



PINNACLE
CONSULTING ENGINEERS

CWL01 & CWL02 QUINN

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0004-V5**

TRAVEL PLAN

- BUILDING INFORMATION MODELLING (BIM)
- CIVIL DESIGN & ENGINEERING
- DUE DILIGENCE
- OFFSHORE & ONSHORE ENGINEERING
- PRE-DEVELOPMENT
- STRUCTURAL ENGINEERING
- TRANSPORTATION & HIGHWAYS

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1 INTRODUCTION

1.1 Introduction

Pinnacle Consulting Engineers Ltd have been commissioned to prepare a Travel Plan (TP) for a proposed development of a site at the former Quinn Radiator Factory.

The figure below illustrates the location of the proposed development.



Figure 1.1 – Site Location

1.2 Development Proposal

This report relates to the development of a data centre with ancillary office space together with associated groundworks, utilities, infrastructure, car parking, landscaping, and site access via Dyffryn Lane and Celtic Way.

1.3 References

To complete this report, Pinnacle Consulting Engineering has referred to National, Regional and Local policies when preparing this Travel Plan.

1.4 Background

The purpose of the report is to outline the objectives of the Travel Plan (TP) for the staff and visitors to this development during both the construction phase and operational phase.

Their purpose is to ultimately reduce the number of single occupancy car trips and promote the use of more sustainable modes of travel.

The aim being to minimise vehicle trip rates, the volume of which has been outlined in the Traffic and Transport Assessment (TTA) for the proposed development.

The measures as outlined within this document will be introduced to achieve the target of minimising vehicle trips from staff and visitors of the proposed project, along with a timeframe for the implementation of the various measures outlined.

A Travel Plan Co-ordinator (TPC) shall be appointed to provide ongoing management for the TP. The TPC will be appointed by the occupier of the development.

In conjunction with the on-site management team, the TPC will prepare a document detailing the progress of The Travel Plan and the strategy for its future development as stated within it.

A Travel Plan (TP) is thus a document which seeks to increase sustainable travel to/from the development by:

- reducing the need for travel
- reducing single-occupancy car travel
- providing and encouraging the use of more sustainable travel choices, such as walking, cycling, public transport, car sharing and car clubs

A TP addresses all types of trips to, from and within the development, including trips made by staff and visitors. It sets out the implementation, marketing, monitoring, and review of a variety of travel measures to meet pre-agreed targets.

A TP is site-specific and considers the characteristics of the development such as its location, surrounding transport infrastructure and proximity to local facilities. It is not a static document; it is flexible and should be adapted to suit changes in the site's characteristics over time.

The benefits to staff of the proposed development, and the wider community in the local area, will include:

- increased choice and quality of travel modes
- reduced traffic congestion and saving travel time on roads
- reduced harmful impacts on the environment due to fewer vehicles being on the roads and promoting less environmentally intrusive forms of travel, such as walking and cycling
- improved air quality and minimised greenhouse gas emissions due to a reduction in traffic growth and congestion and an increased choice of more sustainable modes of transport
- reduction in the harmful effects to the existing biodiversity and the built and historic environment as a result of reduced traffic growth
- improved health due to less pollution from vehicles and the take up of more active modes of travel, such as walking and cycling
- financial savings from free or discounted travel vouchers and the take up of less costly alternatives of travel, such as walking or car sharing
- safer communities through reduced number of accidents and other incidents, for example by reducing traffic on roads, restricting traffic speeds, creating road crossings, or forming home zones
- improved sustainable access to local services, facilities, and the natural environment such as open spaces and green corridors for non-motorised forms of transport

- reduced social isolation as a result of extended or new public transport services, worker walking/cycling groups, worker travel forums and building links with the wider community

1.5 Travel Plan Benefits

A travel plan can bring several benefits to a new development for the developer, the local authority, and the ultimate users of the site.

Benefits:

- Less congestion and therefore improved safety on local roads by promoting alternatives to the car
- Reduced highway capacity problems by promoting sustainable travel choices
- Local environmental improvements from reduced congestion, carbon emissions, pollution, and noise
- Making the site more attractive to potential occupiers/users
- Increased opportunities for active healthy travel, such as walking and cycling
- Reduced demand for parking spaces enabling land to be put to more cost effective or commercially beneficial use and freeing space for active travel initiatives
- Improved travel choice, quality and affordable access to services for all users

The overarching purpose of a travel plan should be to encourage behaviour change which will lead to the use of more sustainable modes of travel and reduce overall travel to and from the site.

1.6 Report Structure

Section 2 of this report will give a summary on the current thinking regarding mobility management and best practice when preparing a Travel Plan.

Section 3 of this report will summarise the existing public transport, walking and cycling facilities at the subject site, together with the existing commuter travel patterns for the local area (information extracted from the submitted parking and mobility study for the proposed development).

Section 4 takes the commuter travel patterns for the area and proposes year-of-opening modal splits for the proposed development, plus target modal splits for year-of-opening plus 10 years.

Section 5 details the objectives of the Travel Plan Strategy and what measures will be implemented to facilitate the achievement of these objectives.

Section 6 details the central role of the Travel Plan Coordinator in the attainment of the objectives as set out within this document.

Section 7 Summary & Conclusion

2 GUIDANCE & POLICY DOCUMENTS

2.1 Regional Policy

Planning Policy Wales

Planning applications for developments, including changes of use, falling into the categories identified in TAN 18: Transport must be accompanied by a Transport Assessment. In addition, in areas where the transport network is particularly sensitive, planning authorities should consider requiring Transport Assessments for developments which fall outside of the thresholds set out in TAN 18. Transport Assessments can be required for any proposed development if the planning authority considers that there is a justification or specific need. Transport Assessments provide the basis for negotiation on scheme details, including the level of parking, and measures to improve walking, cycling, and public transport access, as well as measures to limit or reduce levels of air and noise pollution. They should cover the transport impacts during the construction phase of the development, as well as when built and in use. Transport Assessments also provide an important basis for the preparation of Travel Plans. Further guidance on Transport Assessments and Travel Plans is contained in TAN 18.

