

**Carlyon Bay  
Environmental  
Statement (2011)**

Chapter G

Transportation

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## G1.0 **Introduction**

G1.1 This section of the Environmental Statement has been prepared by Bryan G Hall and Steer Davies Gleave and addresses the potential environmental effects arising from the transportation impacts of the proposed development. A Transport Assessment and a Travel Plan have also been prepared by Bryan G Hall and Steer Davies Gleave and are appended at Appendices G1 and G2. The findings of the Transport Assessment, which has been prepared in accordance with the following guidance, forms the basis of this section.

- 1 IEA 'Guidelines for the Environmental Assessment of Road Traffic' (IEA, 1993);
- 2 DMRB Volume II (Department of Transport, 1994);
- 3 Planning Policy Guidance PPG13 Transport;
- 4 Guidance on Transport Assessment (Department of Transport 2007); and
- 5 Travel Plans – Advice for Developers in Cornwall (Cornwall Council, 2007).

### **Structure of Chapter**

G1.2 This chapter sets out a summary of the transportation policy context of the proposals and then describes the existing transport network including its use by all users, along with the potential effects of the transport impact of the development including construction traffic upon the local and strategic highway networks. The impacts on driver and pedestrian delay, amenity and road safety are assessed.

G1.3 This chapter should be read in conjunction with Chapter H: Air Quality and Chapter I: Noise and Vibration.

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## G2.0 Policy Context

G2.1 The assessment of the effects of the development proposals has been carried out having regard to national guidance set out in the Department for Transport – Guidance on Transport Assessment (March 2007) and PPG13 – Transport (March 2001). In addition the transport impact has also been assessed against local policy ‘saved’ policies in the Restormel Borough Council Local Plan 2001, policy in the emerging Cornwall LDF Topic Paper – Transport and Accessibility, and the Cornwall Second Local Transport Plan 2006-2011. The objectives of national and local policy guidance is to integrate planning and transport to:

*‘promote more sustainable transport choices for both people and for moving freight’*

*‘promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling, and’*

*‘reduce the need to travel, especially by car’*

G2.2 Policies 1 and 2 saved in Restormel Local Plan set the scene for sustainable development, identifies that main urban areas will contribute to sustainable development because of the concentration of services and employment found in such locations.

G2.3 Policy 49 states that for all non-residential development the council will seek adequate disabled parking spaces positioned appropriately close to the buildings for ease of access.

G2.4 Transport Policy 79 sets out that development proposals will be required to provide car parking to meet minimum essential needs and shall not exceed the relevant maximum standards for various land uses.

G2.5 In respect to Traffic Safety Policy 80 sets out that development will only be permitted where additional traffic generated by the development can gain access to and be accommodated on the road system without undue environmental, operational or safety problems.

G2.6 Policy 81 promotes walking and cycling through measures such as including provision for pedestrians and cyclists on dedicated routes which should link into existing or potential networks within the area and provide access to schools, shops, work places and neighbouring facilities.

G2.7 The emerging Cornwall LDF Draft Topic Based Issues Paper ‘Transport and Accessibility’ identifies the following issues:

Issue TP1 – The Core Strategy should establish an approach to improve people’s ability to access places and facilities.

Issue TP2 – The Core Strategy should ensure that new development does not increase the demand for unsustainable transport.

Issue TP3 – The Core Strategy should consider enhancing sustainable transport options in the light of the future impact of climate change, rising fuel costs and the depletion of oil stocks on existing and future transport infrastructure and services.

Issue TP4 – The role of strategic links and connectivity, such as trunk roads, ports and airports, should be addressed in order to facilitate sustainable growth in the county's economy.

Issue TP5 – The Core Strategy should consider car parking provision and the impact that this has on town centre development, amenity, congestion and economy.

G3.0

## Assessment Methodology & Significance Criteria

### Assessment Methodology

G3.1

This chapter uses the findings of the Transport Assessment and Travel Plan to assess the environmental effects arising from the transportation impacts of the proposed development. Before quantifying the transport impacts of future development proposals, baseline conditions must first be established. Comprehensive transport surveys of the surrounding transport network have been carried out and up to date personal injury accident data has been obtained. The scope of the surveys has been agreed with Cornwall Council.

