# **Alton Towers Resort**

Proposed Lodge Development Phase II

**Transport Assessment** 

John Taylor
Transport Consultant

December 2015

## **Alton Towers Resort**

## Proposed Lodge Development Phase II

**Transport Assessment** 

December 2015

## **Document history**

| Job number: |                        | Document ref:              |                      |          |            |          |
|-------------|------------------------|----------------------------|----------------------|----------|------------|----------|
|             |                        | Lodge Development Phase II |                      |          |            |          |
|             |                        |                            | Transport Assessment |          |            |          |
| Revision    | Purpose description    | Originated                 | Checked              | Reviewed | Authorised | Date     |
| Rev 1.1     | Initial Draft          | JWT                        |                      |          |            | 20/5/15  |
| Rev 1.2     | Final Draft            | JWT                        |                      |          |            | 28/7/15  |
| Rev 2.0     | Revised scheme Draft   | JWT                        |                      |          |            | 28/10/15 |
| Rev 2.1     | Amended scheme         | JWT                        | TB                   | ТВ       | JWT        | 29/11/15 |
| Rev 2.2     | Amended scheme - Final | JWT                        | TB                   | ТВ       | JWT        | 7/12/15  |
|             |                        |                            |                      |          |            |          |
|             |                        |                            |                      |          |            |          |
|             |                        |                            |                      |          |            |          |
|             |                        |                            |                      |          |            |          |

## **Table of contents**

| Chapter  |   | Pages           |  |  |
|--|---|-----------------|--|--|
|  | roduction<br>sed Development                        | <b>4</b><br>4   |  |  |
|  | f the Document                                      | 5               |  |  |
| Summary c  | of Conclusions                                      | 6               |  |  |
|  | e Resort Location<br>cal Highway Network            | <b>7</b>        |  |  |
|  | blic Transport                                      | 8               |  |  |
| •  | Travel Plan   | 9               |  |  |
|  | ailable Data  | 10              |  |  |
| Resort Visit   |   | 10<br>10        |  |  |
|  | odge Guests  f Key Transport Parameters             | 11              |  |  |
| •  |   |                 |  |  |
|  | ffic Generation and Impact esort Traffic Generation | <b>13</b><br>13 |  |  |
| Lodge Development Traffic Generation  Additional Resort Trips  Proposal Impact |   | 14              |  |  |
|  |   | 14              |  |  |
|  |   | 14              |  |  |
| Potential Ti   | ransport Benefits                                   | 15              |  |  |
| Parking  |   | 16              |  |  |
| Constructio  | n Traffic   | 16              |  |  |
| 5. Coı   | nclusion  | 17              |  |  |
| Tables   |   |                 |  |  |
| Table 2-1  | Railway Stations serving Alton Towers Resort        | 8               |  |  |
| Table 2-2  | Bus Services to Alton Towers Resort                 | 9               |  |  |
| Figures  | 8   |                 |  |  |
| Figure 1-1   | Development Location                                | 5               |  |  |
| Figure 2-1   | Location of the Alton Towers Resort                 | 7               |  |  |
| Figure 4-1   | Resort Generated Traffic Movements                  | 13              |  |  |

## 1. Introduction

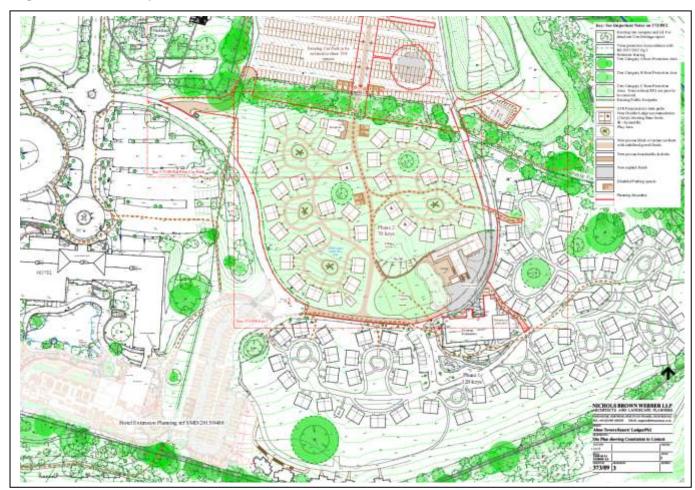
- 1.1. This Transport Assessment has been prepared on behalf of the Merlin Entertainment Group in support of a planning application for phase II of the Enchanted Village Lodge development within the Alton Towers Resort in Staffordshire.
- 1.2. The first phase of the lodge accommodation was approved on 22<sup>nd</sup> May 2014, comprised of 61 double lodges and 10 tree houses, and is now on site. The restaurant was to be built in two phases; the second phase is to be built with this phase of the Enchanted Village.

