s significance.

Figure 11. The OS 2nd ed map of 1897 showing the farm in its 19th century historic context including its links with Hown’s Quarry, the well and the railway.

6.2 **HER 799 Hownsgill Caves, Old Quarry**

This site is located 684m south west of the turbine and based on the fact that it was linked to Howns Farm by a path in the 19th century (OS 1st – 2nd ed maps), was presumably worked by the farm. It will not be visible from the turbine site and the turbine will not be visible to people visiting the caves and quarry. The sandstone quarry appears to have started by working the natural edges to the gorge, then a substantial quarry hole was made and then the face of the sandstone worked to form caves. The caves are of particular local interest; indeed it is recommended by Pevsner as a romantic place worth a visit while admiring the nearby viaduct. The caves do not appear to be very safe as the natural bedding layers of the rock can shear off and there is evidence that this has already happened on a number of occasions.

**Historic interest**

Its historic interest is its association with sandstone working, Hown’s Gill Farm and the tracks leading between them. It does not appear to have a strong historic association with the viaduct as the viaduct was constructed with firebrick not sandstone; it is possible that the sandstone was extracted to use at Consett or Blackhill. The earliest date of the quarry is not clear. It is however shown as being active in the mid 19th century maps (1st edition) and as an Old Quarry on the late 19th
century maps (2nd edition) suggesting that it is entirely 19th century in date. This historic interest will be unaffected by the proposal.

*Plate 17. Howns Gill Quarry and Caves*

**Architectural interest**
The site is of limited architectural interest represented by the use of retained sandstone pillars to extract the sandstone from the gorge edge.

**Archaeological interest**
The archaeological interest will be limited to any evidence of quarry working and extraction processes, all of which will be unaffected by the proposal.

**Artistic interest.**
Caves are always of interest to people, even when of relatively recent construction. As such they do have some artistic interest, although only one post card has been found featuring the caves and this is undated, but appears to be taken from the south side of the gorge on high ground, possibly from the viaduct and looking towards the turbine site. Such a view is now impossible due to tree cover (see plate 5b for a similar view). The site is well photographed today with many images appearing on web sites, but it is also clear that views to and from the caves are now restricted to the immediate area because of tree cover. Views towards the turbine from the caves are impossible and views of the caves with the turbine in the same view are not possible due to tree cover. There will therefore be no impact on the artistic interest of the caves.
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Plate 18. Howngill (Houndsgill) Caves, possibly a 19th century post card

Conclusion
The special interest of the caves is closely associated with the site itself and historic associations beyond. None of these will be affected by the proposal.

6.3 HER 6908 Howngill Cottages
Before Howngill viaduct was built in 1857, wagons were transported over the gorge by a double incline designed by Robert Stephenson, with cradles worked by a single steam haulage engine at the foot of the gill. Howngill Cottages appear to have been built to house the workers who operated these inclines, but they remained in use after the viaduct was built, and survived until the 1960s, about the time of the closure of the railway (see plate 6 above). They are located 937m south west of the proposal and today, there is little evidence on the tree covered ground for their existence.

Architectural interest
As demolished features, the cottages are of no architectural interest.

Historic interest
The cottages are of historic interest because of their association with early wagon transportation, the technical innovation of Stephenson and the viaduct. However this interest will not be affected by the proposal.

Archaeological interest
The site of the cottages will be of archaeological interest, although much damaged by tree roots. This interest will not be affected by the proposal.

Artistic interest
The cottages only feature as an aside in historic photographs of the viaduct. It is the viaduct that is the subject matter not the cottages which are of artistic interest.
Conclusion
The significance of this site is limited to archaeological evidence below ground and to its historic associations, none of which will be affected by this proposal.

6.4 HER 1873 Delves DMV, Knitsley
This site, 957m south east of the proposed heightened turbine, is listed as a possible deserted medieval village in the historic environment record. The source of information for this is unreliable and based on the settlement pattern of farmsteads on historic mapping without additional supporting evidence. The location given includes a set of terraced houses, possibly 19th century in date. Aerial photographs (Google Earth) show some ploughed out ridge and furrow in fields to the east, but no more than might be expected from a rural, formerly arable, landscape served by a dispersed settlement pattern of farmsteads. This site is therefore not considered any further.

