

Appendix 03: Extract from Road Safety Risk Assessment Report.

Application No: 6/2015/0198

Modification of Conditions 1 and 5 of Planning Permission 6/1999/0804 to allow for continued winning and working of mineral and removal of the previously imposed limitation on winter HGV movements at Southard Quarry, Swanage.

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Road Safety Risk Assessment

Panorama Road,

Swanage Dorset

18th November 2014

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9 SUGGESTED ROAD SAFETY RISK IMPROVEMENTS FOR PROPOSED ROUTE FOR HGVs ALONG PANORAMA ROAD

- 9.1 There are a number of potential road safety issues / risks identified in Sections 4, 5, 6 and 7 above with respect to the proposed access route for HGVs along Panorama Road to and from California Quarry. These potential issues / risks and some suggested road safety improvements are listed below:-
- 9.2 Panorama Road between the first bend and the entrance to California Quarry is not suitable for two-way simultaneous HGV traffic in its existing layout. A minimum carriageway width of 5.5 metres should be provided for two way traffic (greater at bends) where possible and where not possible traffic control should be introduced (see 9.15 below).
- 9.3 If there is a likelihood of abnormal loads needing to access the site, particularly during set up and de commissioning then these will pose significant further issues in their own right including the method by which they can negotiate the public highway en-route to Panorama Road. These factors will need to be established and put together in the form of suitable Travel Plan for such deliveries.
- 9.4 At the entrance to California Quarry on the east side of Panorama Road visibility is restricted to the south on emerging from the quarry access road by hedging. Whilst it is appreciated that traffic movements from this direction will be limited as this is a no through road it was noted during the site visit that the route is also used by dog walkers, joggers, cyclists and farm vehicles on what appears to be a regular basis. As such, the hedge should be cut back and maintained on a regular basis.
- 9.5 Given the ambiguity of the current speed limit the notional 20mph speed limit on Panorama Road should be formalised and accompanied by the appropriate road markings and upright traffic signs that comply with current regulations.
- 9.6 Parking on Panorama Road on the eastbound approach to the second bend adjacent to Plantation Close results in vehicles having to pass on the opposite side of the carriageway to negotiate the bend (see 4.19 above). This has the potential for head-on conflicts to occur with vehicles travelling north to west around the bend in the opposite direction. As such, an appropriate length of waiting restrictions should be introduced on the north side of Panorama Road on the eastbound approach to the bend.
- 9.7 The inability of certain vehicles to gain traction in certain weather conditions on the steep gradient of Panorama Road after the second bend should now result in the Polished Stone Value (PSV) of the carriageway at this point to be established. If this found to be inadequate, (a PSV greater than 65 is recommended at this location) then an appropriate length of High Friction Surfacing (HFS) should be introduced.
- 9.8 Should it be necessary to close Panorama Road in the event of an abnormal load being required to access the site then such a closure would need to have a

comprehensive publicity campaign as it would be likely to cause significant disruption to the local community, schools and Bay View Holiday Home Park. It would also be necessary to give sufficient advance notice of such an operation and when implemented it would require the manned operation of road closures and footway accesses along the entire route to California Quarry.

- 9.9 Notwithstanding 9.8 above should an abnormal load be required to access the site then it would be necessary to enforce temporary parking restrictions on the agreed access route which will need to be timed appropriately following adequate advance notice to local schools, business and residential premises en-route.
- 9.10 Notwithstanding 9.5 above it is felt that delivery Drivers should have a compulsory speed limit imposed which would be particularly important for Drivers leaving the site and travelling down the steep gradient of Panorama Road. The actual current speed limit as it stands on the steep gradient section of Panorama Road is not clear but is likely to be interpreted as derestricted. As such, a mandatory 20mph speed limit should be introduced.
- 9.11 Following the incident on the 6th November 2013 HGVs with automatic gearboxes should be restricted from deliveries to the site if this failure to gain road surface traction in inclement weather conditions and on a steep gradient is characteristic of these types of vehicles.
- 9.12 Notwithstanding 9.11 above if other large (particularly heavily laden) vehicles are going to have a problem negotiating the route up the gradient of Panorama Road in certain road and weather conditions then it should be rescheduled to a more appropriate time or arrive in smaller delivery vehicles that can negotiate the steep gradient of Panorama Road in all road and weather conditions without incident. Alternatively, all haulage operations should be restricted to summer months when ice and rain is unlikely to be a problem for large HGVs negotiating the steep gradient of Panorama Road.
- 9.13 The route to and from California Quarry should include a number of traffic sign improvements to include gradient signs if appropriate (greater than 10% refer Traffic Signs Manual Chapter 4), sharp bend signs on both approaches to both bends, Keep in Low gear signs on the northbound approach to the second bend, 'Pedestrians in carriageway' warning signs at appropriate points along the route, signing for pedestrians emerging from the various footpaths onto Panorama Road to be alert for vehicles, 'Chevron' signs on the apex's to both bends visible from both approaches and the formalisation of a 20 mph speed limit for Panorama Road in the form of the appropriate upright traffic signs and road markings (refer Traffic Signs Regulations and General Directions 2002 and Chapter 5 of The Traffic Signs Manual 2003).
- 9.14 The need of some form of control of potentially opposing HGVs movements on the narrow section of Panorama Road between the second bend and the California Quarry entrance is essential. Whilst the use of temporary traffic signals would appear to be one solution these could be compromised by the difficulty in

calculating the amount of southbound (uphill) 'green time' that would be required to allow a large fully laden HGV to pass. Nonetheless an alternative method short of widening the entire route or providing a significant number of additional passing places seems unfeasible.

- 9.15 To prevent potential conflicts with school children and parents travelling to and from school or the swimming baths then all deliveries should be restricted outside of these time periods.
- 9.16 Given the undulating vertical profile of the steep gradient on Panorama Road between the second bend and the entrance to California Quarry which includes a number of hill crests the ground clearance of low loaders should be checked against the vertical profile of Panorama Road before they are despatched to make deliveries.
- 9.17 To prevent pedestrians from walking in the carriageway after the first bend a new footway should be constructed making use of either the northern or southern verge of Panorama Road to connect with an existing pedestrian route at the apex of the second bend. Any new pedestrian crossing point provided as part of these works should ensure that adequate intervisibility is maintained for both drivers and pedestrians.
- 9.18 The integrity of the existing vehicle restraint system (VRS) on the northern side of Panorama Road between the two bends should be checked by an appropriately qualified engineer and if necessary improvements / replacements carried out.
- 9.19 All HGV deliveries to and from the site should be accompanied where appropriate by suitable number of banksmen.
- 9.20 The Author has considered the potential for the introduction of an arrester bed off the steep gradient of the northbound section of Panorama Road towards the second bend. However, it is recommended that the suitability and practicality of such a device in this location is the subject of a further report from a suitably qualified Highway Design Engineer, (refer TA 57/87 of The Design Manual for Roads and Bridges (DMRB)).