


Welsh Government,
Economic Infrastructure

**Development of up to 576 residential dwellings, community
facilities and a 1-form entry Primary school
on land at and near Upper Cosmeston Farm,
Cosmeston**

RESIDENTIAL TRAVEL PLAN REV. B

June 2022

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1.0 INTRODUCTION

1.1 Background

1.1.1 Asbri Transport Limited have been appointed by Welsh Government to produce a Travel Plan to accompany an outline planning application for the proposed development of up to 576 residential dwellings, and a 1-form entry Primary school.

1.1.2 The site is located on land adjacent to Lavernock Road, Cosmeston. The site is located approximately 1.5km from Penarth to the north and the settlement of Sully is located to the south.

1.1.3 The majority of the site is allocated in the Vale of Glamorgan's Local Development Plan for residential development of up to 576 dwellings and provision is to be made for the development of a 1-form entry Primary School.

1.1.4 A separate interim Travel Plan has also been prepared specifically for the proposed Primary school. It is an interim travel plan as the nature and catchment area for the proposed school is not yet known. The school's interim Travel Plan also accompanies the planning submission.

1.1.5 Notwithstanding this, the movement implications of the school have been given due consideration in terms of the design and type of sustainable and active travel infrastructure that are proposed within the development's masterplan and associated infrastructure.

1.1.6 At the time of drafting this Travel Plan a planning application for the expansion of Ysgol y Deri Special Educational Needs school by way of a second campus on land immediately south of the Cosmeston Masterplan area is awaiting determination.

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 users of the site from travelling by sustainable and active travel modes.

1.2.2 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.

1.2.3 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 also public transport. This is the primary aim of this Travel Plan.

1.2.4 Travel plans can also:

- Reduce the carbon footprint of the development;
- 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 residential developer/s of the site will adopt to ensure that all occupiers and visitors to the site are fully aware of their travel options and increase the use of sustainable and active modes of transport.

1.3.2 This Travel Plan has been produced in accordance with The Vale of Glamorgan Supplementary Planning Guidance (SPG) 2018 which provides specific guidance on:

- The council's requirements for Travel Plans and when they will be required;
- The role of travel plans in encouraging shifts towards sustainable transport;
- Different types of travel plans;
- Travel plan content;
- Their benefits; and
- Travel plan monitoring.

1.3.3 This Travel Plan has been produced to ensure that occupiers and visitors 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.

1.3.4 A comprehensive package of sustainable transport infrastructure accompanies the development and such infrastructure is considered a significant complementary measure that will facilitate the successful implementation of the Travel Plan.

1.3.5 The package of active and sustainable travel infrastructure is examined in detail in the Transport Assessment and is detailed specifically in the Transportation Implementation Strategy.

1.3.6 The Authority commissioned a '**Sustainable Transport Corridor**' study in 2019, to develop and appraise potential options for improving sustainable transport within and between Penarth and Cardiff Barrage. It is understood that a Park and Ride development at Cosmeston Lakes is no longer being progressed.

1.3.7 The extensive package of sustainable travel infrastructure that accompanies the proposed development is briefly detailed in Section 2. In line with Welsh Government Planning and Transport policy and guidance there is a significant package of active and sustainable travel initiatives as detailed in this Travel Plan.

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 6** 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 Overview

2.1.1 The outline planning application for the proposed development is accompanied by an extensive Transport Assessment (TA) which assesses the existing level of sustainable travel accessibility and proposed physical measures to improve the site's accessibility. The TA also includes a Transportation Implementation Strategy.

2.1.2 It is only intended to briefly review the existing level of provision of sustainable travel infrastructure and that which is proposed as part of the planning application in this Travel Plan.

2.1.3 This is discussed in greater detail in the Transport Assessment that accompanies the planning application and specifically within the Transportation Implementation Strategy.

2.2 Site location and local highway network

2.2.1 As outlined above, the proposals are for a residential development of up to 576 residential dwellings and permission is also sought for the development of a 1-form entry Primary School.

2.2.2 The site covers an area of approximately 25.2 hectares on greenfield and agricultural land occupied by Upper Cosmeston Farm. The site is located to the east of Lavernock Road and fronts the Bristol Channel on its eastern boundary.

2.2.3 The site's northern boundary abuts existing residential development and Lavernock Road routes on a northerly alignment on its western boundary. The road is served by bus services that provide access to Penarth and Cardiff city centre.

2.2.4 The location of the site together with the local highway network is shown in **Figure 2.1**

Lavernock Road

- 2.2.5 Lavernock Road is a strategic road classified as the B4267 in the Vale of Glamorgan's highway network. It provides access to Penarth and Cardiff city centre from traffic with origins in Barry, Sully and other settlements in the Vale of Glamorgan to the south.
- 2.2.6 Lavernock Road is a wide all-purpose single carriageway distributor road that accommodates two-way traffic. In the vicinity of the site Lavernock Road is approximately 8.5 - 9m wide, with a wide footway and verge of varying widths in the range of 2.5m to 3.5 along the eastern side of the carriageway only.
- 2.2.7 The road is unlit in the vicinity of the site's frontage and is subject to a 40mph speed limit. To the north, the speed limit reduces to 30mph and street lighting is present. The road is fronted by predominantly residential dwellings and some commercial premises such as public houses.
- 2.2.8 There is a signal-controlled pedestrian crossing present in the vicinity of the access junction to Cosmeston Lakes.
- 2.2.9 The development's access strategy and the accompanying highway works are described in Section 3.

2.3 Walking and cycling

Walking

- 2.3.1 The Welsh Coastal Path abuts the site's eastern boundary and is a designated public right of way for its entire length past the application site.
- 2.3.2 The site's location on the southern edge of the built environment of Penarth and Cosmeston has meant that most of the active travel infrastructure is concentrated on routes to the north. These link the Cosmeston area with Penarth and beyond.
- 2.3.3 There is a shared cyclist and pedestrian route present on the eastern side of Lavernock Road that is signed and lit (once north of the site) and this provides an existing, active travel route to destinations to the north.

2.3.4 This active travel route also runs south of the site along the eastern side of carriageway for approximately 430m before crossing to the western side of carriageway where the route continues south.

2.3.5 The following pedestrian-related improvements are proposed in the planning application:

- The development will provide an active travel route on the western side of Lavernock Road in the vicinity of the proposed new bus stop.
- The installation of a new signal-controlled Toucan crossing providing a safe crossing location for pedestrians and cyclists wishing to access Cosmeston Lakes and the proposed new stop for north-bound bus services.
- The provision of an active travel route that will traverse the entire site connecting with the existing NCN 88.
- A 3.5m active travel route will connect the site with the Lavernock Road frontage and existing provision to the north.

2.3.6 The site is well located in terms of proximity and easy access by foot or bicycle to a number of local facilities, including the leisure, employment and public transport opportunities offered in Penarth to the north. The site's connectivity to the wider area by active travel modes will be significantly enhanced by the package of works and measures included within the planning application.