Technical Advice Note 18: Transport

Travel Plans

A travel plan may already be in operation by the occupiers at a site where there are proposals to extend or redevelop. The existing travel plan should therefore be integrated into the TA process where significant additional trips are likely or significant effects on the surrounding transport networks could occur. The existing travel plan would therefore contribute to the baseline assessment.

Developers may voluntarily submit a travel plan with a planning application, for example to illustrate existing promotion of sustainable travel activity at the site. However, in order to determine the necessity and effectiveness of the travel plan, it is preferable that a TA is undertaken and the travel plan developed as a component of the TIS. The weight to be attached to a travel plan when determining a planning application will depend upon the extent to which it (or parts of it) can be secured through a planning condition or obligation and the extent to which it affects the acceptability of the development proposed. Development that is unacceptable should never be permitted because of the existence of a travel plan if the implementation of that plan cannot be enforced.

Travel plans not linked to planning applications remain an important tool to raise the awareness of the impacts of travel decisions. The Welsh Assembly Government wishes to promote the widespread adoption of travel plans by businesses, schools, hospitals, tourist attractions and other significant travel-generating uses. In order to demonstrate the benefits to sustainable transport that can be achieved by the adoption of travel plans, local authorities should consider producing their own plans. Travel plans should relate to targets for the reduction of road traffic and the promotion of walking, cycling and public transport contained in the local RTP.

Travel plans may be prepared, individually or jointly, by the owners and operators of existing or proposed developments. Joint travel plans can be part of a TIS, and both travel plans and TISs should set out proposals for the delivery of more sustainable travel patterns.

2.2 Local Policy

Newport Local Development Plan

SP15 Integrated Transport

Integrated transport will be pursued in line with the national and regional transport strategies. Such transport will comprise:

- i) a co-ordinated pedestrian network, including schemes such as “safe routes in communities”;
- ii) implementation of the cycling strategy;
- iii) innovative forms of public transport such as bus priority, safeguarding and enhancement of rail routes and identification of new stations; iv) designation of transport interchanges for park and ride, park and share, and road to rail freight centres;
- iv) a central area parking strategy;
- v) facilities for public transport, walking and cycling in major new development;
- vi) interchange between bus, bicycle and car to enable sustainable use of the countryside. Significant development proposals shall be accompanied by **Travel Plans**.

The following is extracted from Planning Policy Wales (11th Edition, February 2021):

'4.1.56 Planning applications for developments, including changes of use, falling into the categories identified in TAN 18: Transport²⁷ must be accompanied by a Transport Assessment. In addition, in areas where the transport network is particularly sensitive, planning authorities should consider requiring Transport Assessments for developments which fall outside of the thresholds set out in TAN 18. Transport Assessments can be required for any proposed development if the planning authority considers that there is a justification or specific need. Transport Assessments provide the basis for negotiation on scheme details, including the level of parking, and measures to improve walking, cycling, and public transport access, as well as measures to limit or reduce levels of air and noise pollution. They should cover the transport impacts during the construction phase of the development, as well as when built and in use. Transport Assessments also provide an important basis for the preparation of Travel Plans. Further guidance on Transport Assessments and Travel Plans is contained in TAN 18. and Technical '

2.3 Reference Material

Making Travel Plans Work (Department for Transport, UK, 2007)

UK document providing a framework for Travel Plans, detailing the content that should be provided within the Travel Plan. The structure advocated by this document is incorporated within this report.

'Making travel plans work – Lessons of U.K. case studies' by Department of Transport (U.K.), 2002.

This report is based on the experience and findings of several large employers e.g., hospitals, councils, large companies and third level educational facilities in the U.K. The guide was published for employers who want to reduce congestion around their respective sites, improve travel options for their staff and reduce costs using a travel plan. The main findings of the report are as follows:

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Travel Plan

- It found that parking restrictions through a parking permit scheme can reduce staff car use;
- Financial incentives such as subsidies on public transport tickets have been found to work better in combination with parking restrictions.

The initiatives would need the full support of the management of the company and a staff member would need to be appointed to form a Travel Plan. Local recruitment is found to be useful when reducing travel distances.

2.4 The Travel Plan Pyramid

A Travel Plan outlines a set of measures and operating procedures that are tailored to meet the demands of individual circumstances of different locations, but with the common goal of minimising the impacts of travel and transport activity. A variety of companies, organisations and institutions adopt Travel Plans to manage the transport needs of commuters by raising awareness, promoting alternatives, facilitating change, and implementing a system of continuous management and review.

A Travel Plan outlines a package of measures and initiatives put in place by an organisation to encourage more sustainable modes of transport amongst its staff and visitors.