G3.2

Using a combination of these results of local surveys and industry standard toolkits, the trip generation of the proposed development has been established having regard to a sustainable travel demand strategy consistent with local and national policy and technical guidance. To ensure a robust assessment of the transport impact a maximum value of 50% permanent residents on site has been assumed, with higher trip rates than typical holiday lets. The trip generation of the Holiday residents/visitors and permanent residents has been established separately and the impact of the development trip generation upon the transport network has been assessed for assessment years of 2016 and 2021 as agreed with Cornwall Council. The impact assessment includes

- 1 Impact on the capacity of the network;
- 2 Impact upon road safety; and
- 3 Impact upon all road users.

G3.3

The Transport Assessment also compares the impact of the development proposals against implementation of the Extant Scheme having regard to the fact that the extant scheme does not require a sustainable travel demand strategy as per the current scheme.

### Significance Criteria

G3.4

For the ES, the transportation impacts of the proposed scheme when compared to baseline conditions are quantified according to the following significance criteria.

Table G3.1 Sensitivity/Value of Receptor

Sensitivity/value of a Receptor	Description
Very High	Roads where high levels of vulnerable pedestrians such as children and the elderly are present such as outside schools, hospitals etc.
High	Roads with poor non motorised user facilities such

Sensitivity/value of a Receptor	Description
	as narrow footways etc and lack of safe crossing facilities.
Medium	Roads through residential areas
Low	All other locations including principle roads such as Par Moor Road.

Table G3.2 Magnitude of Impact

Magnitude of Impact	Description
High	Greater than a 90% increase in traffic flow levels
Medium	In the order of a 60% increase in traffic flow levels
Low	In the order of a 30% increase in traffic flow levels
Negligible	Less than 10% change in traffic flow levels

Table G3.3 Impact Significance Matrix

Sensitivity/value of a Receptor	Magnitude of Impact			
	High	Medium	Low	Negligible
<b>Very High</b>	Substantial	Substantial	Moderate	Minor
<b>High</b>	Substantial	Moderate	Minor	Negligible
<b>Medium</b>	Moderate	Minor	Negligible	Negligible
<b>Low</b>	Minor	Negligible	Negligible	Negligible

### Consultation

- G3.5 Consultations have been carried out with Cornwall Council as Local Highway Authority. These consultations have included submission and agreement of a Transport Assessment and Travel Plan Scoping Report and attendance of three pre application meetings with officers. In addition to the consultations with Cornwall Council, Bryan G Hall and Steer Davies Gleave have attended two liaison group meetings to discuss transport issues and two pre application public exhibitions.
- G3.6 The Highways Agency have also been consulted on the Transport Assessment and Travel Plan scope and methodology.

## G4.0 **Baseline Conditions**

### **Existing Highway Network**

- G4.1 Vehicular and pedestrian access to the site is taken from Beach Road with a security point located at the top of the cliff at the western end of Crinnis Beach. The South West Coastal Footpath crosses Beach Road at this location and immediately to the west of the site access is a large car park with capacity for some 170 visitor's cars.
- G4.2 Between the site access and its junction with Sea Road, Beach Road is the ownership of the applicant. From its junction with Sea Road (and to the west). Beach Road is adopted and functions as a local access road and also provides access to the residential areas of Carlyon Bay.
- G4.3 To the south of Beach Road, Sea Road is a private road that serves a mix of residential properties and hotels. To the north, the road passes under the South West mainline railway and becomes Cypress Avenue, continuing north to connect to A3082 Par Moor Road at a simple priority controlled junction. Cypress Avenue is adopted highway and the section of Sea Road between Cypress Avenue and Beach Road is public highway not maintainable at public expense.
- G4.4 A3082 Par Moor Road provides access to the A390 Holmbush Road corridor and, via the A391, to the A30 and the wider strategic network.
- G4.5 In addition to the Cypress Avenue route, the site can be accessed from the A390 Holmbush Road corridor by the following routes
- 1 From the Mount Charles Roundabout along Charlestown Road, Church Road, Crinnis Road and Beach Road.
  - 2 From the Holmbush Arch Road traffic signals along Holmbush Arch Road, Crinnis Road and Beach Road.