2.3.7 The propensity for people to walk or cycle depends on the individual preferences and circumstances. These circumstances might include, for instance, the purpose of the journey the attractiveness of and activity along the route, weather and the cost of alternatives.

2.3.8 The thrust of this policy is to promote sustainable travel and specifically to encourage and promote the choice of walking and cycling above other modes of transport where travel is required. It is reasonable to assume that walking is a viable and growing means of travel. As displayed in 2011 Census data 4% of residents within the vicinity of the site travel to work on foot.

2.3.9 The distance that individuals choose to walk depends of the individual’s circumstances. However, it is reasonable to assume that over time and given the current policies to promote walking, the propensity for individuals to do so will increase.

2.3.10 The Chartered Institution of Highways and Transportation (CIHT) guidance ‘Providing for Journeys on Foot’ (2000) sets out the desirable, acceptable and preferred maximum walking distances for different trip purposes. These are set out in **Table 2.1** below.

	Town Centre (m)	Commuting/School (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Maximum	800	2000	1200

Table 2.1 CIHT suggested acceptable walking distances

2.3.11 The local amenities within walking distance of the development are shown in **Figure 2.2**.

Cycling

2.3.12 As mentioned previously, there is an existing shared cycling/pedestrian route running along the eastern side of Lavernock Road providing a lit and safe off-road link to NCN 88 which leads to Penarth. From Penarth, NCN 88 runs north to Cardiff City Centre where NCN 8 - Taff Trail is accessible.

2.3.13 NCN 8, known locally as Lôn Las Cymru, forms the southern section of the Taff Trail, which is a fully signed long distance cycle route between Cardiff and Holyhead (Anglesey) via Brecon, Builth Wells, Machynlleth, Porthmadog and Bangor.

2.3.14 Cycling in Cosmeston is currently a relatively minor mode of travel, with only 2% of local residents travelling to work by bicycle. The Travel Plan includes specific measures to increase cycling’s modal share by residents and visitors to the development.

- 2.3.15 Cycling as a mode of travel to work is ever increasing given the growing trend of recreational cycling, and is seen as a key travel mode for a shift away from the car. Penarth and Cardiff are suited to cycling given its relatively flat topography and relatively small size.
- 2.3.16 The local cycle infrastructure is shown in **Figure 2.3**.
- 2.3.17 There have been preliminary discussions with 'nextbike' regarding the provision of a bicycle station within the site and another at Penarth Railway Station.
- 2.3.18 The proposed improvements to active travel routes and associated infrastructure is detailed in **Figure 2.4** and **Appendix A**.

2.4 Public transport

- 2.4.1 The local area is served by public transport, with regular scheduled bus services operating on Lavernock Road providing frequent access to Cardiff City Centre some 8.5km to the north. The bus services operating in the vicinity of the site are described below.
- 2.4.2 The site is also accessible to rail services at Penarth Railway Station located approximately 2.4km to the north-east. The various bus services available on Lavernock Road (described below) provide convenient access the City Centre and the 94 service provides access to Penarth Railway Station.
- 2.4.3 Penarth Railway Station may be accessed directly by NCN88 which as detailed above is proposed to be extended into the site and will traverse the site from north to south.

Bus services

- 2.4.4 There are a number of existing bus stops along Lavernock Road. The nearest stops are located in the immediate vicinity of the vehicular access to Cosmeston Lakes, to the north of the application site.
- 2.4.5 The development proposes the provision of 2 new stops for north and south-bound services respectively on Lavernock Road on the northern edge of site's frontage.

2.4.6 In addition, the development Masterplan allows for safeguarding of a suitable corridor for bus permeability into the site at a future date. This has been the subject of preliminary discussions with officers of the Highway Authority during the pre-application period.

2.4.7 **Table 2.2** below outlines the services that call at bus stops within the vicinity of the site. It is noted that the S51 and SC1 services operate on restricted timetables serving local schools but the 94 service has an approximate 30-minute frequency through-out the day.

2.4.8 The existing and proposed bus stops in proximity to the site are shown in **Figure 2.5**.

Route No.	Route	Frequency
88	Penarth – Barry	Mon-Fri, hourly services between 07:33-15:33
	Barry – Penarth	Mon-Fri, hourly services between 07:19-15:19
94	Cardiff – Penarth – Sully - Barry	Mon-Fri, services every 20-40 minutes from 07:26-18:33, hourly 19:25-23:30 Sat, 07:33-18:30 half hourly, hourly 19:25-23:30 Sun, 07:52, then hourly from 09:24-21:24
	Barry – Sully - Penarth - Cardiff	Mon-Fri, services half hourly to hourly from 06:35-18:51, hourly from 19:31-22:21 Sat, 07:43-17:35 half hourly, 17:35-22:31 hourly Sun, 07:04 – 21:20 hourly
S51	Llandough – St Richard Gwyn High School	Mon-Fri, service at 08:20 (school days only)
	St Richard Gwyn High School – Llandough	Mon-Fri, service at 15:45 (school days only)

Table 2.2: Summary of bus services operating in the vicinity of the site

Rail services

2.4.9 Penarth Railway station is located approximately 2.4km to the north of the application site. The station lies along the Vale of Glamorgan Line and provides direct services to Cardiff Central, Cardiff Queen Street, Grangetown and Bargoed to name but a few.

2.4.10 Transport for Wales operate around 56 trains per day between Penarth and Cardiff Central with an average journey time of 13 minutes. The first train from Penarth to Cardiff Central departs at 06:02, with the last departing at 23:26. Evening services run twice hourly and Sundays see one train every two hours with a total of 8 per day.

2.4.11 From Cardiff Central, interchange services are available providing access to destinations such as Swansea to the west via Bridgend, Port Talbot and Neath and London Paddington to the east via Newport, Bristol Parkway, Swindon, Didcot Parkway and Reading. Numerous stations on the railway network may be accessed from Cardiff Central Station.

South Wales Metro

2.4.12 The South Wales Metro is an ambitious multi-modal project linking people and jobs across South East Wales in a fast, efficient and environmentally positive way.

2.4.13 It will provide a platform to deliver sustainable economic development, in line with the 'Our Valleys, Our Future' initiative, by connecting people, communities and business to employment, services, facilities and markets through reliable, resilient infrastructure.

2.4.14 The following train service improvements are detailed on the Transport for Wales web site:

- A new 1 train per hour (tph) Ebbw Vale to Newport service by May 2021.
- 2tph between Cardiff and Bridgend via Vale of Glamorgan from December 2023.
- 4tph throughout the Rhymney route from December 2023.
- 4tph to Treherbert from December 2022.
- 6tph to Cardiff Bay from December 2022.
- 4tph between Merthyr Tydfil, Aberdare and Cardiff from December 2022.