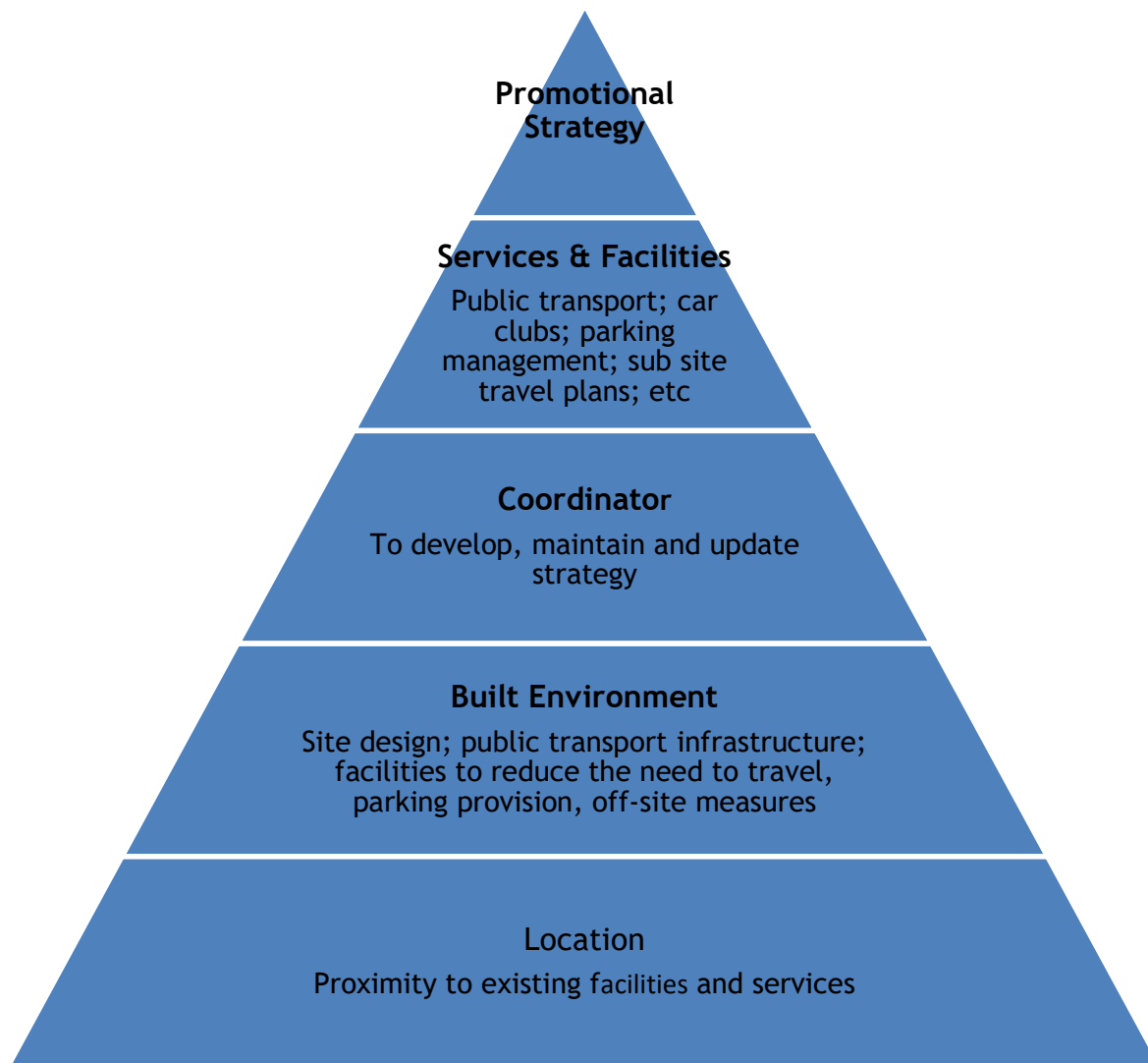


Figure 2.1 – The Travel Plan Pyramid (Source: ‘Making Travel Plans Work’ Dept of Transport UK (2007))

The Travel Plan Pyramid helps demonstrate how successful plans are built on the firm foundations of a good location and site design. A Plan should also combine hard measures – such as new bus stops and cycle ways and soft measures – such as discounts on season tickets and help with individual journey planning. All measures should be integrated into the design, marketing, and occupation of the site. In addition, parking restraint is often crucial to the success of the plan in reducing car use.

To minimise the impacts of the development and to encourage sustainable modes of transport a Travel Plan sets out the following actions to achieve this:

- Introduction of appropriate parking management
- Optimise links with public transport
- Provide and enhance cyclist and pedestrian facilities
- Encourage modes of transport other single car trips

For the development, the primary purpose of the Travel Plan is to review current levels of transport accessibility and suggest measures that reduce the potential of continued reliance on private car use as the main mode of transport to and from the site.

The following five key concepts that are central to a good Travel Plan:

- Location - Staff need to be within easy reach of shops and services – so that walking or cycling becomes the natural choice
- Built Environment - Low density developments are hard work to get round by bike and foot. Encouraging compact development that is walking and cycling friendly, with low parking allowances, is crucial in encouraging sustainable travel choices.
- Travel Plan Coordinator - Successful travel plans need people. The coordinator plays a crucial role in developing the plan and working with staff and management to ensure the plan meets their needs for access and evolves over time
- Services and facilities - Good public transport and a car club can help reduce the need for on-site parking. Other measures, such as broadband internet access can reduce the need to travel off site.
- Promotional strategy - Welcome packs, public transport discounts and cycling incentives can all help introduce the travel plan to staff and build enthusiasm.

This report will demonstrate the central role that will be undertaken by the Travel Plan Coordinator in setting targets, updating the Travel Plan, monitoring use of car club spaces and maximising the circulation of promotional material among staff.

3 EXISTING SITUATION

3.1 Introduction

A summary of the sustainable transport option, public transport network, local highway network and highway safety record related to the site is provided below.

3.2 Site Description and Location

The application site is situated to the south of the M4 Motorway, southeast of junction 29. The proposed development is located at National Grid Reference (NGR) ST 28267 84090 (Easting 328267, Northing 328267, 184090) at Dyffryn Lane, Imperial Park, Coedkernew, Newport, Wales NP10 8BE.

The site is a brownfield site with existing building with a developable area of approximately 78,800 sq. m.

The site is bound to the south by the Dyffryn Lane, to the west by Church Lane, to the north by industrial units and to the east by Celtic Way.

The site is currently accessed via a roundabout off Celtic Way and Dyffryn Lane.

The Proposed Development will be accessed using the existing access road via Celtic Way or Church Lane



Figure 3.1 – Aerial View of the existing development site (approximate site boundary edged yellow)

3.2.1 Celtic Way

Celtic Way is a high-quality road measuring c.7m on approach to the development site.

