

# 4 PROPOSED DEVELOPMENT

4.1 The development of the Henley Gate site seeks to provide the following (IBC planning application ref. IP/16/00608/OUT):

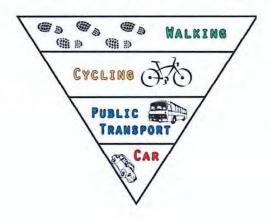
Mixed use development comprising up to 1,100 residential dwellings (C3); a local centre inc up to 250sqm (net) of convenience floor space (A1), up to 300sqm of comparison floorspace (A1), up to 250sqm in use classes A1-A5 and up to 500sqm community/visitor centre (D1); provision of land for a primary school (D1); provision of sports facilities, Country Park (inc Visitor Centre) and open space (inc amenity space/children's play areas and allotments), sustainable urban drainage systems; and associated landscaping, infrastructure and engineering/ earthworks; and the creation of 2No. new vehicular accesses from Henley Road, 1No. vehicular access from Westerfield Road (to serve Country Park only), pedestrian/cycle bridge over railway (access only), vehicular bridge over railway (access only).

## **Proposed Land Uses**

- 4.2 It is proposed that the development of the site will provide a new mixed use neighbourhood in brief comprising the following:
  - A residential neighbourhood comprising up to 1,100 residential units with supporting local facilities including retail and community facilities and a primary school; and
  - A Country Park including visitor centre.
- 4.3 The Henley Gate site is identified as a strategic allocation within the adopted IBC Local Plan Core Strategy as part of the wider IGS.
- 4.4 By providing a mixed use development with supporting facilities such as local shops on the site then the demand for transport on the wider highway network will be reduced. These facilities will also be made available for nearby local residents.
- 4.5 It is proposed that the local centre, which will include retail and educational uses, will be located to the west of the site, in the heart of the residential area. The Country Park will be located predominantly to the north and east of the site adjacent to existing residential properties on Westerfield Road and Lower Road.



- 4.6 There are four key stages to creating a socially inclusive community, hereby encouraging community interaction (within and neighbouring the scheme), in such a way to encourage non-motorised travel modes, prioritising walking ad cycling, followed by use of the bus.
- 4.7 **Design** is in terms of creating communities, where public interaction, outdoor and indoor, is the norm. Where friends and day to day activities are nearby and easy to get to, and where it is not an automatic reaction when leaving home to get into a car. The site is well placed to take advantage of the proximity of a range of day to day facilities.
- 4.8 The site design is of a pedestrian scale. Walking, cycling, and using a bus, will be easy, and vehicle intimidation will be at a minimum.
- 4.9 Choice is in terms of providing the infrastructure and facilities to minimise reliance on any single option. This widens social inclusion, and for instance, on average, makes contributing to commuter car congestion more of a choice and less of a necessity.
- 4.10 Through increased choices, a change in behaviour can be effected. The proposals will introduce and maintain any sustainable transport options through the measures detailed in the remainder of this section, and seek to encourage a net travel behavioural change.
- 4.11 Behaviour is in terms of educating people in the options for travel and the consequences of their choice of mode. It brings together awareness of travel options and the health, environment and personal convenience consequences associated with the available options.





4.12 Network Management is in terms of managing the road network in accordance with the user hierarchy preferred by the Council. Car travel is the lowest capacity network in terms of space occupied per person. It also occupies the lowest priority in the user hierarchy. This means, for instance, prioritising the reliability and speed of bus and cycle movement over that of cars in the commuter peaks.