- 1tph between Cardiff and Cheltenham from December 2022.
- 4tph between Cardiff and Bridgend (direct, Monday to Saturday) from December 2019.

3.0 DEVELOPMENT PROPOSALS

3.1 Introduction

3.1.1 As set out in Section 1, it is proposed to develop up to 576 residential dwellings, and a new one form entry Primary School on land at Upper Cosmeston Farm, Cosmeston.

3.1.2 The development site is to be accessed via two new priority junctions on Lavernock Road. Each junction will be provided with a ghost island right turn lane and footway provision linking the site to Lavernock Road.

3.1.3 Pedestrians and cyclists will also be able to access the site from the extension of NCN 88 that will enter the site on its northern boundary.

3.1.4 The development also includes the provision of a Toucan signal-controlled crossing on Lavernock Road. The development will deliver an extensive variety of physical infrastructure measures to encourage sustainable travel. These include measures to facilitate walking, cycling and public transport use. More detail is provided in the sections below.

3.1.5 The masterplan for the site is shown in **Appendix B**.

3.1.6 The following sections detail the sustainable travel infrastructure that is proposed within the outline planning application.

3.2 Pedestrian/cyclists

3.2.1 The development will provide the necessary pedestrian and cycling infrastructure within the site to promote and encourage residents to walk and cycle. All bar the primary roads through the development will prioritise pedestrians and cyclists.

3.2.2 Walking and cycling access to the local and wider city area will be provided via the following initiatives:

- A dedicated cycling/pedestrian route that traverses the site north to south that will form an extension of National Cycle Network Route 88;

- A new Toucan crossing on Lavernock Road and associated works allowing pedestrians and cyclists to access Cosmeston Lakes and passengers to access the north-bound bus stop;
- A relocation of the start of the existing 30mph speed limit on Lavernock Road so that traffic is slowed to 30mph when passing the proposed development; and,
- The provision of a mandatory 20 mph speed limit on the site's entire internal road network.

3.2.3 The pedestrian and cycle link thorough the heart of the site provides a traffic-free link that fully traverses the site from north to south, keeping vehicle intimidation to a minimum with the aim to encourage and prioritise walking and cycling.

3.3 Local facilities

3.3.1 Whilst there are recreation opportunities at Cosmeston Lakes there are limited local retail or service facilities in the immediate vicinity of the site, however, the site is well connected and accessible by foot, bicycle and public transport to a wide range of local amenities in Penarth town centre.

3.3.2 The site fully complies with local and national policy in this respect offering transport choice and integrated travel modes, ultimately reducing travel demand dependence on the car.

3.3.3 Ensuring that more everyday journeys are undertaken by sustainable modes of transport will be essential. This is the cornerstone of the Vale of Glamorgan's key transport policy, ensuring developments are accessible by sustainable travel modes. This will help in achieving a necessary shift away from car-based travel across the Authority.

3.4 Public transport

3.4.1 As indicated in section 2, the site is well located in terms of access to public transport provision with 2 bus stops served by 5 services and a railway station within 2.5km of the site, providing frequent services to various parts of Penarth, Cardiff and beyond.

3.4.2 The development's master-plan also allows for bus service permeability into the site and consideration has been given to the provision of new bus stops on the Lavernock Road site frontage.

3.5 Sustainable travel to local schools

3.5.1 Notwithstanding that outline planning permission is also sought for a 1-form entry Primary school on the southern sector of site a brief review is undertaken here of the existing provision of Primary and Secondary Schools.

3.5.2 In considering the overall sustainability of the site, it is important to consider journeys made for education purposes. The National Travel Survey (2012) indicates that 48% of all journeys during the morning peak hour are related to education. Of these education trips, travel by car accounts for 44% and 26% of journeys to primary and secondary schools respectively.

3.5.3 There are 4 primary schools within the catchment area of the site which are, St Joseph's RC Primary School, St Andrew's Major C/W Primary School, Ysgol Pen-y-Garth and Evenlode Primary School. In addition, a new 1-form entry school is to be provided within the application site.

3.5.4 Based on the CIHT guidelines, Evenlode is located just within the maximum suggested walking distance (2km) to school.

3.5.5 Due to the pedestrian links in the area it is reasonable to assume that some of the children will walk to school and that some trips will be made by car. It is assumed that all children to be resident in the proposed residential development that are to attend the new proposed school will be able to walk or cycle to school.

- 3.5.6 The catchment for state secondary schools in the area is Ysgol Gymraeg Bro Morgannwg, St Richard Gwyn RC High School and Stanwell Comprehensive School. Stanwell Comprehensive School is the closest secondary school to the proposed development located approximately 2.64 km to the north.
- 3.5.7 Most of the comprehensive schools are possibly located too far away from the proposed development to walk, however, there are school bus services in operation which route through Cosmeston.
- 3.5.8 Service S51 provides a service to St Richard Gwyn High School and service S76a serves Ysgol Bro Morgannwg. Currently, there is no school bus provision from Cosmeston to Stanwell Comprehensive School although school bus services do route past the proposed development site.
- 3.5.9 **Table 3.1** indicates the travel options for school pupils to travel to Stanwell in free flow traffic conditions. In practice, during the AM peak period car journey times are likely to be longer due to the large numbers of cars on Penarth's local highway network during this period.

Journey type	Distance	Journey time
Walk	1.6 miles	32 min
Cycle	1.6 miles	9 min
Public bus (Service 94)	1.6 miles	13 min
Car	1.6 miles	5 min

Table 3.1 Journey times to Stanwell Comprehensive School

3.6 Vehicular access

- 3.6.1 Vehicular access to the site is proposed via two priority junctions on Lavernock Road, which are to be constructed with a ghost-island right-turn lane and associated pedestrian refuges.
- 3.6.2 The internal road network will be between 5 - 6m wide with 2 and 3.5m wide pedestrian and cycle routes on both sides of the carriageway.

3.6.3 As has been detailed, the Masterplan has allowed for bus services to route into the site from Lavernock Road.

3.7 Car parking provision

3.7.1 As stated previously, a masterplan (see Appendix B) has been developed for the site detailing parking provision. Provision will be made for all houses within the development to have electric vehicle charging infrastructure. It is expected that 5% of the parking spaces for the apartments within the development will have vehicle charging infrastructure.

3.7.2 Car parking provision through-out the proposed development has been provided in accordance with the Vale of Glamorgan's adopted Parking Standards, 2019.

3.7.3 All parking spaces will be provided within the curtilage of the site, with a mixture of on-plot spaces and dedicated parking areas, and will be provided in accordance with the above parking standards.

3.8 Cycle parking provision

3.8.1 As part of the development, secure cycle parking will be provided in accordance with the approved plans.

3.8.2 Note 6 of Appendix 4 of the Vale of Glamorgan's Parking Standards (9March 2019) states:

6. All residential developments must be accessible by cycles and cycle storage must be a factor of dwelling design. In appropriate circumstances, convenient communal facilities may be provided. Guidance on this subject is available within Manual for Streets.

