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WAINWRIGHTS QUARRY, BATHAM GATE ROAD
PEAK DALE, HIGH PEAK

PROPOSED CAMPING & OUTDOOR LEISURE DEVELOPMENT

TRANSPORT STATEMENT

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1.0 INTRODUCTION

1.1 This Transport Statement has been prepared by Axis on behalf of Mr William Bagshawe to consider highways and transport issues related to a proposed camping and outdoor leisure development at the former Wainwrights Quarry site located off Batham Gate Road, Peak Dale, Derbyshire. It is envisaged that the scheme would be developed on a phased basis and would ultimately comprise circa 61 mobile caravan pitches, 19 'glamping pods' and 30 tent pitches. This primary camping land use would be supported by complementary outdoor leisure uses such as fishing and canoe & cycle hire. The proposals represent the sustainable re-use of this former industrial site and would deliver a high quality leisure offer to support the strong tourist industry within High Peak and the Peak District National Park.

1.2 The report has been prepared to appraise the Local Planning Authority (High Peak Borough Council) and Local Highway Authority (Derbyshire County Council), of the highway demand / impact associated with the development proposals and to outline the design and nature of the site access arrangements. The appraisal also includes an assessment of the operating capacity of the immediate local highway network.

1.3 The report has been prepared to reflect guidance set out in National Planning Policy Guidance (NPPG) "Travel Plans, Transport Assessments and Statements in Decision Taking". This guidance notes that paragraph 32 of the National Planning Policy Framework (NPPF) identifies that developments that generate significant amounts of transport movements should be supported by a formal Transport Statement or Transport Assessment. Formal transport appraisal has typically been undertaken in the past to support planning submissions for developments that might have the potential to generate in excess of 30 vehicle movements (per hour). Given the nature of the Wainwrights Quarry application scheme and that a significant proportion of any traffic generated by the site could be expected to access the important nearby key county road route of A6

Buxton Road, it is considered that the production of a Transport Statement style report is appropriate in this case.

1.4 This Transport Statement has therefore been produced to review all relevant highways and transport issues associated with the proposed development scheme - via an audit of the existing characteristics of the immediate highway layout to the site, a review of key development elements & proposed site access strategy, and an assessment of the future traffic levels anticipated to be generated by the proposals.

1.5 The core structure of the remainder of this document is therefore as follows:

- An audit of the existing characteristics of the immediate highway layout to the site, including observed peak hour traffic demand, highway safety matters and a review of site accessibility via alternative travel modes to the private car.

- A review of the key proposed development elements & details of the proposed site access strategy.

- An assessment of the future traffic levels anticipated to be generated by the development scheme and the anticipated assignment of this traffic over the immediate local highway network.

- A review of the operating capacity of the proposed site access junction to Batham Gate Road and the suitability of the local network to accommodate the additional traffic volumes associated with the scheme.

- A review of anticipated HGV traffic levels during associated with the delivery of landscaping materials during the construction period of the scheme.

- Summary & conclusions.

1.6 The assessment work set out in this Transport Statement should be viewed in the context of advice regarding the appraisal of development traffic impact as set out in the National Planning Policy Framework (NPPF) document. Paragraph 32 to this key reference document provides guidance on those key matters to be considered when determining the suitability of development proposals:

> ***"….Plans and decisions should take account of whether:***
>
> - ***the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;***
> - ***safe and suitable access to the site can be achieved for all people; and***
> - ***improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe." (Para 32).***

1.7 The last bullet point of paragraph 32 to NPPF is considered to be of key importance in the context of the review of the Wainwrights Quarry application scheme and the assessment of the operation of the immediate local highway network. NPPF clearly identifies that development should only be refused in those cases where highways impact would be demonstrably 'severe' - which is typically understood to mean situations where introduction of the development is likely to result in a material detrimental 'step change' change in circumstances when compared to current or predicted Baseline / 'Do-Nothing' conditions. Should changes in local traffic volumes as a consequence of development be marginal in nature, highway authorities are directed not to seek to prohibit development on highways and traffic grounds.

2.0 SITE LOCATION AND EXISTING NETWORK CONDITIONS

2.1 Site Location

2.1.1 The strategic location of the Wainwrights Quarry application site is illustrated in **Figure TS1** to this report. This plan identifies the location of the site in relation to the small settlements of Peak Dale & Dove Holes proximity to the A6 and the larger town of Buxton.

2.1.2 Details of the layout of the immediate local highway network to the application site are illustrated in **Figure TS2** to this report, with photographs of key existing layout features illustrated in **Appendix TS1**.

2.2 Existing Site Conditions & Planning Status

Site Conditions

2.2.1 The application site represents the former Wainwrights Quarry site located approximately 250m to the north east of the small settlement of Peak Dale and is characterised by a man-made landscape associated with the former quarry use. The site includes a number of lakes / ponds, as well as cleared land platforms appropriate to accommodate new development.

2.2.2 The site is currently not the subject of any commercial use. It is understood that the site was used by a local trail motorbiking club within the past five years, however, the club has now vacated the site and all features associated with this former use have been removed. The site is therefore considered cleared and ready for re-development.

Site Planning Status

2.2.3 The development plan comprises the saved policies (from 2008) of the High Peak Local Plan (adopted March 2005). However, significant weight should also be given to the submitted version of the High Peak Borough

Council (HPBC) Local Plan (April 2014), which was subject to an independent Examination in Public (EIP) by an inspector in January and February 2015. The Inspector has recently published proposed main modifications to the Local Plan which are currently subject to consultation.

2.2.4 According to the High Peak Borough Local Plan Proposals Map (March 2005) the site is located within the open countryside.

2.3 Description of Surrounding Local Highway Network

Existing Vehicular Site Access Arrangements

2.3.1 The Wainwrights Quarry application site is currently served by a single vehicular connection point to the local adopted highway network. This access point is a gated industrial access to Batham Gate Road, located to the south eastern corner of the site (see **Figure TS3** to this report). As set out in section 3.2 to this report, it is proposed that the camping / leisure scheme at the site would ultimately be served via an improvement to this existing access location. An additional access to a further abandoned quarry site lies opposite, however, it is understood that this other quarry access has not been in regular use for many years.

2.3.2 The current access represents a single track skewed access road junction, with the quarry access road primarily made up of a compacted hardcore / gravel surface (see **Appendix TS1**). A gate is set back approximately 17m into the site access road to prevent unauthorised vehicle access. The access road falls at an approximate 8% gradient, from the main internal site level to the connection point to Batham Gate Road.

2.3.3 Batham Gate Road itself is also subject to a relatively steep gradient in the vicinity of the Wainwrights Quarry access point, with the route experiencing an approximate 9.5% fall towards Smalldale to the west

(measured over a 100m section through and either side of the site access point).

2.3.4 In the immediate vicinity of the existing site access point, Batham Gate Road is of 5.0m – 6.0m carriageway width with no available footway and limited highway verge. Indeed to the immediate west of the application site access, the edge of carriageway to Batham Gate Road is effectively formed by adjacent site boundary walls. As a consequence of these boundary walls, lateral visibility to the west when measured from a standard 2.4m x-distance at the existing site access connection point is extremely limited. Lateral sightlines to the east from the existing site access are assisted by both a slight bend in the Batham Gate Road and the availability of an element of unobstructed highway verge, which combine to allow for much better visibility in this direction.

Local Highway Network Connections

2.3.5 Batham Gate Road represents the main local distributor road route through the settlement of Peak Dale and connects this settlement and surrounding land (including Wainwrights Quarry) to the A6 to the west and Peak Forest and the A623 to the east. Batham Gate Road is of a single carriageway layout, with local side road connections being of a simple 'give-way' T-junction design. As noted above, in the immediate vicinity of the application site frontage, Batham Gate Road varies between 5.0m – 6.0m in width. Further to the west, within the settlement of Peak Dale, itself, the route widens to between 6.9m – 7.3m, with a segregated footway available to both sides.

2.3.6 Batham Gate Road is lit through the settlement of Peak Dale and onwards to the west towards Batham Gate and the A6. Street lighting was also observed on the immediate frontage section to the Wainwrights Quarry site (street lighting units attached to telegraph poles), albeit it is understood that this street lighting is currently not operational. The route operates under a 40mph speed limit and is subject to a 7.5t weight limit

(except for access) through the settlement of Peak Dale and past the application site access point.

2.3.7 Approximately 370m to the west of the application site access, Batham Gate Road connects to the local side road route of School Road. School Road serves additional established residential development within the settlement of Peak Dale and local facilities including a social club, school & children's play area. The route provides onward south western local road connections towards Upper End, Waterswallows and Buxton (Fairfield).

2.3.8 To the west of the settlement of Peak Dale, Batham Gate climbs up to a crest (the extent of the signed weight restriction area), before falling towards the settlement of Batham Gate and the A6. This section of the route is generally straight in horizontal alignment, with good forward visibility apart from over the section of crest. The route operates under 40mph controls through Batham Gate up to the junction with Waterswallows Lane (approximately 1200m to the west of the application site).

2.3.9 Immediately to the west of the junction with Waterswallows Lane, the route changes to national speed limit control (with no further frontage properties) and ultimately provides a terminal connection to the A6. The side road connections of Waterswallows Lane and the terminal section of Batham Gate Road are all regularly used by commercial large vehicle traffic serving the nearby Nestle Buxton Water facility and other commercial uses at the Waterswallows Business Park to the south. Waterswallows Lane and Batham Gate Road effectively form a local Y-connection to the A6, with traffic to / from Buxton (to / from the south west) signed to use Batham Gate Road and traffic to / from Dove Holes & Chapel En Le Frith (to / from the north west) signed to use the northern section of Waterswallows Lane (see **Appendix TS1**). On site observations and reference to collected local traffic data indicate that the vast majority of traffic movements follow this signed local routing strategy.

