



TRANSPORT STATEMENT

FOR

THE PROPOSED EXTENSION TO

YENNADON QUARRY, IRON MINE LANE,

DOUSLAND, DEVON, PL20 6NA

21st May 2015

Job No: 7397 TS Rev.A

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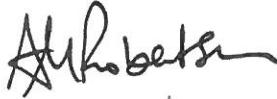

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Report Status:	Revision A. ISSUED		
Project Number:	7397 / TS		
	Engineer	Signature	Date
Report by:	A. Robertson		19/11/2013
Revisions by:	J. Blyth		21/05/2015
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1.0 INTRODUCTION

1.1 Summary

1.1.1 This Transport Statement has been prepared by John Grimes Partnership Ltd on behalf of Yennadon Stone Ltd to accompany the Environmental Statement in support of the extension to Yennadon Quarry. The quarry is currently in operation with existing planning constraints imposed. This current application concerns proposals to extend the quarry area. In transport terms, the operation method, employee numbers, and delivery route remain identical to the existing operation.

1.1.2 This Transport Statement focuses on the traffic and transport aspects of the proposed extension to Yennadon Quarry. It describes the existing traffic conditions and characteristics of the area and the impacts of the proposed quarry extension based on maximum of 30 lorry trips per week (a lorry is defined in the current planning conditions as any vehicle as having a load capacity of 3 tons or over, but excluding tractor trailers). This report has been prepared with reference to relevant guidelines.

1.1.3 The key findings of the Transport Statement are:

- The impact of the vehicle trips associated with the operation of the proposed quarry extension on the existing highway network users is expected to be negligible;
- The existing quarry access is expected to continue to operate efficiently and safely;
- The accident history does not raise any significant accident concerns and the proposed quarry extension is not expected to increase accident rates on the highway;
- The existing arrangements are expected to remain effective in minimising mud / debris being tracked onto the highway;
- The proposed extension is expected to have a negligible impact on the highway.

1.2 Development Planning Context

1.2.1 The planning authority, Dartmoor National Park Authority (DNPA), set out in their Scoping Opinion that the Traffic Statement should consider in detail the adequacy of existing arrangements and an assessment of the potential for the proposal to result in an increase in traffic generation.

1.3 Aims of the Transport Statement

1.3.1 In line with the scoping requirements, the purpose of this Transport Statement is to:

- Consider the existing local conditions in terms of public transport, walking and cycling, safety and local highway conditions for the agreed route which the quarry traffic use to access the road network;
- Consider access and movement to and from the site by all modes, including walking, cycling, public transport and commercial vehicles, having regard to existing and future year travel demand;
- Determine the likely effects of the quarry traffic on the surrounding transport network.

1.3.2 This Transport Statement provides:

- The context of the site in relation to the local and wider transport network, local facilities and amenities and local Personal Injury Accident (PIA) data.
- Assessment of vehicular access to and from the site for commercial and employee vehicles.
- Consideration of the anticipated travel demand and impact resulting from the quarry extension.

1.4 Methodology

1.4.1 The data for the assessment of existing conditions was obtained from a transport survey carried out by John Grimes Partnership Ltd on 22nd July 2011. This was conducted on Burrator Road, either side of the crossroads with Iron Mine Lane

1.4.2 This was supplemented by survey data obtained by Devon County Council. Data obtained included:

- Average Annual 24hr Data Traffic (AADT) Flows for 1990 and 2000 on the B3212;
- 24hr Weekday HGV flows for HGVs in 2000 on the B3212;
- Weekly Volume and Speed Reports for Burrator Road; and
- Personal Injury Accident (PIA) data for 01/01/2008 to 31/12/2010 from Iron Mine Lane to Yelverton roundabout (A386).

