

Kier Living

**Proposed residential development
on land at Caerleon Road,
Dinas Powys**

Travel Plan

February 2017

Applicant: Kier Living

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Project name: Proposed residential development on land at Caerleon Road,
Dinas Powys

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1.0 INTRODUCTION

1.1 Background

1.1.1 Asbri Transport has been appointed by Kier Living to produce a Travel Plan in support of a planning application to develop a 2.73 hectare parcel of land within Dinas Powys to provide 70 residential dwellings.

1.1.2 The site will consist of the following mix of units:

- 42 no. open market houses;
- 28 no. affordable dwellings; and,

1.2 Travel plan benefits

1.2.1 Travel plans are management tools designed to enable the users of a site to make more informed decisions about their travel whilst minimising the adverse impacts of the development on the environment. This is achieved by setting out a strategy for eliminating the barriers that prevent the users of the site from using sustainable travel modes. This Travel Plan will apply to both residents and visitors to the site and will aim to minimise the impact of the development on the local area whilst adhering to local policy aims.

1.2.2 The implementation of an effective and properly managed travel plan can lead to an increase in the proportion of residents travelling by sustainable modes, particularly walking and cycling, and public transport. This is the primary aim of this Travel Plan.

1.2.3 Travel plans can also:

- Reduce the carbon footprint of residents;
- Reduce the traffic impact of the development on the local highway network; and,
- Improve the health and well-being of the residential community by increasing active travel patterns.

1.3 This Travel Plan

1.3.1 This Travel Plan details the approach that the developer, Kier Living, will adopt to ensure that all occupiers are fully aware of their travel options and increase their travel options and use of sustainable modes of transport.

1.3.2 This Travel Plan has been created to ensure that occupiers can travel to and from the site by their chosen sustainable mode, and will help to remove any potential barriers to using modes other than single occupancy car travel.

1.4 Structure of the report

1.4.1 Following this introductory chapter, the Travel Plan is structured as follows:

- Chapter 2 summarises the existing conditions around the site;
- Chapter 3 details the development proposals;
- Chapter 4 lays out the objectives, targets and performance indicators for the site;
- Chapter 5 describes the Travel Plan strategy, including management roles and responsibilities;
- Chapter 5 details the proposed measures to encourage sustainable travel and to help meet the targets; and,
- Chapter 7 identifies the travel plan monitoring process.

2.0 SITE ACCESSIBILITY AND SUSTAINABILITY

2.1 Site location and local highway network

2.1.1 As outlined above, the proposed development is a 2.73 hectare greenfield site situated within Dinas Powys, vale of Glamorgan.

2.1.2 The site is bounded to the north and east by greenfield field land, to the south by properties fronting Caerleon Road and to the west by the Vale of Glamorgan railway line.

2.1.3 The location of the development and the local highway network is identified in **Figure 2.1**.

A4055 Cardiff Road

2.1.4 The A4055 is situated to the west of the proposed development and is the nearest district distributor road to the site providing a continuous link between Cardiff (to the east) and Barry (to the west), via the village of Dinas Powys.

2.1.5 Within the village of Dinas Powys, Cardiff Road varies in width between approximately 6m and 7m, and is predominantly fronted by residential dwellings, albeit there are commercial properties to the west of Murch Road. The carriageway has footways on both sides, is lit and is subject to a 30mph speed limit.

Murch Road

2.1.6 Murch Road is situated to the south of the proposed development and runs east-west through the village. The road links to the A4055 Cardiff Road to the west and terminates at the eastern fringe of the settlement, and there is an existing highway sign (adjacent to Windyridge) that informs road users that it is a no-through route.

2.1.7 The road is a local distributor providing access to a number of residential roads along its length.

2.1.8 The road is approximately 7m wide in proximity of the junction with Castle Drive with footways (approximately 2m wide) along both sides of the carriageway. The road is lit and is subject to a 30mph speed limit.

Castle Drive/Conway Close/Caerleon Road

2.1.9 Castle Drive/Conway Close/Caerleon Road provide the link between the proposed development and the wider highway network, linking to Murch Road.

2.1.10 Within proximity of the Castle Drive/Murch Road priority junction, Castle Drive serves a number of commercial premises/convenience stores and associated parking provision.

2.1.11 Castle drive is a predominantly residential road, which varies in width between approximately 6.6m and 6.8m, and includes footways (approximate width of 1.8m) on both sides of the carriageway. The road is lit, and is subject to a speed limit of 30mph.

2.1.12 Approximately 500m from the junction with Murch Road is the junction with Conway close. This is a residential road with direct frontage access, and provides access to a number of residential cul-de-sacs. The road is approximately 5.8m wide, has footways (approximate width of 1.8m) on both sides of the carriageway, is lit, and is subject to a 30mph speed limit.

2.1.13 Caerleon Road is a continuation of Conway Close, running from the Criccieth Court for approximately 240m to the north-west.

2.1.14 The road provides access to a number of residential cul-de-sacs, varies in width between 5.6m and 6.8m, and has pedestrian footways (approximate width of 1.8m) on both sides of the carriageway for the 'majority' of its length. The road is lit, and is subject to a 30mph speed limit.

Bus services

2.1.15 There are existing bus stops on Cardiff Road– to the west of the proposed development, which are within easy walking distance (i.e. less than 400m) of the proposed development.

2.1.16 The north bound stop is street lit with a shelter and tactile paving.

2.1.17 The 93,95 and 304 services serve the bus stop. These serve Heath Hospitals, Cardiff and the nearby town of Barry.

2.1.18 **Table 2.1** below outlines the services that call at bus stops within the vicinity of the site.

Route No.	Origin destination	Frequency
89A	Cardiff – Cardiff Bay – Llandough – Dinas Powys	09:48-17:48, Service every 2 hours (Monday-Saturday)
89A	Dinas Powys – Llandough – Cardiff Bay – Cardiff	07:57-16:05, Service every 2 hours between 10:05-16:05 (Monday-Saturday)
93	Cardiff – Penarth – Dinas Powys – Barry	07:49-18:51, Service every hour
93	Barry – Dinas Powys – Penarth – Cardiff	07:36-18:02, Service every hour between
95	Heath Hospital - Barry Island	06:58- 19:44 every 30 mins.
95	Barry Island - Heath Hospital	07:17-20:32 every 30 mins.
304	Barry - Cardiff	08:30 – 21:30 Service every hour between (Monday-Saturday)
304	Cardiff - Barry	06:20 – 20:28 every hour between (Monday-Saturday)

Table 2.1 Existing scheduled bus services

2.1.19 Local bus routes/stops are shown in **Figure 2.2**.

Rail services

2.1.20 As outlined above, the nearest rail station to the site is Eastbrook, which is located approximately 270m to the south-west of the site. This is well within the preferred maximum walk distance of 2km for commuting purposes (Chartered Institute of Highways and Transportation, Guidelines for providing journeys on foot, Table 3.2, p49).