3.9 Modal split

3.9.1 **Table 3.2** below outlines the current 'journey to work' mode share for existing Cosmeston residents, which is based on the Census 2011 National Statistics Travel to Work datasets. The useful data provides a snapshot of the 2011 travel behaviour of residents in the area. The modal split excludes those who were not in employment at the time of the Census and those working from home.

3.9.2 Method of travel to work data has been generated for the following output areas:

- Cosmeston (Ward)
- The Vale of Glamorgan (Unitary Authority)
- Wales (Country)

Method of Travel to work	Cosmeston (Ward)	Vale of Glamorgan (Unitary Authority)	Wales (Country)
Work mainly at or from home	5.7%	5.2%	5.4%
Underground, metro, light rail, tram	0.1%	0.1%	0.1%
Train	4.6%	5.5%	2%
Bus, minibus, coach	3.9%	2.7%	4.6%
Taxi	0.3%	0.5%	0.5%
Motorcycle, scooter or moped	0.5%	0.6%	0.6%
Driving a car or van	71.9%	68.9%	67.4%
Passenger in a car or van	5.0%	5.8%	6.8%
Bicycle	2.2%	1.4%	1.4%
On foot	4.9%	8.6%	10.6%
Other method of travel to work	0.8%	0.7%	0.6%

Table 3.2: Mode split – journeys to work

3.9.3 The data summarised in Table 3.2 illustrates that the existing residents of Cosmeston currently travel to work in a relatively unsustainable manner with a low proportion (15.7%) of residents travelling to work via active travel or public transport and a high proportion (71.9%) of residents travelling to work by private car. This is higher than the proportion of residents that travel to work by private car in the Vale of Glamorgan (68.9%) as a whole.

3.9.4 The low proportion of work-related journeys made by foot, bicycle and public transport within this area of Cosmeston is reflective of the limited concentration of local amenities and employment opportunities in the local vicinity. The proportion of residents walking to work is lower when compared with the walking modal share for the Vale of Glamorgan as a whole.

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 the means by which 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 active travel 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 which 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 'single occupancy vehicle (SOV). The Travel Plan targets 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 years three and 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 20% 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	72%	70%	65%	62%
	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%	10%	11%
	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	8%	9%	11%	12%
	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	100%	100%	100%	100%

Table 4.1 Travel Plan 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, or an appointed consultant, three months prior to initial occupation of the site; and,
- To undertake the initial monitoring survey within three months of reaching approximately 10% occupation or on occupation of the 58th residential dwelling.

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 a Travel Plan Co-ordinator/s (TPC), or an appointed consultant, who has direct responsibility for the implementation of the Travel Plan.

5.2.2 Due to the size of the development there may be more than one TPC if the development is to be constructed by more than one house-builder and as the Masterplan is to be built in phases.

5.2.3 The TPC/s will be responsible for the following:

- Ensuring physical measures are implemented before initial occupation;
- 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.

5.2.4 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.

5.2.5 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. The TPC will work closely with the Vale of Glamorgan Council throughout the life of the Travel Plan.

5.3 Travel Plan funding

5.3.1 The funding of the Travel Plan will be the responsibility of the developer/s who implement any detailed planning permissions and build out the development.

5.3.2 Funding of the TPC/s for the site will also be the responsibility of the respective developer/s for the first five years of the Travel Plan.

5.3.3 Following this five-year lifecycle of the Travel Plan, and providing that the targets have been met, the Travel Plan will be handed over to the occupiers or relevant management organisation for its implementation to be continued indefinitely.

5.4 Travel Plan funding

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 The implementation of the Travel Plan will be incumbent on the house-builders who ultimately develop the site.

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

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

5.4.5 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/s	During construction
Appointment of TPCs	Developer/s	Three months prior to initial occupation
Establish a timescale for implementation of soft measures	TPCs	Prior to initial occupation
Production of marketing material	TPCs	Completed prior to initial Occupation
Launch of Travel Plan	TPCs	Initial occupation
Initial travel survey (ITS)	TPCs	Within 3 months of 10% occupation or on occupation of the 57 th dwelling.
Ratify Travel Plan targets	TPCs	Within 1 month of ITS Completion
Ongoing monitoring	TPCs	Ongoing following ITS
Full review at end of year 5	Developer/TPC /VoG	5 years after ITS
Transfer of responsibility	TPCs/VoG/ occupiers	5 years from ITS or upon reaching targets, whichever comes later

Table 5.1 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 in order 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.

“Welcome Pack”

6.2.2 A “Welcome Pack” will be produced and distributed to all residents by the TPC as they move to the site. The purpose of the Welcome Pack 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 Welcome Pack 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;
- 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;

- Information on specific incentives and events, such as “Walk to Work” week; 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 Welcome Pack will continue to be distributed to new residents who move to the site in the future. This same information can also be disseminated to prospective occupiers to promote the Travel Plan and its benefits as a selling tool for the development.

6.2.7 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

6.2.8 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.

6.2.9 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

6.3.1 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

6.3.2 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.

6.3.3 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

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

6.3.5 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 approved plans.

6.4.3 In addition, there has been engagement with Transport for Wales regarding the provision of cycle parking at Penarth Railway Station.

Marketing incentives

6.4.4 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.

6.4.5 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.

6.4.6 Information on cycling routes, local area cycle maps, cycle training and local cycle shops will be included in the Welcome Pack and the Newsletter.

- 6.4.7 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)

- 6.4.8 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 removes safety concerns for individual cyclists who travel alone.

- 6.4.9 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 a number of buses operating within the vicinity, offering regular services within Penarth and the neighbouring areas.

- 6.5.2 Later stages of the development may see bus services enter the site as the Masterplan has been designed to accommodate this. The appointed Travel Plan co-ordinator/s will liaise with the VoG, local bus operators, private transport operators to encourage more regular bus services and service penetration into the site.

Marketing incentives

- 6.5.3 The TPC will promote the use of public transport through a number of 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 is to be provided in accordance with the Vale of Glamorgan's adopted Parking Standards, 2019.

Car sharing

6.6.6 Lift Share 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 <http://carshare.liftshare.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 2%	Developer	Prior to occupation
Cycle parking available	To increase the mode share for cyclists by 2%	Developer	Prior to occupation
Participation in walking events, detail on walking in Welcome Pack	To increase the mode share for walkers by 2%	TPC	Ongoing from 10% occupation
Walking buddy scheme		TPC	Ongoing from 10% occupation
Participation in cycling events, details on cycling in Welcome Pack	To increase the mode share for cyclists by 2%	TPC	Ongoing from 10% occupation
Bicycle Users Group		TPC	Ongoing from 10% occupation
Promotion of public transport in Welcome Pack and in Travel Plan newsletter	To increase the mode share for rail by 2%	TPC	Ongoing from initial occupation
	To increase the mode share for bus by 2%		
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	As long as marketing suite is open
Travel Plan newsletter		TPC	Quarterly following initial occupation

Table 6.1: Travel Plan 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 or internet- 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 10% occupation, i.e. on occupation of the 57th residential dwelling. This will ensure that there is critical mass on site for surveying resident's travel behaviour but is suitably early during the development's construction period.