1.5 Site Location

1.5.1 Yennadon Quarry is located approximately 300m to the east of Dousland [Grid Reference SX 543 688]. It lies just within the western boundary of the south western confines of Dartmoor National Park. Access to the existing quarry is gained from Iron Mine Lane (unclassified road) via a compacted stone access track that runs along the

quarry's western edge. Yennadon Stone Ltd maintains the compacted stone access track.

2.0 EXISTING CONDITIONS

2.1 Operation Details and Existing Planning Conditions

2.1.1 The operating hours of the quarry are restricted to the periods 0700 to 1800 Monday to Friday and 0800 to 1300 on Saturdays (as stated in the conditions of the existing planning conditions for Yennadon Quarry). Essential maintenance, pumping etc., can be conducted outside of these periods subject to LPA permission.

2.1.2 The existing Planning Permission also stipulates that lorry movements are restricted to periods 0800 to 1800 Monday to Friday and 0800 to 1300 on Saturdays.

2.1.3 It also stipulates the permitted total number of lorries / HGVs per week at 35. Of these only 10 to 15 are currently used for transport of stone, with a further five for miscellaneous deliveries, such as diesel, etc.

2.1.4 The site currently employs 18 permanent staff. All employee vehicles are parked in the staff / visitor car park adjacent to the site entrance.

2.1.5 The quarry operates one HGV for deliveries. The maintenance plan for the HGV includes basic daily inspections and frequent thorough maintenance checks.

2.1.6 Stone is weighed prior to placing on the HGV, which avoids the requirement for a weighbridge at the site. The HGV remains in the site office compound area and does not enter the quarry processing area or working area where excessive mud can occur. The compound comprises areas of concrete hardstanding and compacted stone fill, which during wet weather has a thin layer of mud across the surface. The compacted stone access track effectively removes any mud / debris from the HGV tyres prior to it joining the local highway network. Yennadon Stone maintains the compacted stone access track. There is a 5mph speed limit imposed on all Yennadon employees using the access track, including the HGV.

2.1.7 The current planning submission proposals are for an extension of the quarry area to replace the current areas of extraction which are nearing depletion. In simple terms

the proposals are for the repositioning of the working plan area of the quarry. It is understood that the operators, Yennadon Quarry Ltd., do not intend to increase the volume of stone produced and have volunteered to reduce the maximum permissible production from 14,000 tonnes per annum down to 10,000 t/a; and the maximum permissible lorry trip from 35 down to 30 per week.

- 2.1.8 There are no proposals to increase the number of employees; therefore the number of employee vehicles is not expected to change.

2.2 Local Highway Network

- 2.2.1 The existing quarry access is via a private compacted stone track that extends for approximately 400m before joining the highway network at Iron Mine Lane.

- 2.2.2 The majority of HGV traffic associated with Yennadon Quarry operates along a specific route due to characteristics of the local road network. The route is illustrated in Figure 7397/TS/01 and comprises:

- Link 1. Iron Mine Lane
- Link 2. Burrator Road
- Link 3. B 3212 (Dousland Road) to A386 [Yelverton roundabout]

- 2.2.3 From the Yelverton roundabout [A386], the HGV route depends on the client delivery location.

- 2.2.4 The A386 Tavistock Road to the southwest is the principal route linking Yelverton to Plymouth and the A38 Devon Expressway. The A386 Tavistock Road is congested during the a.m. and p.m. peak hours, particularly at Derriford roundabout and to a lesser extent at The George junction.

- 2.2.5 The A386 to the northwest is the principal route linking Yelverton to Tavistock.

- 2.2.6 The existing conditions of the local highway network are summarised in the context of this route.