No footpaths or cycle paths were noted locally.

There is a posted speed limit of 30mph on approach to the development site.



Figure 3.2 – Celtic Way

3.2.2 A48

The A48 is a high-quality dual carriageway measuring c.20m wide including central median. It is subject to a speed limit of 40 mph on its approach to Church Lane and Celtic Way.

There is a posted speed limit of 40mph on approach to the Development site.

A footpath is located on both sides of the road with limited crossing points.



Figure 3.3 – A48

3.2.3 M4

Access to/from the development will be provided via Junction 29 of the M4 Motorway. The M4 motorway runs from west London to southwest Wales.

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The M4 provides excellent access to the strategic road network, providing direct access to locations along the M4 corridor, leading to access to the M5 and other road networks, therefore allowing access to Cardiff, Newport, Bristol, Birmingham, Swindon, Reading and London.

The southern arm of the grade separated runabout at Junction 34 of the M4 provides direct access to the development site.

3.3 Pedestrian and Cycling Accessibility

3.3.1 Introduction

Encouraging more people to walk and cycle is increasingly being a vital part of any Local Highways Authorities (LHA) to tackle congestion, improve air quality, promote physical activity, and improve accessibility. A summary of locally pedestrian and cycle infrastructure is outlined below.

3.3.2 Pedestrian Accessibility

Given the location of the development and local catchment there is limited pedestrian permeability adjacent to the development.

Accordingly, the 15-min walk distance provides limited walking accessibility but does include residential areas such as those located off Pencarn Way.

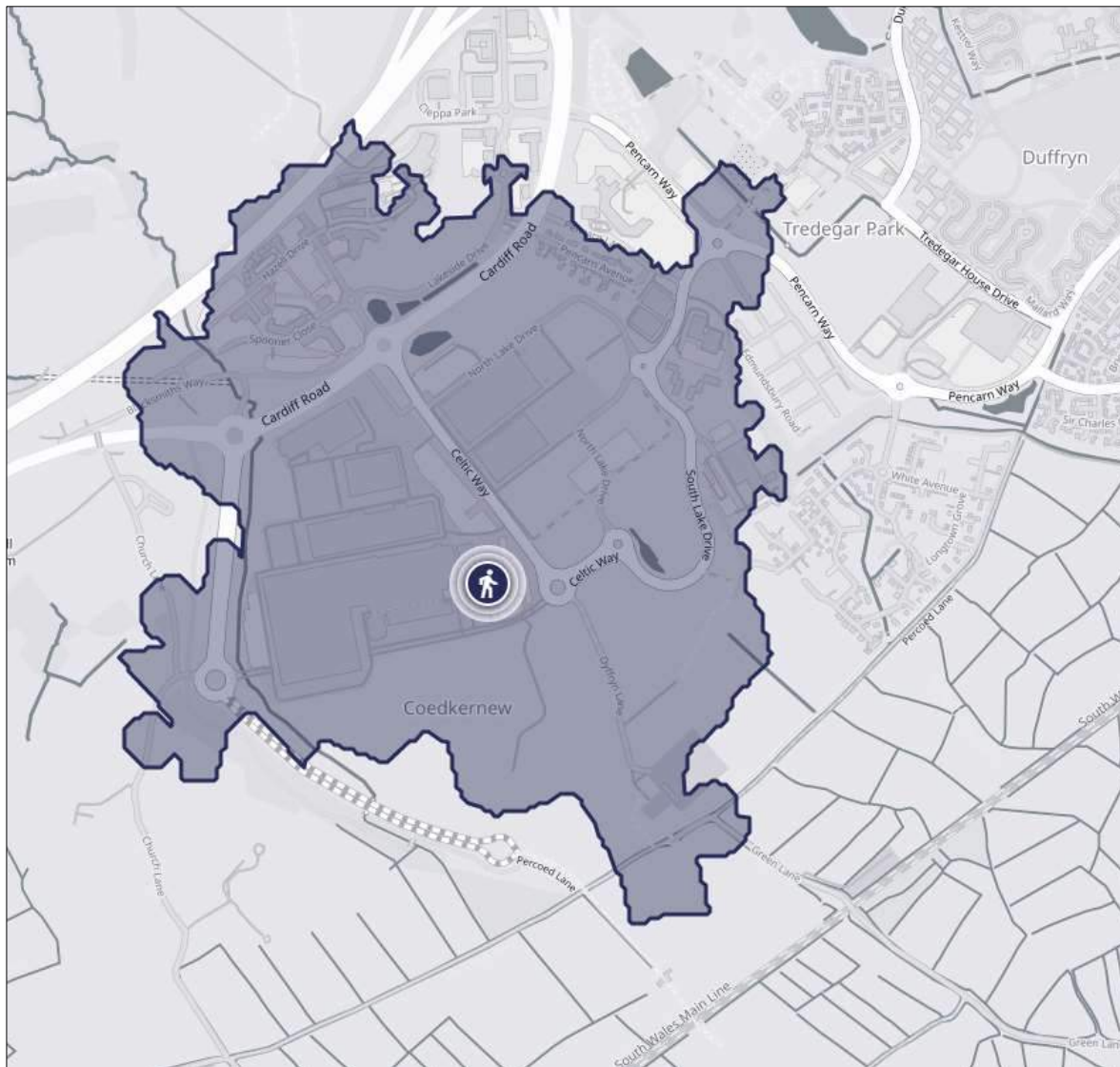


Figure 3.4 Pedestrian Accessibility - 15 Min Walk Time (Source: travelttime.com)

3.3.3 Cycling Accessibility

The local cycle network is illustrated in the figure below.

