

Windy Ridge Quarry, Holmfirth

Technical Note

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Paragon Highways

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1 INTRODUCTION

1.1.1 Paragon Highway Consultants have been appointed to prepare this Technical Note to support the application to vary planning conditions 7 & 8 of the 2013 planning permission to allow for the continued extraction of sandstone minerals and restore the land at Windy Ridge Quarry, Cartworth Moor Road, Cartworth Moor, Holmfirth. Appendix A shows the site location in relation to the local highway network.

1.1.2 The site has the benefit of planning permission (planning application reference 2012/62/93305/W) to extract sandstone and import fill material (along with some recycling of the infill material for exportation) until 2028. Planning conditions were attached to the permission that restrict the number of HGVs accessing the site as identified below: -

Condition 7)

The total number of vehicles transporting mineral and recycled aggregates from the site shall not exceed 10 per week.

Condition 8)

The total number of vehicles transporting waste material into the landfill site shall not exceed 5 vehicles per day.

- 1.1.3 It has been confirmed by the Local Planning Authority that the controls described in the above planning conditions refers to HGV movements only. It is considered that the restrictions on the number of HGV movements are onerous and are impacting productivity and efficiency at the site.
- 1.1.4 This Technical Note considers the site access and suitability of the local highway network, including details on the accident record and provides suitable justification to the LPA that the HGV restrictions can be relaxed to allow further HGV movements associated with the quarry operations. This Technical Note demonstrates that the proposed variation in planning conditions should be acceptable in highway terms.

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2 EXISTING CONDITIONS

2.1 Site Description

- 2.1.1 The site is located within Holmfirth some 2km southwest of the town centre and around 1km southeast of the settlement of Holmbridge. The site occupies around 1.9 hectares of quarry workings and is accessed from an unmade track that bounds the site to the north. The site is bounded by grazing land to the east and south, and White Gate Road to the west. A site location is shown at Appendix A.
- 2.1.2 The quarry has operated over many years producing around 1350 tonnes of sandstone used for block, walling, paving and graded stone per annum. It also provides around 2650 tonnes of masonry stone per annum.
- 2.1.3 The current planning permission (planning application number 2012/93305) was granted in 2013 and allows for the continued extraction of sandstone and to deepen the quarry. The current permission allows for the quarry to be restored to agricultural use by means of infill and to recycle construction, demolition and excavated waste. The current permission will allow workings until 2028, allowing a back fill volume of some 100,000m3 with 20% recoverable aggregate for export.
- 2.1.4 Highway related planning conditions were applied to the 2013 permission including condition 5 preventing vehicle access onto White Gate Road, condition 6 relating to the cleaning of vehicle chassis and wheels, and conditions 7 and 8 relating to the number of HGV movements. Planning condition 32 relates to the operational hours of the quarry with operations other than water pumping, servicing, environmental monitoring, maintenance and testing of plant to be restricted to between 0800 and 1730 hours Monday to Friday and between 0800 and 1230 Saturdays.
- 2.1.5 As per the conditions referred to above, the HGV traffic will use Cartworth Moor Road and will travel southeast to access the A616 Sheffield Road via Linshaws Road, Bare Bones Road, Flight Hill, Law Common Road, and Penistone Road (B6106). Whilst there is no strict routing for HGVS (other than the prohibition of using White Gate Road) this route is the only feasible route for HGV quarry traffic given the limited opportunities for HGVs to use other routes given the layout, widths, and alignments of these alternative routes.

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Hillhouse Edge Quarry

2.1.6 Located around 500m to the north of the site there is another sandstone quarry (Hillhouse Edge Quarry). This quarry is comparable in size to Windy Ridge Quarry and also utilises Cartworth Moor Road for access for HGV traffic. The current planning approval (planning application reference 2015/70/90531/W) was granted in June 2015 and had a planning condition applied to the decision (condition 8) that limits the number of vehicle movements to no more than 8 per day. As this quarry provides similar operations to the Windy Ridge Quarry the types of vehicles accessing this quarry are similar to those for the application site.