2.3.10 On site observations also identified that the current left turn radius connection between Waterswallows Lane (N) and Batham Gate Road is currently of a limited nature, making such manoeuvres for larger vehicles (such as HGVs, farm vehicles or towing traffic such as caravans) awkward – effectively requiring the vehicle to cross the centreline of the mainline route (see **Appendix TS2**). Opportunities to improve this radius are restricted by third party land boundaries and the presence of telecommunication apparatus within the necessary splay. Notwithstanding this reduced standard radius it is noted that the junction has generally operated with a good highway safety record (see section 2.5 to this report). Alternative access to Batham Gate Road for such larger vehicles also exists at the nearby A6 / Batham Gate Road junction, which provides a wide left turn radius connection, suitable to accommodate typical large vehicle traffic (see **Appendix TS2**).

2.3.10 Batham Gate Road terminates at the A6 at a ghost island priority T-junction layout on the main A6 route – providing a separate right turning lane for northbound traffic from Buxton waiting to turn into Batham Gate Road without blocking through traffic. The layout of this junction is illustrated in site photos included in **Appendix TS1** to this report. The A6 is unlit and operates under a 50 mph speed limit at this point. Visibility to the A6 from the Batham Gate side road at this location is considered to be appropriate with respect to the operating speed limit.

2.3.11 The junction of the A6 / Waterswallows Lane to the north is of a simple priority T-junction layout, with little to no right turn traffic into the side road observed from the A6 (as a consequence of the availability of the previous higher standard connection to Batham Gate Road). Lateral and forward sightlines at this junction are also considered to be suitable for local operating speeds.

2.3.12 To the east of the application site Batham Gate Road is rural in character, with limited frontage development and ultimately drops downhill towards Smalldale, a number of quarry sites and a bridge over

the former Midland mainline rail route (retained as quarry sidings). To the east of the rail bridge the route provides rural lane connections towards the settlements of Peak Forest, Wormhill & Tideswell and links to the A623 Chapel – Chesterfield route.

2.4 Baseline Highway Network Operating Conditions

Observed Traffic Flow Levels

2.4.1 Traffic conditions on the immediate highway network to the application site have been established through local manual traffic surveys undertaken in November 2013 at the following locations:

- Batham Gate Road / School Lane (Peak Dale);
- A6 / Batham Gate Road

2.4.2 These traffic counts were undertaken for the survey periods 07:00-09:30 and 15:30-18:00. Review of this data identified that maximum hourly traffic demand levels occurred during the following time periods:

- AM Peak 08:00-09:00
- PM Peak 16:45-17:45

2.4.3 Additional traffic count information has also been collected at the Batham Gate Road / Waterswallows Road crossroads junction in late May 2015 in order to supplement the A6 / Batham Gate Road junction data and allow for a better understanding of the split of traffic between the two terminal access points to the A6. Calculated peak hour background traffic conditions (for a 2015 base year, including for growth of 2013 traffic counts where relevant) is illustrated in **Figure TS4(a-c)** to this report.

2.4.4 Review of this background survey data suggests that traffic on Batham Gate Road in the immediate vicinity of the application site is generally very low, even during traditional 'rush hour' periods, with maximum two-

way observed traffic demand being as follows (west of site access junction):

- AM Peak 08:00-09:00: 163 vehicles (9 HGVs / Buses)
- PM Peak 16:45-17:45 171 vehicles (3 HGVs / Buses).

2.4.5 Traffic demand on the A6 distributor road is noted to be at much higher levels, with peak hour demand being as follows:

North of Waterswallows Lane

- AM Peak 08:00-09:00: 1144 vehicles (97 HGVs / Buses)
- PM Peak 16:45-17:45 1202 vehicles (83 HGVs / Buses).

South of Batham Gate Road

- AM Peak 08:00-09:00: 1138 vehicles (116 HGVs / Buses)
- PM Peak 16:45-17:45 1250 vehicles (98 HGVs / Buses).

2.4.6 In addition to the above local junction count information, Axis have also reviewed daily link count data for the main A6 corridor as provided by DCC Highways. **Figure TS5** to this report illustrates two-way daily profile information for average Friday, Saturday and Sunday dates as recorded at the DCC permanent Automatic Traffic Counter (ATC) station at Dove Holes during June 2014. These days of the week were specifically considered as they typically represent the busiest operational days for caravan / camping developments.

2.4.7 Review of this ATC information demonstrates that maximum demand conditions on the A6 corridor during the June 2014 study period took place on Friday afternoons, broadly mirroring traditional AM & PM 'rush hour' periods. In comparison, traffic demand on Saturday & Sunday dates was noted to be substantially lower, with maximum weekend traffic being some 200+ vehicle movements less than maximum Friday traffic, as summarised below:

- Max Friday hourly demand on A6 (16:00 – 17:00): 1252 vph
- Max Saturday hourly demand on A6 (12:00 – 13:00): 1041 vph
- Max Sunday hourly demand on A6 (12:00 – 13:00): 1044 vph

2.4.8 It is considered that the above analysis clearly demonstrates that any assessment of maximum network conditions should be focused on weekday demand conditions and that there is no requirement for the detailed analysis of weekend operation, when overall traffic levels on key local highway links are at a much lower levels.

Observed Vehicle Speeds

2.4.9 Vehicle speed surveys were carried out for the main approaches to the existing application site access junction to Batham Gate Road. These speed readings were collected in accordance with TD22/81 "Vehicle Speed Measurement on All Purpose Roads" guidance and were undertaken at the following survey locations:

- Westbound traffic: 90m to the east of the application site frontage:
- Eastbound traffic: 90m to the west of the application site frontage.

2.4.10 Recorded vehicle speeds from these surveys identify the following average and 85th percentile wet-weather speed readings:

Average Recorded Speeds:

- Westbound traffic: 31.0 mph (49.9 kph);
- Eastbound traffic: 30.0 mph (48.3 kph).

85th Percentile Recorded Speeds:

- Westbound traffic: 38.0 mph (61.2 kph);
- Eastbound traffic: 35.0 mph (56.3 kph).

2.4.11 Reference to both DfT guidance (DMRB TS9/93) and the more recent research set out in CIHT design guidance document 'Manual for Streets

2' suggests that appropriate visibility criteria for new side roads access points to main roads demonstrating such 85th speed characteristics would be as follows (taking into account relevant approach gradient – see **Appendix TS3** to this report):

Leading Direction (Westbound Approach Traffic: +9.6% uphill gradient on approach)

- Absolute minimum acceptable sightline requirement: 2.4m by 67.6m

Non - Leading Direction (Eastbound Approach Traffic: -7.9% downhill gradient on approach)

- Absolute minimum acceptable sightline requirement: 2.4m by 76.2m

NB – To ensure a robust assessment of stopping sight distance the above calculations include for the upward correction of reaction time and vehicle deceleration rate based on observed speeds over 60kph.

2.5 Road Safety: Review of Personal Injury Accident Records

2.5.1 An appraisal of the operational safety of the immediate local highway network to the application site has been carried out through a review of Personal Injury Accident (PIA) data (the standard accident data utilised for the analysis of historical road safety trends) for the most recent five year search period available from Derbyshire Constabulary (1 January 2010 – 31 December 2014) at the time of the initial preparation of this report (Summer 2015). Details of the accident review search area and the location of the recorded accident events are illustrated in **Figure TS6** to this report. The review area includes the full extent of Batham Gate Road from the A6 terminal junctions to the west, through towards Smalldale in the east.

2.5.2 A review of the available accident information identifies that no accident events have been recorded at the existing Wainwrights Quarry access point to Batham Gate Road or along any part of the frontage section of

the application site to this route. Indeed only one injury accident has been recorded within the locality of the application site. This accident occurred within the settlement of Peak Dale, at the Batham Gate Road / School Road junction and was a slight injury classification event, taking place on a summer evening. The incident involved a collision between a vehicle turning right out of School Road and a through vehicle movement on Batham Gate Road.

2.5.3 No other accident events have been recorded along the remainder of the Batham Gate Road corridor, including at the off-set crossroads junction with Waterswallows Road.

2.5.4 A total of four accident incidents have been recorded at the western terminal junction connections to the A6 Buxton Road. Given the main road nature of the A6 in this location and the substantive level of daily flow experienced on this route, it is not considered that this represents a particularly high accident rate.

2.5.5 A review of the accident events recorded at the A6 terminal junctions identifies a range of causation factors:

A6 / Batham Gate Road

- Rear shunt incident involving vehicles stopping / slowing to turn right from A6 into Batham Gate Road (Saturday, May 2010).
- Collision involving an HGV turning right out of Batham Gate Road and a vehicle travelling southbound on the A6 (Wednesday, April 2012).
- Rear shunt in snow conditions on northbound approach to A6, involving a vehicle stopping / slowing to turn to Batham Gate Road (Thursday, December 2013).

A6 / Waterswallows Lane

- Motorcycle overtaking southbound left turning vehicle collides with vehicle exiting side road and turning right (Sunday, June 2013).

2.5.6 Given the above review of accident history, it is ultimately concluded that there is no evidence to suggest that the development of a new camping / outdoor leisure scheme at Wainwrights Quarry would result in a material impact on overall existing good highway safety conditions and thus call the application scheme into question.

2.6 Site Sustainability & Accessibility

2.6.1 Local and national development policy documents set out two primary transport objectives when considering the location of new development:

- The need to reduce the need to travel, especially by private car;
- The need to promote accessibility to a range of sustainable travel options.

2.6.2 The nature of local sustainable transport opportunities available within the immediate catchment of the Wainwrights Quarry application site are summarised in the paragraphs below.