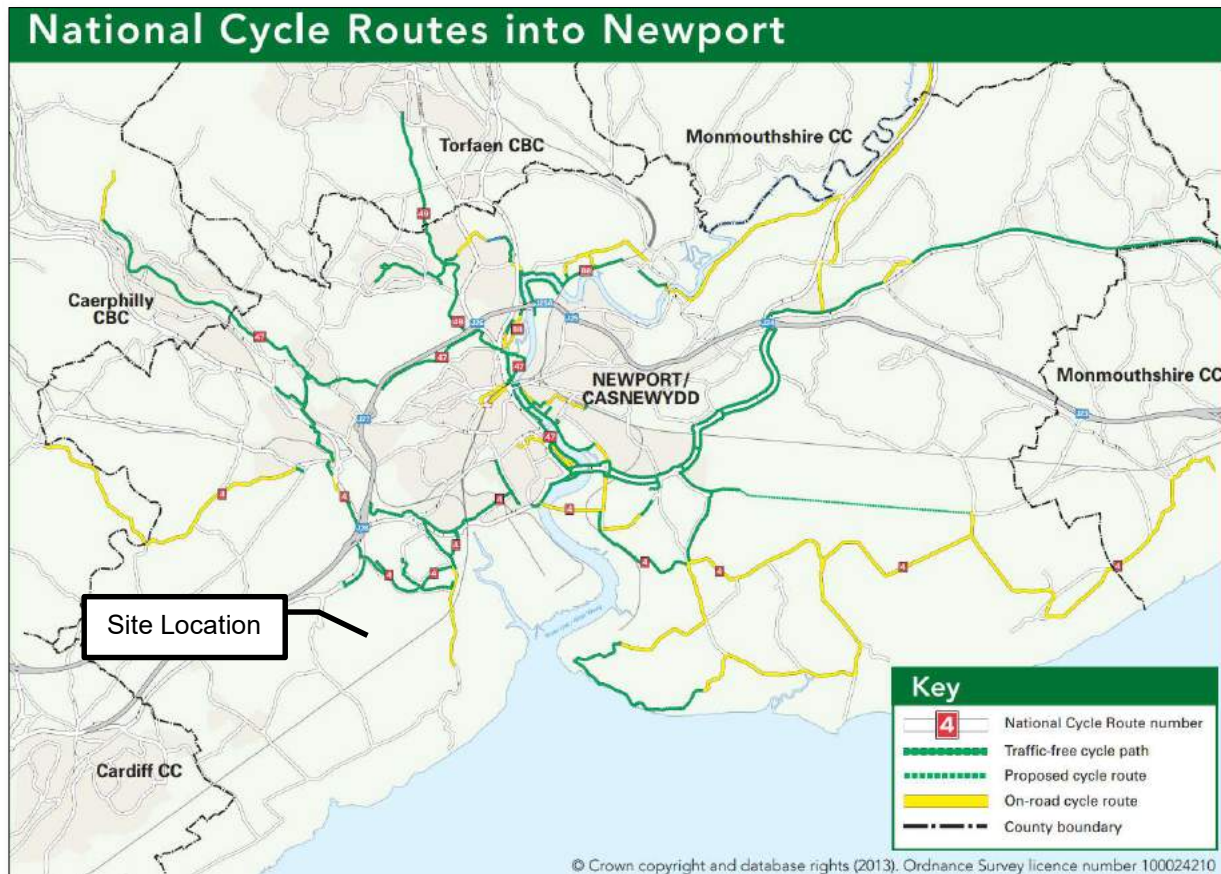


Figure 3.5 Local cycle network

There is no dedicated local cycle infrastructure. All trips undertaken by bike will be on road sharing road space with general traffic. Areas accessible by bike included:

1. Wales And West Utilities Spooner Close 4 min
2. Holiday Inn Express Lakeside Drive, Coedkernew 5 min
3. Waterloo Hotel 113 Alexandra Road 16 min
4. Best Western St Mellons Hotel Castleton 18 min
5. Sytner Newport MINI The Old Town Dock 20 min
6. Opal 1 Newport Endeavour House 21 min
7. Newport 22 min
8. O2 Shop Newport 169 Commercial Street 22 min
9. Newport Central Library John Frost Square 22 min
10. Blue Banana Newport
11. Commercial St 22 min
12. Newport Market Bus Station 23 min
13. Newport Market Upper Dock St 23 min
14. Newport Railway Station (NWP) High St 23 min
15. Newport Castle 24 min
16. Wales 24 min
17. Neon 25 min
18. Newport Stadium Spytty Rd. 26 min

19. St John Wales Newport Training Centre Lyne Road 27mins

This is illustrated in the figure below.