## **Pedestrian and Cycle Routes**

- 4.13 The aim is to provide an environment in which pedestrians and cyclists will feel as though they are generally of highest priority. Pedestrian routes will be direct, convenient and attractive, and contribute to the sense of place created by the design and layout of the site. The development will seek to maximise and enhance the permeability of the site to cyclists and aim to encourage cycling as a mode of transport for short trips.
- 4.14 Within the site, there will be a network of pedestrian and cycle routes. On the main east-west spine road within the site, it is envisaged that cyclist access will be segregated from general traffic. However internal roads will be designed to allow on carriageway cycling.
- 4.15 Improvements to the existing pedestrian and cycle infrastructure in the vicinity of the site are required and these include:
  - Provision of controlled pedestrian and cyclist crossing facilities across Henley Road as part of the two site access junctions;
  - Access to two new bridges over the railway line to link with land to the south, which forms part of the Ipswich Garden Suburb;
  - Provision of improved pedestrian and cyclist crossing facilities at the Valley Road /
     Henley Road junction;
  - Improvements to the Fonnereau Way Public Right of Way;
  - Improvements to other Public Rights of Way within the wider Ipswich Garden Suburb site;
  - Improvements and signage on the Henley Road / Dale Hall Road route between the site and Town Centre;
  - Improvements and signage on the route from Picton Avenue to the Town Centre; and
  - Provision of a new Toucan Crossing on Valley Road between the Henley Road and Westerfield Road junctions.



- 4.16 These improvements are likely to be delivered by a variety of different mechanisms including on-site works, as off-site highway works under Section 278 agreement and via financial contributions as part of the Section 106 agreement to allow SCC to undertake works.
- 4.17 The proposed pedestrian and cycle access strategy for the Henley Gate site, in the context of the wider IGS, is set out in **Figure 4.1.**



Figure 4.1 - Proposed Pedestrian and Cycling Access Strategy

#### Vehicular Access

- 4.18 Access to the site will be provided via two new traffic signal controlled junctions with Henley Road, in accordance with the requirements of the Ipswich Garden Suburb SPD.
- 4.19 These two new junctions will also provide access to the new country park visitor centre and associated car park.
- 4.20 It is proposed that vehicle access to a small car parking area associated with the Country Park will be provided via Westerfield Road. This is proposed via a priority junction which has been designed with reference to the principles set out within Manual for Streets. This would also provide a maintenance access to the Country Park.



- 4.21 The proposed car park will provide 10 parking spaces, and access will be managed and controlled via a gate to ensure that this is not used inappropriately, for example by those wishing to use Westerfield Station. At the western edge of the car park a small gated maintenance road will also be provided.
- 4.22 A further, gated maintenance access will also be provided from Lower Road.

## **Proposed Railway Bridges**

- 4.23 The IGS SPD sets out how two new bridges over the railway line will be provided as part of the delivery of the IGS. The approximate location of the access to these bridges from the site is shown on the Parameter Plans submitted as part of the outline planning application for Henley Gate. These locations are consistent with the SPD. The eastern most bridge will be on the alignment of the Fonnereau Way PROW, replacing the existing at-grade crossing of the railway line. It is intended that this bridge will provide a pedestrian and cycle route only.
- 4.24 The western most bridge will provide a new route for vehicles, cyclists and pedestrians, linking the two new communities on the north and south of the railway line to create an integrated community. SCC has indicated that access across this bridge for private vehicles will be restricted during weekday commuter peak periods to avoid the creation of a vehicular route from Henley Road to Westerfield Road, through the IGS. As a result, only cyclists, pedestrians and buses will be able to use the bridge during peak periods. It is likely that buses serving the new bus route will require transponders to signal a raising bollards system, however the exact method of managing traffic across the bridge is to be agreed with SCC.

#### Fonnereau Way Diversion

- 4.25 As set out above, Network Rail has considered the potential to close the existing at-grade crossing of the railway line on the alignment of the Fonnereau Way and divert this via the Westerfield Road level crossing.
- 4.26 Development at Henley Gate does not prejudice the diversion of the Fonnereau Way as proposed by Network Rail and once a potential alignment is known this can be considered further. In principle, Crest are happy to facilitate a suitable connection to allow the diversion to take place.



# **Parking Provision**

- 4.27 Parking for the different land uses within the proposed redevelopment will generally be in accordance with the guidance contained within SCC publication 'Suffolk Guidance for Parking' (November 2015), which is the adopted car parking standard within Ipswich Borough. The development will adhere to the principles of sustainable travel by not providing an over-supply of parking provision.
- 4.28 **Table 4.1** below is a summary of IBC's adopted parking standards for residential units.