### **Footpath Network**

- G4.6 The South-west Coastal Footpath passes the site along the Cliff top, crossing Beach Road. From the Coast Path there are links to Charlestown, across the golf course to join Cypress Avenue and via Merthen Farm and the railway bridge to Par Moor Road. There are footways along Beach Road and Sea Road that connect to the wider pedestrian network of Carlyon Bay and St Austell.

### **Bus Network**

- G4.7 The nearest bus stops are located on Beach Road at the junction with Sea Road. The stops are served by the No 525 service which operates on an hourly frequency in each direction between 07:00 and 18:00, Monday to Saturday, providing connections to local schools, supermarkets and hospital.

## Railway Station

- G4.8 The nearest railway stations are Par, some 2.6 kilometres to the north-east of the site and St Austell, some 4.2 kilometres to the west of the site. Both stations are located on the South West mainline and provide links to London Paddington, Truro, Plymouth, Penzance, Exeter St Davids and other mainline destinations. A branch line to Newquay is also available from Par.

## Airports

- G4.9 Newquay Airport is located some 22 kilometres to the north-west and Plymouth Airport some 45 kilometres to the east. Direct flights are available to a range of destinations including London, Manchester, Leeds, Edinburgh and other European destinations.

## Existing Traffic Flows

- G4.10 Counts of traffic flows on the local highway network were undertaken in 2009 on Saturday 22 August, Tuesday 25 August and Tuesday 6 October between the hours 7.00am to 7.00pm. The surveys provide a picture of both weekday and weekend conditions, as well as illustrating any differences between traffic flows in peak season and out of season. In addition, 24 hour automatic traffic flow data (ATC) for the A390 Holmbush Corridor has been obtained from Cornwall Council. Diagrams showing the results of the surveys are attached to the TA at Appendix BGH7.
- G4.11 The survey results show that during August, traffic flows are typically 8 to 10% higher than October.
- G4.12 Using the automatic traffic count data for the A390, a 12 hour to Annual Average Daily Traffic (AADT) factor has been calculated and applied to the 12 hour flows to give the following AADT flows on the local highway network.

Table G4.1 Existing 2009 Annual Average Daily Traffic (AADT) Flows

Road	AADT	
	Total Vehicles	Heavy Goods Vehicles
Access Road (section of Beach Road between site and Sea Road)	712	10
Sea Road (Between Beach Road & Cypress Avenue)	1927	29
Cypress Avenue	2051	34
A3082 Par Moor Road (Between Cypress Avenue & A390 Holmbush Road)	10713	285
A390 Holmbush Road (Between Par Moor Road & A391)	24470	5027
A391	9470	496

Road	AADT	
	Total Vehicles	Heavy Goods Vehicles
Beach Road (Between junctions with Sea Road)	3251	69
Sea Road (South of Beach Road)	896	21
Crinnis Road	3752	75
Holmbush Arch Road	3138	59
Church Road	3596	66
Charlestown Road (Between Church Road & A390)	4910	80
A390 (To the west of Charlestown Road)	23184	771

- G4.13 The Transport Assessment also provides a summary of the peak hour flows on the network for each link. The busiest hour has been taken to be the highest aggregate hourly traffic flow on the entire local highway network.
- G4.14 When looking at peak hour flows it has been calculated that during August the highest hourly flows are some 12% higher than in October.
- G4.15 In the immediate vicinity of the site, all roads are currently operating lower than their respective practical capacities. Junction capacity analyses and site observations show that the Beach Road/Sea Road, Cypress Avenue/Par Road, Par Moor Road, Crinnis Road/Holmbush Arch Road and Church Road/Charlestown Road, Charlestown Road/Holmbush Road junctions operate within their theoretical capacities at peak times. The Daniels Lane/Holmbush Road/A391 junction operates over capacity at peak times with queues of traffic forming on the A390 Holmbush Road corridor in both directions. A plan of the local highway network is contained in Appendix BGH3.