Accessibility to Local Facilities (Walking and Cycling)

2.6.3 The rural location of the Wainwright Quarry site reduces the extent of available options for regular walking and cycling to surrounding amenities, with few 'everyday' destinations lying within typical acceptable travel distance thresholds. National guidance states that walking offers the greatest potential to replace car trips of under 2 kilometres; likewise cycling has the potential to substitute trips of under 5 kilometres. Ultimately, however, opportunities to promote journeys to / from the site by these travel modes are more likely to be associated with leisure purposes rather than a specific social 'need' and therefore time & distance may be less critical factors in the decision to make a trip in such cases.

2.6.4 Within the immediate vicinity of the site, provision for pedestrians is relatively limited with no footway available on the site frontage section of

Batham Gate Road. Pedestrian facilities are available within the local settlement of Peak Dale and it is proposed that new dedicated footway connections are provided from the Wainwright Quarry site to Peak Dale as part of the application scheme. Peak Dale provides a small range of services including Rocks Social Club / Public House, Public Play Area and Recreation Area - all of which lie well within a 2km walk distance.

2.6.5 In addition to walking opportunities, cycling has also been recognised to have the potential to substitute for short car trips and represents a popular leisure activity, often related to camping / outdoor leisure sites. The location of the Wainwright Quarry application site allows for access to the local settlement of Dove Holes and Buxton (see **Figure TS7** to this report). Opportunities also exist to connect to longer distance leisure cycle routes such as the Limestone Trail and Monsal Trail at Millers Dale. Details of available formal local cycling routes and connections are illustrated in **Figure TS8** to this report.

Access to Public Transport

2.6.6 Closest bus stops to the application site are located on Batham Gate Road to the east (next to the Peak Dale Products building) and approximately 100m from the existing site access connection. This stop is of a simple flagpost design. As set out in section 3 to this report, it is proposed that direct footway connections would be provided across land associated with the Wainwright Quarry site in order to directly link to this local bus stop as part of the camping / leisure masterplan.

2.6.7 A further bus stop (including passenger shelter and information board for Buxton bound services) is available within Peak Dale village at the junction of Batham Gate Road / School Road junction (approximately 100m from the western corner of the Wainwrights Quarry site and also to be connected by an on-site footway route).

2.6.8 A plan of the existing bus route connections available at these local bus stops is illustrated in **Figure TS9** to this report and summarised below

Table TS2.1 – Local Public Transport Connections

Route Number	Route Description	Mon - Fri	Sat	Sun
68	Buxton – Tideswell - Castleton	1 per day	1 per day	-
189 / 190	Whaley Bridge – Chapel – Chinley – Peak Dale - Buxton	5/6 per day	5/6 per day	-
Skyline 199	Manchester Airport – Stockport – Disley – Chapel – Peak Dale - Buxton	Hourly	Hourly	Hourly

2.6.9 Review of these bus service opportunities demonstrates a minimum hourly bus connection to the key local retail and service centres of Buxton and Chapel-en-le-Frith, along with links to other local settlements such as Dove Holes, Whaley Bridge and Chinley.

2.6.10 In addition to these local bus connections, the site is located within 2.25km travel distance of Dove Holes rail station. This station is served by hourly frequency trains on the Manchester – Buxton line and therefore provides connections to the local settlements of Chapel-en-le-Frith, Whaley Bridge and Buxton, as well as more strategic links to Stockport and Manchester. The station provides opportunities for on-site cycle parking (the station lying within an appropriate local cycle catchment of the Wainwright Quarry site) or alternatively could be accessed by car / local taxi links.

Summary

2.6.11 The Wainwrights Quarry application site represents an appropriate location for camping / outdoor leisure development, being located within a 100m walk of bus stops served by regular bus connections and within a walk / cycle catchment of a limited range of local services / facilities. Such locational characteristics should assist in meeting the sustainable planning objectives of promoting opportunities for the use of alternative travel modes to the private car and managing the overall traffic impact associated with new development.

2.6.12 An additional camping / leisure offer at this site is also considered likely to support the viability of local services and respond to the thriving tourist industry within High Peak and the Peak District National Park.

3.0 REVIEW OF THE DEVELOPMENT PROPOSALS

3.1 Development Proposals

3.1.1 The application scheme represents the delivery of the re-use of the former Wainwrights Quarry site at Batham Gate Road, Peak Dale for camping and outdoor leisure land use. It is envisaged that the scheme would be developed on a phased basis and when completed would ultimately deliver:

- 61 mobile caravan pitches;
- 19 'glamping pods', and;
- 30 tent pitches.

This primary camping land use would be supported by complementary outdoor leisure uses such as fishing / canoe activities associated with the on-site lakes / ponds and guest cycle hire.

3.1.2 A masterplan of the full application scheme is included as **Figure TS10.** This plan illustrates the proposed siting of the key caravan / camping elements, as well as proposed internal road and footpath links and the location of other ancillary administration buildings, site car parking and landscaping features.

3.2 Proposed Highway Access Arrangements

3.2.1 Vehicle access to the application scheme would be provided via an improved site access connection to Batham Gate Road to the south eastern corner of the site – at the location of the existing quarry access. The existing access would be improved to ensure safe two-way caravan entry / exit operation and would be based on the following key design dimensions (see also **Figure TS11a** to this report):

- Minimum 7.3 wide site access road connection to ensure 2-way vehicle & caravan access (see **Appendix TS4** for details of

relevant vehicle swept path testing analysis). The first 30m of the access road would be of an appropriate bound surface with private highway drainage in order to ensure that no loose materials or surface water originating from the site would impact on the adopted highway.

- Widened junction bellmouth including 15m left turn site entry radius from Batham Gate Road (W) approach;

- Setting back of site boundary wall to Batham Gate Road to improve sightlines and deliver localised widening to assist two-way caravan access to the site.

- Site security gate feature located 20m back from Batham Gate Road to allow for waiting / storage of a vehicle with caravan off the public highway.

3.2.3 The proposed access improvements and relocation of boundary wall features have been carefully designed in order to achieve appropriate lateral sightlines from site side road access point. **Figure TS11b** to this report, demonstrates that the access junction works would deliver the following lateral sightlines when measured from a standard development side road access point 'x' distance of 2.4m from the edge of carriageway:

- Leading direction (to the right): 2.4m by 80m
- Non-leading direction (to the left): 2.4m by 70+m to inside kerb.

3.2.4 Reference to relevant national design standard requirements (see section 2.4 to this report) demonstrates that the proposed levels of achievable lateral visibility at the improved site access junction are entirely appropriate for recorded prevailing operating conditions on Batham Gate Road at this location.

3.2.5 In addition to the site access junction improvements to assist vehicular access, the application scheme will also include for the provision of two

new dedicated footpath connections to Batham Gate Road. The nature of these new connections are illustrated in **Figure TS12** and would provide links to Peak Dale village and local bus stops. The footpath to the south east of the site (close to the site entrance) would link directly to the existing well used public footpath connecting to the centre of Peak Dale village, as well as the bus stop at Peak Dale Products.

3.3 Car Parking

3.3.1 It is proposed that all mobile caravan pitches would include for 'in pitch' car parking opportunities, thereby avoiding the need for any additional parking areas for towing vehicles.

3.3.2 A further 56 formal car parking spaces would be provided across the site to serve the proposed glamping pods, tent pitches and other on-site outdoor leisure uses (fishing / canoe hire). Such a level of formal on-site parking is considered appropriate to support the level of development proposed. Ultimately given the nature of the development site and the substantive areas of land available, it is considered likely that any additional car parking could be accommodated on-site as necessary, without any need for any 'overspill' car parking demand onto sections of the nearby adopted highway network

3.4 Vehicle Servicing

3.4.1 Given the nature of primary use, it is not anticipated that the application scheme would require regular daily servicing by large delivery / waste collection vehicles. Notwithstanding this, the proposed site access improvement scheme and internal site layout is capable of safely and efficiently accommodating large service vehicle access when necessary. Details of large vehicle swept path analysis are provided in **Appendix TS4** to this report.

3.5 Travel Plan

3.5.1 The inherent need for a vehicle / caravan trip as part of an initial visitor journey to mobile caravan / camping site represents a limit to the opportunity to promote sustainable access to the site for main arrival / departure movements. Notwithstanding this, however, section 2.6 to this report has identified that a number of opportunities do exist to encourage walking, cycling and bus / train travel for visitor movements over the remaining duration of stay at the site, particularly when accessing other nearby local services or leisure offers.

3.5.2 This section of the report therefore provides a summary of the measures that would be pursued by the applicant as part of a formal Travel Plan to support the operation of the application scheme - in order to complement existing sustainable transport infrastructure, improve the attractiveness of the site to visitors, and manage vehicle trip demand to / from the site / ensure that caravan movements are guided to utilise appropriate approach routes. The measures proposed for inclusion in the Travel Plan have been developed based upon experience of similar initiatives that have been implemented at other caravan / camping sites across the UK and via reference to general feasibility / practicality in view of the Wainwright Quarry site's rural location and the necessity for initial arrival / final departure journeys to be made in a vehicle.

3.5.3 It is proposed that final measures and initiatives to be included in the Travel Plan would be developed in dialogue with the local planning & highway authorities and that ultimately the delivery / agreement of a final plan document would be secured via a suitable planning condition or legal agreement. A copy of a Framework Travel Plan, setting out the key building blocks for the delivery of a successful Travel Plan at the wainwrights Quarry site is included as **Appendix TS5** to this report.

Management of Mobile Caravan Arrival / Departure Movements

3.5.4 A site location map and detailed routing information would be provided to all visitors as part of the information package supplied on confirmation of booking. This information would advise customers on the most appropriate local approach routes to the site for caravan movements (including advisory information regarding the tight radius turn at Waterswallows Road / Batham Gate Road and the local alternative access option via the A6 / Batham Gate Road junction) and make visitors aware of any immediate local routes considered inappropriate for regular caravan access. This routing information would also be made available on any website / promotional information prepared to support the caravan / camping business.