7.2.3 Following the initial travel survey, monitoring of travel behaviour at the development will take place annually until targets are met.

7.3 Reporting

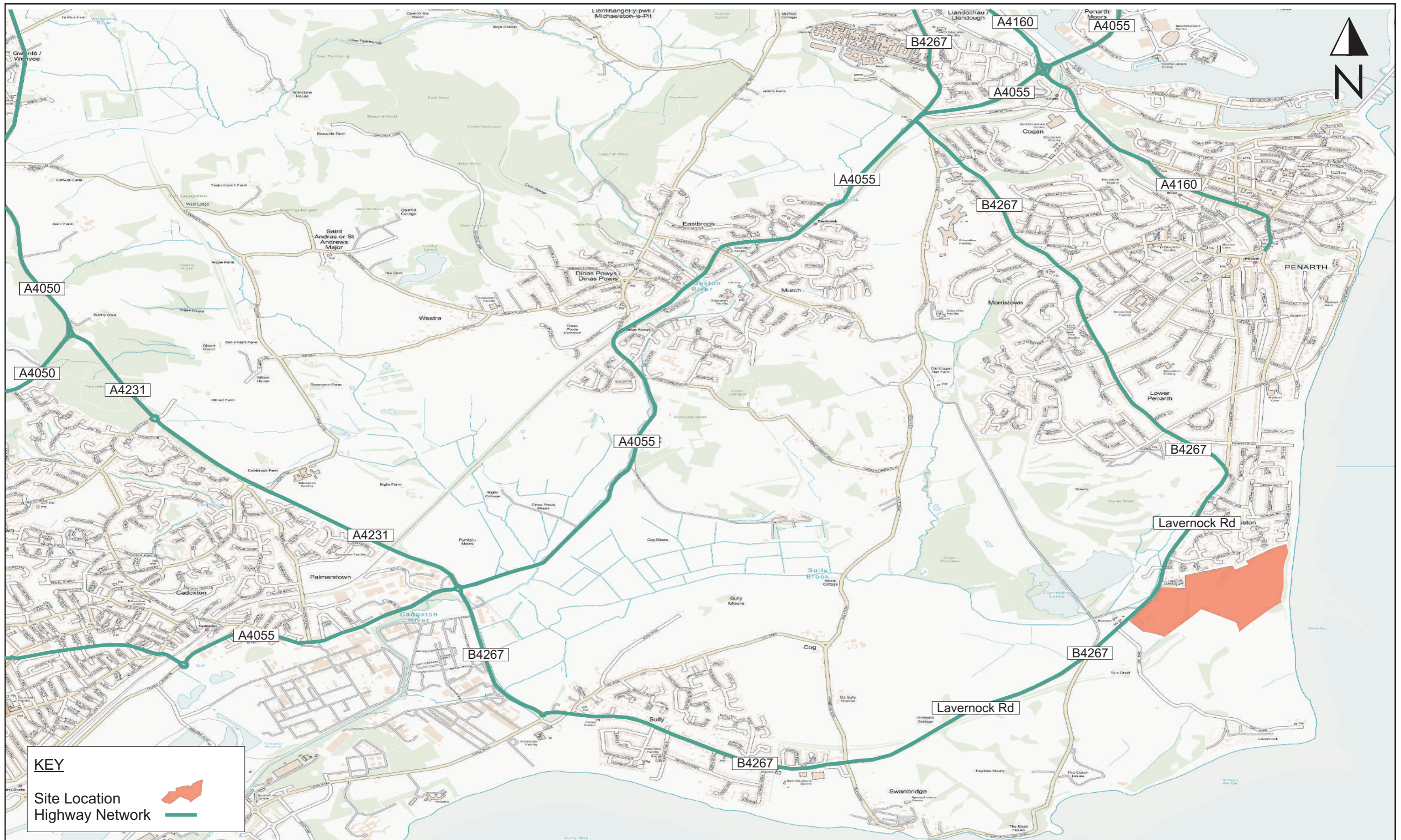
7.3.1 A full monitoring report will be submitted to the Vale of Glamorgan Council by the TPC or the appointed consultant following each monitoring period. The report will include the results of both the formal and informal monitoring and demonstrate how this relates to the Travel Plan targets, together 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 particular short-comings of any monitoring results and may include:

- Possible provision of personalised travel planning for occupiers of the development; and,
- Further Incentives for occupiers to travel by sustainable modes.