#### **The Proposed Development**

- 1.3. It is proposed to construct a further 35 double lodges to the north of the existing Enchanted Village Lodges which lie to the east of the existing hotel complex.
- 1.4. The Resort has a Long Term Plan that includes a strategy to provide family accommodation to encourage longer stays which assists in reducing the peak time traffic movements on the local highway network. The provision of further family accommodation is intended to further enhance its position in the family short break market and will reduce the peak period traffic movements.
- 1.5. Phase II of the Lodge development will provide an increase in the available Resort accommodation by 70 keys from the existing 391 hotel rooms, 61 double lodges (122 keys) and 5 tree houses (13% increase) which is in line with the Resort's Long Term Plan.
- 1.6. Furthermore highways contributions have been made by Alton Towers Resort to the County Council to allow local measures to be implemented to improve traffic flows in the surrounding area.
- 1.7. The lodges will be constructed on concrete plinths at ground level with accommodation for up to 5 persons.
- 1.8. The development will be constructed in three sub-phases:
  - Phase 2.1 26 double Lodges (52 keys) with service huts, maintenance and staff facilities together with the approved extension to the restaurant.
  - Phase 2.2 Provision of an area for the erection of Tipis adjacent to the existing restaurant for events, extension to the service core and toilet facilities.
  - Phase 2.3 Remaining 9 double Lodges (18 keys) with reception area and service hut.
- 1.9. This Transport Assessment examines the total development. The earlier phases will have a lesser transport impact.
- 1.10. As part of the development it is proposed to provide a pedestrian link into the Lodges from the existing car park to the north of the site.

- 1.11. The accommodation will be managed as part of the existing hotel complex and guests will be able to deliver baggage to the lodges using golf carts. Only disabled guests, service vehicles and emergency vehicles will be allowed on the site.
- 1.12. The development will be accessed using the existing Resort access road from the Farley Lane entrance. The location of the development and layout are shown in Figure 1.1.

Figure 1-1 Development Location



#### **Contents of the Document**

- 1.13. The Alton Towers Resort is a major tourist destination in Staffordshire and attracts visitors to the theme park and hotel complex. The transport assessment needs to examine both these attractions as they are closely linked and many hotel or lodge guests are also theme park visitors.
- 1.14. Section 2 describes the Resort location and Section 3 provides the available visitor and traffic data based on surveys in 2010, 2011 and 2012 which supports the assessment of potential key transport parameters that enable an assessment of traffic generation and impact in Section 4. The conclusion is provided in Section 5 with a brief summary below.

## **Summary of Conclusions**

1.15. In summary, the main users of the proposed lodges will be resort guests who's arrival and departure will be spread across the day therefore having little or no conflict with day visitors to the theme park. Indeed the additional accommodation, in line with the statements provided for the Long Term Plan, will potentially reduce the number of vehicles to and from Alton Towers Resort during existing peak hours of the site. There are also additional transport benefits related to the increased on-site accommodation.

## 2. The Resort Location

2.1. Alton Towers Resort is located in the County of Staffordshire in the Staffordshire Moorlands District. The location of the site in its wider geographical context and major highway network is illustrated below.

Alton Towers
Motorway
Major A Road
Minor A Road
B Road

STOKE

A510

A511

B5032

B5031

A515

Uttoxeter

DERBY

Figure 2-1 Location of the Alton Towers Resort

## **Existing Local Highway Network**

2.2. Vehicular access to Alton Towers Resort is by Farley Lane and the B5032 in the south and Wootton Lane and the B5417 in the north. The B5417 connects to the A52 in the north to the west of Ashbourne, and the B5032 connects to the A50 at Uttoxeter via the B5030 in the south. The A52 and A50 are primary routes and link to the motorway and trunk road network.

#### **Farley Lane**

2.3. Farley Lane is the main southern access road to Alton Towers Resort and the development site. It is a rural road with a width of approximately six metres. Through the village of Alton the road is undulating with tight corners and has a speed limit of 30 mph. At the southern end of Farley Lane is Alton village and the B5032, which links the site to the B5030 at Denstone and the A50 Trunk Road in the south.