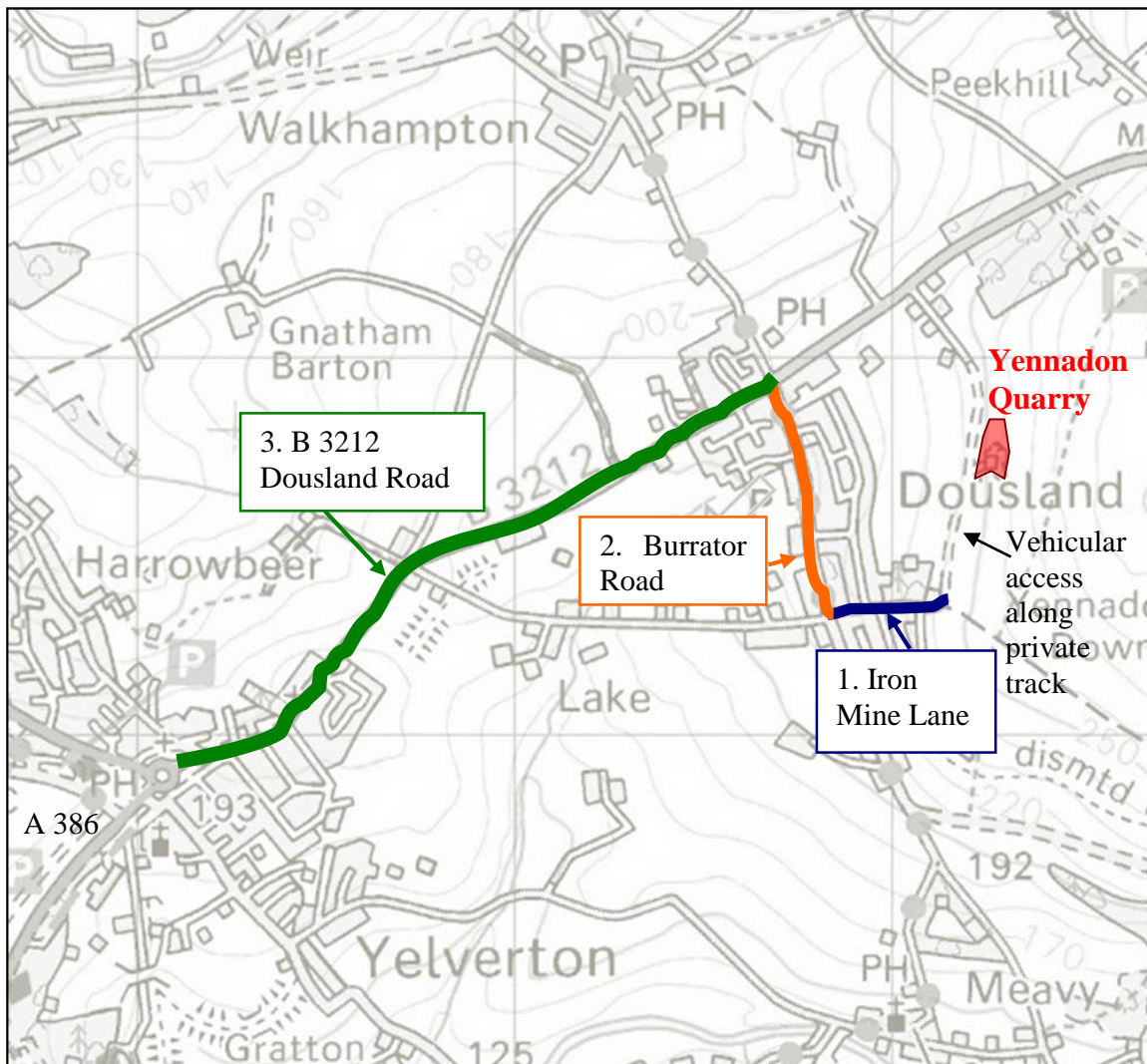


Figure 7397/TS/01: HGV Delivery Route

Link 1 – Iron Mine Lane (from site entrance to Burrator Road)

- 2.2.7 Iron Mine Lane is a narrow, single carriageway, 2-way residential road that runs from Burrator Road (Plate TS/01) in the west to the edge of Yennadon Down in the east (approximately 220m).
- 2.2.8 There is a cattle grid on Iron Mine Lane approximately 150m east of Burrator Road (Plate TS/02). With the exception of the junction markings at Burrator Road, no lane markings or other road markings exist. The entire stretch of carriageway has a 30mph speed limit. The carriageway width ranges from approximately 3m to 4.5m.