3.5.5 All advisory routes promoted to serve the application scheme would be based on seeking to manage access to the site via the main county 'A' road network where possible (e.g.; A6, A623, A50) and the use of other suitable connecting routes. An example of the proposed routing strategy approach for the site is reproduced as Appendix TP2 to the attached Framework Travel Plan. As a matter of course visitors would be advised not to rely on satellite navigation systems when route planning. Such a methodology reflects existing good site practice already implemented at other mobile caravan park sites.

On-Site Travel Notice Board

3.5.6 A Travel notice board would be placed in a prominent location on the site, close to the site reception. This would include details of local sustainable travel opportunities (walk / cycle & public transport services) and the means by which they could be accessed from the site. As a minimum it is envisaged that the notice board would include the following:

- Leaflets produced by DCC in relation to safe walking and cycling routes / leisure trails.

- Bus timetable for the local 68, 189/190 and 199 bus services and details of bus stop location, return fares to popular destinations (Buxton, Chapel, etc).
- Rail timetables from Buxton / Dove Holes stations.
- Details of local taxi firms in Buxton and the surrounding area.

On-Site Shop

3.5.7 The site operator will investigate options to operate a limited site shop / 'essentials' ordering service. The provision of a shop / ordering service operated by the site would reduce the necessity for visitors to leave the site to undertake 'everyday' shopping during the course of a stay.

3.5.8 Copies of suitable travel leaflets / information would also be made available at the site shop / office.

Cycle Hire

3.5.9 In view of the accessibility of the surrounding countryside and the availability of nearby off-road / quiet lane provision it is proposed that the site operator would offer a cycle hire scheme available to visitors to the site. The service would be promoted via the notice board and other promotional literature provided to customers and would be supported by further information related to local routes and directions to access popular leisure trails.

4.0 PREDICTED TRAVEL DEMAND TO THE APPLICATION SITE

4.1 Introduction

4.1.1 This section of the Transport Statement seeks to identify the levels of traffic demand anticipated to be generated by the proposed camping and outdoor leisure development at Wainwrights Quarry and the likely local routing of this traffic.

4.2 Predicted Trip Demand Levels Associated with the Application Scheme

4.2.1 Predicted vehicle traffic demand associated with the development of the Wainwrights Quarry site for camping and outdoor leisure use has primarily been estimated via reference to the operation of example sites held in the TRICS traffic generation database. TRICS is a nationally regarded source of historical trip demand data and contains observed traffic data for a large number of development-type sites and, as such, can be considered to produce reliable base trip rate data.

4.2.2 Based on the analysis of background local network peak demand conditions set out in section 2.4 to this report, it is anticipated that combined peak hour background + development conditions would take place for weekday mornings and afternoon / early evening network conditions. The analysis below therefore concentrates on likely development trip demand during such weekday periods, with a particular focus on Friday development conditions - associated with the arrival of 'weekend' bookings.

4.2.3 The TRICS database holds a limited sample of caravan / camping sites that could be considered as likely being representative of the Wainwrights Quarry application scheme, both in terms of site size (no. of pitches) and rural location. Anticipated trip information for Friday scenarios has therefore been obtained via analysis of the following representative sites from TRICS:

- Site SH-03-J-01: 115 Pitch Site, Shrewsbury, Shropshire
- Site DS-03-J-01: 152 Pitch Site, Thurlston, Derbyshire
- Site DC-03-J-05: 122 Pitch Site, Moreton, Dorset

4.2.4 Average trip rates (per caravan / camping pitch) for the traditional AM peak and selected afternoon / evening time periods, are illustrated in the table below, along with trip rates for the core 12hr weekday day time period 07:00-19:00. These trip rates have been applied to the total number of caravan / pod / camping pitches proposed at the Wainwrights quarry site (up to 110 pitches), with the results set out in **Appendix TS6** and summarised in **Table TS4.1** below.

Table TS4.1 – Predicted Development Trip Generation

	Average Trip Rates (per caravan / camp pitch)			**Trip Demand (110 pitches)**		
	Arrivals	Departures	**Total**	Arrivals	Departures	**Total**
Caravan / Camping						
AM Peak (08:00-09:00)	0.023	0.046	0.069	3	5	8
A'noon Peak (16:00-17:00)	0.162	0.113	0.275	18	12	30
PM Peak (17:00-18:00)	0.167	0.080	0.247	18	9	27
12hr (07:00 – 19:00)	1.231	1.059	2.290	135	116	252

4.2.5 The above analysis demonstrates that the primary caravan / camping element of the application scheme is not anticipated to generate a substantive level of travel demand, with maximum hourly 2-way (in + out) vehicle demand predicted to be of the order of 30 vehicle movements per hour during the maximum afternoon period of 16:00-17:00. Such demand is the equivalent of 1 development vehicle trip movement every 2 minutes and is unlikely to result in a material impact on local network operating conditions.

4.2.6 It is anticipated that the majority of the demand for the proposed on-site outdoor leisure opportunities (fishing / canoe hire / cycle hire) will be generated from caravan / camping site visitors and therefore will not result in a significant level of additional traffic movements over above that

related to the core camping use. Notwithstanding this, in order to ensure a robust assessment of future traffic demand, the following additional outdoor leisure related vehicle trip demand levels have been assumed for the key assessment hours.

- AM Peak (08:00-09:00): 3 in, 3 out;
- Afternoon Peak (16:00-17;00): 5 in, 5 out;
- PM Peak (17:00-18;00): 5 in, 5 out;
- 12hrs (07:00-19:00): 52 in, 52 out.

4.2.7 The addition of the above estimates for vehicle movements related to the outdoor leisure uses to the TRICS estimates for the core caravan / camping land use suggests the levels of total hourly site trip demand as summarised in **Table TS4.2** below:

Table TS4.2 – Predicted Total Trip Demand to Wainwrights Quarry Application Scheme

	Wainwrights Quarry Camping & Outdoor Leisure Total Trip Demand		
	Arrivals	Departures	**Total**
AM Peak (08:00-09:00)	6	8	**14**
A'noon Peak (16:00-17:00)	23	17	**40**
PM Peak (17:00-18:00)	23	14	**37**
12hr (07:00 – 19:00)	187	168	**355**

4.3 Predicted Development Trip Distribution and Assignment

4.3.1 In practice, given the nature of the core caravan and camping land use proposed for the Wainwrights Quarry site, trips to / from the application scheme could be expected to be drawn from over a wide catchment and would likely vary in terms of travel direction on any given day, depending on the origin of visitor bookings. In order to provide a reasonable overview of general travel patterns, Axis have estimated visitor trip distribution to / from the site on the basis of population distribution within a one hour travel catchment of the site. This catchment is considered to provide a good proxy for likely travel movements to the site on the basis

that it includes the main regional cities of Manchester, Sheffield, Derby and Stoke-on-Trent (see **Figure TS13** to this report).

4.3.2 In order to derive a geographic distribution of likely trips to / from the site from within this one hour catchment, population data has been obtained from the Microsoft Map Point demographic database (based on postcode areas). A copy of this catchment area distribution exercise is included as **Appendix TS7** to this report.

4.3.3 The assignment of trips to / from the application site from these postcode areas has been undertaken via reference to appropriate 'quickest time route paths' as suggested by the Map-Point journey planning software. The results of this route choice / assignment exercise are set out in **Appendix TS7** to this report, which highlights the calculated overall approach route proportions summarised below:

- A6 North (via Dove Holes): 55.3%
- A6 South (via Buxton): 22.8%
- A623 East (via Peak Forest): 21.8%

4.3.4 The application of these assignment proportions to the peak hour total development trip estimates set out in section 4.2 to this report, are illustrated in **Figure TS14(a-c)**. Predicted trip demand on key sections of the immediate local highway network as a result of this assignment can be summarised as follows:

Table TS4.3 – Predicted Development Traffic Link Assignment

All Vehicles	AM Peak (08:00-09:00)	Afternoon Peak (16:00-17:00)	PM Peak (17:00-18:00)	12hr Weekday (07:00-19:00)
Batham Gate Road (East of application site)	3	9	8	78
Batham Gate Road (Peak Dale)	11	31	29	278
A6 (North of Waterswallows Ln)	8	22	21	197
A6 (South of Batham Gate)	3	9	8	81

(Two-way Traffic)

5.0 ASSESSMENT OF ANTICIPATED NETWORK TRAFFC IMPACT

5.1 Introduction

5.1.1 This section of the report considers the assessment of the operation of the immediate local highway network to the Wainwrights Quarry application site, and the ability of this network, including the proposed new site access junction, to accommodate all traffic flow movements predicted to access the development.

5.1.2 The extent of operational impact assessment included within this section reflects the limited scale of development proposed and the generally low traffic demand nature of much of the local highway network and includes:

- Link / flow impact for Batham Gate Road to the east and west of the application site access.

- Link / flow impact for the A6 to the north and south of the terminal junction connections of Batham Gate Road / Waterswallows Lane.

- Junction operational capacity assessment for the proposed development site access junction to Batham Gate Road (via PICADY modeling) and the terminal junctions of Batham Gate Road & Waterswallows Lane with the A6.

5.1.3 In order to provide for a comparative assessment of future network operating conditions, the analysis set out within this Transport Statement includes for the consideration of two main future traffic scenarios:

- **'Do Nothing' Baseline Scenario** – Operation of the local highway network, assuming that no development takes place at the Wainwrights Quarry application site.

- **'Do Something' Baseline + Development Scenario** – Operation of the local highway network including for the development of the application site for up to 110 caravan / camping pitches and ancillary outdoor leisure use.