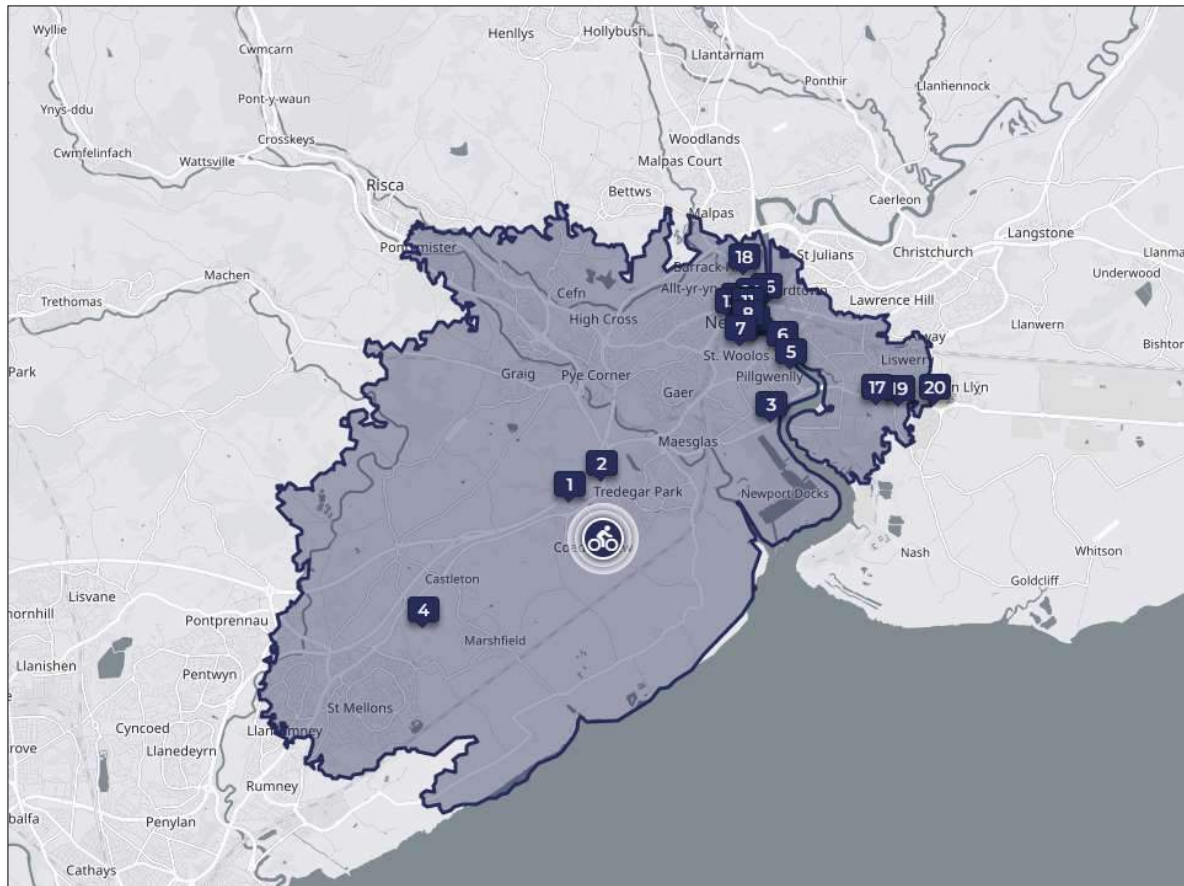


Figure 3.6 Cycling Accessibility - 30 Min Cycle Time (Source: travelttime.com)

3.3.4 Bus Services

The location of the proposed development is well situated where it benefits from existing bus services as shown in the figure below.

These bus stops are located within Walk 948 m/12 minutes walking distance from the site boundary.

A summary of the available bus services and routes from the bus stops closest to the site entrance are set out in the table below.

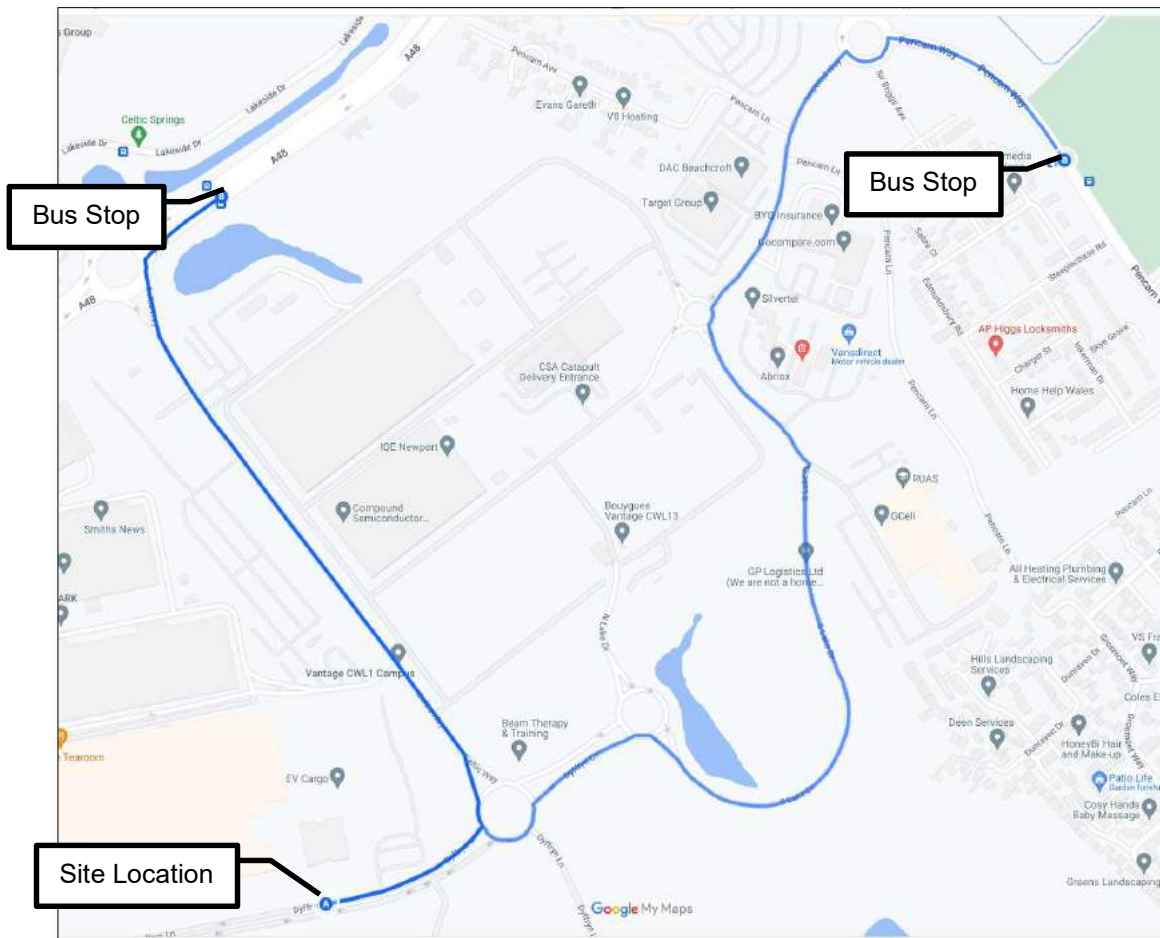


Figure 3.7 – Location of bus stops within the proximity of the proposed development