Plate TS/01: View east from crossroads on Burrator Road along Iron Mine Lane

2.2.9 At the east end of Iron Mine Lane (Plate TS/03) there is:

- a private residential road (extending to the south);
- a public footpath that leads onto the Down; and
- the compacted stone access track that runs to the north towards Yennadon Quarry.

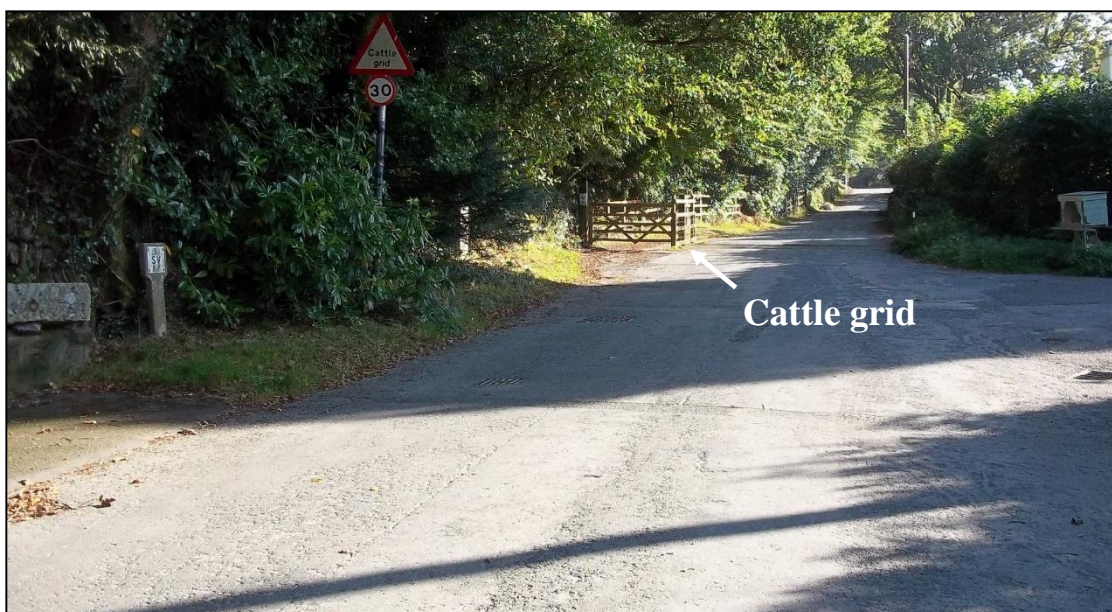


Plate TS/02: View east along Iron Mine Lane showing cattle grid



Plate TS/03: View at the east end of Iron Mine Lane

2.2.10 Pedestrians and Cyclists: There are no parking restrictions in place along the entire carriageway. There are no footways along the entire carriageway.

2.2.11 Safety: Review of personal injury accident (PIA) data for the past three years (01/01/2008 to 31/12/2010) established that one PIA occurred at the junction of Iron Mine Lane with Burrator Road. The PIA data notes that the junction has a very poor line of sight to the right. Details are summarised below:

Severity	Date / Day / Time	Vehicles Involved	Description of Incident
Slight	01/03/2009 Sunday 13:40	V1: Car V2: Car	V1 was attempting to pull out of Iron Mine Lane & turn right. As V1 pulls out V2 comes into view and vehicles collide.