Table 4.1: Residential Parking Standards

Size of Units	Parking (Minimum)
1 bedroom	1 space per dwelling
2 bedrooms	1.5 spaces per dwelling (1 allocated and 1 shared between 2 units for flexible use); 2 spaces per dwelling when provided within curtilage (or where sharing a space between 2 units is not practical)
3 bedrooms	2 spaces per dwelling
4+ bedrooms	3 spaces per dwelling
Visitor / unallocated	0.25 spaces per dwelling (unallocated)

- 4.29 Parking provision will be provided for each residential plot along with visitor parking in general accordance with the standards required.
- 4.30 For the other uses proposed on the site the relevant parking standards are contained in **Table 4.2** below.



Table 4.2: Non-Residential Parking Standards

Land Use	Parking (Maximum)			
A1 (Food stores <b>),</b> <1000sqm GFA	1 space per 16sqm			
A1 (excluding food stores)	1 space per 20sqm			
A2	1 space per 20sqm			
A3 (excluding Transport Cafes)	1 space per 5sqm of public floor area			
A4	1 space per 5sqm of public floor area			
A5	1 space per 3sqm public area; plus Employees 1 space per 4 normally present			
Education- primary / secondary	Teaching staff: 1 space per 15 pupils plus Visitors: 1 space per 20 pupils			
Team sports (outdoor sports pitches)	20 spaces per pitch plus 1 space per 10 spectator seats			
Other Sports facilities	Individual merit			
Other Uses	Individual merit			

4.31 It is proposed to provide parking for all of the identified land uses in general accordance with the adopted standards. Separate parking for each land use will be provided as appropriate including for the Local Centre, Primary School and Country Park.

#### **Car Parking Summary**

4.32 Providing the correct level of parking will ensure that there are no on-street parking problems that have been experienced in recent developments where lower levels of parking have been provided. It will also ensure that parking provision does not dominant the street scene.

#### Cycle Parking

4.33 Cycle parking provision for the different land uses will be generally in accordance with the minimum parking standards contained with the Suffolk Guidance for Parking.



Table 4.3: Cycle Parking Standards

Land Use	Parking (minimum)			
Residential	2 secure covered spaces per dwelling			
A1 (Food stores), <1000sqm GFA	1 stand per 200sqm (1 stand allows 2 cycles to park)			
A1 (excluding food stores)	1 stand per 200sqm (1 stand allows 2 cycles to park)			
A2	1 stand per 300sqm (1 stand allows 2 cycles to park)			
A3 (excluding Transport Cafes)	1 stand per 100sqm (1 stand allows 2 cycles to park)			
A4	1 stand per 50sqm			
A5				
Education- primary / secondary	1 stand per 5 staff plus 1 stand per 3 pupils Also consider scooter parking			
Team sports (outdoor sports pitches)	10 stands plus 1 space per 10 vehicle space			
Other Sports facilities	Individual merit			
Other Uses	Individual merit			

#### Other Parking

- 4.34 Disabled parking will be provided for each land use as appropriate to ensure that the uses are accessible by all.
- 4.35 Parking for motorcycles and for the commercial units for deliveries will be generally in accordance with the requirements of the adopted parking standards.

#### Summary

4.36 All parking requirements will be provided generally in accordance with the Council's adopted standards to ensure that a balance is found to between ensuring that sufficient parking is provided to meet demand and to adhere to the principles of sustainable travel by not providing an over-supply of parking.

# **Phasing**

- 4.37 The construction of the Development is anticipated to span approximately 13 years. The construction of the Development is likely to take place in a number of phases. Overall, the construction process is expected to be completed by 2030.
- 4.38 The initial stages of the construction will include access routes. It is anticipated that the internal roads will be constructed up to base-course level and used for construction traffic



- routes as the Development is built. Roads will then be finished to wearing course as phases are completed.
- 4.39 The off-site highway works will be implemented in line with the agreed phasing plan which is to be agreed with IBC and SCC. This will allow the transport infrastructure to be provided when it is necessary to meet the requirements of developing the site. The phasing plans and agreement of off-site highway works will be conditioned as part of the planning permission or secured through a planning obligation.