5.1.4 This approach is in accordance with guidance on assessment good practice set out in the National Planning Policy Framework (NPPF). As noted in section 1 to this report, paragraph 32 to this document identifies that development should only be refused in those cases where highways impact is identified as likely to be 'severe' - which is typically understood to mean situations where development could result in a material detrimental 'step change' change in circumstances when compared to predicted Baseline / 'Do-Nothing' conditions. Should no severe impact be identified, then an application scheme should not be subject to a highways related objection.

5.2 Assessment Parameters

5.2.1 For the purposes of this assessment, full development opening year for the proposed caravan / camping development is anticipated to be end of 2017. In order to meet the requirements of DfT good practice guidance, however, network assessments have been carried out at a future 'design year' of 2020 (i.e. 5 years from the date of the 2015 planning submission). This future assessment year approach is consistent with recent methodology agreed for the network analysis of a nearby residential development scheme at Peak Dale.

5.2.2 Network appraisal has been carried out for maximum weekday traffic conditions, both in terms of prevailing background network patterns and the predicted development peak. Assessment time periods included in this report are therefore as follows:

- Traditional AM peak hour: 08:00-09:00
- Afternoon 'Development' Peak: 16:00-17:00
- Traditional PM peak hour: 16:45-17:45

Background Network Traffic

5.2.3 Background traffic demand estimates for the immediate local highway network to the application site have been calculated based on the 'growthing' of the observed November 2015 traffic count information to 2020 future year estimates using appropriate locally adjusted (Buxton area) National Traffic Model (NTM) growth factors. The methodology for the calculation of growth factors is set out in **Appendix TS8** to this report and the relevant key growth factors summarised below.

2015 - 2020

- AM Peak: 2015 – 2020 Factor: 1.0752
- PM Peak: 2015 – 2020 Factor: 1.0796

5.2.4 2020 Background traffic estimates for the immediate local network calculated via the application of these growth factors are illustrated in **Figure TS15(a-c)** to this report.

Committed Development

5.2.5 In addition to the growthing of background traffic in line with local forecasts, the network assessments in this report have also included for traffic estimates associated with a proposed new 27 dwelling residential development at Peak Dale (Planning Ref: HPK/2015/0174). This scheme was granted planning consent by High Peak Borough Council in early Summer 2015.

5.2.6 Review of the Transport Statement prepared in support of the planning application for the Peak Dale residential scheme identifies the predicted additional development traffic as set out in **Figure TS16(a-c)** to this report (based on average trip rates).

'Do-Nothing' Baseline Traffic Estimates

5.2.7 The addition of the predicted Peak Dale residential development traffic to the 2020 background estimates to generate 'Do-Nothing' Baseline future year traffic conditions is illustrated in **Figure TS17(a-c)** to this report.

'Do-Something' Baseline + Development Traffic Estimates

5.2.9 'Do-Something' Baseline + Wainwrights Quarry Development traffic estimates are set out in **Figure TS18(a-c).** These estimates have been calculated as follows:

2020 Baseline Traffic (Figure TS17) + Wainwrights Quarry Development Traffic Estimates (Figure TS14).

NB – For the purpose of this assessment, the 17:00-18:00 development trip demand estimates have been added to the 16:45 to 17:45 PM baseline traffic in order to generate the PM peak 16:45 – 17:45 'Do-Something' flow estimates.

5.3 Link Flow Assessment

5.3.1 Reference to Chartered Institution of Highways and Transportation (IHT) 'Guidelines for Traffic Impact Assessment' suggests that more detailed analysis of highway impact and / or capacity improvements is only likely to be required where either:

- Traffic to / from the development exceeds 10% of existing two way traffic on the adjoining highway; or,

- Where traffic to / from the development exceeds 5% of the existing two way traffic flow on the adjoining highways at locations where traffic congestion exists within the assessment period or in other sensitive locations.

5.3.2 It is noted, however, that this traditional assessment approach was reviewed and updated by the March 2007 DfT "Guidelines for Transport Assessment" (this guidance itself withdrawn in October 2014 and replaced by NPPF / NPPG) which stated:

> ***"If the TA confirms that a development will have material impact on the highway network, the level of impact at all critical locations on the network should be established. A particular example of material impact would be a worsening of congestion. In congested areas, the percentage traffic impact that is considered significant or detrimental to the network may be relatively low (possibly below the average daily variation in flow), and should have been determined in discussions with the relevant highway authorities. For the avoidance of doubt, the 1994 guidance regarding the assessment thresholds of 10 per cent and 5 per cent levels of development traffic relative to background traffic is no longer deemed an acceptable mechanism, since it creates an incentive in favour of locating development where high levels of background traffic already exist."***

5.3.3 Notwithstanding the more recent DfT advice, in the case of the immediate local highway network to the Wainwrights Quarry application site which has been observed to operate with typically free flowing un-congested traffic conditions, it is considered that the traditional 5% & 10% thresholds still represent a reasonable initial 'contextual guide' as to the likely extent of total development traffic operational impact on immediate local routes. Any predicted percentage flow change values close to, or over, such a thresholds could be considered potentially suitable for further, more detailed investigation re: a likely material impact on operating capacity conditions, albeit any such percentage change should be appraised in the context of the low baseline traffic position identified on certain routes such as Batham Gate Road / Waterswallows Lane

5.3.4 Link flow operational assessments have therefore been carried out for the following link sections:

- Batham Gate east of the application site access;
- Batham Gate west of the application site access;

- A6 to the south of the Batham Gate junction.
- A6 to the north of the Waterswallows Lane junction.

5.3.5 It is considered that these immediate sections of route network would experience the maximum traffic demand associated with the proposed Wainwrights Quarry application scheme. Should link impact levels on these immediate sections of route prove to fall within acceptable criteria, it can reasonably be concluded that development traffic at more remote network locations would also lie within suitable thresholds.

5.3.6 **Table TS5.1** below demonstrate the anticipated changes in two-way 2020 future year link flows associated with the proposed residential development (average trip rate scenarios).

Table TS5.1 – Predicted Changes in Link Flow on Immediate Sections of the Local Highway Network to the Application Site

	2020 AM Peak Period (07:00-08:00)			2020 Afternoon Dev Peak (16:00-17:00)		
	Do Nothing	Do Something	% Change	Do Nothing	Do Something	% Change
All Vehicles						
Batham Gate Road (West of application site)	181	192	5.8%	172	203	18.1%
Batham Gate Road (East of application site)	181	184	1.6%	172	181	5.1%
A6 (N of Waterswallows Ln)	1,234	1,242	0.6%	1,241	1,263	1.8%
A6 (South of Batham Gate)	1,228	1,231	0.3%	1,322	1,332	0.7%

	2020 PM Peak Period (16:45-17:45)		
	Do Nothing	Do Something	% Change
All Vehicles			
Batham Gate Road (West of application site)	191	220	15.0%
Batham Gate Road (East of application site)	191	199	4.2%
A6 (N of Waterswallows Ln)	1,302	1,322	1.6%
A6 (South of Batham Gate)	1,354	1,363	0.6%

(Two-Way Traffic)

5.3.8 Review of the link flow assessment results demonstrates that typically the immediate sections of the A6 to the application site would not experience increases in traffic demand in excess of 1.8% of Do-Nothing Baseline levels.

5.3.9 Maximum predicted link impact would take place during the PM peak period on the immediate section of Batham Gate Road to the site frontage and Peak Dale village (i.e. to the west of the site access), where an increase in traffic demand of 18.1% of 2020 Do-Nothing traffic levels is predicted as a result of the operation of the Wainwrights Quarry application scheme. In practice such a high level of percentage change is more a function of the existing low Baseline traffic levels and in practice represents additional development related trip demand on this link circa 30 vehicles per hour (or 1 vehicle movement every 2 minutes). Such traffic levels are typically considered unlikely to give rise to distinguishable local network operational effects or material traffic related environmental / amenity impacts.

5.4 Junction Capacity Assessments

5.4.1 Notwithstanding the conclusions of the link flow / link capacity assessments set out above, a detailed review of junction operational capacity has been carried out for the following local junctions:

- Batham Gate Road / Application Site Access;
- A6 / Batham Gate Road;
- A6 / Waterswallows Lane.

5.4.2 Operational capacity has been assessed using DfT standard analysis software JUNCTIONS8 (PICADY models: T-junction layouts). PICADY splits the hourly traffic estimates into 15-minute time segments, including for peak operation above the hourly average and the results generated indicate the peak Ratio of Flow to Capacity (RFC) during these time periods and the anticipated traffic queues. RFC values for approach arms between 0.00 and 0.85 are generally considered to represent stable and

acceptable operating conditions. Values between 0.85 and unity (1.0) represent variable operation (i.e. possible queue build up and increases in vehicular delay for traffic moving through the junction). RFC values in excess of unity represent overloaded conditions (i.e. congested conditions).

Batham Gate Road / Application Site Access Junction

5.4.3 Results of the 2020 Baseline + Development scenario PICADY model runs are summarised in **Table TS5.2** below, with relevant model output attached as **Appendix TS9**.

Table TS5.2: Site Access Connection to Batham Gate Road: PICADY Assessment Results

2020 Baseline + Wainwrights Quarry Development

	AM Peak (07:00-08:00)			**Afternoon Dev Peak (16:00-17:00)**		
	Flow (pcus)	RFC	Queue	Flow (pcus)	RFC	Queue
Application site to Batham Gate Rd	8	0.01	0	17	0.03	0
Batham Gate Rd RT to site	1	0.01	0	5	0.01	0

	PM Peak (16:45-17:45)		
	Flow (pcus)	RFC	Queue
Application site to Batham Gate Rd	14	0.02	0
Batham Gate Rd RT to site	5	0.01	0

5.4.4 Review of the results set out in the above table indicates that the proposed site access junction would operate efficiently during all time periods including for full re-development of the site. No significant queuing or delay is predicted at the junction, which would offer a substantive level of spare capacity.