6.5 HER 264 Prehistoric carved rock
This is the findspot of a prehistoric carved rock with 22 cup markings and some linears, now in the Fulling Mill Museum in Durham. While the site itself may be of some archaeological interest, the exact provenance of the stone is unknown. It is not considered further here.

There are no other non-designated sites within 2km of the proposal.

7.0 Summary of special interest within 2km of the proposal
In summary, there are no designated or undesignated heritage assets within two kilometers of the proposal which will be adversely affected by the proposal. The one with the greatest visibility of the proposed heightened turbine is the viaduct, but its special interest is its architectural form and historic associations which will be unaffected, and its artistic interest. Its main artistic interest is based on views from below where Bouch’s graceful arches can best be appreciated, but since it has been used as a recreational route, it has also been appreciated for the views from the top, in particular views through and including the rounded cast iron railings which so beautifully reflect the twelve arches of the viaduct itself and the niches within the arches. The construction of suicide prevention fencing will marr this special artistic interest. Views of the turbine will be limited by tree cover, a natural rise in the ground levels and the fencing and be perhaps less obvious than larger wind frams at Tow Law and Kiln Pit Hill to south and north. Overall this impact on significance is not considered to be sufficient to recommend refusal.

8.0 Designated assets between 2 and 5km of the proposal.
At this distance, any adverse impacts are most likely to be restricted to designated assets which include in their design, or as a fortuitous accident, an appreciation of

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3 [http://archaeologydataservice.ac.uk/era/section/panel/overview.jsf?erald=1373](http://archaeologydataservice.ac.uk/era/section/panel/overview.jsf?erald=1373) [accessed 060113]
views or a strategic requirement to observe the surrounding landscape for defense purposes. Consequently the impact of milestones on the A68 for example, are not considered further here.

Between 2 and 5km there is one scheduled monument, namely a continuation of part of the Roman Aqueduct that fed Lanchester Roman fort. There is one locally designated parkland at Woodside which contains two listed buildings. There are a further twelve listed buildings excluding milestones in the ZTV and one conservation area within the ZTV, namely Iveston.

8.1 Remains of Roman Aqueduct DU 59/ RU41544
This is a Scheduled Monument which runs across the allotments near Longedge Lane to Woodside and Lanchester for about 3.2km. It exists only at ground level 1.88km south of the proposal at its nearest point and 3.8km away at its furthest point. An account of 1820, using an earlier survey described the route as follows:

These channels ‘take a circuitous direction on each side of Umber Hill. The Southern branch has its source in the Rippon-burn, and is traced through Mr. White’s woods [Woodlands, see below], and on the lower side of the Wolsingham-road, between Coldpike-hill and Hollingside. The Northern channel makes a North-West angle in the fields above Newbiggin, and diverging towards Upper-houses one Way, and to Mr. White’s woods the other, terminates at a spring whose stream is now employed in turning Knitchley-mill. This branch is easier to trace than the other, and is extremely conspicuous through the uncultivated ground, in Mr. White’s woods, and at its head, where a mound has been thrown up to obtain a level. Mr. White has re-opened a part of it, and employs it in conveying water to his fish-ponds. The reservoir of both channels was opposite the South-West corner of the Vallum.” (Surtees 1820, 303-60)

Architectural interest
As an earthwork site only, it has no architectural interest.

Historic interest
Its historic interest is its associations with Lanchester Roman fort. It also has associations with Woodlands (see below) where the aqueduct was surveyed and part of its route was restored to feed the reservoir and garden ponds at Woodlands. These associations will not be affected by the proposal.

Archaeological interest
The site has considerable archaeological interest for the evidence it contains relating to water management and the occupation of the area by the Romans. The channel will also potentially contain well preserved water logged remains of vegetation which might provide information of contemporary land use. However this evidence is based on the opposite side of the valley to the proposal and will not be affected by it.

Artistic interest
The site has no artistic interest, but does feature in a poem by Hodgson on Longovicium (see below).
**Conclusion**

Although these remains are nationally important, their special interest will not be affected by the proposal.