Table 7397/TS/01: PIA data for Junction at Iron Mine Lane and Burrator Road

2.2.12 Lighting: There are no street lights on Iron Mine Lane.

Link 2 –Burrator Road (from Iron Mine Lane to B 3212)

2.2.13 Burrator Road is a narrow single carriageway, 2-way highway, subject to the national 30mph speed limit. The carriageway width ranges from approximately 3m to 4m. Burrator Road runs roughly in a north-south direction. The junction with Iron Mine Lane

is a crossroads; with Iron Mine Lane extending to the east and Link Lane extending to the west. Link 2 of the HGV delivery route extends north of the crossroads to the B3212.

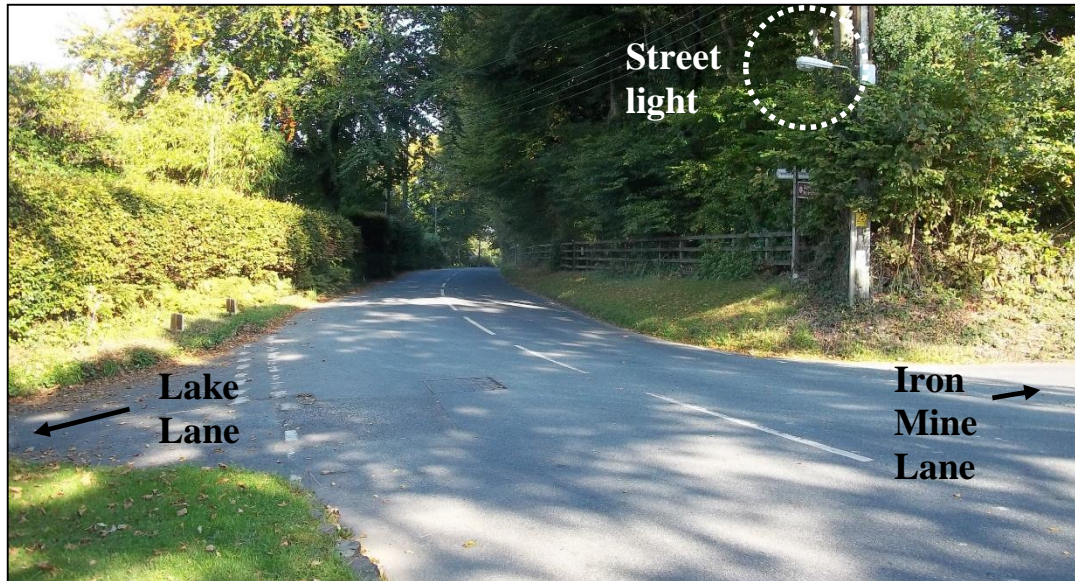


Plate TS/04: Burrator Road, view north from crossroads with Iron Mine Lane

2.2.14 An Automatic Traffic Count (ATC) undertaken by Devon County Council (Appendix TS/A) between 29th April 2006 and 1st May 2006 indicated that Burrator Road has an Average Daily Traffic flow (ADT) of approximately 1,874 vehicles. The average (mean) vehicle speed recorded over this period was 31.7mph.

2.2.15 The traffic survey conducted by John Grimes Partnership on Burrator Road at the crossroads with Iron Mine Lane on 22nd July 2011 indicated that HGVs and small lorries (including buses) made up 2.4% of the traffic on Link 2 [Note: rubbish collection took place on this day and accounted for two HGV movements in both directions]. Other commercial vehicles made up approximately 5% of the traffic. Part of the traffic survey was conducted on the southern side of the crossroads to provide comparison data.

2.2.16 Pedestrians and Cyclists: There are no footways along the carriageway except for a short section either side of the junction with Manor Park. There are no parking restrictions along the entire carriageway. The traffic survey conducted on 22nd July 2011 indicated that cyclists make up approximately 7% of the traffic on this section of road.

2.2.17 Safety: Review of personal injury accident (PIA) data (Appendix TS/B) for the past three years (01/01/2008 to 31/12/2010) established that one PIA occurred at the junction of Iron Mine Lane with Burrator Road (see Table 7397/TS/01 above). No other PIAs are recorded along link 2 in this period.