A6 / Waterswallows Lane Junction

5.4.5 Additional junction capacity assessments have been undertaken for the western terminal connection to the main A6 local distributor road, as

these junctions could be expected to be utilised by the majority of traffic seeking to access the Wainwrights Quarry site. **Table TS5.3** summarises the results of the 2020 Baseline + Development scenario PICADY model runs for the A6 / Waterswallows Lane junction. Relevant PICADY model output for these capacity tests is included as **Appendix TS10** to this report.

5.4.6 Review of the results of the PICADY modelling suggests that the A6 / Waterswallows Lane junction could also be expected to operate with no capacity issues for 2020 future year 'with development' traffic conditions. No significant queuing or delay is predicted at the junction, which would operate at RFC levels well below critical 0.85 thresholds.

Table TS5.3: A6 / Waterswallows Lane: PICADY Assessment Results

2020 Baseline + Wainwrights Quarry Development

	AM Peak (07:00-08:00)			**Afternoon Dev Peak (16:00-17:00)**		
	Flow (pcus)	RFC	Queue	Flow (pcus)	RFC	Queue
Waterswallows Lane to A6	32	0.12	0.15	38	0.14	0.18
A6 RT to Waterswallows Lane	0	0	0	0	0	0

	PM Peak (16:45-17:45)		
	Flow (pcus)	RFC	Queue
Waterswallows Lane to A6	38	0.15	0.18
A6 RT to Waterswallows Lane	0	0	0

A6 / Waterswallows Lane Junction

5.4.7 **Table TS5.4** below sets out the results of the 2020 Baseline + Development scenario PICADY model runs for the A6 / Batham Gate Road junction, with relevant model output attached as **Appendix TS11**.

Table TS5.4: A6 / Batham Gate Road: PICADY Assessment Results

2020 Baseline + Wainwrights Quarry Development

	AM Peak (08:00-09:00)			Afternoon Dev Peak (16:00-17:00)		
	Flow (pcus)	RFC	Queue	Flow (pcus)	RFC	Queue
Batham Gate Rd to A6	100	0.15	1	116	0.22	1
A6 RT to Batham Gate Rd	113	0.20	1	121	0.21	1

	PM Peak (16:45-17:45)		
	Flow (pcus)	RFC	Queue
Batham Gate Rd to A6	115	0.22	1
A6 RT to Batham Gate Rd	114	0.20	1

5.4.8 Review of the above results demonstrates that the A6 / Batham Gate Road terminal junction could be expected to operate efficiently during all study time periods even including for full re-development of the Wainwrights Quarry site. No substantive queuing or delay is predicted at the junction, which would operate at RFC levels well below critical 0.85 thresholds.

5.5 Impact Summary

5.5.1 Capacity assessments have been undertaken for key immediate links and junctions to the proposed Wainwrights Quarry application site for future year operating conditions, including for traffic growth forecasts and proposed local development. The results of these tests demonstrate that the marginal changes in operational performance predicted associated with the development and operation of the application scheme do not represent a material worsening in local traffic conditions and, in practice, are unlikely to be distinguishable from existing day-to-day variations in Baseline traffic flows.

5.5.2 No local highway improvements are therefore considered necessary in order to accommodate the proposed development, with the network predicted to continue to operate efficiently, with a level of spare capacity.

6.0 SHORT TERM CONSTRUCTION TRAFFIC EFFECTS

6.1 Introduction

6.1.1 It is anticipated that the delivery of key elements of the application scheme can be delivered using existing land forms and materials already in-situ at the Wainwrights Quarry site. In order to complete site landscaping and earth bund features, however, it has been identified that it will be necessary to import substantive quantities of recycled rock and soils from a local supplier. Such material importation would be undertaken by HGV road haulage and would involve a short term / temporary delivery campaign utilising local access roads to the site.

6.1.2 This section of the report therefore seeks to identify the volume of materials to be transported to the site during this temporary construction period, the number and nature of vehicles likely to be carrying out such delivery runs, the proposed duration of the anticipated temporary HGV delivery campaign and details of any proposed conditions of operation that could be implemented to manage any traffic related environmental or network operational effects.

6.2 Predicted Temporary Construction HGV Demand

6.2.1 It is anticipated that two site construction elements would require substantive importation of construction materials, viz:

- Construction of a noise / visual bund to the north east of the site, requiring the import of up to 9,000m3 of materials;

- Delivery of additional landscaping soils across the remainder of the site, requiring the import of up to 5,000m3 of materials.

6.2.2 It is proposed that required import materials would be sourced from a supplier based in the Peak Dale locality (Barry Wood Plant Hire), thereby minimising HGV mileage and limiting local haulage impacts. The location

of the proposed supplier base, the practical HGV haulage route and the location of the Wainwrights Quarry application site are illustrated in **Figure TS19** to this report. This plan demonstrates that the HGV haulage route would require HGV travel over approximately 1300m of the immediate section of Batham Gate Road to the west of the application site, including a section through the settlement of Peak Dale which is currently subject to a localised 7.5t weight limit (except for access). As Batham Gate Road represents the primary access corridor serving the Wainwright Quarry application site and there are no other practical alternative options for HGV access between the origin and destination site, it is considered that this route would represent a suitable haulage route.

6.2.3 Information supplied by the HGV haulage contractor has identified that the transport of all required construction materials (both earth bund and landscaping soils) would be undertaken over a single HGV haulage campaign and would be carried out using 8 wheel tipper vehicles with a maximum payload of circa 8.3m3. In practice it is likely that the haulage contract would be operated by a single vehicle, making regular daily runs between the material supply depot and application site (with potentially a second HGV being made available at times to allow peak delivery levels). This single / two vehicle operation would avoid the potential for 'platooning' of large HGV vehicles and would also limit opportunities for conflicts between construction HGVs at the site access point or at other locations along the haulage route.

6.2.4 Based on a total construction materials import requirement of circa 14,000m3 and the identified HGV payload, it could be expected that of the order of 1700 import HGV movements would be required over the course of the importation campaign (see **Appendix TS12** to this report).

6.2.5 As a reflection of the proposed single / two vehicle operation of the HGV contract and in order to manage potential HGV impacts along the proposed Batham Gate Road haulage corridor, it is proposed that daily construction HGV traffic levels would be limited to a maximum of 25

import loads per day (50 HGV movements in + out). These movements would be restricted to a day time delivery window of 08:00 – 17:00.

6.2.6 **Appendix TS12** to this report demonstrates that based on an average of 25, 20 & 15 HGV import runs per day, the HGV haulage campaign could be expected to last for between 14 – 23 weeks (assuming 5-day 'weekday' operation). Assuming a generally flat delivery profile across the daytime HGV delivery window, hourly HGV demand could therefore be expected to range between 3 – 6 HGV trips per hour (in + out) or 1 HGV movement every 10 – 20 minutes, depending on the average daily HGV demand assumption.

6.3 Operational and Environmental Effects of Predicted Construction Traffic Movements

6.3.1 The potential highways and transport related environmental effects of traffic demand is typically assessed via reference to the methodology set out in the Institute of Environmental Management & Assessment (IEMA) document "Guidelines for the Environmental Assessment of Road Traffic". The IEMA guidelines have been prepared to inform the environmental assessment of road traffic associated with development and are designed to assist in the assessment of off-site traffic impacts. Alternative guidelines and established procedures exist for the environmental assessment of new road / highway infrastructure (as set out in Design Manual for Roads and Bridges), however, such procedures are not directly relevant to the case of the Wainwright Quarry application scheme - which would not involve new off-site road construction.

6.3.2 IEMA guidelines suggest the following general 'rules of thumb' when considering the initial appraisal or 'screening' of environmental impact and the identification of where more detailed analysis of specific environmental effects might be required:

> ***"Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of heavy***

goods vehicles will increase by more than 30%)

Rule 2: Include any other specifically sensitive areas where traffic flows have increased by 10% or more"

6.3.3 With respect to Rule 1 (30% threshold), IEMA guidance notes that traffic forecasting is not an exact science and that it is generally accepted that accuracies greater than 10% are not achievable. Day-to-day variation of traffic on a route corridor is frequently at least some + or – 10% of data recorded on a single survey date. The IEMA guidelines therefore suggest that, at a basic level, projected changes in traffic of less than 10% would create no discernible environmental impact.

6.3.4 IEMA guidance further notes that the most discernible environmental impacts of road traffic are considered to be noise / vibration, severance and pedestrian delay & intimidation. In terms of these potential impacts, IEMA guidance states the following:

- In general, people are unable to perceive a change in noise nuisance for changes in noise levels of less than 3dB(A), such changes requires a "doubling or halving in the level of traffic".

- At low flows, increases in traffic of around 30% can double the delay experienced by pedestrians attempting to cross a road.

- Severance (community disruption) and intimidation are much more sensitive to traffic flow and DfT suggest 30%, 60% and 90% changes in traffic levels should be considered as 'sight', 'moderate' and 'substantial' impacts respectively.

6.3.5 Other environmental impacts (e.g.: pollution, ecology, etc.) are considered to be less sensitive to traffic flow changes, and IEMA guidelines recommended that as a starting point, a 30% change in traffic would represent a reasonable threshold for the need to undertake a more detailed assessment of environmental conditions. Where there are major changes in the composition of the traffic flow, say a much greater flow of

HGVs, the IEMA guidance identifies that a lower percentage change threshold might be appropriate and the assessor should use their professional judgement as to whether additional detailed assessment is required.

6.3.6 Guidance with respect to IEMA Rule 2 (10% threshold) identifies that the assessor should consider the inclusion of any other locations or network links where a 10% change in traffic demand is predicted in specific environmentally 'sensitive' areas. Suggested locations highlighted in the IEMA guidelines which could be considered to represent a 'sensitive' receptor include accident blackspot locations, conservation areas, hospitals, links with high pedestrian flows, etc. IEMA guidance notes that it would not normally be appropriate to consider links where traffic flows have changed by less than 10% unless there are significant changes in the composition of traffic, e.g.: a substantive increase in the number of heavy goods vehicles. Again the assessor is charged with utilising their professional judgement to determine whether further assessment is necessary in such cases and factors such as the duration of impact are important considerations in this regard, particularly when considering development construction effects - which are essentially only temporary in nature.