#### **Wootton Lane**

2.4. Wootton Lane is also a rural road of approximately six metres width with limited pedestrian facilities and numerous farm entrances. At the northern end of

Wootton Lane is the B5417, which in turns connects to the A52 and provides access to the north of Derby and Stoke.

#### B5417

2.5. The B5417 connects Wootton Lane to the A52 to the north of Alton Towers. It has a width of around six metres and has a speed limit of 40 mph.

#### B5032

2.6. The B5032 connects with Farley Lane in the south, the carriageway is approximately six metres in width. The national speed limit is in force and there is an average travel speed of 35 to 40 mph.

#### B5030

2.7. The B5030 connects the B5032 to the A50 at Uttoxeter in the south. The carriageway is approximately nine metres wide and is relatively flat with few curves. The national speed limit is in force, with a small section around some new roundabouts with a 40mph restriction, so the average speed is around 55 to 60 mph.

### **Existing Public Transport**

2.8. The use of public transport for visitors to the Resort is limited as trips tend to be long distance, for family parties and at off peak periods when services are limited. However Alton Towers Resort does encourage public transport and provides information on available services on its website.

#### Train

2.9. There are several train stations within reasonable proximity to Alton Towers, shown below, some of which are linked to Alton Towers via public bus.

| Table 2-1  | Railway | <b>Stations</b> | sarving  | Alton  | Towers | Resort |
|------------|---------|-----------------|----------|--------|--------|--------|
| I able 2-1 | Rallway | Stations        | Servilla | AILOII | TOWEIS | Resolt |

| Station          | Distance    |
|------------------|-------------|
| Uttoxeter        | 6.44 miles  |
| Blythe Bridge    | 7.49 miles  |
| Longton          | 10.42 miles |
| Barlaston        | 12.02 miles |
| Wedgwood         | 12.04 miles |
| Tutbury & Hatton | 12.11 miles |
| Stoke-on-Trent   | 12.26 miles |

2.10. As Stoke-on-Trent is a main-line station, in many cases it is cheaper and faster to reach than Uttoxeter. A series of buses connect these two stations with the resort as demonstrated below. These shorter multi-modal journeys that combine bus and rail, from destinations which are within say a 20 mile radius, are a realistic travel option.

#### **Buses**

2.11. The Alton Towers website provides a list of bus services and their corresponding fares. There are two bus services running to and from Alton Towers Resort from conurbations in the area (as shown in Table 2.2). These services do have a limited frequency. Alton Towers also operates buses for employees.

Table 2-2 Bus Services to Alton Towers Resort

| Service<br>Number | Route   | Frequency                                 | First and Last<br>Service<br>Outward Journey | First and<br>Last Service<br>Return Journey |
|-------------------|---|---|--|---|
| 32A               | Hanley - Cheadle<br>Uttoxeter Railway<br>Station – Rocester<br>– Denstone –<br>Alton – Alton Towers | 7 - 9 Journeys per<br>day – every 2 hours | 09.00am and<br>19.45pm                       | 08.00am and<br>19.15pm                      |
| X32               | Stoke-on Trent – Alton<br>Towers  | 4 per weekday                             |  |   |
| X52               | Nottingham – Derby –<br>Alton Towers  | 1 per day (main<br>season)                | 0915   | 1730  |

2.12. First PMT (Potteries Motor Traction) operates the X32/32A from Stoke on Trent to Alton Towers Resort and And Notts Derby Buses runs the X52 from Nottingham via Derby and Ashbourne. The First PMT service is operational throughout the period Alton Towers Resort is open to visitors / staff at the Resort or hotel complex.

### **Employee Travel Plan**

- 2.13. The Alton Towers Resort currently operates an Employee Travel Plan for all employees. The plan encourages all team members to reduce their dependence on the private vehicle by promoting the following policies:
  - Car sharing
  - Utilising public transport
  - Cycling
  - Varying travel times to the site
  - Working from home if practical
  - Using IT to virtually attend meetings rather than travel to them
- 2.14. The existing Travel Plan was approved by the District and Borough Councils in 2014 and is currently being promoted to encourage these principles. Any new employees are advised of the Travel Plan and its initiatives.

## 3. Available Data

3.1. This section provides a summary of relevant data on visitors and traffic to both the hotels and resort over recent years.