2.2.18 Lighting: There is one street light at the crossroads with Iron Mine Lane. Burrator Road.



Plate TS/05: View northeast along B3212 showing crossroads with Burrator Road

Link 3 –B3212 (from Burrator Road to A386)

2.2.19 The HGV route extends from Burrator Road southwest to the A386, which avoids Dartmoor National Park. The B3212 is a single carriageway, 2-way highway, which is subject to national speed limits: 60mph or 30mph at Dousland and Yelverton. The carriageway ranges from 3m to 5m wide.

2.2.20 A permanent ATC (Automatic Traffic Count) site is located at Dousland on the B3212 to the southwest of the junction with Burrator Road. Devon County Council data (*Devon Local Transport Plan 2001-2006*) for 2000 indicates an Average Annual 24hr Day Traffic Flow (AADT) of 3,750 vehicles, of which 70 were HGVs (>3 tonnes including buses and coaches). The 1990 AADT figure was 3,930 vehicles in total.

2.2.21 Pedestrians and Cyclists: There are no footways along the carriageway except for short sections at Yelverton. There are no designated cycle lanes along link 3.

2.2.22 Safety: Review of personal injury accident (PIA) data (Appendix TS/B) for the past three years (01/01/2008 to 31/12/2010) recorded four PIAs along the B3212 and two at the roundabout / junction with the A386. Five incidents were recorded as being slight and one as serious. No other PIAs are recorded along link 3 in this period.

2.2.23 Lighting: The only street lights along the B3212 link are at Yelverton.

2.3 Public Transport and Cycling

2.3.1 Dousland has limited accessibility to public transport, with one bus service provided in Burrator Road. The closest bus stop to Iron Mine Lane is located in Burrator Road immediately south of the junction with Iron Mine Lane. approximately 220m from the access track (620m from the quarry entrance). Table 7397/TS/02 outlines the services available in Dousland. Only service 56 stops in Burrator Road (Service 55 stops at Burrator Inn on the B3212). There are no shelters or seating at the bus stops in Burrator Road.

Service Number	Areas Served	Frequency at Dousland
Beacon Bus 55	Tavistock – Yelverton – Milton Combe	One a day (each-way)
Beacon Bus 56	Yelverton – Dousland circular	5 stops per day (09:32 to 16:32)

Table 7397/TS/02: Bus Routes Serving Dousland

2.3.2 Dousland is served by buses with only limited frequency. There are no direct bus services to Plymouth City Centre. During the weekday, no services currently pass Iron Mine Lane prior to 08:00. As site working hours at Yennadon Quarry are 0800 to 1800 Monday to Friday and 0800 to 1300 on Saturdays, public transport is not suitable as 'Sustainable Access' for employees.

2.3.3 Other local community transport schemes include The Tavistock Ring and Ride scheme, which covers the village of Dousland.

2.3.4 Burrator Road and the nearby Burrator Reservoir is a popular cycle route. Devon Online advertises the Burrator Reservoir Cycle Route, with the start point being along Burrator Road.

3.0 PROPOSED DEVELOPMENT

3.1 Site Details

- 3.1.1 Full details of the proposed development are included in Section 5.0 of the Environmental Statement. It is intended that the existing quarry access, parking area, site offices and processing area will remain as existing; with the extraction area being extended to the north of the existing quarry.
- 3.1.2 The site vehicular access will remain as existing, i.e. access is via the compacted stone track at the end of Iron Mine Lane. The access track crosses open moorland, which has public access.
- 3.1.3 The new proposals seeks to reduce the maximum permitted production rate of stone from 15,000T to 10,000T per annum, together with a concomitant reduction in lorries from 35 to 30 lorry trips per week.
- 3.1.4 Over the past six years, annual output at the quarry has ranged from 4,500 tonnes to 6,285 tonnes. Should output increase to the maximum 10,000 tonnes, the proposed limit of 30 lorry trips would not be exceeded and there would be no requirement for a significant increase in additional staffing numbers (i.e. no significant increase in person-trip generation).