2.1.21 The station is situated on the Vale of Glamorgan line, which runs from Cardiff Central to Bridgend (via Rhoose and Llantwit Major), with a short branch line to Barry Island.

2.2 Pedestrians and cyclists

2.2.1 As outlined above, the majority of roads within the vicinity of the site have footways on one or both sides of the carriageway, providing links between the site and the surrounding facilities. However, in terms of pedestrian crossings, there are no formal crossing facilities within the vicinity of the site.

2.2.2 In addition to the above, pedestrians are also provided with a footway link between the end of Caerleon Road and Eastbrook station. The footway also extends into the end of Chamberlain Road providing access to a footbridge crossing the railway line.

2.2.3 The CIHT guidelines indicate that the desirable walking distance for commuting/school journeys is 500 metres, the acceptable walking distance is 1.0km and 2.0km is the preferred maximum.

2.2.4 **Figure 2.3** indicates the 500m, 1.0km and 2.0km isochrones from the centre of the proposed site, together with local amenities within walking distance of the site.

Cycle routes

2.2.5 There are no formal cycle facilities within the immediate vicinity of the site. However, the Cardiff Bay Trail is within easy cycling distance of the site, providing a circular route running around Cardiff Bay and into Penarth, providing access to a range of facilities including the International Sports Village. This route is shown in **Figure 2.4**.

3.0 DEVELOPMENT

3.1 Introduction

3.1.1 As outlined in the section above, it is proposed to develop the site to provide approximately 70 residential dwellings comprising a mix of 1, 2, 3, and 4 bedroom properties. An indicative masterplan for the proposed development is shown in **Figure 3.1**.

3.1.1 The planning application proposes the following mix of dwellings:

- 42 open market dwellings and
- 28 affordable dwellings

3.2 Pedestrians/cyclists

3.2.1 As shown in Figure 3.1, the vehicular accesses to the site will also provide access for pedestrians and cyclists. The development will provide the necessary pedestrian and cyclist infrastructure within the site to promote and encourage residents to walk and cycle.

3.3 Public transport

3.3.1 As indicated in Section 2, the site is located in an excellent location, in terms of access to public transport provision, with a number of bus stops on Castle Drive and Murch Road as well as Eastbrook railway station.

3.4 Vehicular access

3.4.1 As part of the development of the site, it is proposed to construct a new vehicular access from Caerleon Road fronting the site.

3.4.2 The proposed access is a simple priority junction that has been designed in accordance with standards set out in Design Manual for Roads and Bridges (DMRB) Volume 6, section 2, part 6 – TD 42/95.

3.5 Car parking provision

3.5.1 Car parking provision has been provided in accordance with the Vale of Glamorgans adopted parking standards, 2015. All spaces are to be provided within the curtilage of the site.

3.6 Cycle parking provision

3.6.1 Secure cycle parking is to be provided in accordance with the Vale of Glamorgans adopted parking standards, 2015.

3.7 Modal split

3.7.1 **Table 3.1** outlines the current 'journey to work' mode share for existing residents near the site, which is based on the Census 2011 National Statistics Travel to Work datasets. The useful data provides a snapshot of the existing travel behaviour of residents in the area. The modal split excludes those who were not working at the time of the Census.

3.7.2 Method of travel to work data has been generated for the Middle Layer Super Output Area 'W02000242 : *The Vale of Glamorgan 006*' which includes the areas shaded red in **Image 1** below.

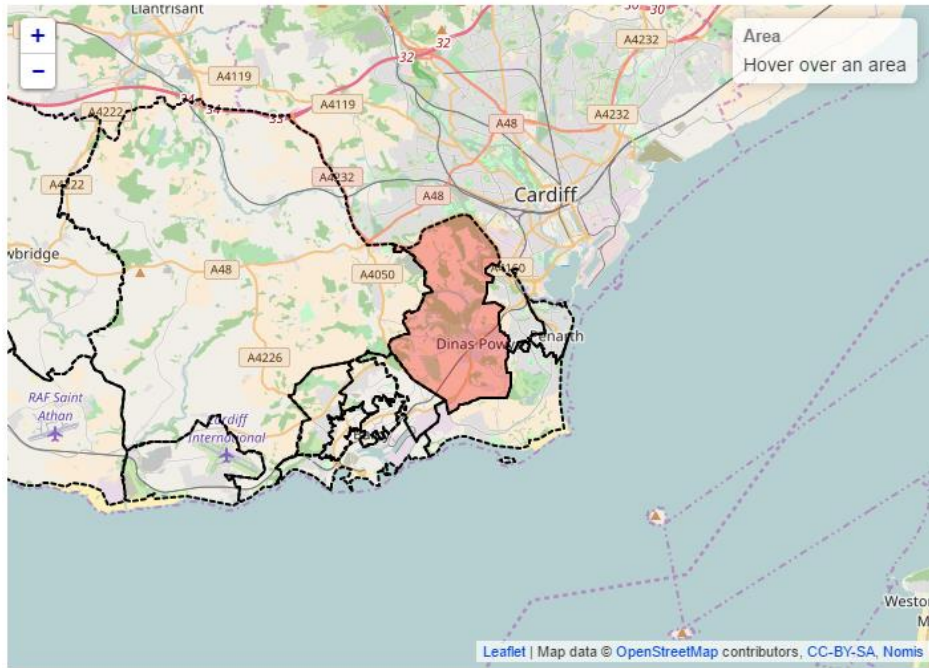


Diagram 1 – Middle Layer Super Output Area ‘W02000242 : The Vale of Glamorgan 006’

Method of Travel to Work	Total	Percentage
All categories: Method of travel to work	3,607	100%
Work mainly at or from home	203	6%
Underground, metro, light rail, tram	6	0%
Train	318	9%
Bus, minibus or coach	76	2%
Taxi	10	0%
Motorcycle, scooter or moped	26	1%
Driving a car or van	2,511	70%
Passenger in a car or van	187	5%
Bicycle	62	2%
On foot	189	5%
Other method of travel to work	19	1%

Table 3.1 – Modal split – Journey to work

3.7.3 As shown in table 3.1, 70% of residents in the area travel to work by car.

4.0 OBJECTIVES AND TARGETS

4.1 Introduction

4.1.1 This chapter details the objectives, targets and performance indicators for the Travel Plan. The Travel Plan targets provide quantitative goals to assess whether the objectives of the plan have been met. The performance indicators outline how the targets are measured.