### 8.2 HER 356 Woodlands Parkland, Woodlands Hall and Garden Walls

This is a locally listed parkland referred to in the former Derwentside Local Plan, but is not designated. However as designed landscapes are most likely to include designed views, it is considered further here in case its special interest would suggest that it is of designatable quality. It also includes two listed buildings; Woodlands Hall and the garden wall north east of Woodlands Hall both of which are Grade II. The parkland is located 2.39km south east of the proposal at the parkland’s nearest corner. Woodlands Hall is 2.94km south east.

Woodlands Hall is early 19th century in date and was built for Thomas White. Thomas White was noted for his transformation from what had been ‘wild heath’ in 1777 to ‘a fruitful valley’ (1808, 407). For these he received numerous gold and silver medals from the Society of Arts (Mackenzie Ross 1834, 228). The hall was described as ‘an excellent mansion house; and the pleasure grounds and gardens, which have been created in the midst of a wilderness, evince much taste’ (ibid).

**Architectural interest**

Woodlands Hall is listed because of its architectural form and interior historic features, but there is no indication that views from the hall or towards it were ever intended, or have become possible, from any distance. The hall appears to be orientated facing east towards ponds and away from the road and the proposed heightened turbine. The drive from the west is planted with trees with additional immature copses at the fine stone entrance pillars and this has had the effect or preventing views from the house to the west where the heightened turbine would be. Tree planting along the main road had also ensured that any views from the house are terminated here and do not extend to the turbine. A further entrance on the north side of the hall is currently disused, but still retains its gateposts (albeit damaged). Its architectural interest will not therefore be affected by the proposal.

**Historic interest**

The building and park has historic associations with Thomas White and the enclosure movement, but this will not be affected by the proposal.

**Archaeological interest**

The landscaped grounds of Woodlands Hall were furnished with ponds and reservoirs which were fed by the Roman aqueduct (Mackenzie Ross 1834, 228), restored in part for this purpose, presumably by Thomas White. There will be no impact on these remains.

**Artistic interest**

Woodlands featured in a lengthy poem by John Hodgson entitled, ‘Woodlands, a poem’; in 1807 in which he celebrated the winding walks of Woodlands and the flora and fauna (1808, 407). He was never happy with the poem and intended to rewrite it (Atkinson 1850, 139). Woodlands itself was considered to ‘afford a pleasing instance
of the triumphs of art and industry over the most difficult and discouraging of obstacles to general improvement’ (Mackenzie Ross 1834, 228). These associations will be unaffected by the proposal.

Plate 19. The main entrance into Woodlands – this is tree lined and has copses planted at the junction with the road. This restricts views on exiting the park to the west

Conclusion
The listed buildings and locally listed parkland at Woodlands are significant for their architecture, the Roman remains and their associations with wider landscaped improvements and none of these will be affected by the proposal. The aqueduct is protected because of its archaeological interest and its associations with Lanchester Roman fort and Woodlands. These associations will not be affected by the proposal. There is no evidence that views towards the north west and the proposed heightened turbine were ever or are important from Woodlands and there is no evidence that views towards Woodlands from beyond the turbine have ever been possible.

8.3 East Knitsley Grange Farmhouse LB UID 438995
This Grade II property is located 2.22km south east of the proposal. It is a mid 18th century farmhouse which now operates as a farm shop and cafe. It has been listed for its architectural features and historic internal fittings and there is no evidence that its significance extends to over 2km away. It is therefore not considered further here.

8.4 Hurbuck Farmhouse LB UID 350603
This listed grade II farmhouse is located 3.78km to the east of the proposal on rising ground. With its substantial metre thick walls it is possibly late 16th century with early 17th and 19th century alterations. It has replacement 20th century windows. It is dated 1633 for TH and MH, and 1877 for EB, over the doors. The front of the farmhouse faces towards a group of trees. There is no evidence that the significance of the house extends to 3.78 km away and so is not considered further here.
8.5 **Low Woodside Farmhouse LB UID 350543**
This listed Grade II farmhouse is located 3.91km to the east of the proposal. It is 17th century with 19th century alterations. It is listed for its architectural interest but there is no evidence that its significance extends to 3.91km away and so is not considered further here.