# Proposed Pedestrian & Cycle Improvements

- 4.40 Alongside the internal network of pedestrian and cycle routes, improvements to the existing pedestrian and cycle infrastructure in the vicinity of the site are required and are set out within the SPD.
- 4.41 The primary pedestrian and cycle access points to the site will be provided via Henley Road.
  At the vehicle access junctions, which are to be signal controlled, controlled crossing facilities will be provided to allow pedestrian and cyclists to cross Henley Road.
- 4.42 A pedestrian and cycle access to Westerfield Road will also be provided that will allow residents of the site to access Westerfield Station. Pedestrian access to the Country Park will be provided via the main internal road network (accessed via Henley Road), Westerfield Road and also via a further access point on Lower Road.
- 4.43 The off-site highway works at the Valley Road / Henley Road / Dale Hall Lane will provide shared footway / cycleway routes through the junction, which, together with Toucan crossings will provide an off carriageway route through the junction for those cyclists that prefer this route. The existing on-carriageway advisory cycle lane and advance stop lines will remain for those cyclists that wish to continue on-carriageway through the junction.
- 4.44 A new Toucan crossing will be provided on Valley Road between the junctions of Henley Road and Westerfield Road to assist pedestrian and cyclist movements across Valley Road.
- 4.45 The Fonnereau Way PROW is proposed to be upgraded to allow this to be become a pedestrian and cyclist route. This upgrading would also include provision of an appropriate surface to allow safe movement of pedestrians and cyclists. This would provide a traffic free



route through the IGS to Valley Road, and would then link with the proposed new Toucan crossing.

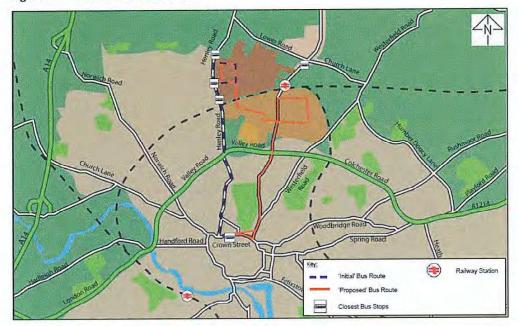
- 4.46 It is also proposed to provide new signed cycle routes to improve access to the Town Centre from the development. Two potential routes have been identified by SCC. The first route would run via Henley Road and residential roads to the west, whilst the second would provide a link from the PROW on Picton Avenue using routes between Valley Road and Westerfield Road. This route would then also utilise permitted cycling routes through and adjacent to Christchurch Park for onward access to the Town Centre.
- 4.47 The majority of roads that would make up these cycle routes are considered to be of sufficient standard and traffic flow to allow on-carriageway cycling. As a result, signage of these routes as cycle links to the town centre and inclusion on publicly available cycle route maps would be required in order to direct users that these are appropriate routes for cycling.
- 4.48 It is envisaged that a financial contribution via S106 agreement would be made to allow SCC to deliver these cycle route improvements.

# **Proposed Public Transport Services**

4.49 New bus services will be provided to ensure public transport connectivity both within the IGS and with the Town Centre. This is consistent with the requirements of the SPD. To identify these bus routes, discussions have taken place with SCC and the two main bus operators within Ipswich; Ipswich Buses and First. As a result of these discussions, both operators have expressed support for a two staged approach to bus service provision. This is set out in Figure 4.2.



Figure 4.2 - Future Bus Services



- 4.50 The initial stage would see the Henley Gate site served independently, in advance of the completion of the vehicle bridge over the railway line. It is anticipated that buses on this route would operate on a 30 minute frequency between the site and Tower Ramparts bus station in the Town Centre.
- 4.51 Once the vehicle bridge is completed, bus provision would be coordinated across the IGS with buses travelling via Westerfield Road from Tower Ramparts bus station, through the land west of Westerfield Road, before looping within the Henley Gate site and returning on the same route. An alternative loop via the Red House site would also be provided. Bus operators have indicated that these routes could operate on a 15 minute frequency.
- 4.52 The primary road network within the site as defined on the Parameter Plans will be designed to accommodate buses, with bus stops equipped with real time passenger information, high level kerbs and shelters.

#### **Off-Site Highway Improvements**

4.53 In accordance with the IGS SPD, off-site highway improvements will be provided at a number of external junctions to mitigate the impact of traffic associated with the proposed development and provide improved pedestrian and cyclist crossing facilities on key routes.