4.2 Objectives

4.2.1 The headline objective of this Travel Plan is to reduce the proportion of single occupancy vehicle (SOV) trips to and from the site. This reduces the impact of the development on the local highway network.

4.2.2 This headline objective is supported by:

- Increasing the proportion of walking and cycling trips to and from the site;
- Increasing the proportion of public transport trips to and from the site;
- Reducing the carbon footprint of the site in relation to travel to and from the site; and,
- Enabling occupiers to make informed decisions about how and when they travel to and from the site.

4.3 Targets

4.3.1 Targets are essential for monitoring the progress and success of the Travel Plan, and should be 'SMART' – specific, measurable, achievable, realistic and time-related.

4.3.2 Targets come in two forms: 'Action' type targets are non-quantifiable actions that need to be achieved by a certain time, while 'Aim' type targets are quantifiable and generally relate to the degree of modal shift the Travel Plan is seeking to achieve.

4.3.3 Action targets include actions such as employing a Travel Plan Co-ordinator (TPC), and launching the Travel Plan. Aim targets focus on the modal split of travel to and from the site.

4.3.4 The aim of the Travel Plan, as discussed, is to reduce the proportion of trips made to and from the site by SOV. The Travel Plan targets should therefore aim to achieve a realistic and practical reduction in car trips over the first five years of the site being occupied. Targets will be reviewed in year five.

Aim targets

4.3.5 **Table 4.1** sets out the Travel Plan targets. These targets are based on travel to work data only. The initial surveys will identify travel modes for all trips associated with the site and these targets may need to be adjusted to reflect the results of these base surveys. These targets will be ratified and agreed with the Vale of Glamorgan Council against the results of the Initial Travel Survey (ITS) which will be conducted within three months of the development exceeding its trigger point of 50% occupation.

Objective	Target	Base	Mode share target		
			Year 1	Year 3	Year 5
Reduce the proportion of SOV trips to and from the site	To reduce the mode share for car drivers	70%	67%	63%	60%
	To increase the mode share for car passengers	5%	6%	7%	8%
Increase the proportion of walking and cycling trips to and from the site	To increase the mode share for walkers	7%	8%	9%	10%
	To increase the mode share for cyclists				
Increase the proportion of public transport trips to and from the site	To increase the mode share for rail	11%	12%	14%	15%
	To increase the mode share for bus				
Enable occupiers to make informed decisions about how and when they travel for all trips to and from the site	Every new occupier to receive travel information within one month of occupation	0%	100%	100%	100%

Table 4.1: Modal Share Targets.

4.3.6 There is every expectation that the Travel Plan will achieve these targets within five years of the initial monitoring survey. The interim targets have been derived to assess the progress of the Travel Plan over the duration of its lifecycle. The interim targets will also allow adjustments to the Travel Plan strategy if necessary.

4.3.7 The 10% headline reduction in overall car use has been derived after taking into consideration previous experience on the effectiveness of Travel Plan measures (national case studies suggest a reduction in SOV of between 10-20%). Local and national guidance, previous Travel Planning experience and the consideration of likely travel patterns.

Action targets

4.3.8 'Action' type targets are non-quantifiable actions that need to be achieved by a certain time; therefore, these targets have no numerical values but each target can be assessed by its own method.

4.3.9 The action targets for this site are:

- To appoint a Travel Plan Co-ordinator three months prior to initial occupation of the site; and,
- To undertake the initial monitoring survey within three months of the development reaching 50% occupation.

5.0 TRAVEL PLAN STRATEGY

5.1 Introduction

5.1.1 A travel plan is an active, dynamic document that requires a strategy for its implementation that will be continually updated throughout its life. This chapter details who will be responsible for the management of the Plan and how it will be funded and implemented.

5.2 Travel Plan Co-ordinator

5.2.1 Vital to the success of the Travel Plan is the appointment of, or the assigning of responsibilities (to a named individual) of a Travel Plan Co-ordinator (TPC) who has direct responsibility for the implementation of the Travel Plan.

5.2.2 The TPC will be responsible for the following:

- Establishing a timescale for the implementation of the Travel Plan measures;
- Providing travel options information to residents;
- Marketing and publicising new initiatives relating to the Travel Plan and,
- Evaluating progress towards the Travel Plan targets and producing a progress report.

5.2.3 The TPC will play a key role in explaining the Travel Plan and its requirements to potential occupiers of the site. The TPC will be funded by the developer, and will be appointed three months prior to the occupation of the site. The TPC will be continually in post from the opening of the development to oversee monitoring and development of the Travel Plan.

5.2.4 The role of the TPC can be undertaken on a part-time basis, with some flexibility to allow for busier times, such as in the run up to, and immediately following initial occupation of the site.

5.3 Travel Plan funding

5.3.1 The funding of the Travel Plan will be the responsibility of the developer.

5.4 Travel Plan implementation

5.4.1 Delivery of the Travel Plan will begin prior to construction with the implementation of physical measures and will continue through to the implementation of soft measures.

5.4.2 Approximately three months prior to the opening of the development, it is recommended that production of site promotional material commences to allow immediate distributions on and after the opening of the development.

5.4.3 The TPC will take overall responsibility for the delivery of the specific measures for the site.

5.4.4 The implementation programme provides a clear timescale for how and when different aspects of the Travel Plan should be implemented, and by whom. **Table 5.1** sets out the implementation programme.