8.6 **Board (or Bord) Cottage and outbuilding, Iveston Lane LB UID 428993**
This former inn and mid 19th century byre and loft are listed Grade II and located 3.56km to the east of the proposal. They have been listed for their architectural interest and the archaeological information apparent in the heightening of the roof on the house. The early 18th century house faces towards the south away from the proposal and there is no evidence that there is anything of significance associated with this house and outbuilding that extends 3.56km away. It is located on a hilltop on the edge of Iveston Conservation Area and this is considered in more detail below. The cottage and outbuildings are therefore not considered further here.

*Plate 20. Bord Cottage and outbuilding*

8.7 **Iveston Conservation Area**
This village was designated as a Conservation Area in 1975 with alterations to its designation in 1994. It is 3.38km east of the proposal at its nearest point. No appraisal has been prepared for the village which outlines its significance, only a short statement in the Derwentside Local Plan. Iveston is a linear hilltop village and has views over a wide area, limited tree cover and is within the ZTV so it is considered further here.

*Architectural interest*
Elements of architectural interest include the topographic location on the hilltop, the plan form with a village green and the preservation of medieval property and field boundaries to the north of the settlement (the proposed development is to the east). Only two listed buildings are included in the conservation area, namely Board Cottage and its outbuilding (see above). Despite much coal mining heritage in the area it has retained its agricultural character which makes it locally distinctive. Part of this agricultural character is the presence of open plots of land extending into the
heart of the village and an informal distribution of buildings. It is this agricultural character that is of special interest rather than the architectural or historic interest of any individual buildings (Derwentside Local Plan Appendix G).

In terms of important views which define the character of the village; that to the west is significant as it forms a back drop to the village as seen from the main road. The village appears to be inward looking and views across the landscape may be possible from the backs of properties, but are not readily available from the main road. The man approach to the village is from the east (the direction of the proposed heightened turbine) and so views across the landscape towards the turbine are possible when leaving the village. However this view includes a number of distant modern features in the landscape including all of Delves and therefore the turbine, if visible at all, would be seen in this urban context.

Plate 21. Views from the village to the west would include distant views of Delves; any views of the turbine would be beyond this and very distant

Historic interest
The village is of historic interest because of its pre-industrial character, although coal mining has been recorded in this area since 1440 (D6843).

Archaeological interest
The village is of archaeological interest because of its hilltop location (although nothing has been found to suggest that it was ever occupied in prehistoric times) and the presence of fossilised field and property boundaries. Dere Street is also thought to run through this area and the site of St Margaret’s Chapel is also of interest (D6843). However none of these will be affected by the proposal.
Artistic interest
The only historic images of the village found are of the duck pond and so there is nothing of artistic interest that might be affected by the proposal.

Conclusion
The significance of the village is in its topographic position, agricultural character, its dispersed and open form and good survival of medieval property boundaries. None of these will be affected by the proposed development. If the turbine is visible at all from the village it will be set beyond the urban area of Delves in the view.

8.8 Church of St Ives, Ives Road, Consett LB UID 439035
The church is located 3.75km to the north east of the proposal and is a Grade II church built between 1865-8 and designed by C.H. Fowler. It has been listed for its architectural form including its interior fittings. The church is a low built church with no tower or spire and there is considerable intervening development and transport infrastructure and so it is not considered further here.

8.9 Field Head Farmhouse LB UID 240610
This late 17th or early 18th century Grade II farmhouse is over 4km to the north west of the development. It is a two storey building listed for its architectural interest and there is nothing to suggest that its significance extends to over 4km away and so is not considered further here.

8.10 Healeyfield Bridge, Healeyfield Lane LB UID 350557
This grade II listed bridge is located 3.55km south west of the proposal. It was designed to carry a farm track over the railway and so dates to 1832 and was designed by T.E. Harrison, consulting engineer to R. Stephenson, for the Stanhope and Tyne Railroad Company. It has a delightful horse shoe shaped arch and is surrounded by trees. It has been listed for its architectural interest and because of its historic association with Harrison, Stephenson and the early railways. It is low lying and there is considerable intervening development, transport infrastructure and woodland between it and the proposed heightened turbine 3.5km away and so is not considered further here.