Service	Stops	Route	Typical Weekday Services & Frequency		
			First Bus	Last Bus	Peak Frequency
30	Nwpdj dj/ nwpdj dm	Cardiff to Newport	07:15	20:15	30 minutes headway
		Newport to Cardiff	06:30	20:25	30 minutes headway
35	Nwpapmj/ nwpapmg	Friars Walk at Friars Walk 10 - Friars Walk at Friars Walk 10	07:45	18:45	60 minutes headway

36	Nwpapmj/ nwpapmg	Friars Walk at Friars Walk 10 - Friars Walk at Friars Walk 10	07:15	18:13	60 minutes headway
X15	Nwpapmj/ nwpapmg	Brynmawr to Upper Dock Street	05:35	21:10	60 minutes headway
		Upper Dock Street to Brynmawr	06:30	22:40	60 minutes headway

Table 3.1 Bus timetable for bus stops near the site entrance

The route from the bus stop to the development has a proportion with no footpath available. The above route is shown for illustrative purposes only.

3.3.5 Summary

In summary, the existing site benefits from limited levels of existing bus/services and walking/cycling infrastructure which will mean that initially, and pending investment in local public transport, the development will likely be car dependent.

3.4 Accident Analysis

An analysis of the injury records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area is recommended by the Guidance on Transport Assessment. Accident data has been obtained from the CrashMap website for the five-year period between 2019 and 2021 and is depicted in the figure below.

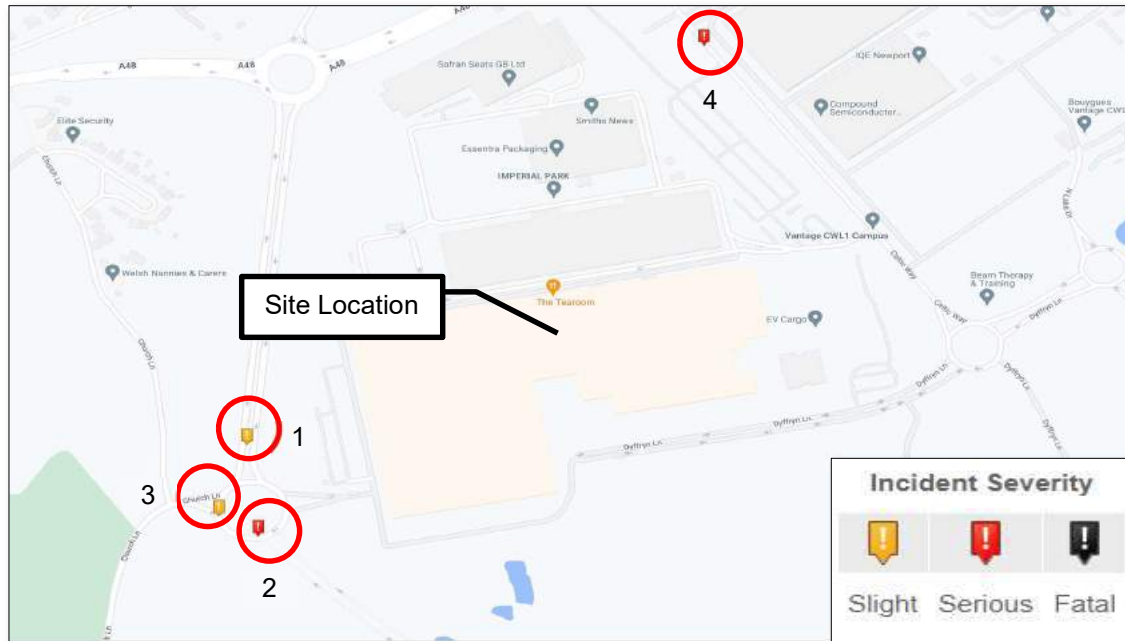


Figure 3.8 - Accident data for the five-year period between 2015 and 2020 within the proximity of the proposed development

It can be seen from the figure above that 4No. accidents were recorded on the approach roads to the development, as summarised below:

1. Incident Details
Date: 25/04/2019
Severity: Serious
Number of Vehicles Involved: 2
Number of Casualties Involved: 1Severity: Serious
Number of Vehicles Involved: 2
Number of Casualties Involved: 1
2. Incident Details
Date: 24/01/2021
Severity: Serious
Number of Vehicles Involved: 2
Number of Casualties Involved: 4
3. Incident Details
Date: 11/09/2020
Severity: Slight
Number of Vehicles Involved: 1
Number of Casualties Involved: 1
4. Incident Details
Date: 13/01/2017
Severity: Slight
Number of Vehicles Involved: 1
Number of Casualties Involved: 1

Although there are number of accidents of the surrounding local highway networks, it is unlikely that the proposed development will have material impact on the safe operation of the local highway network.

3.5 Existing Commuter Travel Patterns

The figure below illustrates the DataShine commuter data for locations adjacent to the development site. It is assumed that these travel patterns will be replicated for future employees of the development.