### Road Safety

- G4.16 The record of personal injury accidents that have occurred on the local highway network during the five year period commencing 01/04/2005 has been obtained from the Local Highway Authority. Full details of these accidents are set out in the Transport Assessment at Appendix G1. They show that there are no junction layout or highway characteristics which adversely affect road safety.
- G4.17 A baseline analysis has also been undertaken for the proposed opening year of 2016 and a future assessment year of 2021. The 2016 and 2021 forecast baseline flows have been established by applying unconstrained traffic growth factors for the St Austell area derived from the National Traffic Model (NTM) and the traffic movements likely to be generated by the Tesco store extension approval have been added to the 2016 and 2021 growth traffic flows to give 2016 and 2021 forecast baseline flows.
- G4.18 A baseline analysis has also been undertaken on the basis the Extant Scheme is implemented. The Extant Scheme takes access from Beach Road and does

not require implementation of a Travel Plan or any other significant travel demand management measures.

## G5.0 **Potential Effects**

### **Introduction**

G5.1 This section assesses the impact of the vehicle trips likely to be generated by the development upon the local transport network. It considers the impact upon all the highway links set out in Table G4.

### **During construction**

G5.2 Construction of the development is likely to generate construction staff car trips and a wide range of materials delivered to the site. The majority of HGV construction traffic movements will use Sea Road (between Beach Road and Cypress Avenue), Cypress Avenue and Par Moor Road to access the wider highway network. For those deliveries that are unable to use this route as a result of geometric constraints at the Cypress Avenue Railway Bridge, Beach Road will be used.

G5.3 Construction generated traffic movements including staff and HGV's will not increase total traffic flows by more than 10% on any link. The Construction generated HGV's are likely to increase the number of HGV's using Sea Road, Cypress Avenue and Par Moor Road by greater than 30%. On all other links including Beach Road the percentage increases are likely to be less than 10%.

G5.4 In terms of overall increases in traffic movements and having regard to Table G3.3 Significance Matrix construction generated traffic is likely to result in a negligible impact upon the Sea Road, Cypress Avenue and Par Moor Road. In terms of the increase in the number of HGV movements it is considered that there will be a moderate impact upon Sea Road and a negligible impact upon Cypress Avenue and Par Moor Road. The moderate impact upon Sea Road will be a short term impact.

### **After Completion**

G5.5 If approved, construction of the development is likely to begin in 2012 and be fully open in 2016. The traffic impact has been assessed at the full opening year (2016) and a 2021 future assessment year.

G5.6 In line with current guidance a multi modal assessment has been undertaken for the proposed development. The residual vehicle trips likely to be generated on the local transport network have been calculated in the TA with a 20% reduction applied to the resulting trips to take into account the targets for reductions in car trips set out in the overarching Travel Plan. This methodology has been agreed with Cornwall Council and is consistent with advice set out in Department for Transport 'Guidance on Transport Assessment'. The targets will be met through implementation of a package of sustainable travel measures, explained in more detail in the Travel Plan and summarised under paragraph G9.7 of the Mitigation Measures sub-heading.

- G5.7 The Transport Assessment explains the derivation of trips likely to be generated by the site. Holiday trips are derived based on surveys at similar locations namely; Pentewan Sands Holiday Resort and beach car parks at Gorran Haven, Caerhays and Carne. The surveys took place at the height of the season on Thursday 12th and Saturday 14th August 2010.
- G5.8 Trips associated with permanent residents have been derived from trip rates calculated from the industry standard tool Trip Rate Information Computer System (TRICS) database.
- G5.9 A summary of the predicted development vehicular trips is set out below for a changeover and non changeover day during the peak summer months.