8.11 Bridge over Waskerley Walk LB UID 350558
This Grade II listed bridge is located 3.66km to the south west of the proposal. It was built c.1867 for the North Eastern Railway Company to carry a track from Healeyfield farm over the railway. The railway is now the Waskerley Walk which is set low within a cutting. There is considerable intervening development, transport infrastructure and woodland between it and the proposed heightened turbine 3.6km away and so is not considered further here.

8.12 Church of Our Lady and St Joseph LB UID 438585
This Grade II church is located 4.44km to the north east of the proposal on the A692 in Consett. Dating to 1866-9 and designed by E.G. Pugin, it is a low lying church with no tower or spire and considerable intervening development between it and the proposal over 4km away and so is not considered further here.
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8.13 Farm buildings north and east of High Waskerley Farmhouse LB UID 240638 and High Waskerley Farmhouse
This Grade II group of buildings is located 4.82km to the north west of the proposal. The farm building represent early 19th century planned farm buildings and the farmhouse is a little earlier. Their associations are with each other and the adjacent farm land but there is nothing to suggest that their significance extends to 4.82km away and so they are not considered further here.

8.14 Crooked Oak Farmhouse LB UID 240623
This Grade II building is located 4.89km to the west of the proposal. It is dated 1684 with the initials TRI (Thomas Richardson and wife) on the door surround. It is a simple two storey building listed because of its architectural interest internally and externally, but there is nothing to suggest that its significance extends nearly 5km to the proposal site. It is therefore not considered further here.

8.15 Humber House Farmhouse LB UID 350602
This listed Grade II farmhouse is located 4.3km south west of the proposed heightened turbine. It is a mid 18th century two storey house listed for its architectural interest but this interest does not extend to the development site 4.3km away. It is therefore not considered further here.

9.0 Designated heritage assets over 5km away
At this distance, only heritage assets of the highest level (scheduled monuments and listed grade II* and I) are assessed for the potential effects of the proposed heightened turbine. However other designated assets may be included if there is a need to establish whether they incorporate designed views and vistas which might be affected by the proposal. At this distance most farmsteads will not be affected (although each is checked to ensure that it is not decorated and incorporated into a view as an eye catcher) and churches are briefly checked for spires, towers and hilltop positions suggesting that they should be seen from a wide area.

9.1 Lanchester Roman Fort SM DU22
The north east end of this scheduled monument is within the ZTV and at this point, the nearest to the proposed development, it is 5.82km from the proposed development. The entire scheduled area is over 73 hectares. There is no public access to the fort, but it has an interpretation panel by the roadside. As a nationally important heritage asset it merits some further consideration.

The site consists of a Roman period fort with a vicus to the north and south of the fort. It links with Dere Street on the east side (the opposite side from the proposed turbine site). The remains consist of stone and earthwork foundations, but much of the stonework was removed in the 18th century to build the enclosure walls of the surrounding fields. The site has been under plough for much of its history and there are ridge and furrow and lynches across part of it.
Plate 22. The north west corner of the Roman fort adjacent to the B6296. The rubble core work from the walls can be seen.

It is of archaeological interest because of the wealth of archaeological remains that have been recorded through geophysical survey, some small scale excavation and remain to be found in the future. It also has associations with Dere Street, the remains of the aqueduct (see above) and other forts in the chain of forts created by the Roman army in the mid 2nd century. However these associations do not extend to the proposed development site over 5km away; the archaeological interest will therefore be unaffected by the proposal.