Travel Plan stage	Responsibility	Target date for completion
Implementation of infrastructure measures	Developer	During construction
Appointment of TPC	Developer	Three months prior to initial occupation
Establish a timescale for implementation of soft measures	TPC	Prior to initial occupation
Production of marketing material	TPC	Completed prior to initial occupation
Launch of Travel Plan	TPC	Initial occupation
Initial travel survey (ITS)	TPC	Within 3 months of 50% occupation
Ratify Travel Plan targets	TPC	Within 1 month of ITS completion
Ongoing monitoring	TPC	Ongoing following ITS
Full review at end of year 5	Developer/TPC/CCS	5 years after ITS
Transfer of responsibility	TPC/CCS/occupiers	5 years from ITS or upon reaching targets, whichever comes later

Table 5.1 Travel Plan implementation programme

6.0 TRAVEL PLAN MEASURES

6.1 Introduction

6.1.1 This chapter provides details of the measures to be implemented to facilitate sustained travel behaviour change and encourage sustainable travel by residents.

6.2 Marketing and travel information

6.2.1 The dissemination of information of the Travel Plan is vital to raise awareness of the various travel options and benefits of travelling in a sustainable manner, as well as identifying the purpose and benefits of the Travel Plan.

“Tenants Information Pack”

6.2.2 A Tenants Information Pack (TIP) will be produced and distributed to all residents by the TPC as they move into their properties. The purpose of the TIP is to introduce new occupiers to the Travel Plan and the travel options available to them both to and from their new home.

6.2.3 The TPC will be responsible for collating the necessary information, producing the pack and distributing it.

6.2.4 The TIP will include the following:

- Location map of the site highlighting the travel related facilities such as bus stops and cycle stands;
- Site specific public transport information including up to date local service timetables and details of smart-phone and tablet applications;
- Links to relevant local websites with travel information such as public transport operator information and cycling organisations;
- A local walking and cycling map;
- Information about the Travel Plan and its key objectives;
- Information on bicycle maintenance, and

- A feedback form.

6.2.5 The feedback form will assist in gathering information about perceived transport choices and ideas on ways to improve the Travel Plan. Results of this will be included in monitoring reports (as outlined in Chapter 7).

6.2.6 The pack will be kept up-to-date by the TPC and revisions will contain the results of any post monitoring targets and achievements.

Travel Plan newsletter

6.2.7 The TPC will produce a regular newsletter for occupiers providing information on national and local travel events, updates on the Travel Plan (include monitoring results) and to introduce new Travel Plan measures. The newsletter will serve as a regular reminder that occupiers should continue to think about how they travel and alternatives available to them.

6.3 Walking

Walking provides a healthy alternative to the car for journeys less than 2km, and typically forms a minor component of many journeys made by public transport and car.

Marketing incentives

6.3.1 Information on key walking routes with journey information displayed in terms of the time (not distance) required to reach the destination, as well as the health benefits of walking, will be included in the Welcome Pack and highlighted within the Travel Plan newsletter.

6.3.2 The TPC will promote participation in local and national walking events, such as walking days, 'Get Walking Week', or 'Walk to Work' week (typically April/May annually). Free accessories, such as pedometers or personal safety alarms will be distributed to those who attend as an incentive to participate.

Buddy scheme

6.3.3 A walking buddy scheme will be established for residents, encouraging residents to walk together to improve safety and security, and for social benefits.

6.3.4 Information regarding this measure will be included in the Welcome Pack.

6.4 Cycling

6.4.1 Cycling provides an excellent alternative to the private car for journeys of up to 5km as it is inexpensive, offers reliable journey times, is environmentally friendly and promotes improved health through regular exercise.

Cycle parking

6.4.2 As part of the development, secure cycle parking will be provided in accordance with the Vale of Glamorgan Planning guidelines.

Marketing incentives

6.4.3 The TPC will actively promote the use of bicycles as a regular and reliable transport mode and illustrate the physical health benefits of regular exercise to all site users.

6.4.4 The TPC will organise and promote participation in cycling events and promotions, and will invite local organisations such as Sustrans and the local police to provide promotional material and to offer security marking.

6.4.5 Information on cycling routes, local area cycle maps, cycle training and local cycle shops will be included in the Welcome Pack and the Newsletter. Travel information materials will provide advice on bicycle security, i.e. detailing how to lock a bicycle most effectively and advice on best locks to buy.

Bicycle Users Group (BUG)

6.4.6 There will be an on-site Bicycle Users Group (BUG) which will be organised by the TPC. Those already cycling or those who wish to cycle will be encouraged to take part in this scheme as BUGs are a good way for less experienced cyclists, or those who are not confident in their route, to gain experience by cycling with a more experienced cyclist. A BUG also removed safety concerns for individual cyclists who travel alone.

6.4.7 The BUG scheme will also allow site occupiers to meet other cyclists who live on-site. This will help to raise awareness of the Travel Plan, its aims and the current initiatives that are operational, through word of mouth.

6.5 Public transport

6.5.1 The site has connections to the public transport network, with several buses operating within the vicinity, offering regular services to Cardiff and the neighbouring areas.

6.5.2 The site is also near Eastbrook train station that provides regular services into Cardiff and further afield.

Marketing incentives

6.5.3 The TPC will promote the use of public transport through several different incentives, primarily through the Welcome Pack and the Travel Plan newsletter. The Welcome Pack will include information on local bus routes, timetables and location of stops as well as the services available from the rail and bus stations.

6.6 Managing car use

6.6.1 Despite the many alternatives to the private car some people will rely on their car for certain trips, for example, shopping trips involving bulky or heavy goods is an instance where a car becomes a necessity.

6.6.2 Multi-occupancy car travel is shown to improve the environmental credentials of the private car considerably in comparison to SOV travel and should therefore be promoted.

6.6.3 Residents will be encouraged to plan their weekly trips ahead of time to optimise the number of destinations accessed and have sufficient time to increase vehicle occupancy.

6.6.4 The management of car use is especially important at this location as the use of alternative methods of sustainable travel – particularly walking and cycling - is hampered by local topography and the speed limits on the surrounding road network.

Car parking provision

- 6.6.5 Car parking provision has been provided in accordance with The Vale of Glamorgan's adopted Parking Standards, Vale of Glamorgan Supplementary Planning Guidance, Access, 2015.

Car sharing

- 6.6.6 Sharecymru.com will be promoted to occupiers as part of the Welcome Pack and highlighted within the Travel Plan newsletter. The web-site has been set up to help reduce congestion, pollution, parking problems, stress and expenditure. The service is free to use, and is easily accessible via the internet on www.Sharecymru.com.

6.7 Reducing the need to travel

- 6.7.1 In addition to promoting sustainable forms of transport, a key aspect of a Travel Plan is to reduce the need of site users to travel and to help minimise the total distance travelled.