Table G5.1 Vehicle Trips likely to be generated by Proposed Scheme (non-change over day)

Type of Vehicle	Busiest Hour 17:00-18:00			Daily 7:00-19:00		
	Arrivals	Departures	Total	Arrivals	Departures	Total
All Vehicles	153	152	305	1244	1267	2511
HGV	0	0	0	10	7	17

Table G5.2 Vehicle Trips likely to be generated by Proposed Scheme (change over day)

Type of Movement	Busiest Hour 17:00-18:00			Daily 7:00-19:00		
	Arrivals	Departures	Total	Arrivals	Departures	Total
All Vehicles	116	154	270	1190	1158	2348
HGV	0	0	0	4	4	8

- G5.10 The table shows the during the peak July and August months assuming full occupancy the proposed development uses are likely to generate some 305 vehicle trips during the busiest hour and some 2511 daily vehicle movements. The movements set out in Tables G5 and G6 include existing visitors to the upper Car Park at the site.
- G5.11 The predicted flows associated with the busiest non-changeover day set out in table G5 have been distributed on the highway network in accordance with the distributions set out in the Transport Assessment at Appendix BGH24. These flows have then been added to baseline flows to produce 'with development' forecasts.
- G5.12 The 'Guidelines for the Environmental Assessment of Road Traffic' suggests the following two broad rules regarding potential environmental impact:
- 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%); and,
  - 2 include any other specifically sensitive areas where traffic flows will increase by 10% or more.

- G5.13 So, for links with impacts between 10% and 30% only those in sensitive areas need be considered further.
- G5.14 The predicted daily traffic flows during the peak July and August summer period on the local highway network at the opening year with and without the development traffic are summarised in Table G7 together with the predicted percentage changes in traffic flow.
- G5.15 As noted in para F8.10 the traffic movements to and from the development include existing visitors to the site and therefore to avoid double counting the flows in Table G7 below include the existing visitor car trips in the do nothing situation.

Table G5.3 Existing visitor car trips in the do nothing situation

Link	2016 August Weekday					
	Busiest Hour 5:00pm-6:00pm			12 Hour		
	Do Nothing	With Dvpt	% Change	Do Nothing	With Dvpt	% Change
Access Road (section of Beach Road between site & Sea Road)	92	326	+354%	776	2338	+301%
Sea Road (Between Beach Road & Cypress Avenue)	287	415	+44%	2099	2947	+40%
Cypress Avenue	307	435	+42%	2234	3082	+37%
A3082 Par Moor Road (Between Cypress Avenue & A390 Holmbush Road)	1152	1271	+10%	11802	12589	+6.7%
A390 Holmbush Road (Between Par Moor Road & A391)	2713	2795	+3%	27005	27540	+2%
A391 (Between A390 & Trenowah Road)	1087	1166	+7%	10381	10892	+5%
Beach Road (Between junctions with Sea Road)	394	490	+24%	3540	4254	+20%
Sea Road (Between Sea Road & The Cedars)	98	98	No change	976	976	No change
Crinnis Road	465	561	+21%	4086	4719	+15%
Holmbush Arch Road	343	349	+2%	3448	3487	+1%
Church Road	469	559	+19%	3916	4510	+15%

Link	2016 August Weekday					
	Busiest Hour 5:00pm-6:00pm			12 Hour		
	Do Nothing	With Dvpt	% Change	Do Nothing	With Dvpt	% Change
Charlestown Road (Between Church Road & A390)	618	708	+15%	5348	5942	+11%
A390 (Between Charlestown Road & Porthpean Road)	2421	2485	+3%	25321	25742	+2%

G5.16 Table G5.3 shows that during the busiest hours the development is likely to result in traffic increases greater than 30% on the following links.

- 1 Beach Road (between site and Sea Road)
- 2 Sea Road (between Beach Road and Cypress Avenue)
- 3 Cypress Avenue

G5.17 The highway links with predicted traffic increases of between 10% and 30% are:

- 1 A3082 Par Moor Road
- 2 Beach Road between junctions with Sea Road
- 3 Crinnis Road
- 4 Church Road
- 5 Charlestown Road

G5.18 All other highway links are predicted to result in increases of less than 10% and therefore having regard to 'Guidelines for the Environmental Assessment of Road Traffic' broad rules noted in paragraph G5.12.