Figure 12. Lanchester Roman fort scheduled area in red and those parts with a theoretical view of the turbine in green (assuming no intervening obstacles such as tree cover or buildings)
9.2 **Greencroft Cottage, Ice House and Dovecot, A691 (LB UID 350547, 350546, 350545) and parkland**
Greencroft Cottage, listed grade II was a house in the grounds of Greencroft Hall (now demolished). It functioned variously as a dower house and gamekeeper's house and at one time was divided into two. It is probably early C18 at its core with late C18/early C19 additions and alterations. The dovecot is an early 19th century roofless tower of one storey, also grade II and the ice house is early 19th century and partially below ground. They are set within a parkland listed in the former Derwentside Local Plan which is approached via a listed bridge (the bridge is not in the ZTV). They are c. 5.6km to the east of the proposal. The landscape around is referred to as Greencroft Park and Park Gill and the parkland appears to be set out in woodland drives with relic enclosure field pattern consisting of gappy hedgerows.

The woodland plantations have the effect of obstructing views and there is nothing to suggest that the relatively humble cottages had any designed views out towards the proposed heightened turbine. The main focus for these historic buildings and the parkland was Greencroft Hall but as this has been demolished, there is no interest likely to be affected by the proposal. It is therefore not considered further here.

9.3 **Listed buildings at Black Hedley (LB UIDs 240617 - 240622)**
A cluster of listed buildings at Black Hedley (Northumberland) consists of a farmhouse, farm buildings, a doctor's cottage, a stable, garden walls and washhouse and are listed grade II. They are located 5.57km to the north west of the proposal. They are all two storey buildings (the doctor's cottage has an attic dovecote) dating from the mid 18th century onwards and listed for their architectural interest internally and externally. They also have some historic associations with buildings at Greenhead as Humphrey Hopper appears to have owned both (his initials appears in both groups of buildings). There is no evidence however of anything of significance that would be affected by the proposal over 5km away and so is not considered further here.

9.4 **Cluster of buildings at Greenhead LB UID 240627**
This group of 18-19th century buildings at Greenhead (Northumberland) consists of a house (a former inn), farm buildings, cottages and walls and are listed grade II. They are 5.8km from the proposal. The farm buildings have some connection with the listed buildings at Black Hedley as Humphrey Hopper appears to have owned both in the 18th century. They also have historic and artistic associations with James Lough (1798 - 1876) the sculptor, who is said to have been born in the room with the ‘1751’ doorway. However there is no evidence of any significance which would be affected by the proposal over 5km away.

9.5 **Church of St John (LB UID 240611)**
This grade II listed church is located 5.18km to the north west of the proposal at Snod's Edge (Northumberland). It was built in 1836 to replace the church on Greymare Hill. It appears to have been listed for its architectural form internally and externally. It is a low lying church without a tower or spire and only a small bellcote at its west end. It is therefore not designed to be seen across a wider landscape which would include the heightened turbine over 5km away.
There are no views of the turbine site from the church because of tree cover, but views are possible from further along the road where Howns Gill viaduct can be seen in the distance. The church’s significance will therefore not be affected.

9.6 **Group of buildings at Muggleswick including the remains of the Manor House and Priory Farm (Grade I), Grange Farmhouse and gin gang (Grade II) (LB UID 439110-1) and the Monastic Grange (Scheduled Monument 32718)**

This is a cluster of heritage assets 5.9km to the west of the proposal and which together represent nationally important heritage assets ranging from scheduled monuments to grade I and grade II listed buildings. This once isolated spot was the location of a grange for the Priors of Durham and was built by Hugh of Darlington.
between 1258-72 (Pevsner 1990, 366), although possibly on the site of an earlier grange. There are some impressive remains left including the listed grade I (and scheduled) gable 15.5m high with projecting turrets, machicolations and a blocked 15th century tracery window clearly designed to impress and possibly indicating its use as a chapel on the top floor. The grange consisted of a hall, chapel, grange and a dairy in the 15th century and stock consisted of oxen, cattle, calves, sheep, pigs and lambs. The remains consist of 4m high walls and earthworks and some of the remains have been excavated in the 19th century. The site has been scheduled for its archaeological interest represented by below ground remains and the vertical archaeology that the building remains contain. It also has strong historic associations with medieval Priory in Durham. The full extent of the grange has not been ascertained, but there is no indication that its significance extends to the proposed turbine site. There may be views of the turbine from these scheduled remains, but they will be so distant and across the urban expansion of Castleside, with intervening tree cover (see below), that it will have no impact on the significance of the ruins.