4.0 ASSESSMENT OF IMPACTS

4.1 Traffic and Operational Assessment

- 4.1.1 As the extension of the quarry will not involve the construction of any new structures (i.e. existing site offices and processing areas are to remain); there will be no increase in transport impacts for the proposed development. There will be no requirement for increased freight or service traffic.
- 4.1.2 Due to the rural location, limited public transport and distance employees travel to their workplace; sustainable modes of travel for employees are considered to be impracticable.
- 4.1.3 The accident history does not raise any significant accident concerns, and the proposed quarry extension is not expected to increase accident rates on the highway.

4.1.4 The traffic survey during the hours of operation of the quarry counted 1179 vehicle trips in 10 hours. Of these, 28 were HGV or small lorries equating to 2.4% of traffic on Burrator Road. The quarry currently accounts for approximately 20 HGV lorries per week, and operates 5.5 days per week. At these levels the current quarry operation contributes 3.63 HGV vehicles per day or 7.26 HGV trips per day or 0.62% of traffic on Burrator Road. Increasing HGV trips to 30 per week equates to 5.45 HGV vehicles per day or 10.9 trips per day or 0.92% of traffic on Burrator Road. The increase in traffic is 3.64 HGV trips per day. This represents an increase of traffic on Burrator Road of 0.3% associated with the proposal.

4.2 Evaluation of Significance

4.2.1 The evaluation of significance of assessed impacts has been judged on the criteria given in Section 3.0 of the Environmental Statement.

4.2.2 The geographical impacts are local, since their impacts are limited to Iron Mine Lane, Burrator Road and the B3212. The potential impact on the local highway network of a 0.3% increase in HGV trips per day is likely to be insignificant. Furthermore, reducing the maximum permitted number of vehicles associated with the operation of the quarry reduces the potential impact of the quarry operation as compared to the current planning permission. The duration of the small impact duration can be considered to be medium to long term since the development will cease by 2025 when the current planning permission expires. The evaluation is summarised in the table below.

	Geographical	Nature	Duration	Significance	Mitigation
Volume of traffic associated with proposed extension	Local	Not significant	Medium / Long	Minor	Maintain traffic management

Table TS/01: Summary of the assessment of potential impacts

5.0 MITIGATION AND RESIDUAL EFFECTS

5.1 Mitigation

5.1.1 It is proposed that the existing traffic management arrangements will continue to be operated as existing.

5.1.2 The following traffic management measures are recommended to mitigate the potential impacts of the quarry extension:

- Continue vehicle maintenance plan for HGV.
- Monitor the amount of mud in compound area and staff / visitor car park; carry out cleaning / maintenance if excessive mud accumulates.
- Maintain access routes to the quarry to ensure the access track effectively removes mud from HGV tyres.

5.1.3 Due to the limited nature of the local public transport system and hours of work at the quarry, it is considered that public transport is not suitable as 'Sustainable Access' for employees.

5.2 Residual Effects

5.2.1 The implementation of the mitigation measures described above will ensure that there will be no significant residual effects of the development upon the existing local highway network users. The measures will provide mitigation of the potential impacts of development on the local highway network. It is anticipated therefore that there will be temporary insignificant impacts on the local transport network during the operation of the quarry extension. These impacts would cease upon final restoration and closure of the site. No permanent residual effects are anticipated.

5.2.2 In summary, the key residual effects are:

- The impact of the vehicle trips associated with the operation of the proposed quarry extension on the existing highway network users is expected to be negligible;
- The existing quarry access is expected to continue to operate efficiently and safely;
- The accident history does not raise any significant accident concerns and the proposed quarry extension is not expected to increase accident rates on the highway;
- The existing arrangements are expected to remain effective in minimising mud / debris being tracked onto the highway;
- The proposed extension is expected to have a negligible impact on the local highway network.