2.2 Local Highway Network

2.2.1 The site is accessed from an existing track that connects the quarry with Cartworth Moor Road to the east. The track contains a compacted stone surface and generally ranges between 3m and 3.5m in width and is therefore of single width. There are two junction areas prior to reaching the far west side quarry entrance that can be used as informal passing places. The track is around 600m in length and travels in a western direction from Cartworth Moor Road.



Existing Access Track

- 2.2.2 The track forms part of the public right of way network (No 94) and is a bridleway that runs between Cartworth Moor Road and White Gate Road. It is signed from Cartworth Moor Road and White Gate Road and along the HGV access route it contains grass verges on both sides providing step off areas for pedestrians and cyclists should a HGV be travelling along the track.
- 2.2.3 The track joins Cartworth Moor Road via a an unmarked priority junction. Visibility at the junction is good given the alignment of Cartworth Moor Road and are considered to be proportionate to the general traffic speeds experienced along the road.
- 2.2.4 Cartworth Moor Road is a local access road that provides access to a small number of commercial and farmstead properties in addition to the application site and Hillhouse Edge Quarry. It is subsequently subject to light traffic volumes throughout the day. Cartworth Moor Road is a two way single carriageway road with grass verges provided on both sides. The first 350m length of this road south from the site access track contains a bituminous and sealed surface that is in fair condition. The carriageway width is generally between 3.8m and 4.8m and provides good intervisiblity for approaching vehicles to position at wider areas to allow for two way flow. Further to the south road changes to a compacted stone surface that ranges between 3.8m and 6m in width, and provides numerous opportunities for opposing vehicles to simultaneously pass until the road meets White Gate Road/ Linshaws Road junction around 1km further south. Whilst the road contains an unmade surface for the majority of its length it does form part of the highway network and is maintained in character.
- 2.2.5 Cartworth Moor Road joins White Gate Road via an unmarked priority junction. White Gate Road joins with Linshaws Road and Bare Bones Road as a continuous route between Cartworth Moor Road and Dunford Road some 2.58km in length. These roads do not contain any frontage development and are subject to light traffic volumes throughout the day.

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- 2.2.6 The carriageways of White Gate Road, Linshaws Road and Bare Bones Road are generally between 5 and 5.5m allowing for the majority of its length to allow a HGV to pass a car or for opposing HGVs to simultaneously pass. It is acknowledged that there are narrow sections of around 4.1m in some isolated areas, however these are generally preceded by wide sections of carriageway that can be up to 6m wide, with good intervisibility between opposing motorists. The carriageway is in fair condition and considered to be suitable for its day to day use. The road contains grass verges on both sides and does not contain any streetlighting. Subsequently, the road is subject to the national speed limit (60mph) although actual traffic speeds are much lower given the layout of the road.
- 2.2.7 Bare Bones Road meets Dunford Road via a priority junction complete with giveway markings and signing. Dunford Road is a much higher status road and contains a wider two way single carriageway of around 7.3m in width and contains grass verges on both sides. The road is subject to the national speed limit, and in the vicinity of the Bare Bones Road junction does not contain street lighting. Dunford Road provides a connection between Hade Edge and Holmfirth to the north and Dunford Bridge and the A628 to the south, the latter of which is a primary route that connects the towns of Barnsley and Pontefract to the east with Greater Manchester to the west and is one of the key routes across the Pennines. Dunford Road is generally subject to light traffic volumes with a noticeable increase during the network peak periods.
- 2.2.8 Dunford Road also provides a connection to Flight Hill opposite the Bare Bones Road junction. This route connects with Law Common Road and provides a direct route to the B6106 Penistone Road, which also provides a good connection to the A616 and the A628 to the southeast.

2.3 Road Traffic Accidents

2.3.1 The personal injury accident records for the 5 year period up to the 31st December 2018 have been obtained from the Crashmap website (crashmap.co.uk). The study area includes the lengths of highway within the vicinity of the site and the route leading to and including the junction with Dunford Road, and therefore includes Cartworth Moor Road, White Gate Road, Linshaws Road and Bare Bones Road totalling some 4.25km of highway. The search area is considered to be robust and allows a suitable appraisal of the road safety impact of the quarry operations on the adjacent highway network. The injury accident record is included at Appendix B.