#### **Resort Visitor Data**

- 3.2. The Alton Towers Resort is open during February half term and then from mid-March to early November. Daily visitor numbers to the Resort vary considerably affected as they are by a number of influences including the economic climate, the increase in 'staycation' holidays, day of the week, school holidays, weather, other sporting events and the influence of new attractions.
- 3.3. Generally the peak periods, approximately 30 days per annum, immediately precede or are during school holidays, when up to 20,000 visitors are attracted to the Theme Park. There are occasions when special events (eg, concerts, Scarefest, Fireworks) are held when this number is exceeded and up to 25,000 attend. However special traffic measures are implemented at these times to reduce the traffic impact on the road network. On other days the volume is considerably less and the majority of days average at less than 15,000 visitors. The proposed lodge development will have limited impact on the number of theme park visitors and provides an additional facility for longer stays by visitors with long journeys.
- 3.4. Theme Park visitors purchase entry in a number of ways including at the ticket booths, group bookings, as special advance online purchase offers, through promotional vouchers or annual Merlin or Resort passes.

## **Hotel and Lodge Guests**

- 3.5. Data is available from the existing Alton Towers Resort hotels on the hotel guest volumes. The hotels provide accommodation for Park visitors, conference guests and tourists requiring a local base for the regional attractions. The existing hotels have a total of 391 rooms together with 61 double lodges and 5 tree houses in the Enchanted Village, a total of 518 rooms, which can be used for double or family occupancy. The average number of sleepers per room during 2011 was 2.97. Occupancy of 90% is experienced during the peak Park opening period.
- 3.6. Hotel / lodge guests are permitted to purchase 2 day tickets for the Theme Park alongside their accommodation booking and approximately 52% of hotel guests purchased Theme Park tickets.
- 3.7. In addition there are hotel / lodge guests that have annual Merlin passes or tickets purchased in other ways that are not recorded but it is estimated that approximately 80 90% of accommodation guests visit the Theme Park during the open season. This indicates that up to 1,400 peak day Theme Park visitors could be guests at the available accommodation.
- 3.8. Hotel / lodge visitors can check in from 3.00pm and check out before 11.00am but are permitted to leave their cars in the car park before or after their stay. They are permitted to enter the Theme Park at 9.00am in advance of other visitors who are not staying at the site. Generally one night accommodation

guests will arrive during the afternoon and use the water park and hotel facilities. This assists in reducing the number of vehicle trips arriving at the Resort in the morning peak hours.

#### **Summary of Key Transport Parameters**

- 3.9. The availability of visitor and transport data enables a number of key transport parameters to be identified. Clearly these parameters will vary based on time of the year, day of the week, weather and events but they enable estimates to be made of the expected impact of the proposed development.
- 3.10. There are a number of key parameters that determine the volume of vehicles generated by the Alton Towers Resort. These include:
  - Annual Volume of Guests
  - Seasonal Variation identification of volume of guests per day
  - Modal Split
  - Vehicle Occupancy
  - Arrival / Departure Profile
  - Trip Distribution
  - Hotel Stays
- 3.11. This section sets out the values of each of these parameters that are used in this assessment.

#### **Volume of Resort Visitors**

- 3.12. As described in Section 3 the annual number of visitors to the Resort is dependent on a number of influences including the economic climate, the increase in 'staycation' holidays, the weather and the influence of new attractions.
- 3.13. Generally, peak days attract approximately 20,000 visitors to the resort. However, on peak days or on occasions when special events (eg, concerts, Scarefest, Fireworks) are held this number can exceed this and at peaks up to 25,000 attend.

#### **Seasonal Variation**

3.14. The Peak and Peak+ days at the Resort are when the traffic generation has some effect on the highway network. This was approximately 22 days during 2011 and 34 days during 2010. It is the Resort strategy to encourage guests to use the Resort during the quieter days and not significantly increase the number of Peak days.

#### **Modal Split**

3.15. Surveys during 2012 identified the modal split at the Resort as being:

| Private car               | 88.1% |
|---------------------------|-------|
| Private hire coach or bus | 8.4%  |
| Train and bus             | 2.1%  |
| Train and taxi            | 0.7%  |
| Other                     | 0.7%  |
|                           | 100%  |

3.16. For this analysis these figures are being used to estimate the number of vehicles to be generated by the proposed lodge development.

#### **Vehicle Occupancy**

3.17. 2008 surveys estimated the vehicle occupancy to be 3.6 persons per car and 40 persons per coach.