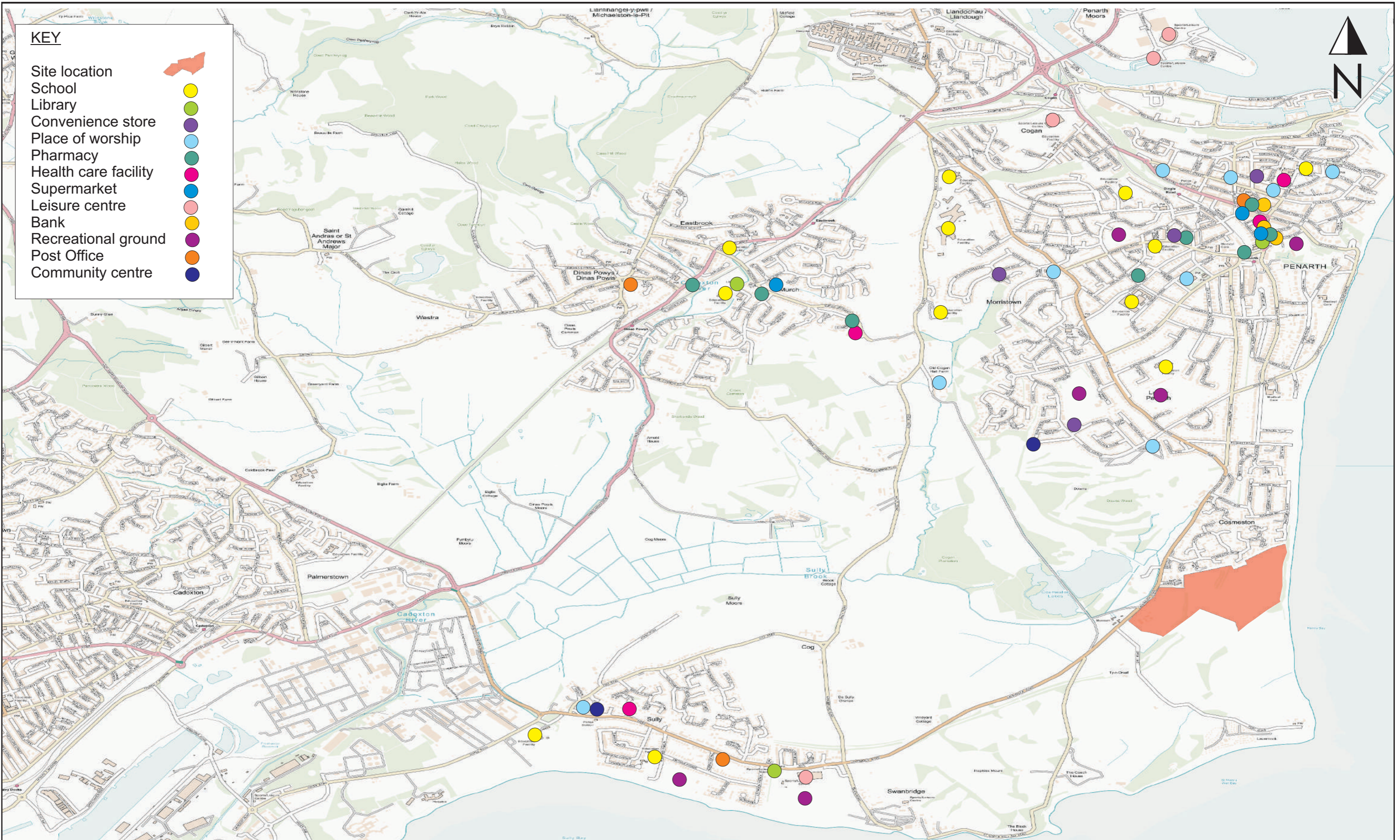
KEY

Site Location 


Highway Network 

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Drawing Title Site Location & Local Highway Network	Client Austin-Smith: Lord	 Suite D 1st Floor 220 High Street Swansea SA1 1NW T 01792 480535	Scale: NTS	File Extension:
	Job Title Cosmeston		Designed by: KW	
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			1st Issued: Feb 2019	Drg No: Figure 2.2
			Job No: T18.164	

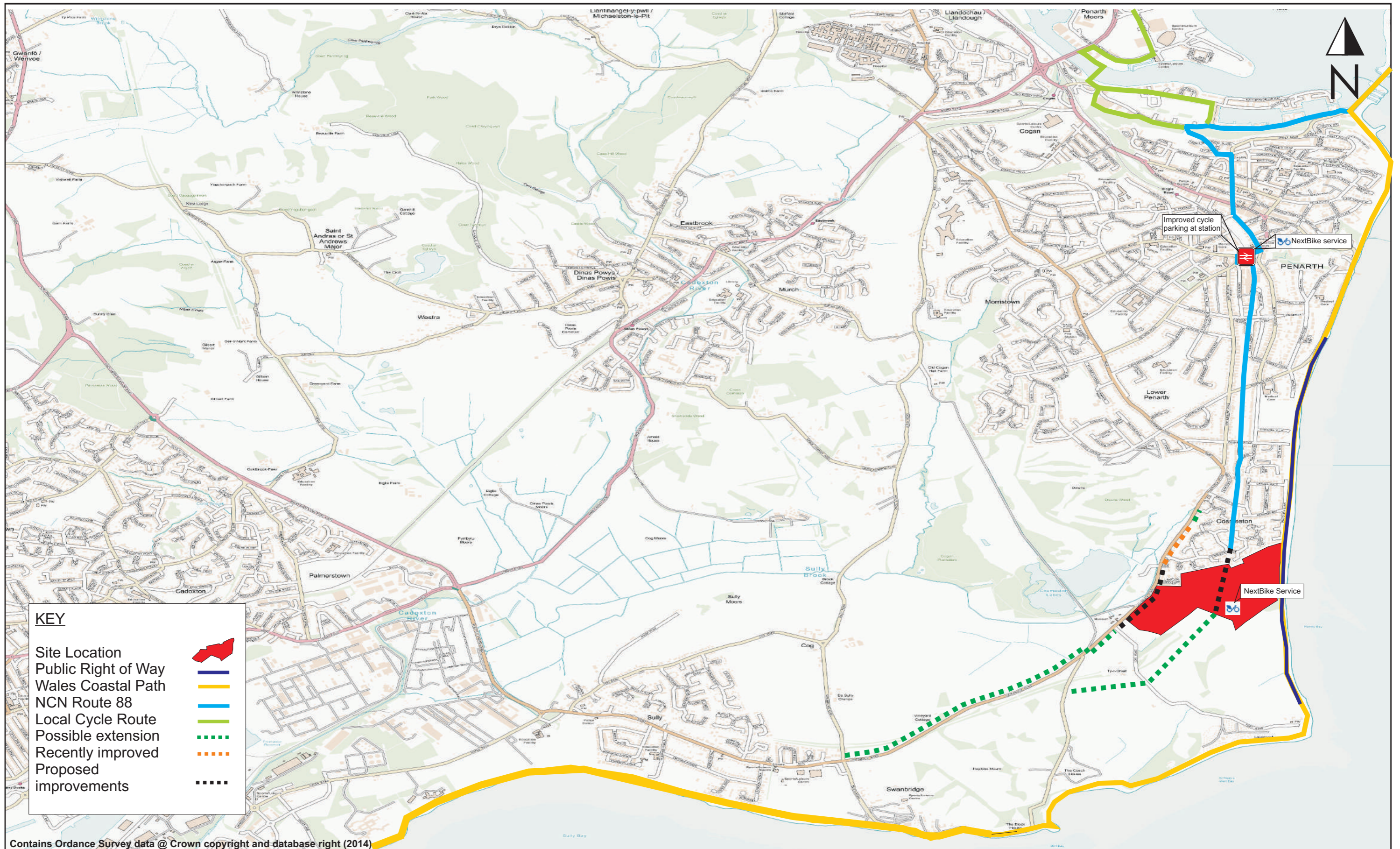


KEY

- Site Location
- NCN Route 88
- Local Cycle Route

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Drawing Title Local Cycle Network	Client Austin-Smith: Lord	 Suite D 1st Floor 220 High Street Swansea SA1 1NW T 01792 480535	Scale: NTS	File Extension:
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			Drawn by: KW	
			Ckd/Appd: PO'C	
			1st Issued: Feb 2019	Drg No: Figure 2.3
			Job No: T18.164	