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- 2.3.2 From the accident study is has been found that there have been no reported injury accidents during the 5 year study period on the rural roads and junctions mentioned above. Therefore, the site access arrangement and adjacent local highway network appears to operate safely for all traffic including HGVs associated with Windy Ridge Quarry or the neighbouring Hillhouse Edge Quarry.
- 2.3.3 The reported injury accident record along the access roads used by quarry traffic is good and does not indicate a road safety problem that would warrant treatment of be a cause for concern as a result of the slight change in HGV traffic volumes using the route between the site and Dunford Road.



3 TRAFFIC IMPACT

3.1 Existing Traffic

- 3.1.1 The existing planning permission at the site (planning application number 2012/93305) restricts the hours of operation to between 0800 and 1730 hours Monday to Friday, and between 0800 and 1230 hours on Saturdays (planning condition 32(a)). Conditions 7 & 8 of the approval restrict the number of HGVs to no more that 10 per week, and 5 per day.
- 3.1.2 Therefore, the existing site generates a maximum of 1 HGV transporting material to/ from the quarry every 2 hours (based on the maximum of 5 HGVs in any one day). As these would be two way trips, then this would equate to 1 HGV movement per hour.
- 3.1.3 The quarry vehicles differ depending on what is being transported. The transport of block stone is transported in 25 tonne loads, with the walling, paving, and garden stone transported in 15 tonne loads. The masonry stone and imported material is generally exported/imported in 20 tonne loads, using a rigid tipper waggons.
- 3.1.4 The neighbouring quarry (Hillhouse Edge Quarry) produces sandstone material and is also subject to similar HGVs that access the Windy Ridge Quarry, as they are generally 20 tonne rigid tipper waggons. The current permission at the Hillhouse Edge Quarry allows up to 8 HGVs per day using the same route for HGV traffic as Windy Ridge Quarry (planning application number 2015/70/90531/W condition 8). Utilising the same operational hours this quarry would provide on average 1 HGV accessing the quarry every 70 minutes, and as these are 2 way trips, this would equate to between 1 and 2 HGV trips per hour.
- 3.1.5 Considering the HGV traffic from both quarries, they have the permission to generate 3 HGV trips per hour on the local highway network including Cartworth Moor Road and the route leading to Dunford Road (on the busiest day).
- 3.1.6 There is no evidence that the HGV traffic associated with the quarries causes a problem on the local highway network given the good road safety record over the 5 year study period, and that notwithstanding the status of some of the roads, they appear suitable to enable the continued quarry operations at the site and neighbouring quarry.

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3.2 Proposed Traffic

- 3.2.1 The existing planning permission for Windy Ridge Quarry expires in 2028. To improve productivity and efficiency of quarry operations at the site, there is a requirement to increase the volume of HGV accessing the site, as the existing planning conditions are considered to be onerous and detrimental to productivity, when compared to the neighbouring quarry.
- 3.2.2 Having regard to the layout of the site access and local highway network along the HGV route that is followed by the drivers and the good road safety record along the route, it is proposed to increase the maximum number of HGVs that can access the site transporting waste material from 4 to 8 per day.
- 3.2.3 The increase in HGVs would equate to an extra HGV trip (generally 20 tonne rigid) per hour using the local roads and gaining access to the site. This would provide a total of 2 HGV trips per hour associated with Windy Ridge Quarry. When this additional traffic is considered with the adjacent quarry, the total number of HGV trips per hour would be 4 trips per hour on average as a worse case (1 HGV trip every 15 minutes). Please note these trips are divided into journeys to and from the quarries, therefore the 4 trips would reflected 2 HGVs accessing the site and leaving the site in the same hour.
- 3.2.4 The proposals will therefore increase the total HGV quarry traffic from 3 trips per hour to 4 trips. This increase would not be noticeable from the level of HGV traffic already experienced along the route linking the quarry with Dunford Road. The improved productivity and efficiency of the quarry also relies on the existing planning condition 7 of the current approval being removed. The proposed increase in HGV traffic at Windy Ridge Quarry would also match the HGV restrictions associated with the adjacent Hillhouse Edge Quarry to the north of the site.
- 3.2.5 Therefore, considering the layout of the local highway network containing for the majority a suitable width and construction to cater for the HGV traffic, with wide areas provided near to narrower sections. The road safety record does not indicate a problem and is good with no reported injury collisions during the 5 year study period. The proposed slight increase in daily HGV movements associated with the quarry would not be material or significant and has been balanced with the appropriateness of the adjacent highway network and site access arrangements.