*".....it can be concluded that the impact of development generated traffic will result in no discernable environmental impact upon the links with an increase in traffic of less than 10%".*

G5.19 The links listed in G5.16 show a predicted increase in traffic of between 10% and 30%, and only those in specifically sensitive areas need be considered further. Based on the criteria set out in Table G3.1, only Crinnis Road in the vicinity of Charlestown Primary School is a specifically sensitive area. On this basis it is concluded that although there will be increases in flow in excess of 10% upon Par Moor Road, Beach Road (through Carlyon Bay), Church Road and Charlestown Road, there will be no discernable environmental impact as a result of the development when compared to the do nothing baseline scenario.

G5.20 Charlestown Road Primary School is located on Crinnis Road, however during the peak summer season when the development will be generating the highest amount of traffic, the School will be closed and therefore, there will be no environmental impact upon the School during these periods. During school term time the proposed development is likely to increase traffic on Crinnis Road

by some 10% during the period 8.00am to 9.00am and 30% during the period 3.00pm to 4.00pm. Using a combination of the Magnitude of Impact given in Table G3.2 and the Impact Significance Matrix in Table G3.it can be seen that the magnitude of this increase in traffic levels would be minor. Furthermore Crinnis Road is traffic calmed in the immediate vicinity of the school which keeps traffic speeds low and therefore minimises the risk of any speed related accidents.

- G5.21 As noted above, the only links likely to result in traffic increases greater than 30% are Access Road (section of Beach Road between the site and Sea Road), Sea Road (between Beach Road and Cypress Avenue) and Cypress Avenue. Access Road and Cypress Avenue do not have any frontage development and footways/cycleways provide safe access for pedestrians and cyclists. Both these links will continue to operate well within their traffic carrying capacities and therefore, it is considered that the proposed development will result in no environmental harm to these roads when compared to the 'do nothing' baseline position.
- G5.22 Sea Road, between Beach Road and Cypress Avenue, is some 5.0 to 6.0 metres wide, is a bus route with a 1.8 metre wide footway on its eastern side and is lit. There is frontage access to some nine properties on the western side with good egress visibility to/from all properties. The road safety record shows that this section of Sea Road is currently operating in a safe manner and with the proposed development traffic added will continue to operate well within its traffic carrying capacity. The alignment also restricts vehicle speeds along this section. During the busiest hour, the proposed development is likely to add some 128 two-way movements to this section of Sea Road, which equates, on average, to two additional movements every minute. This level of increase in traffic will not cause environmental harm to either uses of Sea Road or the residents taking frontage access off Sea Road. Using the Impact Significance Matrix (Table G3.3) the impact is considered to be negligible.
- G5.23 In summary during the operational phase with the exception of Crinnis Road during the weekday period 3.00pm to 4.00pm the impact of development generated traffic against the do nothing baseline position is likely to be negligible upon all highway links. On Crinnis Road during School term time the impact will be minor/moderate.
- G5.24 Within the Transport Assessment, a comparison exercise of the proposed development compared with the Extant Scheme has been carried out. The extant scheme could potentially generate some 335 vehicle movements during the busiest hour and some 3151 daily vehicle movements compared to 305 and 2511 for the proposed scheme. It can therefore be seen that when the proposed development is compared to the existing/former uses on the site there is a net decrease in generated daily vehicle movements in the order of 640 vehicle trips.
- G5.25 A similar comparison of impacts concludes that implementation of the Extant Scheme would have higher impact in terms of increases in traffic levels upon

the local highway network, although the overall conclusions, both during operation and construction, are the same.

## G6.0 Mitigation Measures

### Introduction

G6.1 This section sets out the mitigation measures that will minimise the impact of development generated vehicle trips upon the local highway network.

