Paragraph 110 states that: "Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes."

The proposals set out in the new i-Transport report do not offer a genuine choice. To argue that the site is sustainable in transport terms, emphasis is placed on the introduction of a car club and proposed improvements to cycle connectivity and bus connectivity. These measures would have little or no impact on the reliance on the private car by occupiers because of the sites remote location and other factors outlined below.

Car Club

While a car club operator has been identified, the long-term viability of this proposal remains questionable. Car club vehicles are generally well utilised in areas with low levels of car ownership. Car ownership rates in Langley Vale are known to be significantly higher than the benchmark figure of 1 car or less per household, and the proposed development would adopt the local authority's 'minimum' parking standards, resulting in far more than one space per dwelling.

Consequently, the long-term viability of the car club is highly uncertain.

i-Transport state that the Car Club operator would be Enterprise which appear to have two cars in Epsom and one in Leatherhead. The new car club vehicle in Langley Vale would not form part of a wider (local) network, with residents relying on a single vehicle to accommodate demand.

Where Enterprise vehicles are located, these are in the built-up areas of Epsom and Leatherhead; locations that do have access to a range of public transport services and where residents may be less reliant on the use of a private car.

Surrey County Council publish guidance on 'Car Clubs in New Development' (August 2018 - Guidance on Car Clubs in new developments). Under the heading Criteria for a Successful Car Club the following table is provided. Items 1, 2, 3, 4, 5, 6, 7, 9 and 10 would not be met by this development, indicating that not only would Surrey's own criteria not be met by the proposal, but that the car club would have little impact on the sustainability credentials of the development.

	Location success factors	Yes	No
1	In an urban area, with high population density (above 25 persons per hectare) and easy access to local amenities by walking and cycling. See Annex1: Population density by ward		
2	High density residential development (50 dwellings or more per hectare), with a high proportion of one and two bedroom dwellings.		
3	Car club to be easily accessed by, and visible to, occupants of the development and the surrounding neighbourhood.		
4	Identified potential day-time business use, to complement evening / weekend residential use.		
5	Good accessibility to public transport: Within 800m walking distance of a train station with a minimum two services per hour in peak time and / or within 400m of a bus stop with a minimum		
6	service of one bus every 30 minutes. Parking constraint within the development and within surrounding streets:		
	For residential developments a parking ratio of no more than 1 space per unit. For business premises with a minimum threshold of 2500m ² a maximum of 1 car space per 100m ² . Within an area in which on-street parking is controlled, or other evidence of local parking pressure.		
7	Car-free developments (developments in which there are no parking spaces provided within the curtilage of the site).		
8	Favourable socio-economic and demographic characteristics: In upper quartile of Surrey wards ranked for car club potential considering levels of private car ownership, number of people working and MOSAIC profile. See Annex 2: Car club potential by ward.		
9	Will be part of an existing car club network in the wider area and occupants of the development will have access to that network.		
10	To be delivered as part of a coherent package of sustainable transport measures, normally as part of a Residential Travel Plan for a large-scale development (ideally promoted at point of sale) or a Business Travel Plan.		

Cycle Connectivity

i-Transport propose to formalise a cycle connection to Epsom from Langley Vale, via Headley Road. The image given by i-Transport to represent the design solution to this route is replicated below. The image shows advisory cycle lanes, with cyclists being overtaken by motor traffic, with a sizeable gap between the car and the cyclist.



Headley Road is narrow and does not provide the width illustrated above for cars and cyclists. The route descends steeply towards Ashtead Garden Centre, includes blind bends, and has a poor carriageway surface, particularly in the areas where cyclists would be expected to travel.

The suggested route is, in part (and where the route is at its narrowest), subject to a 40mph speed limit. The national design guide for the cycle infrastructure (LTN 1/20) states that:

7.2.4 Close overtaking can be intimidating and hazardous to cyclists in free-flowing traffic. Only at speeds lower than 30mph might a minimum clearance of 1.0m be acceptable. No values are given for speed limits greater than 30mph because cyclists should be provided with protected space away from motor traffic (see Figure 4.1).

Importantly, Figure 4.1 of LTN 1/20 states that a 40mph section of carriageway with an advisory cycle route would exclude most potential users and/or raise safety concerns.

In terms of the required width of an advisory cycle lane, the national guidance (LTN1/20) states:

6.4.3 Cycle Lanes less than 1.5m wide should not normally be used as they will exclude the use of the facility by larger cycles and are therefore not inclusive. They can also encourage 'close-passing' of cyclists by motorists, who tend to judge their road position with reference to the nearside marking.

Given the narrow width of the Headley Road carriageway, it would appear unfeasible for 1.5m cycle lanes to be provided on both sides of the carriageway and still accommodate vehicular movement in an appropriate way. The section of route, within the 40mph zone, does not appear to have the width for the proposed design to be implemented.

In summary, the topography of the route, the speed limit, the narrow carriageway and limited forward visibility make the route unsuitable for the installation of advisory cycle lanes. With or

without a cycle lane the route would not be attractive to the vast majority of Langley Vale residents and would not offer a meaningful alternative to the use of the private car.

Public Transport Improvements

The i-Transport report refers to the provision of a financial contribution to extend the Surrey Connect Digital Demand Responsive Transport service to cover both the proposed development and the village of Langley Vale. The proposed value of the contribution is not provided, however. It is not, therefore, known whether the contribution would be sufficient to result in meaningful impact to local travel patterns.

Any improvement to the Surrey Connect service would be insufficient to make an unsustainable location, sustainable. Given the site's location, the ability to own and maintain a car will be required for the majority of occupiers.

In relation to the Grosvenor Road bus stop improvements, in the absence of any detailed designs regarding the raised kerb for bus passengers, it is questioned as to whether this is could be deliverable, both in height and length of kerb space required for such a measure, without requiring significant changes to the footway levels potentially impacting access to properties on Grosvenor Road.