Plate 25. The listed grade I remains of the grange with distant views towards the turbine site.

Plate 26. The view towards the turbine site from Muggleswick; intervening tree cover restricts any distant views.
Heritage Impact Assessment Howns Farm, proposed heightened wind turbine

The Grange Farmhouse has a datestone of 1694, but its thick stone walls have a hint of something earlier within. Other buildings in the group include more modest farm buildings of 18-19th century dates and listed grade II with no significance (or views) extending as far as the proposed heightened turbine. The listed tombs around All Saint’s Church have not been considered here.

9.7 Burnhopeside Hall, farmhouse, farm buildings and ice house LB UID 350565

This listed grade II* hall, farmhouse and farm buildings are located 8.89km south east of the proposal. The ice house is listed grade II and is 8.97km south east. The hall is probably C18 in date, altered and considerably enlarged in the early C19 for William Hedley, the railway locomotive pioneer. Hedley was the designer of Puffing Billy for the Wylam Colliery wagonway 1813-1815; he was also the first to demonstrate that the weight of the engine would create adhesion to the lines and that toothed wheels were not necessary (Wood 133-4). This historic association justifies its higher grading.

The farm buildings are early 19th century and incorporate re-used early C19 railway lines said to have come from a railway track laid in the grounds by William Hedley, thus strengthening the historic association with early railway heritage. The disused railway line, now the Lanchester Valley Walk runs to the south of the grounds. The special interest of the hall and farmhouse is therefore their architectural form, but also more specifically their historic associations with the pioneering days of the railway and Mr Hedley in particular.

The hall is two storeys high (with modern roof lights) and so does not appear to command wide views across the landscape. It is approached from the north east on the A691, but its principal elevation is to the sunny south away from the turbine site. The grounds retain their enclosure field pattern and have not been emparked, although there are a few tree clumps on the north and west sides. Large plantations have been planted on its north side effectively shielding it from any views towards the turbine site and the drive towards the hall is fully planted so that views beyond the drive are not possible. The intervening development of Lanchester also ensures that no views to the turbine site are possible and therefore the special interest of the hall is not affected by the development.

Plate 27. Burnhopeside Hall, listed grade II*. The proposed heightened turbine is 8.89km to the North-West.
Plate 28. Burnhopeside Hall, listed grade II* set within an enclosure field pattern with only limited emparkment to the north and west. The large plantations around it, possibly influenced by Thomas White’s award winning taming of Lanchester Common, screen the hall from the outside world. The proposed heightened turbine is 8.89km to the North-West. (Photo: Google Earth)

9.8 **Greymare Hill St Andrew’s Church, tombstones and hearse house (LB UID 240628)**

This hilltop church is listed grade II and is located 8.33km north west of the proposal. It is considered here because of its hilltop position 293m above sea level which commands views all around. The church was rebuilt in 1769 on the site of a medieval church and was substantially restored and altered in 1892. It has historic associations with St John’s Church at Snod’s Edge which replaced it. It was declared redundant in 1971. North east of the church is the Hopper Mausoleum which is a Grade I listed building and is visually prominent on the hill top. The mausoleum was allegedly erected by Humphrey Hopper of Black Hedley in memory of his wife Jane, d.1752. The mausoleum therefore has historic associations with the listed buildings at Black Hedley and Greenhead (see above) which area also connected with a Humphrey Hopper (although not necessarily the same one).

The hilltop position and ability to be seen and command views across the landscape is clearly part of the church’s special interest. However there are a number of wind turbines already consented closer to the site at Kiln Pit Hill (6 turbines consented in 2009 and now in place). Further the distance from the proposed heightened turbine at over 8km will reduce the turbine to a very small element in the landscape and therefore it would not detract from this special interest. It is clear that the church will retain its hilltop position with commanding views if the proposal is granted.
9.9 **Coke ovens at Inkerman Farm, Scheduled Monument 30929**

The coke ovens are a considerable distance from the proposal at 9.37km south and are only considered here briefly because of their scheduled status which equates to national importance.