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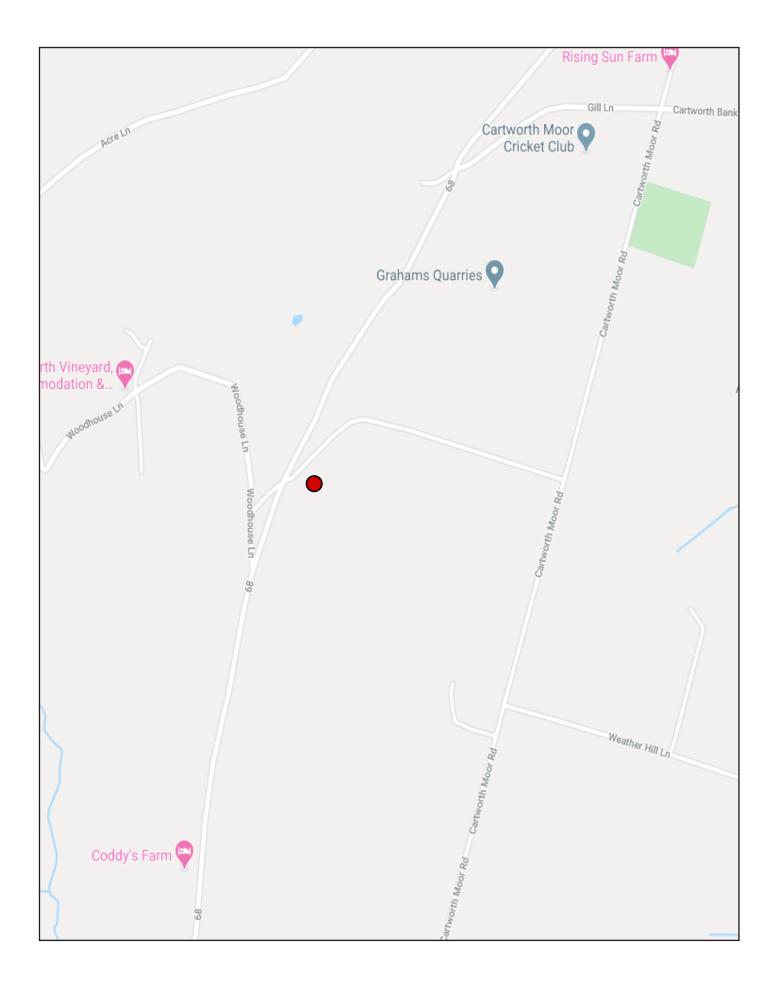
4 CONCLUSIONS

- 4.1.1 This report presents the proposals to increase the number of HGVs transporting material associated with Windy Ridge Quarry, Cartworth Moor Road, Holmfirth.
- 4.1.2 The report concludes that both capacity and safety elements of the proposals are acceptable, as the proposed slight increase in daily HGV movements associated with the quarry would not be material or significant and has been balanced with the appropriateness of the adjacent highway network and site access arrangements.
- 4.1.3 It is therefore concluded that the development is considered acceptable, and that there are no highway safety or efficiency reasons why planning consent for the proposed development should not be granted.



Appendix A

Location plan



Legend:





Appendix B

Accident Data