Significance Criteria

6.3.7 The significance level attributed to the impacts assessed are appraised based on the magnitude of change due to the delivery of the development proposals, and the sensitivity of the affected receptor / receiving environment to change. Magnitude of change and the sensitivity of the affected receptor / receiving environment are typically assessed on a scale of major, moderate, slight and negligible impact as set out below.

- **Major impact**: where the proposed development could be expected to have a very significant impact (either positive or negative) on transport;

- **Moderate impact**: where the proposed development could be expected to have a noticeable impact (either positive or negative) on transport;
- **Slight impact**: where the proposed development could be expected to result in a small, barely noticeable impact (either positive or negative) on transport; and
- **Negligible impact**: where no discernible impact is expected as a result of the proposed development (i.e. less than 10% change in traffic volumes).

Predicted Changes in Overall Local Network Traffic Flow

6.3.8 **Table TA6.1** below sets out the changes in overall traffic demand (2015 baseline levels) predicted on the Peak Dale section (to the immediate east of the committed residential scheme access) of Batham Gate Road associated with predicted temporary HGV traffic demand during the application scheme construction stage.

Table TA5.1 – Nettleton Bottom Total Development Traffic Demand Compared to 2017 Baseline Traffic (12hr 07:00-19:00)

	2015 Baseline	Application Site Construction Traffic	Percentage Change
Maximum 25 Import HGV trips per day			
AM (8-9)	127 (6)	6 (6)	4.7% (100%)
PM (4-5)	156 (7)	6 (6)	3.8% (85.7%)
Average 20 Import HGV trips per day			
AM (8-9)	127 (6)	5 (5)	3.9% (83.3%)
PM (4-5)	156 (7)	5 (5)	3.2% (71.4%)
Average 15 Import HGV trips per day			
AM (8-9)	127 (6)	4 (4)	3.1% (66.7%)
PM (4-5)	156 (7)	4 (4)	2.7% (57.1%)

All vehicles

6.3.9 Review of the results of the above exercise demonstrates that changes in overall traffic demand on Batham Gate Road during the temporary Wainwright Quarry construction haulage period could be expected to be low, being less than 5% of total baseline traffic volumes. Such results are well below relevant operational (5% - 10%) and environmental (10% or 30%) link impact thresholds and suggests that the temporary HGV

haulage campaign is unlikely to result in any material effects on local network operational performance.

6.3.10 Review of the above information demonstrates that the additional construction related traffic would represent a high level of percentage change when viewed in terms of baseline Bus / HGV volumes – albeit that this high percentage change value is more a reflection of very low existing Bus / HGV traffic levels, rather than the introduction of a high number of additional HGV movements. Furthermore it should also be noted that any such construction HGV movements would represent a temporary traffic effect, that could be expected to be limited to a short term (3 to 6 month) campaign period.

6.3.11 Notwithstanding the above conclusions, in order to provide the most robust review of potential temporary construction traffic effects, the following bullet points provide a commentary regarding the anticipated extent of key traffic related environmental effects during the construction period:

- **Pedestrian Delay**: Batham Gate Road enjoys pedestrian footways to both sides of the route through the main settlement of Peak Dale. Pedestrian demand using these footways has been observed to be at generally negligible levels, reflecting the small nature of the immediate settlement and the lack of a significant frontage pedestrian attractor such as a shop. Baseline total traffic levels on Batham Gate Road are generally very low, being of the order of just 2 - 3 vehicles per minute during weekday daytime peak periods. The proposed temporary construction HGV haulage campaign would result in only a strictly limited level of additional traffic movements during weekday daytimes (1 additional vehicle every 10 – 20 minutes). It is therefore concluded that any construction traffic impact on pedestrian delay would be **negligible**.

- **Pedestrian Amenity**: The total increase in traffic associated with the proposed construction HGV campaign is low. This combined with the dedicated pedestrian footway provision available within Peak dale village and on the rural section of route to the west (towards Waterswallows) is likely to limit any pedestrian amenity effects of additional HGV movements. Whilst footways are not available on the section of haulage corridor between Peak Dale and the application site entrance, this section of road is not noted to be regularly utilised for pedestrian journeys and does not directly serve any key pedestrian trip attractors. Alternative future access on foot is also proposed to be provided to / from the Application Site to avoid the need for visitor / staff pedestrian trips over this section of route. The impact of the predicted temporary construction traffic levels on pedestrian amenity over the haulage route is therefore considered to be **slight.**

- **Severance**: Given the low levels of additional hourly HGV demand predicted to be generated during the temporary construction haulage campaign period (up to circa 6 vehicles per hour), it is not considered that crossing opportunities on Batham Gate Road would be materially affected and therefore any severance impact would be **negligible**.

- **Driver Delay**: It is not considered that the predicted construction traffic levels (typically less than 5% increase in existing low baseline traffic volumes) would give rise to any issues of local traffic congestion or delay over the haulage route. Batham Gate Road is also subject to a 40mph speed limit over the proposed haulage route and therefore it is not expected that relatively slow moving HGV operation would adversely impact on the journey times of other existing users of the route corridor. Accordingly it is considered that the impact of the Proposed Development upon driver delay would be **negligible**.

- **Road Safety**: Section 2.5 to this report provides a detailed review of recent road safety history over the proposed construction haulage route. This exercise demonstrates that the local highway network enjoys an excellent safety record (only 1 accident event noted over the 5 year study period for the full length of the proposed HGV haulage route) and there is no evidence to suggest that the anticipated limited temporary construction HGV levels would directly give rise to any material highway safety concerns. Accordingly it is considered that the impact of development related traffic on highway safety would be **negligible**.

- **Noise and Vibration**: The proposed construction HGV haulage route would directly pass of the order of 40 residential properties between the material supply depot and the application site. Whilst some of these properties are set back from the road, many are located close to back of footway. Ultimately, however, the noise generated by a stream of vehicles is related logarithmically to the number of vehicles, such that a doubling of total traffic flow produces an increase of 3dB(A). The temporary increase in total vehicles during the proposed construction HGV campaign would be significantly below such a threshold for noise impact (the total increase in traffic flows on Batham Gate Road being less than 5% of baseline levels, even assuming for maximum predicted daily construction HGV demand). It is therefore considered that the impact of traffic related noise & vibration would be **slight**.

- **Air Pollution Dust & Dirt**: Background air quality in the immediate area to Peak Dale is known to be substantially below national air quality management objectives. The strictly limited levels of temporary increased traffic during the construction period, when compared to the future baseline, would have a **negligible** effect on local air quality. The potential for dust and dirt deposition associated with the transport of materials could be

addressed via the operation of wheel washes at the supply depot and application site.

6.3.13 In summary it is considered that the relatively limited increases in temporary HGV traffic related movements during the site construction phase could only be expected to result in **negligible** / **slight** traffic related environmental impacts and insignificant network operational effects.

6.4 Mitigation Measures

6.4.1 It is proposed that the following mitigation measures are pursued to ensure that traffic related environmental effects during the temporary construction are managed to typically **negligible** / **slight** impact levels:

- Maximum of 25 HGV import trips to site per day.
- HGV import hours limited to Monday – Friday, 08:00-17:00.
- Operation of a maximum of 2 HGV units.
- Wheel wash facilities to be utilised at both application site and material supply depot.

7.0 SUMMARY AND CONCLUSIONS

7.1 This Transport Statement has been prepared by Axis to consider highways and transport issues related to a proposed camping and outdoor leisure development at the former Wainwrights Quarry site located off Batham Gate Road, Peak Dale, Derbyshire. It is envisaged that the scheme would be developed on a phased basis and could ultimately comprise circa 61 mobile caravan pitches, 19 'glamping pods' and 30 tent pitches. This primary camping land use would be supported by complementary outdoor leisure uses such as fishing / canoe and cycle hire. The proposals represent the sustainable re-use of this former industrial site and would deliver a high quality leisure offer to support which would support the important tourist industry within High Peak and the Peak District National Park.

Existing Land Use & Planning Designation

7.2 The application site represents the former Wainwrights Quarry site located approximately 250m to the north east of the small settlement of Peak Dale and is characterised by a man-made landscape associated with the former quarry use. The site includes a number of lakes / ponds, as well as cleared land platforms appropriate to accommodate new development.

7.3 The development plan comprises the saved policies (from 2008) of the High Peak Local Plan (adopted March 2005). However, significant weight should also be given to the submitted version of the High Peak Borough Council (HPBC) Local Plan (April 2014), which was subject to an independent Examination in Public (EIP) by an inspector in January and February 2015. The Inspector has recently published proposed main modifications to the Local Plan which are currently subject to consultation. According to the High Peak Borough Local Plan Proposals Map (March 2005) the site is located within the open countryside.

Existing Vehicular Site Access Arrangements & Network Connections

7.4 The Wainwrights Quarry application site is currently served by a single vehicular connection point to the local adopted highway network, located to the south eastern corner of the site. It is proposed that the camping / leisure scheme site would ultimately be served using an improved vehicle access, based on this existing access location.

7.5 In the immediate vicinity of the existing site access point, Batham Gate Road is of 5.0m – 6.0m carriageway width with no available footway and limited highway verge. Indeed to the immediate west of the existing application site access, the edge of carriageway to Batham Gate Road is effectively formed by adjacent site boundary walls. As a consequence of these boundary walls, lateral visibility to the west when measured from a standard 2.4m x-distance at the existing site access connection point is extremely limited. Lateral sightlines to the east from the existing site access are assisted by both a bend in Batham Gate Road and the availability of an element of unobstructed highway verge, which combine to allow for much better visibility in this direction.