The Weardale Iron and Coal Company opened the Inkerman colliery in 1853 and immediately began coke production from 20 ovens built at that time. In 1875 the number was increased to 50 ovens built in two rows. After 1880 the site was operated by a succession of companies. The coke ovens were used for brick production in their later years, but had become disused before World War I. Following closure in 1969 the colliery, including most of the ovens, was cleared and landscaped, but those that survived both as above ground features or partially buried remains have been included in the scheduling.

The coke oven site is surrounded with a number of wind turbines already and they are clearly not designed to have any views or to be seen from a distance. Their archaeological interest will be unaffected as will their historic associations with technological innovation, the industrialisation of this part of Weardale and the growth of Tow Law. They are therefore not considered further here.
10.0 Conclusion

10.1 The proposed turbine is located in an enclosure field which is little altered from the 19th century, but which has gappy unmaintained hedgerows. The field pattern to the north is more altered with some merging of field boundaries and then, only two fields to the north, the land is largely reclaimed from the Consett Iron Works whose fingers of industry nearly reached Howns Farm. Today housing and light industrial development cover this area. To the south of the proposed turbine site, the rate of change on the historic landscape is much slower and the dispersed settlement pattern and enclosure field boundaries have survived to a greater extent. As the proposed heightened turbine is located at the point where the landscape has undergone more rapid change since the 19th century, it is less sensitive to further change and so the proposal will have an acceptable level of impact on the historic landscape character.

10.2 There are five listed buildings within 2km of the proposal. Two of these are the farm buildings at High Knitsley which have no special interest extending as far as the turbine site c.800m away. Similarly, Christ Church, listed grade II is separated from the turbine site by intervening development and has no interest which extends nearly 2km away.

10.3 Howns Gill Viaduct (Grade II*) and an accommodation arch on the A692 have associations with the historic railway network and these associations also extend to a number of non designated heritage assets such as Hownsgill Caves and the site of the workers’ cottages and inclines below the viaduct. The viaduct’s special architectural interest will be unaffected, but there is some limited impact on its artistic appreciation. Historic images of the viaduct are mostly taken from the gorge where the graceful arches are best appreciated (and where it was safest to admire the structure when still in use) and such views will be entirely unaffected by the proposal. However from the top of the viaduct, where a number of recreational routes now take advantage of the disused railway line, there will be views across to the turbine site and to more distant constructed wind farms. However these views will not diminish our understanding of the viaduct or its associations with the railway heritage. However the on-going installation of suicide fencing will alter the appreciation of such views.

10.4 Beyond 2km there is little that has the grandeur or prominent landscape position that is likely to be adversely affected by the proposal. There are two landscaped parklands within the ZTV at Woodlands (2.94km away) and Greencroft (5.6km away), but they are of local importance and not designated. Their special interest does not include designed views which include the proposed turbine site, but in the case of Woodlands does include the water management system which made use of the Roman aqueducts and the innovative plantations which transformed the Lanchester landscape due to the efforts of Thomas White. The presence of such plantations screen the hall and the grounds from the outside world and so the heightened turbine will not affect its significance.
10.5 The nearest scheduled monument is part of the Roman aqueduct used at Woodlands and this in turn links to Lanchester Roman fort. Its significance is largely based on its archaeological interest and historic associations with the Roman fort, Dere Street and Woodlands which will be unaffected.

10.6 Two Conservation Areas appear in the ZTV, but in reality Blackhill is not visible due to intervening development and Iveston’s views towards the turbine are so distant and across distant urban development, that it has no impact on the architectural interest of the village. In terms of key views from the village, it is the nearer views that are more important on the east and the distant views to the west – away from the turbine site.

10.7 Other sites beyond 5km have been assessed because of their hilltop positions or high level of designation. St Andrew’s on Greymare Hill for example has a view across the distant landscape towards the proposed turbine, but this is across an existing array of turbines which are far closer. The scheduled remains at Muggleswick may also have a distant view, but this is across Castleside and trees on the field boundaries nearby effectively screen out these views.

10.8 In conclusion the raising of the consented turbine height from 35 to 45 metres will cause no substantial harm to the setting of any designated or non designated heritage assets.

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