Broadband internet connection

- 6.7.2 We are aware that broadband is available within the area, and the developer will ensure that residents can take advantage of any available services.
- 6.7.3 Broadband will allow residents to shop online for items which otherwise require a car for their transport. These goods can then be delivered directly to the development, again reducing the necessity for occupiers to travel and own a private car.
- 6.7.4 Access to broadband will also allow occupiers to work from home more easily. The TPC will promote home working to all occupiers (through the Travel Plan Welcome Pack); however, it is understood that this working practice is not applicable to all job types. Home working removes the need for occupiers to travel to work every day. Occupiers will consequently make a lower number of journeys per week. This will reduce an individual's carbon footprint and help reduce congestion.

Promotion of local services

6.7.5 Promotion of the nearest services such as doctors, dentists, libraries and supermarkets in the Welcome Pack will give new occupiers the opportunity to use these local services rather than ones which may be located further afield.

6.8 Measures implementation plan

6.8.1 **Table 6.1** shows the relationship between the measures outlined in this chapter and the overall Travel Plan targets. The table also shows when the measures will be implemented and by whom.

Travel Plan stage	Target	Responsibility	Timeline
All measures	To reduce the mode share for car drivers by 10%	TPC / Developer	As below
Pedestrian-friendly development layout	To increase the mode share for walkers by 1%	Developer	Prior to occupation
Cycle parking available	To increase the mode share for cyclists by 0.5%	Developer	Prior to occupation
Participation in walking events, detail on walking in Tenants Information Pack	To increase the mode share for walkers by 1%	TPC	Ongoing from 50% occupation
Walking buddy scheme		TPC	Ongoing from 50% occupation
Participation in cycling events, details on cycling in Tenants Information Pack	To increase the mode share for cyclists by 0.5%	TPC	Ongoing from 50% occupation
Bicycle Users Group		TPC	Ongoing from 50% occupation
Promotion of public transport in Welcome Pack and in Travel Plan newsletter	To retain the mode share for rail by 1%	TPC	Ongoing from initial occupation
	To increase the mode share for bus by 3%		
Enable residents to take advantage of broadband connections, promoting home working and online shopping	To decrease the carbon emissions related to travel to and from the site by 10%	TPC	Through Welcome Pack
Promotion of local services		TPC	Through Welcome Pack
Welcome Pack	Every new occupier to receive travel information within one month of occupation	TPC	At occupation of individual units
Promotion of Liftshare.com/Wales	To increase the mode share for car passengers by 3%	TPC	Through Welcome Pack
Information for show home	Applies to all targets	TPC	If marketing suite is open
Travel Plan newsletter		TPC	Quarterly following initial occupation

Table 6.1: Travel Plan measures & implementation programme

7.0 MONITORING

7.1 Introduction

7.1.1 This Travel Plan is an evolving strategy that will require monitoring over time to assess progress against its targets. This chapter discusses how progress of the Travel Plan towards its targets will be measured.

7.2 Monitoring

7.2.1 It is anticipated that the monitoring will be composed of either informal occupier surveys or formal TRICS-compliant surveys, based on the following methodology:

- Paper based occupier surveys including a set of basic travel behaviour questions, with survey forms will be submitted to the Council for approval. Responsibility for completing the survey, with possible assistance from a consultant; and,
- TRICS-compliant surveys, with a person count at the site and interview, funded by the developer.

7.2.2 It is recommended that the initial travel survey should take place when the site reaches 50% occupation. This will ensure that there is critical mass on site for implementing the Travel Plan.

7.2.3 Following the initial travel survey, monitoring will take place at two yearly intervals until targets are met. A full five-year monitoring schedule will include three surveys: the initial monitoring survey and two follow-up surveys.

7.3 Reporting

7.3.1 A monitoring report will be submitted to the Local Planning Authority following each monitoring period. The report will include the results of both the formal and informal monitoring and demonstrate how this relates to the Travel Plan targets, together with a summary of the Travel Planning activities that have taken place at the site.