#### **Arrival / Departure Profile**

- 3.18. The surveys undertaken in recent years provide accurate figures on the arrival and departure of vehicles at the Resort. Based on those surveys the peak movements of Park visitors occur in the morning and when the Resort closes in the evening. On Peak days the Resort can implement later evening opening to reduce the peaks.
- 3.19. For this analysis the following proportions are to be applied:

```
9.00 – 10.00 am - 25% arrivals
6.00 – 7.00 pm - 28% departures
```

#### **Trip Distribution**

- 3.20. The traffic data collection in 2010 indicates that 54% of trips to the Resort arrive from the south (through Alton) and 46% for the north (through Farley)
- 3.21. These parameters have been applied in the identification of the traffic impact in Section 4.

#### **Hotel / Lodge Guests**

- 3.22. The hotels and lodges at the Resort are unique and the travel characteristics are quite different than normal business or holiday hotels. Generally guests are visitors to the Park and follow the transport characteristics of seasonal variation, modal split, vehicle occupancy and trip distribution. The main difference is the arrival / departure profile.
- 3.23. Guests generally arrive during the afternoon or evening on the day before their visit to the Park. This period is the opposite of the Park visitor peaks and in fact reduces the peak traffic movements on the local highway network. A similar pattern of travel is expected for the proposed lodge development extension.

## 4. Traffic Generation and Impact

#### **Existing Resort Traffic Generation**

- 4.1. The number of vehicles generated by the Alton Towers Resort is dependent on the key parameters defined in this report and is affected by a number of factors including the economic climate, the increase in 'staycation' holidays, school holidays, weather, other sporting events and the influence of new attractions
- 4.2. Based on the key parameters determined above the vehicles generated on a Peak+ day can be estimated as follows:

Number of Resort visitors on Peak+ days = 25,000

#### Vehicles generated

25,000 x 88% by car / 3.6 per car = 6,111 cars 25,000 x 8% by bus/coach / 40 = 50 buses / coaches TOTAL = 6,161 vehicles per Peak+ day

#### Vehicles per peak hour

 $6,161 \times 25\% = 1,540$  arrival peak hour  $6,161 \times 28\% = 1,725$  departure peak hour

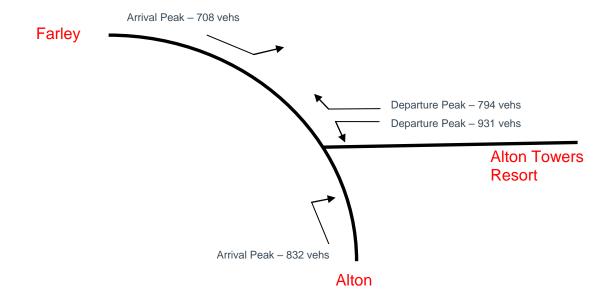
#### **Arrivals** (9.00 - 10.00am)

832(54%) vehicles per hour from the south 708(46%) vehicles per hour from the north

#### **Departures** (6.00 – 7.00pm)

931(54%) vehicles per hour to the south 794(46%) vehicles per hour to the north

Figure 4-1 Resort Generated Traffic Movements



### **Lodge Development Traffic Generation**

4.3. The TRICS database that is normally used to estimate traffic generated by hotel developments is not appropriate for this proposal. The development is tourist accommodation and generated trips are considerably different to a normal tourist resort or business hotel. The availability of hotel or lodge accommodation has a direct impact on the Resort traffic movements. An estimate has been made below of the estimated generation of traffic movements for the lodges based on the parameters establish above and the proportion that is additional to existing movements.

#### **Visitors**

Total number of additional lodge units = 70. Estimated occupancy on Resort Peak days = 90%Estimate of maximum number of guests =  $70 \times 5 = 350$ Based on occupancy number of guests =  $350 \times 90\% = 315$ Estimated number of guests that visit the theme park = 85% = 268

#### Vehicles generated

Estimated 1car per occupied lodge unit 70 x 90% occupancy = 63 vehicles per day

**Peak Arrivals** -3.00pm to 6.00pm =25% per hour =16 vph

Peak Departures – 4.00pm to 5.00pm = 30% per hour = 19 vph

Number of vehicles that are already Resort visitors = 85% = 54 vehs per day

Number of vehicles that are additional = approximately 9 vehs per day

## **Additional Resort Trips**

4.4. The estimated number of additional trips related to the Lodge development is only 9 per day. Due to the nature of the proposed development these will be predominately outside the existing Resort peak period.