The proposed junctions that SCC consider will need improvements are set out in the SPD and are as follows:

- Valley Road / Henley Road / Dale Hall Lane;
- Valley Road / Westerfield Road; and
- Valley Road / Tuddenham Road.
- 4.54 In addition to these junction improvements, the SPD also sets out the requirement for a new Toucan crossing on Valley Road between Henley Road and Westerfield Road to provide improved pedestrian and cycle connections.
- 4.55 The proposed vehicle access strategy including off-site highway improvements is illustrated in Figure 4.3.

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Figure 4.3 - Proposed Vehicular Access Strategy

# Servicing/Refuse Collection

- 4.56 Servicing and refuse collection would take place on-site. Servicing of the local centre will take place to the rear of the units.
- 4.57 In the residential areas, the road network would be designed to accommodate the movement and turning requirements of servicing and refuse/recycling vehicles.



# Summary

- 4.58 In summary, the proposed development is designed to promote travel choice, as well as encouraging and accommodating a positive change in the propensity for more socially inclusive and sustainable modes of transport.
- 4.59 The location and accessibility of the site are excellent, and the proposals will have ancillary benefits for the neighbouring communities. Walking and cycling are encouraged by design within the site, and in the nature of the linkages to the surrounding community.



### 5 EXISTING TRAVEL DEMANDS

- 5.1 Local census data provides an indication of existing mode share within the settlements surrounding the site, for the journey to work.
- 5.2 In the absence of specific data, which will only be available once the development exists, this census data can be used to inform the setting and agreeing of indicative modal shift targets with the local authority within the Travel Plan.
- 5.3 The achievability of meeting these targets, or improving upon them further, can be reviewed once site specific data has been gathered. The monitoring process associated with the Travel Plan will provide actual figures.

## Journey to Work

- 5.4 The method by which existing residents of north Ipswich, who are in employment, travel to their workplace can be found in 2011 Census data. The 2011 Census holds the most recent data for travel to work statistics and Census Middle Super Output Areas (MSOAs) in north Ipswich have been used to provide an indication of how people travel to and from the area.
- 5.5 This data is shown in **Table 5.1** along with travel to work data for Ipswich, the East of England region and England.

Table 5.1 - Existing Method of Travel to Work \*

Mode of Travel	North Ipswich	Ipswich	East of England	England
Work Mainly at or From Home	5%	3%	6%	5%
Underground, Metro, Light Rail, Tram	0%	0%	1%	4%
Train	2%	2%	7%	5%
Bus, Minibus or Coach	6%	8%	4%	7%
Тахі	0%	0%	0%	1%
Motorcycle, Scooter or Moped	1%	1%	1%	1%
Driving a Car or Van	60%	56%	62%	57%
Passenger in a Car or Van	6%	7%	5%	5%
Bicycle	5%	5%	4%	3%
On Foot	13%	17%	10%	11%
Other Method of Travel to Work	0%	0%	1%	1%

<sup>\*</sup> not in employment figures have been excluded from this table



- 5.6 The data shows that existing areas of north Ipswich have slightly higher car driver levels than Ipswich Borough as a whole, but this is lower than the wider East of England area. There are fewer pedestrian trips to work undertaken in north Ipswich than the borough average.
- 5.7 The improvements to the pedestrian and cycling network in the vicinity of the site will encourage residents, employees, pupils and parents to travel sustainably to and from the development. Improvements to the existing bus services and the provision of bus stops within the site will enhance the public transport availability.

# Car Ownership

The 2011 census data has been interrogated for car ownership information for north Ipswich and Ipswich Borough. The results are shown in **Table 5.2** 

Table 5.2- Car Ownership

	Car Ownership (%)						
	North Ipswich	lpswich	East of England	England			
All Households	100	100	100	100			
No car or van	22	28	19	26			
1 car or van	44	46	43	42			
2 cars or vans	27	21	29	25			
3 cars or vans	6	4	7	5			
4 or more cars or vans	2	1	3	2			

5.9 The 2011 Census data shows that there are a greater number of households without a car in Ipswich than across the East of England, although north Ipswich has a slightly lower proportion than the Borough average. Within north Ipswich, 35% of households own 2 or more cars or vans, compared with 26% across the Borough.