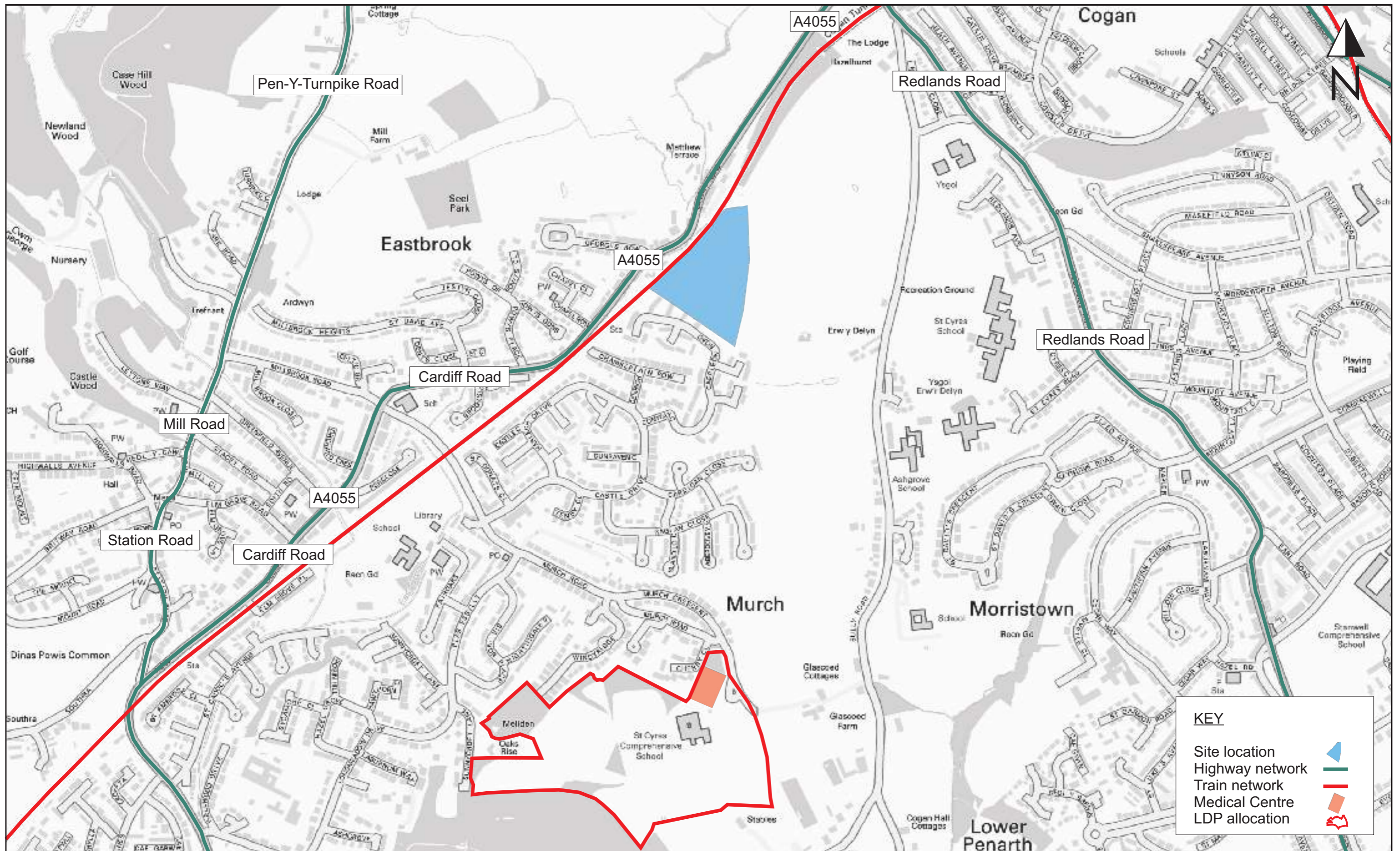
7.4 Remedial actions


7.4.1 If the targets are not met after five years, then remedial measures will be introduced to further encourage occupiers to change their travel patterns.

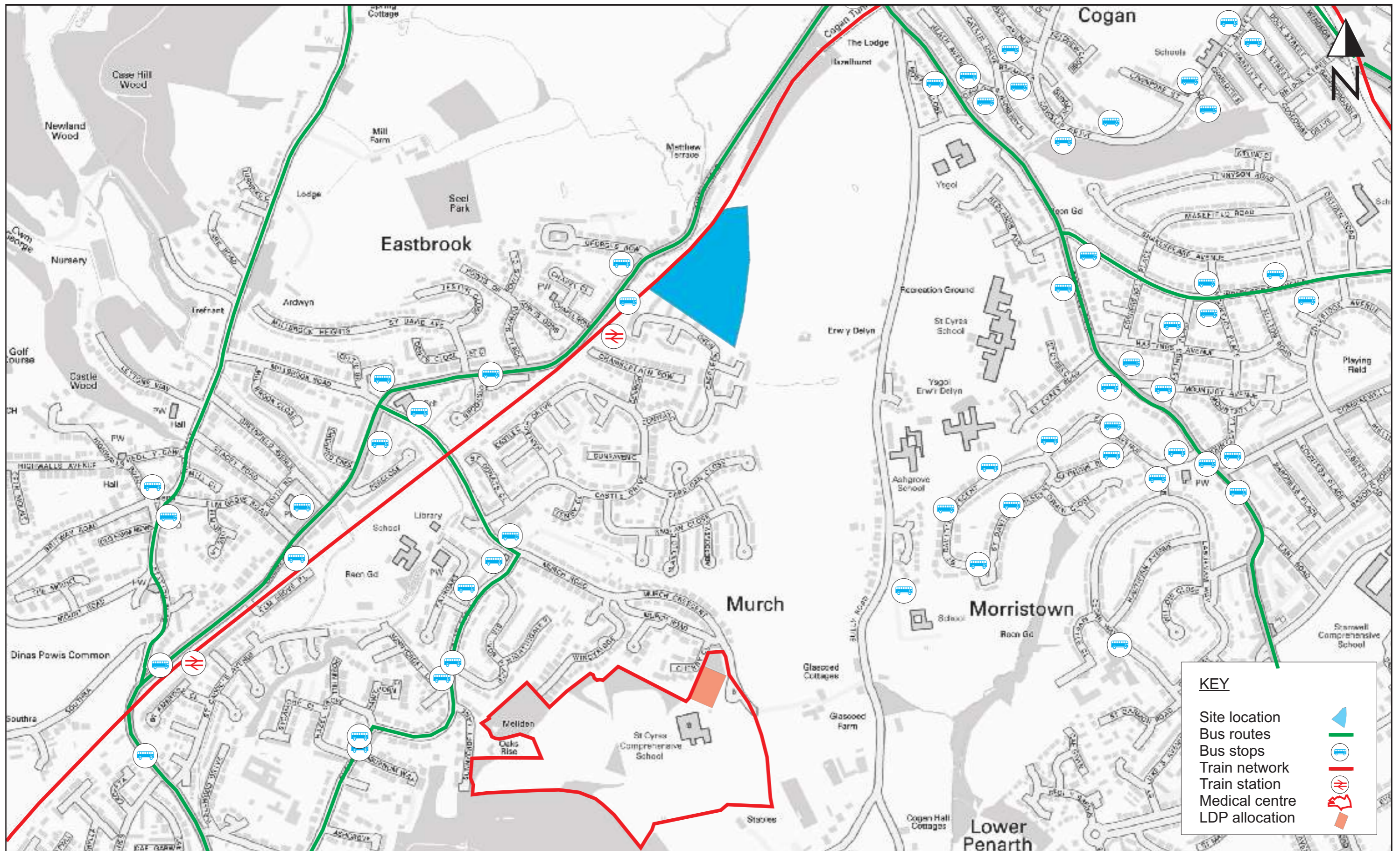
7.4.2 Remedial measures will respond to the short-comings of any monitoring results and may include:

- The possible provision of personalised travel planning for occupiers of the development; and,
- The development of further incentives for occupiers to travel by sustainable modes.