### During construction

- G6.2 Measures will be introduced within the construction programme phasing to ensure that the majority of HGV construction traffic uses Sea Road, Cypress Avenue and Par Moor Road to access the wider highway network. Construction of the development is expected to commence in mid-2012 with completion some 42 months later (except for work to provide a temporary sea defence on Crinnis which will be carried out during 2011, starting Q2 2011).
- G6.3 Appropriate wheel cleaning facilities will be provided within the site to ensure that no mud or debris is deposited on the adjacent highway. A traffic routing and timing management plan will be implemented as part of the Construction Management Plan.
- G6.4 Each contractor will be required to identify a site, away from the main site, to act as a facility where larger loads, where appropriate, can be transferred to vehicles that are able to pass under the rail bridge at the southern end of Cypress Avenue.
- G6.5 Beach Road will need to be used for those deliveries that cannot be made via the principal route outlined above due to the width and height restrictions under the railway on Cypress Avenue.. In such infrequent cases, deliveries will be subject to time constraints to avoid increases in HGV traffic during the morning and afternoon peaks in school activities.
- G6.6 Specific obligations for construction traffic will form part of a Construction Environmental Management Plan (CEMP). The contractor will be required to produce and agree the CEMP. It will describe how construction will be managed to avoid, minimise and mitigate any construction effects on:
- 1 The environment,
  - 2 Existing surrounding communities,
  - 3 Residents of Carlyon Bay.
- G6.7 It will be produced in accordance with the recommendations of PPG6 which has been prepared by the Environment Agency and is entitled Pollution Prevention Guidelines.
- G6.8 The CEMP will provide the management framework needed for the planning and implementation of construction activities in accordance with environmental commitments identified within the Environmental Statement and any requirements of planning condition and Section 106 legal agreements.

- G6.9 A detailed CEMP will be produced as part of the detailed submissions on reserved matters for the development phase. An Outline CEMP in the Construction Methodology section of this ES describes how the detailed CEMP will work, how it will be produced, how statutory authorities and other interested groups will be able to interact with the process, and how the control of construction aspects will be achieved.

### **After Completion**

- G6.10 The proposed development incorporates a comprehensive package of measures to mitigate the environmental impact of the generated traffic. This package of measures is focussed around sustainable transport strategies aimed at reducing the demand for private car travel generated by the development.
- G6.11 A Travel Plan will be implemented to encourage residents, staff and visitors of the development to travel by alternative means of transport to the private car. A Travel Plan (Appendix G2) has been submitted with the application and includes the following package of initiatives to promote sustainable transport choices:-
- 1 Public Transport
    - Increased bus frequency following the route of the 525 service for 3 years, and improved infrastructure at stops closest to the site.
    - The whole length of development will be linked by shuttle bus to the cliff top car park and the existing bus stops.
    - A staff bus will be provided.
    - As off-site technology becomes available a real time information system will be provided giving details of the choices of mode available.
    - Pick-up and drop off service to St Austell and Par rail stations
    - Pick-up and drop off service to Newquay airport
    - Key tourist destinations will be served by dedicated coach trips – Eden, Heligan, St Ives, Newquay, etc
    - Working in partnership with the Council and other developers to help deliver park and ride for St Austell.
  - 2 Information
    - Travel Packs will be provided.
    - Links to the various public transport and walking/cycling route maps will be promoted. Copies of the route maps should also be included in the Travel Packs and readily available to guests at Reception.
    - A Travel Plan Co-ordinator will be responsible for developing and managing a resort website. It is important that the website provides prospective holiday makers with sufficient information to understand the range of opportunities available on site and help promote car-free holidays.

### 3 Parking Provision

The Council's car parking standards will be used as maximum values.

A Car Park Management Plan has been developed.

Controls on parking throughout the site have been designed through the provision of designated parking areas.

Safe and secure pedal cycle and motorcycle parking facilities will be provided throughout the site.

### 4 Car Club

The developer will provide car club facilities within the site. The cars will be electric powered/hybrids and electric charge points will also be available for visitor use.

Free membership of the car club will be provided to residents and holiday makers.

### 5 Walking and Cycling

The development masterplan will be designed to provide high levels of permeability for walkers and cyclists providing priority over movements by car.

The pedestrian and cycle network will provide internal connections as well as providing strong, safe links to adjacent communities and existing footpaths and cycle trails.