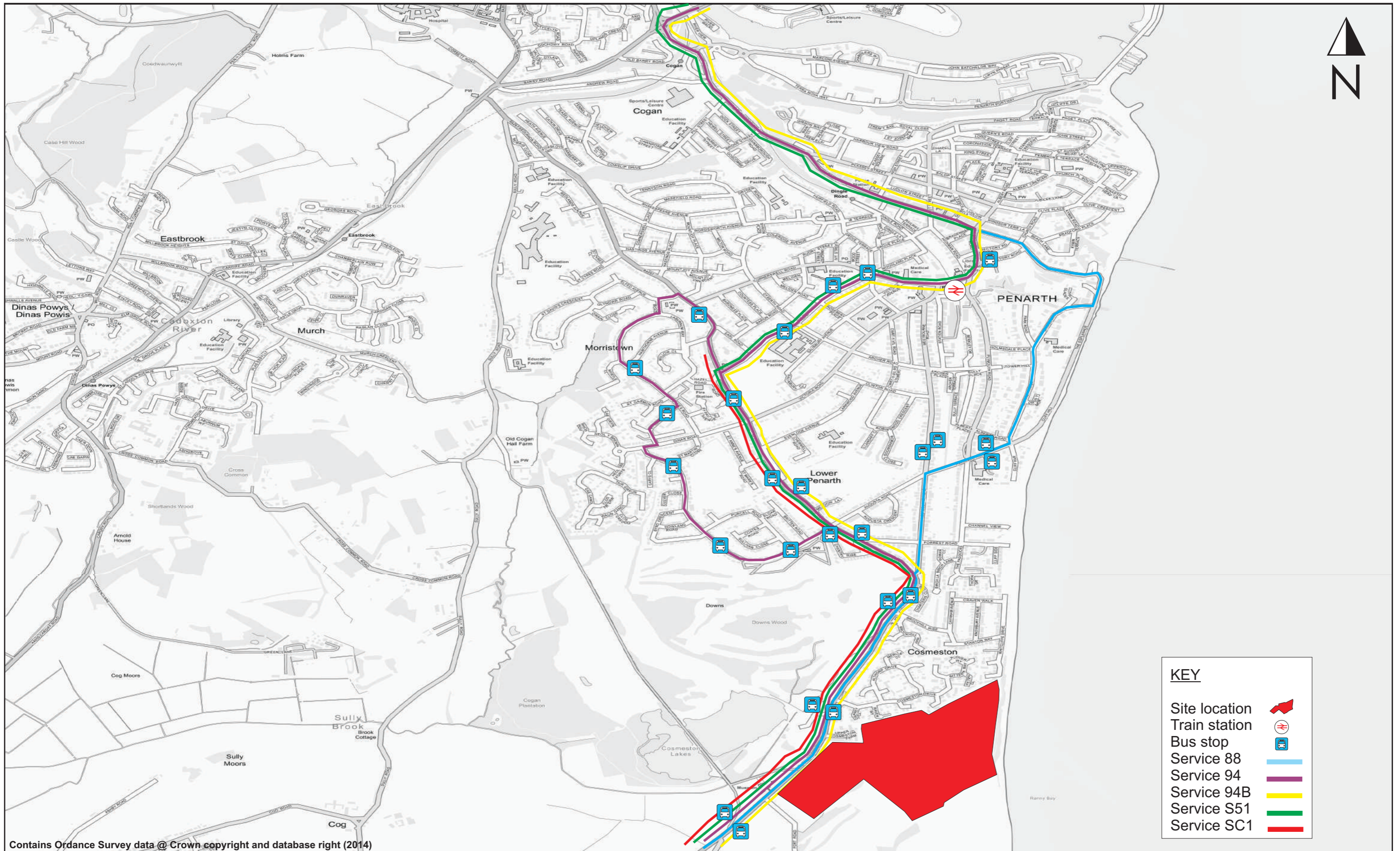


KEY

Site Location	
Public Right of Way	
Wales Coastal Path	
NCN Route 88	
Local Cycle Route	
Possible extension	
Recently improved	
Proposed improvements	

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Drawing Title Active Travel Improvements	Client Welsh Government	 Suite D 1st Floor 220 High Street Swansea SA1 1NW T 01792 480535	Scale: NTS	File Extension:
	Job Title Cosmeston		Designed by: KW Drawn by: KW Ckd/Appd: PO'C Issued: July 2019 Job No: T18.164	

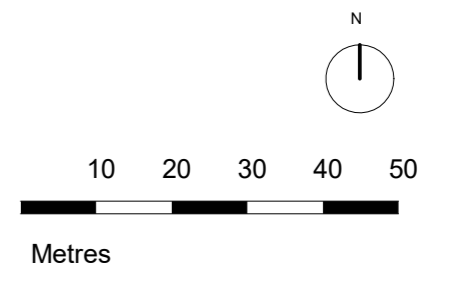
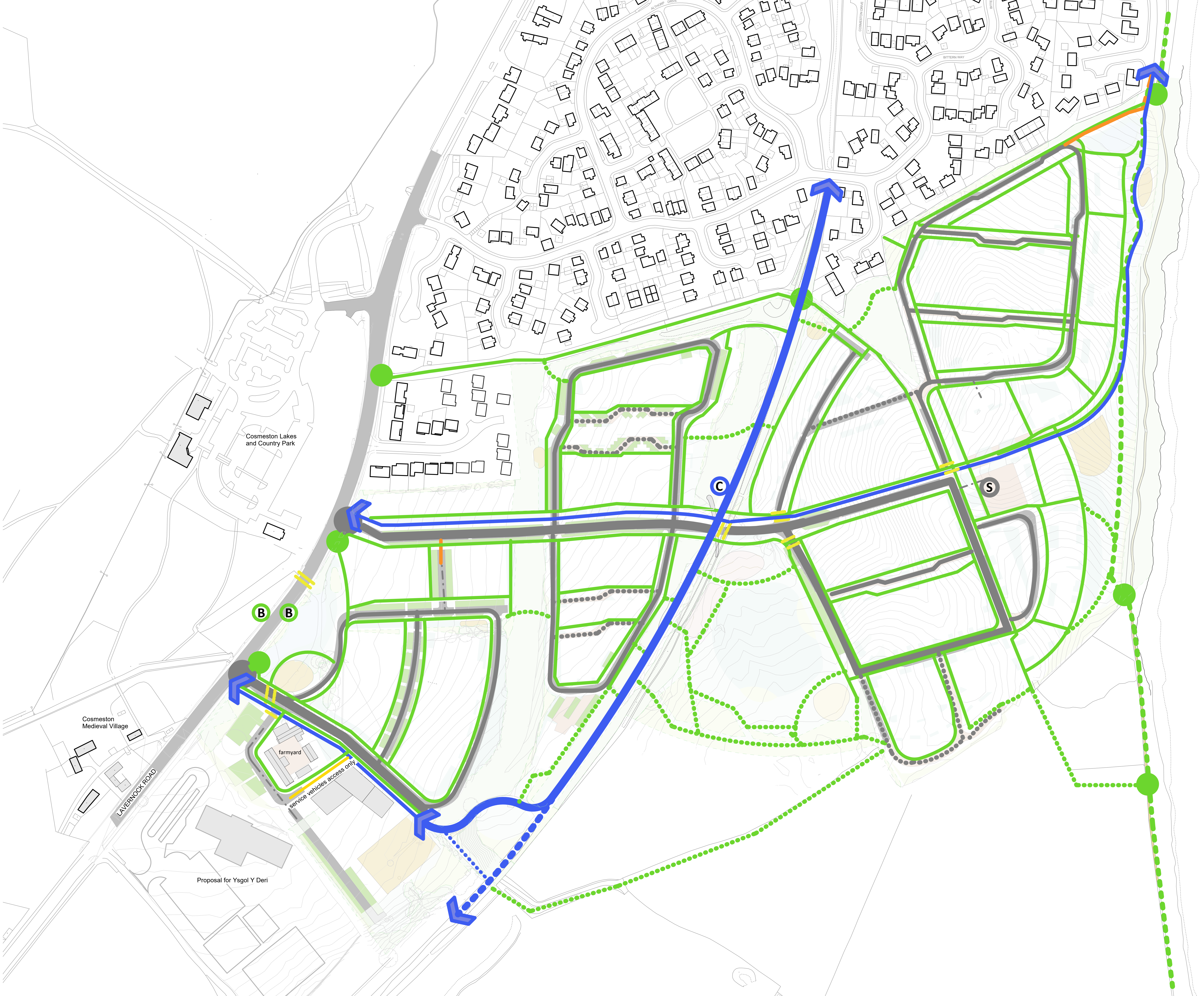