Figures



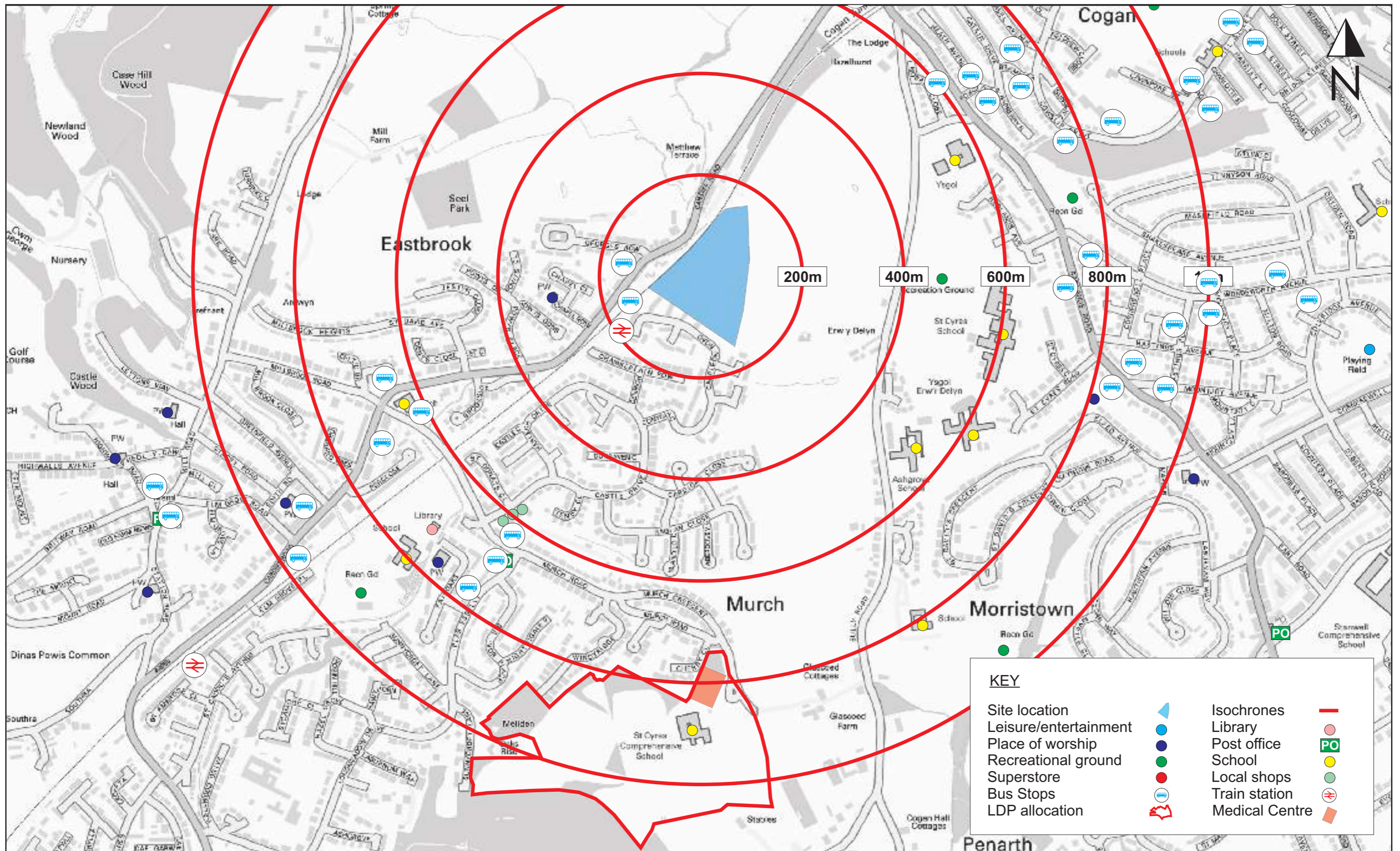
Drawing Title	Client		Scale:	NTS	Drg No:
	Site location and local highway network		Job Title	Designed by:	
Land at Caerleon Road, Dinas Powys		1st Floor, Westview House Oak Tree Court Mulberry Drive Cardiff Gate Business Park Cardiff	Drawn by:	LV	
		T 029 2073 2652 F 029 2073 2670	Ckd/Appd:	PO'C	
			1st Issued:	Feb 2017	
			Job No:	T16.106	Figure 2.1



KEY

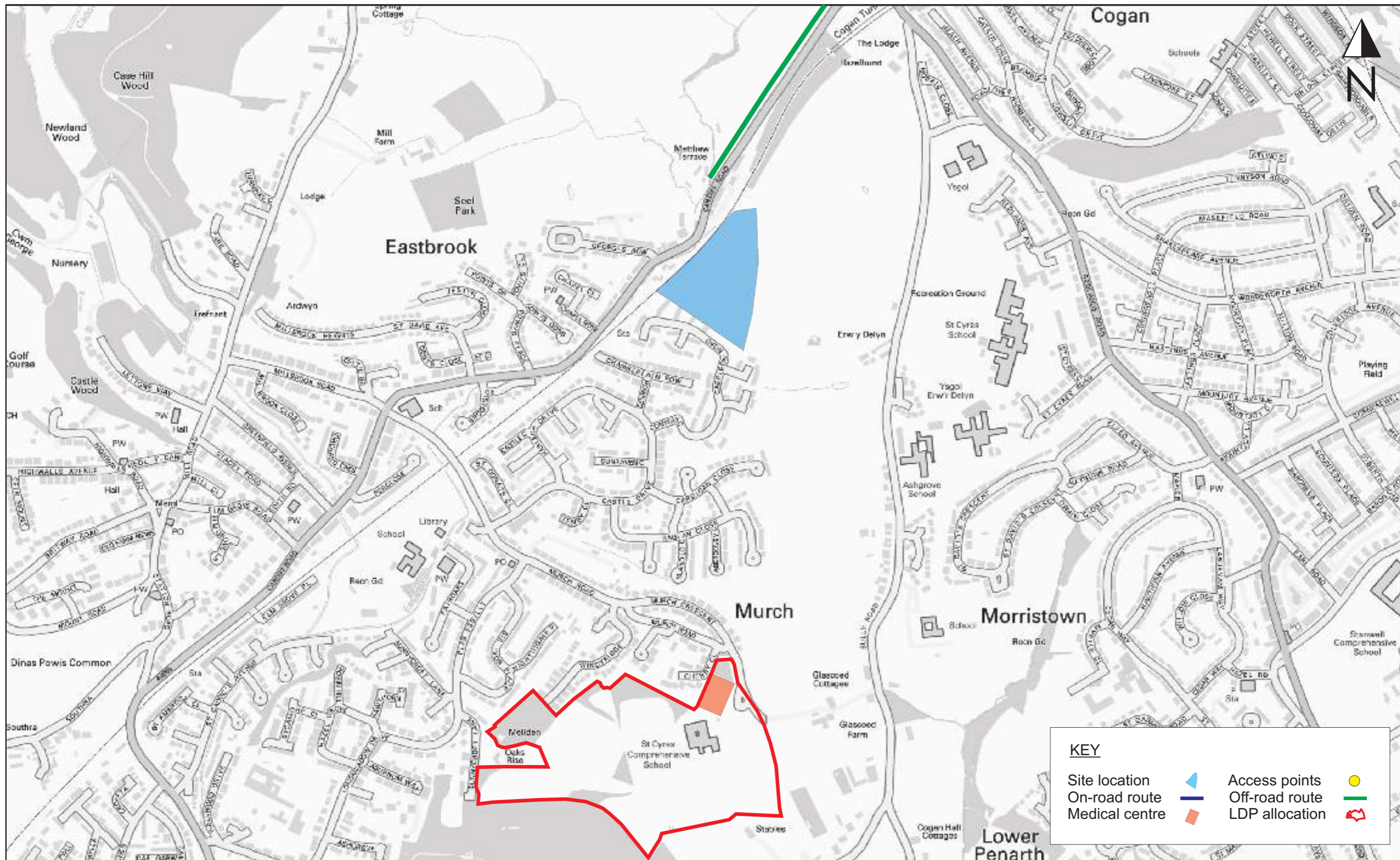
- Site location
- Bus routes
- Bus stops
- Train network
- Train station
- Medical centre
- LDP allocation