### 6 FUTURE TRAVEL DEMANDS

6.1 This section provides a summary of the future travel demands of the proposed development.

Full details are included within the Transport Assessment which should be read in conjunction with this Travel Plan.

## **Trip Generation**

- 6.2 **Tables 6.1 6.4** summarise the total external development trips by purpose and mode, per peak hour and per Phase. These include the following internalisation judgements and Travel Plan modal shift targets, summarised below:
  - Based on Table National Travel Survey Data, the split in education based trips is
     49.3% primary and 50.7% secondary;
  - There will be no on-site primary school in Phases 1&2 and it is unlikely that the new secondary school will be built out on the Mersea / CBRE site by then. Therefore, all primary and secondary education trips will be external during Phases 1&2;
  - The on-site Primary school will be built following Phase 2 which will retain all primary education trips internally. When considering the total Henley Gate development, it is anticipated that the vehicle bridge over the railway will remain closed to private vehicles during peak periods, as previously requested by SCC. Therefore, car trips to the new secondary school on the Mersea / CBRE site will remain external, whilst sustainable modes will use the bridge and as such, will be classed as internal trips;
  - The retail offer at the new local centre will retain half of the development shopping trips. As such, total Henley Gate development shopping trips are discounted by 50%;
  - During Phase 1&2 the Travel Plan will facilitate a modal shift of 15% away from
    private car use for Work and Other purposes. These trips are reallocated as an
    increase in cycle use (5%) and bus patronage (10%);



- During Phase 1&2 the Travel Plan will facilitate a modal shift of 20% away from
  private car use for Education purposes. These trips are reallocated as an increase
  in cycle use (10%) and walking (10%);
- For the total Henley Gate development, the Travel Plan will facilitate a modal shift
  of 20% away from private car use for Work and Other purposes. These trips are
  reallocated as an increase in cycle use (5%), bus patronage (10%) and rail patronage
  (5%);
- For the total Henley Gate development, the Travel Plan will also facilitate a modal shift of 30% away from private car use for secondary Education purposes. These trips are reallocated as an increase in cycle use (15%) and walking (15%), however these trips are made internally and are not shown in the tables below.
- For the total Henley Gate development, 10% of the vehicle trips will be to the country park and are therefore internalised trips.

Table 6.1 - Phases 1&2 Development AM External Trips

N/I - J -	Wo	ork	Educ	Education		Education Shopping		Ot	her	Total	
Mode	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	
Walk	4	16	11	35	1	2	2	6	17	59	
Cycle	1	4	3	10	0	0	0	1	5	16	
Car Driver	12	32	20	54	2	5	4	11	38	102	
Passenger	4	17	7	31	1	2	1	6	13	57	
Rail	0	0	0	0	0	0	0	0	0	0	
Bus	2	5	1	2	0	0	1	2	4	9	
Total	24	74	42	133	3	10	8	26	77	244	

Table 6.2 - Phases 1&2 Development PM External Trips

0.0-1-	W	ork	Educ	ation	Shop	ping	Otl	ner	To	tal
Mode	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP
Walk	10	6	2	1	4	2	7	4	23	14
Cycle	5	3	1	1	1	1	3	2	10	6
Car Driver	43	25	5	3	19	11	29	17	97	56
Passenger	16	9	2	1	6	3	11	6	35	19
Rail	0	0	0	0	0	0	0	0	0	0
Bus	7	4	0	0	1	0	5	2	13	6
Total	82	47	11	6	31	18	55	31	179	101



**Table 6.3 - Total Development AM External Trips** 

N. 0 1 -	Wo	ork	Educ	ation	Shop	pping	Ot	her	То	tal
Mode	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP
Walk	16	59	0	0	1	4	6	21	23	83
Cycle	4	14	0	0	0	1	1	5	5	20
Car Driver	41	110	33	87	4	9	13	34	90	241
Passenger	15	64	26	114	1	4	5	22	47	205
Rail	3	7	0	0	0	0	1	3	3	10
Bus	7	18	0	0	0	0	3	6	10	25
Total	86	272	59	202	6	19	28	91	180	583