KEY	
Site location	
Train station	
Bus stop	
Service 88	
Service 94	
Service 94B	
Service S51	
Service SC1	

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Drawing Title Public Transport Infrastructure	Client Austin-Smith:Lord	 Suite D, 1st Floor, 220 High Street, Swansea, SA1 1NW T 01792 480535	Scale: NTS	File Extension:
	Job Title Upper Farm, Cosmeston		Designed by: KW	Drg No: Figure 2.4
		Drawn by: KW		
		Ckd/Appd: POC		
			1st Issued: Feb 2019	
			Job No: T18.164	

Appendix D



- KEY**
- Extension of NCN88 Cycle Route
 - Future extended connection cycle routes
 - Cycle route
 - 4m wide emergency vehicle access pedestrian route
 - Service vehicle access only pedestrian route
 - Pedestrian route
 - Pedestrian passages designed for unobstructed wildlife movement
 - New Coastal Path
 - Pedestrian Gateway
 - Pedestrian and cycle priority crossing
 - Vehicular Site Access
 - Primary Vehicular Route - Future proofed for potential Bus route
 - Secondary Vehicular Route
 - Home Zone Route - Pedestrian Priority
 - Parking Access only
 - BUS Stop
 - Bicycle Hire (indicative)
 - Dedicated Street Car Rental Spaces (indicative)

Notes:
Electric vehicle charging ready infrastructure throughout the development road network

No.	Description	Issue	Created	Date Issued
1	Initial Design	101	10/01/2023	10/01/2023
2	Final Design	102	15/02/2023	15/02/2023
3	Construction	103	01/03/2023	01/03/2023
4	Handover	104	01/03/2023	01/03/2023
5	Final Review	105	01/03/2023	01/03/2023

1 Parameter Plan - Access & Movement
1 : 1000

DO NOT SCALE. Use figure dimensions only. This drawing is intended to show an indication of the work to be undertaken before the work is put in hand. All dimensions are subject to change without notice.

Drawn: TE Austin-Smith:Lord LLP
Date: 02.05.19
Scale: @ A0
Status: SD

Austin-Smith:Lord
Project: Upper Farm Coreson

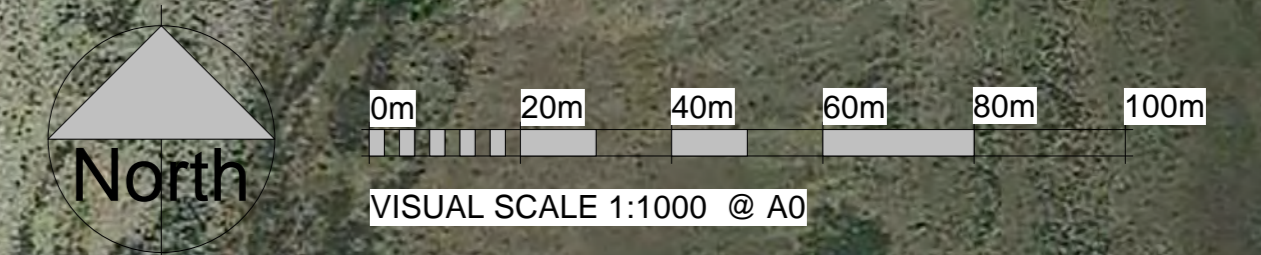
Description: Parameter Plan - Access & Movement

300 No. Drawing No. Revision
318054 LFC-ASL-001-SD-DR-A-0934

Appendix B



Illustrative Masterplan



- KEY**
- 1. Primary School
 - 2. LAP (Local Area for Play) approx. area 120m² each (5x)
 - 3. LEAP (Local Equipped Area for Play) 01-1100m², 02-620m², 03-570m²
 - 4. NEAP (Neighbourhood Equipped Area for Play) approx. area 1400m²
 - 5. Outdoor GYM
 - 6. Cycle Path
 - 7. Water Feature: Attenuation Ponds or Reed Beds
 - 8. Hedgerow
 - 9. New Coastal Path
 - 10. Public Space - Limestone Square
 - 11. Community Gardens & Orchards
 - 12. Coastal Park
 - 13. Sweals & Rain Gardens
 - 14. Bus Stop
 - 15. Bicycle Hire (Indicative)
 - 16. Pedestrian Cyclist Crossing
 - 17. Public Art/Dormice Bridge - Marconi Crossing
 - 18. Community Sport Pitch
 - 19. Hedgerow maintained at lower height (1-1.5m)
 - 20. Lower Cosmeston Farm - community, educational or commercial use

Proposed
SEN School

Rev	Description	Author	Check	Date
01	Issue for Approval	TS	TS	02.05.19
02	Issue for Approval	TS	TS	02.05.19
03	Issue for Approval	TS	TS	02.05.19
04	Issue for Approval	TS	TS	02.05.19
05	Issue for Approval	TS	TS	02.05.19
06	Issue for Approval	TS	TS	02.05.19
07	Issue for Approval	TS	TS	02.05.19
08	Issue for Approval	TS	TS	02.05.19
09	Issue for Approval	TS	TS	02.05.19
10	Issue for Approval	TS	TS	02.05.19

Drawn: TS
 Date: 02.05.19
 Scale: @ A0
 Status: S1

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Austin-Smith:Lord
 Project: Upper Farm Cosmeston
 Description: Illustrative Masterplan
 Job No: 318254
 Drawing No: LFC-ASL-02-00-DR-A-0930
 Revision: _____