7.6 Batham Gate Road represents the main local distributor road route through the settlement of Peak Dale and connects this settlement and surrounding land (including Wainwrights Quarry) to the A6 to the west and Peak Forest and the A623 to the east. The route is of a single carriageway layout, with local side road connections being of a simple 'give-way' T-junction design. In the immediate vicinity of the application site frontage, Batham Gate Road varies between 5.0m – 6.0m in width. Further to the west, within the settlement of Peak Dale, itself, the route widens to between 6.9m – 7.3m, with a segregated footway available to both sides.

Baseline Conditions

7.7 Traffic conditions on the immediate sections of Batham Gate Road to the application site have been established through manual traffic surveys

undertaken in 2013 and 2015. Review of this background survey data suggests that routes within Peak Dale are generally very lightly trafficked even during traditional 'rush hour' periods, with maximum two-way observed traffic demand on Batham Gate Road at the application site frontage being just 170 vehicles per hour (two-way). Such traffic demand represents less than 3 vehicle movements per minute.

7.8 Traffic demand on the A6 distributor road is noted to be at much higher levels, with maximum recorded peak hour demand being of the order of 1250 vehicles (two-way). Review of ATC data for the A6 demonstrates that traditional weekday PM peak periods show significantly higher traffic levels than Saturday or Sunday demand (of the order of 200+ vehicle movements higher). This analysis clearly demonstrates that any assessment of maximum network conditions should be focused on weekday demand conditions and that there is no requirement for the detailed analysis of weekend operation.

7.9 Vehicle speed readings have also been undertaken for the main approaches to the site frontage section of Batham Gate Road. These speed surveys identify 85th percentile wet weather speeds of 35mph (eastbound) and 38mph (westbound) - reflecting the 40 mph speed limit characteristics of this section of Batham Gate Road.

7.10 A review of available accident information identifies that no accident incidents have been recorded along the site frontage section of Batham Gate Road to the application site (including the site access) within the most recent 5 year period. Indeed, only one injury accident has been recorded within the locality of the application site. This accident occurred within the settlement of Peak Dale, at the Batham Gate Road / School Road junction and was a slight injury classification event, taking place on a summer evening. A total of four accident incidents have been recorded at the western terminal junction connections to the A6. Given the main road nature of the A6 in this location and the substantive level of daily flow experienced on this route, it is not considered that this represents a high accident rate. On the basis of the identified limited local accident

history, it is ultimately concluded that there are no reasons to anticipate that the development of a new camping / leisure scheme at Wainwrights Quarry would result in a material impact on overall existing good highway safety conditions and thus call the application scheme into question.

Site Sustainability

7.11 The Wainwrights Quarry application site represents an appropriate location for camping / outdoor leisure development, being located within a 100m walk of bus stops served by regular bus connections and within a walk / cycle catchment of a limited range of local services / facilities. Such locational characteristics should assist in meeting the sustainable planning objectives of promoting opportunities for the use of alternative travel modes to the private car and managing the overall traffic impact associated with new development. Furthermore, an additional camping / leisure offer at this site is also considered likely to support the viability of local services and respond to the thriving tourist industry within High Peak and the Peak District National Park.

Development Proposals

7.12 The application scheme represents the delivery of the re-use of the former Wainwrights Quarry site at Batham Gate Road, Peak Dale for camping and outdoor leisure land use. The scheme would include up to 110 caravan / camping pitches, which would be supported by complementary outdoor leisure uses such as fishing / canoe activities associated with the on-site lakes / ponds and cycle hire.

7.13 Vehicle access to the application scheme would be provided via an improved site access connection to Batham Gate Road to the south eastern corner of the site – at the location of the existing quarry access. The existing access would be improved to ensure safe two-way caravan entry / exit operation, including new junction radii, a widened access road and surfacing improvements. The new access scheme would also include for the relocation of existing boundary walls / minor widening of Batham Gate Road to assist caravan access and to deliver appropriate lateral

visibility splays in line with the identified 85th percentile traffic speeds passing the site. Additional new footway links are also proposed to / from the development to connect to existing local public footpath links to Peak Dale and immediate local bus stops.

7.14 It is proposed that the application scheme would be supported by the operation of Travel Plan at the site, which would be designed to complement existing sustainable transport infrastructure, improve the attractiveness of the site to visitors, and manage vehicle trip demand to / from the site / ensure that caravan movements are guided to utilise appropriate approach routes. The measures proposed for inclusion in the Travel Plan will be developed based upon experience of similar initiatives that have been implemented at other caravan / camping sites across the UK and via reference to general feasibility / practicality in view of the Wainwright Quarry site's rural location and the necessity for initial arrival / final departure journeys to be made in a vehicle.

Development Traffic Demand

7.15 Predicted levels of traffic generation associated with the application scheme have been calculated by reference to suitable caravan / camping development sites held in the TRICS database and estimates for additional traffic associated with the ancillary outdoor leisure uses. The application scheme is not anticipated to generate a substantive level of peak hour travel demand, with maximum total 2-way (in + out) site traffic not anticipated to exceed 40 vehicles per hour. Such demand is the equivalent of less than 1 vehicle trip movement every minute and is unlikely to result in a material impact on local network operating conditions.

7.16 Assignment of this predicted peak hour development trip demand to the immediate local highway network has been undertaken on the basis of the distribution of population within a one hour drivetime catchment of the site and reference to journey planning software. This exercise suggests that of the order of 55% of traffic to the site could be expected to arrive

via the A6(N), with circa 23% to / from the A6(S) and similar demand from the A623 via Peak Forest.

Development Traffic Network Impact

7.17 Capacity assessments have been undertaken for key immediate links and junctions to the proposed Wainwrights Quarry application site for future year operating conditions, including for appropriate traffic growth forecasts and recently consented local development. The results of these tests demonstrate that the marginal changes in operational performance predicted associated with the development and operation of the application scheme do not represent a material worsening in local traffic conditions and, in practice, are unlikely to be distinguishable from existing day-to-day variations in Baseline traffic flows.

7.18 Given the above review of issues, it is concluded that there are no material operational capacity concerns related to the Wainwrights Quarry application scheme and that therefore no off-site highway capacity improvements are required to support the proposed development. The National Planning Policy Framework clearly identifies that development proposals should only be refused on highway grounds in those cases where highways impact has been demonstrated to be 'severe' - which is typically understood to mean situations where development is likely to result in a detrimental 'step change' change in circumstances when compared to predicted Baseline / 'Do-Nothing' conditions. It is considered that the network operational effects of the application scheme would be negligible in scale and therefore that the proposals clearly meet the critical NPPF test.

Construction Traffic Effects

7.19 In order to complete site landscaping and bund features at the application site it has been identified that it will be necessary to import substantive quantities of recycled rock and soils from a local supplier. Such material importation would be undertaken by HGV road haulage and would

involve a short term delivery campaign utilising local access roads to the site.

7.20 Materials would be sourced from a supplier based in the Peak Dale locality (Barry Wood Plant Hire), thereby minimising HGV mileage and limiting local haulage impacts. The proposed HGV haulage route would require HGV travel over circa 1300m of the immediate section of Batham Gate Road to the west of the application site, including a section through the settlement of Peak Dale, which is currently subject to a localised 7.5t weight limit (except for access).

7.21 Based on a total construction materials import requirement of 14,000m3 and identified HGV payloads, it could be expected that of the order of 1700 import HGV movements would be required over the course of the importation campaign. Based on an average of 25, 20 & 15 HGV import runs per day, the HGV haulage campaign could be expected to last for between 14 – 23 weeks (5-day 'weekday' operation). Assuming a generally flat delivery profile across the daytime HGV delivery window, hourly HGV demand could be expected to range between 3 – 6 HGV trips per hour (in + out) or 1 HGV movement every 10 – 20 minutes, depending on the average daily HGV demand assumption considered.

7.22 Changes in overall traffic demand on Batham Gate road during the temporary Wainwright Quarry construction haulage period could be expected to be low, being less than 5% of total baseline traffic volumes. Such results are well below relevant operational (5% - 10%) and environmental (10% or 30%) link impact thresholds and suggests that the temporary HGV haulage campaign is unlikely to result in any material effects on local network operational performance.

7.23 Notwithstanding this, Axis have considered key traffic related environmental effects during the temporary construction HGV haulage period. This exercise has identified that that the relatively limited increases in temporary HGV traffic related movements during the site

construction phase could only be expected to result in **negligible** / **slight** traffic related environmental impacts and insignificant network operational effects.

7.24 It is proposed that the following mitigation measures are pursued to ensure that traffic related environmental effects during the temporary construction phase are managed to typically **negligible** / **slight** impact levels:

- Maximum of 25 HGV import trips to site per day.
- HGV import hours limited to Monday – Friday, 08:00-17:00.
- Operation of a maximum of 2 HGV units.
- Wheel wash facilities to be utilised at both application site and material supply depot.

Conclusion

7.25 Overall it is concluded that the proposed Wainwrights Quarry camping & outdoor leisure scheme represents an appropriate re-use of the site, which would support the tourist industry within High Peak and the Peak District National Park. The proposals are not anticipated to generate a substantive level of new traffic demand, which could be safely and efficiently accommodated by the local highway network without the need for off-site network improvements. Furthermore, the site is located within a 100m walk of bus stops served by regular bus connections and within a walk / cycle catchment of a limited range of local services / facilities. Such locational characteristics should assist in meeting the sustainable planning objectives of promoting opportunities for the use of alternative travel modes to the private car and managing the overall traffic impact associated with new development. These sustainable principles would be further supported by the operation of a Travel Plan at the site to manage visitor journeys. Based on this review of issues, Axis would commend the proposals to the Local Planning Authority and County Highway Authority.