Drawing Title <h2 style="text-align: center;">Local Bus Network</h2>	Client <h3 style="text-align: center;">Kier Living</h3>	 1st Floor, Westview House Oak Tree Court Mulberry Drive Cardiff Gate Business Park Cardiff T 029 2073 2652 F 029 2073 2670	Scale: NTS	Drg No: <h2 style="font-size: 1.2em;">Figure 2.2</h2>
	Job Title <h3 style="text-align: center;">Land at Caerleon Road, Dinas Powys</h3>		Designed by: LV Drawn by: LV Ckd/Appd: PO'C 1st Issued: Feb 2017 Job No: T16.106	



KEY	
Site location	
Leisure/entertainment	
Place of worship	
Recreational ground	
Superstore	
Bus Stops	
LDP allocation	
Isochrones	
Library	
Post office	
School	
Local shops	
Train station	
Medical Centre	

Drawing Title Local Amenities	Client Kier Living	 1st Floor, Westview House Oak Tree Court Mulberry Drive Cardiff Gate Business Park Cardiff T 029 2073 2652 F 029 2073 2670	Scale: NTS	Drg No: Figure 2.3
	Job Title Land at Caerleon Road, Dinas Powys		Designed by: LV	
		Drawn by: LV	Ckd/Appd: PO'C	
		1st Issued: Feb 2017	Job No: T16.106	



KEY

- Site location Access points
- On-road route Off-road route
- Medical centre LDP allocation

Drawing Title

Local Cycle Network

Client

Kier Living

Job Title

Land at Caerleon Road, Dinas Powys

asbri transport

1st Floor, Westview House
 Oak Tree Court
 Mulberry Drive
 Cardiff Gate Business Park
 Cardiff

T 029 2073 2652
 F 029 2073 2670

Scale: NTS

Designed by: LV

Drawn by: LV

Ckd/Appd: PO'C

1st Issued: Feb 2017

Job No: T16.106

Drg No:

Figure 2.4



Schedule of accommodation

Market Sale		
4no	Hatton	@692sqf
6no	Pemberton	@727sqf
6no	Holmewood	@906sqf
4no	Kirkwood	@930sqf
8no	Chelmsford	@1241sqf
8no	Hareford	@1268sqf
6no	Lindford	@1370sqf
Affordable		
5no	2B4P LCHO	@800sqf
6no	1B2P Aff Rent	@540sqf
13no	2B4P Aff Rent	@800sqf
3no	3B5P Aff Rent	@945sqf
1no	4B6P Aff Rent	@1140sqf

Key

- Site boundary
- Road
- Footpath
- Paving
- Shared surface
- Rumble Strip
- Parking spaces
- Public open space
Approx: 1350sqm
- LAP
Approx: 1100sqm
- Bin collection area
(plots 8 - 15)
- Existing tree RPA
- Junction - Visibility
splay (distance on
drawing)
- Forward visibility

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NOTES
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REVISIONS
REV: DATE: DRAWN: CHECKED: NOTES
- 09.01.17 - DC - R/JF: Drawing created.
A: 18.01.17 - DC - R/JF: Site plan updated following clients comments.
B: 24.01.17 - DC - R/JF: Unit positions amended following client comments. Unit mix changed - 1 no Lindford replaced by 1 no Hareford.
C: 09.03.17 - DC - CC: Site layout, unit mix and traffic management amended following pre-app advice. 4B 6P introduced in place of 2B and 1EAP located in south west corner of site.
D: 18.04.17 - DC - CC: Unit and road layout amended following client comments. Drainage management shown and 2x LAPs shown in place of 1x LEAP.
E: 15.05.17 - DC - CC: Road layout and unit amendments made following meeting: 10.05.17
F: 03.07.17 - DC - CC: Unit layouts and road amended following comments from client.
G: 05.07.17 - DC - DC: Unit and parking positions updated following client comments.
H: 05.07.17 - DC - DC: Minor amendments made to unit layout following client comments.
J: 06.07.17 - DC - CC: Minor amendments made to unit layout following client comments.
K: 06.07.17 - DC - CC: Minor amendments made to unit layout following client comments.

DRAWING TITLE

Proposed Site Plan

PROJECT

Caerleon Road, Dinas Powys

CLIENT

Kier Living

SCALE 1:500@A1

DATE 1:1000@A3
Jan 2017



DRAWING NO. REV
5567/F/10 K

Matthews Warehouse, High Orchard Street
Gloicester Quays, GL2 5DT T: 01452 424234

Drawing Title

Site Layout

Client

Kier Living

Job Title

Land at Caerleon Road, Dinas Powys



1st Floor, Westview House
Oak Tree Court
Mulberry Drive
Cardiff Gate Business Park
Cardiff

T 029 2073 2652
F 029 2073 2670

Scale: NTS

Designed by: LV

Drawn by: LV

Ckd/Appd: PO'C

1st Issued: July 2017

Job No: T16.106

Drg No:

Figure 3.1