## **Proposal Impact**

- 4.5. The highway network adjacent to the Resort currently carries approximately 800 vehicles in the peak hour on a peak day at the Resort.
- 4.6. This forecast volume of additional traffic is a very small percentage of the current volume of traffic on the network and less than that experienced in 2010 when no significant congestion was experienced. In 2011 only 22 Peak and Peak+ days were recorded. On the remaining days during the Resort's season the volume of traffic generated will be significantly lower.
- 4.7. This additional volume of traffic can be accommodated on the peak days and is within the capacity of the highway network.

#### **Potential Transport Benefits**

In addition to there being no significant additional traffic impact there are a number of other transport benefits to the proposed development of on site accommodation.

#### Reduced peak period traffic movements

- 4.8. The main users of the accommodation will be Alton Towers visitors whose arrival and departure will be spread across the day therefore having little or no conflict with day visitors. Visitors may arrive later in the day and leave earlier on the following day and include the opportunity explore other facilities within the Resort during their stay.
- 4.9. The additional accommodation will potentially reduce the number of vehicles to and from the Resort during existing peak hours of the site.

#### Provide accommodation for long distance visitors

- 4.10. Visitor surveys have indicated that the Alton Towers Resort attracts visitors from a wide area with many living more than 2 hours away which takes in the main conurbations of Oxford and north London to the south and much of Manchester and Sheffield to the north. The availability of accommodation will enable visitors to share their travel over more than one day thereby reducing fatigue, unnecessary rushing and avoiding peak hours or routes.
- 4.11. This improves road safety and reduces the likelihood of related accidents on the highway network.

#### Visitors can experience other local attractions

- 4.12. Visitors that are able to use the proposed accommodation will have adequate time in the area to experience other local attractions including the Staffordshire Moors and local countryside.
- 4.13. This will further increase the tourism in the area and provides benefit to the local economy.

#### **Enable more visitors to use public transport**

- 4.14. The ability to travel outside the commuter peaks enables more visitors to consider using public transport as rail fares often reduce by mid morning and trains become less crowded.
- 4.15. This will increase the attractiveness of the use of public transport.
- 4.16. These additional transport benefits further enhance the feasibility of the development of accommodation at Alton Towers.

### **Parking**

- 4.17. The proposed parking for the Phase 2 lodge development will be at the northern end of the development (Car Park J). A small area of drop off parking and disabled parking spaces will be located at the reception area and to the west of the restaurant building. It is proposed that bays will be allocated for use by lodge guests in Car Park J which will have a dedicated pedestrian access to the Lodges. The analysis above estimates that the proposed development will generate a minimal number of additional vehicles at the Resort as the majority are existing visitors.
- 4.18. Clearly, predominantly using the existing tarmac car park provides the flexibility to use the available parking for varying levels of lodge occupation without impacting on the total theme park and hotel parking required for the resort.

#### **Construction Traffic**

4.19. Each sub-phase of the lodges will be constructed, where possible, during the winter months when the Theme Park is closed, during which time there will be construction traffic associated with the site. Areas on site will be allocated for storage of equipment and hardware and there will be no need for any off site provision. Alton Towers Resort has vast experience of managing these types of projects with minimal impact on local highways or traffic movements.

## 5. Conclusion

- 5.1. This Transportation Assessment has been carried out in relation to the proposed additional 35 double lodges (70 units) development on the Alton Towers Resort site in Staffordshire. The proposed lodges will be accessible via the existing Alton Towers access.
- 5.2. The main users of the lodges during peak periods will be visitors to the Resort who arrive during the day or in the evening when day visitors are leaving after spending a day at the Resort. The additional accommodation could potentially reduce the numbers of vehicles to Alton Towers Resort during the existing peak hours of the site.
- 5.3. There are a number of additional transport benefits, described in Section 4, that further enhance the feasibility of the development of additional accommodation at Alton Towers Resort. This proposal increases the available accommodation at the Resort by 13% and is consistent with the Long Term Plan for the Resort.
- 5.4. The existing Staff Travel Plan for the Resort will be extended to include the proposed development and any new staff will be encouraged to use alternative forms for transport to the private car, therefore minimising the number of employee vehicle trips to the site.
- 5.5. There are therefore no valid reasons for refusing the proposed development at this site, on highway or transportation grounds.