Table 6.4 - Total Development PM External Trips

0.4-4-	W	ork	Educ	ation	Shop	ping	Ot	her	То	tal
Mode	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP
Walk	38	23	0	0	7	4	26	15	71	43
Cycle	18	11	0	0	2	1	12	8	32	20
Car Driver	150	86	9	5	36	20	87	50	282	161
Passenger	59	32	8	4	11	6	39	21	117	63
Rail	10	5	0	0	0	0	7	4	17	9
Bus	26	13	0	0	1	0	17	9	44	23
Total	301	171	16	9	57	33	188	107	563	319

6.3 The final development external trip modal split is summarised in Table 6.5.

Table 6.5 - Final Development Modal Split

Mode	AM	PM	
Walk	14.0%	13.0%	
Cycle	3.3%	5.9%	
Car Driver	43.4%	50.2%	
Passenger	33.0%	20.5%	
Rail	1.7%	2.9%	
Bus	4.6%	7.6%	

# **Trip Distribution**

6.4 The distribution of vehicular trips varies according to the trip purpose, which is explained in detail below.



#### **Work Trips**

- 6.5 To inform the distribution of development trips we have examined the NOMIS database for 2011 Census data for existing journey to work information for existing residents in the local area. We have used three Middle Layer Super Output Areas (Ipswich 001, 002 & 003), which are part of or adjacent to the development site.
- 6.6 Appendix O of the Transport Assessment contains a summary of the destinations where existing residents of these three areas currently work and the (cumulative) relative percentage proportions.
- 6.7 Development trips were allocated to these destinations using current proportions, as summarised in Appendix O of the Transport Assessment. Destinations with less than a 1% proportion were deselected.
- 6.8 Trips to each destination were allocated according to the most likely mode choice i.e. shortest journeys will be by foot and cycle, whilst longer distance journeys will be by car and rail.
- 6.9 Vehicular trips were assigned to the highway network according to the most logical route.
  Where route choice exists, the assignment of trips is based on a particular routes' appeal.
  The assignment of vehicular trips to specific routes are summarised in Table 6.6.

Table 6.6 - Summary of development work trip route assignment

Route	Proportion
Yarmouth Road	18.7%
Defoe Road	10.7%
Norwich Road (north)	10.0%
Henley Road (south to Town Centre)	3.2%
Norwich Road (south)	13.3%
Star Lane	10.8%
Colchester Road	25.6%
Fore Hamlet (AQMA)	1.6%
Belstead Road	1.8%
Henley Road (north)	1.8%
Westerfield Road (north)	2.6%



#### **Education Trips**

- 6.10 During Phase 1&2, education trips are externally assigned to the primary and secondary schools in the Castle Hill area.
- 6.11 For the total development scenarios, the primary education trips are wholly contained within the site, i.e. no external trips. The secondary school trips are allocated to the new secondary school on the IGS, however as the bridge linking the site to the remaining IGS could be closed during the peak times, traffic has been assigned on to the highway network, rather than being able to travel through the site internally.

#### **Retail Trips**

- 6.12 Half of the retail trips will be retained within the site at the local (retail) centre. Of the remaining retail trips, their ultimate destinations and route choice are summarised below:
  - 30% to Ipswich Town Centre via Henley Road;
  - 30% to Sainsbury's, Hadleigh Road via Valley Road;
  - 20% to Castle Hill local shops via Defoe Road; and
  - 20% to ASDA / Retail Parks (A14) split equally via Norwich Road and via Defoe Road.

#### Other Trips

- 6.13 During phases 1 & 2, the assignment of other trips is summarised below:
  - 10% to Whitton Sports and Community Centre via Defoe Road;
  - 10% to Westerfield Road country park car park via Lower Road;
  - 40% to Ipswich Town Centre via Henley Road; and
  - 40% to the Cardinal Leisure area via Norwich Road.
- 6.14 For the total development, 10% of other trips will be retained within the development as residents visiting the country park visitor centre, located within the site. Of the remaining other trips, they are assigned as follows:
  - 11% to Whitton Sports and Community Centre via Defoe Road;
  - 44.5% to Ipswich Town Centre via Henley Road; and
  - 44.5% to the Cardinal Leisure area via Norwich Road.