Signed routes for pedestrians and cyclists will be provided within the site.

Staff will be encouraged to apply for a free bike on condition that it is used for their journey to work.

A cycle hire scheme will also be set up for both holiday makers, residents and the local community.

The entire site will be designed to ensure low road speeds throughout the development to achieve a pedestrian dominated environment.

G6.12 The comprehensive package of sustainable transport improvements including an improved bus service frequency will also benefit the wider community. These benefits will outweigh the negligible impact of the development upon the local highway network.

G6.13 No mitigation to the local highway network is required.

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## G7.0 **Residual Effects**

### **During Construction**

- G7.1 There may be a short term increase in delay to other road users as a result of construction generated traffic movements.
- G7.2 A condition survey of that length of Sea Road between Beach Road and Cypress Avenue will be carried out prior to construction and any deterioration in condition caused by increased HGV use during construction will be repaired by the developer.

### **After Completion**

- G7.3 There will be a slight increase in delay for non-development vehicular traffic but these increases will not be material. These increases will occur at junctions on the local highway network.
- G7.4 Other residual effects will be an increase in the sustainable accessibility of the site to the wider community through an improved bus service and pedestrian/cyclist access.

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## G8.0 **Summary and Conclusions**

- G8.1 The information contained within this Chapter is based on the work reported in the Transport Assessment (TA) and Travel Plan that also accompanies the planning application. Further detail on the methodologies and the data used are set out in the Transport Assessment.
- G8.2 The baseline analysis has established that the majority of the existing highway network serving the site is operating within capacity and provides good pedestrian/cycling access. The majority of the highway network is also of a sufficient standard to be classified as a low sensitivity receptor.
- G8.3 The environmental impact of the vehicle movements likely to be generated by the proposed development will be negligible on the local transport network when compared against the Do Nothing baseline position. Only on Crinnis Road, during school term time, is the impact classified as minor/moderate. When compared against the implementation of the Extant Scheme the proposed development will generate fewer vehicle trips and have less of an environmental traffic impact, although the overall conclusion is the same.
- G8.4 The proposed development will incorporate a package of measures to mitigate the negligible environmental impact of the traffic generated. This package of measures is focussed around sustainable transport strategies aimed at limiting the demand for private car travel generated by the development.
- G8.5 A Travel Plan will be implemented to encourage residents, employees and visitors of the development to travel by alternative means of transport to the private car. A package of measures have been identified that, together, will provide alternatives to private car use for the full range of trips anticipated to and from the site. Through delivery of these measures the Travel Plan commits to a target reduction in car trips of 20% when compared to predicted traffic levels if no Travel Plan was implemented.
- G8.6 The proposed mitigation measures will result in a neutral environmental impact in terms of the impact of road traffic. However the package of sustainable transport mitigation measures will result in a medium positive impact upon pedestrians/cyclists and public transport users
- G8.7 In terms of residual effects there will be a slight increase in delay for non-development vehicular traffic but these increases will not be material. These increases will occur at junctions on the local highway network.

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## Abbreviations

- 1 HGV – Heavy Goods Vehicle
- 2 AADT – Annual Average Daily Traffic
- 3 IEA - Institute of Environmental Assessment
- 4 DMRB - Design Manual for Roads and Bridges
- 5 NTM - National Traffic Model
- 6 TRICS - Trip Rate Information Computer System
- 7 TA - Transport Assessment

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G10.0

## References

- 1 IEA 'Guidelines for the Environmental Assessment of Road Traffic' (IEA, 1993)
- 2 DMRB Volume II (Department of Transport, 1994)
- 3 Planning Policy Guidance PPG13 Transport
- 4 Guidance on Transport Assessment (Department of Transport 2007)
- 5 Travel Plans – Advice for Developers in Cornwall (Cornwall Council, 2007)
- 6 PPG13 – Transport (March 2001)
- 7 (saved policies of) Restormel Borough Council Local Plan 2001
- 8 Emerging Cornwall LDF Topic Paper – Transport & Accessibility
- 9 Cornwall Second Local Transport Plan 2006-2011