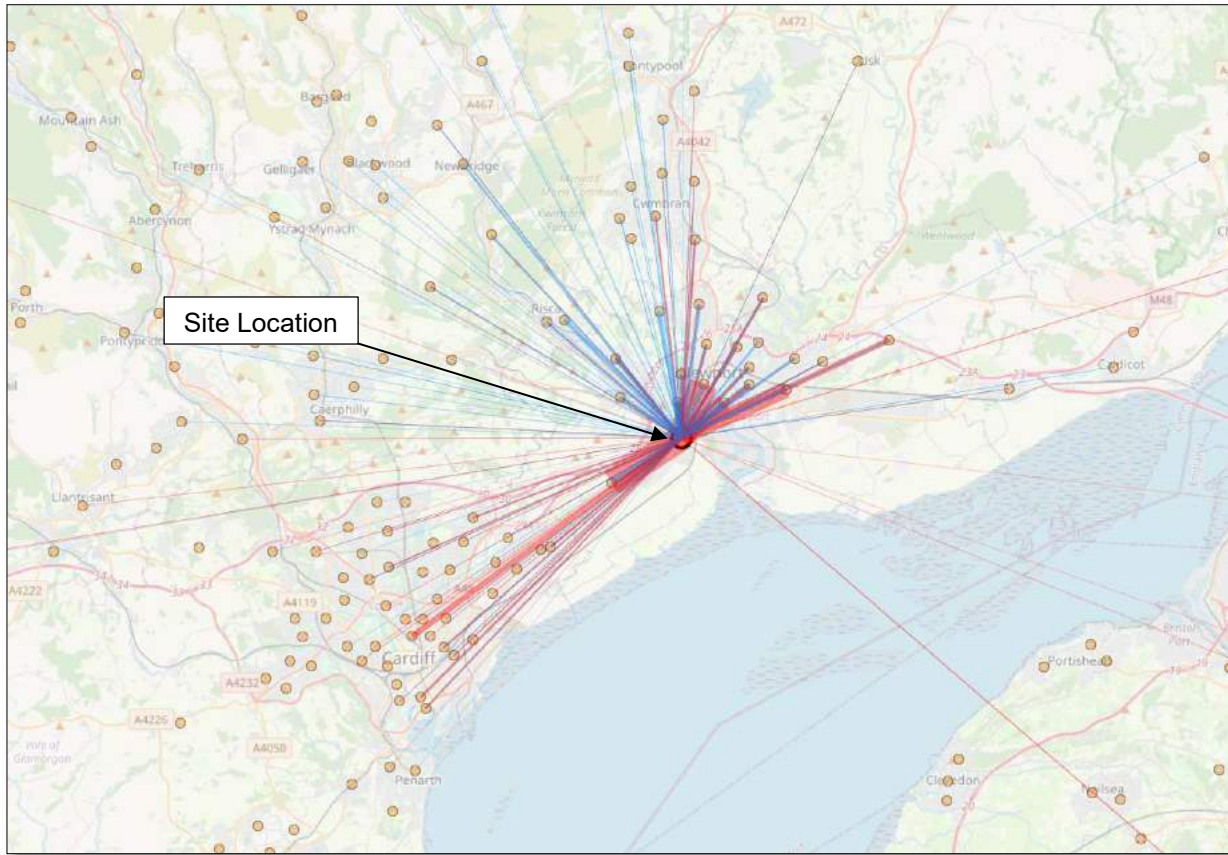


Figure 3.10 Study Area (Source: DataShine Commute)

The modal breakdown is illustrated in the figure below.

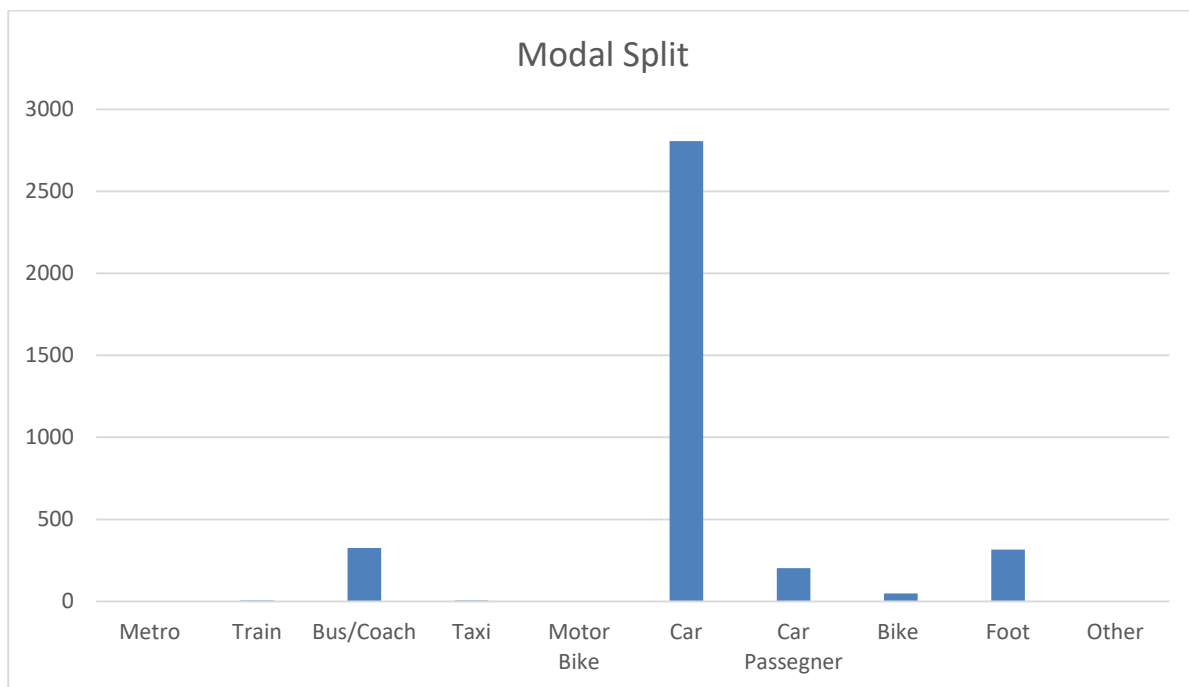


Figure 3.10- Transport Mode Profile

The Office for National Statistics (ONS) have released the Travel to Workflows based on the 2011 census. These are a giant origin-destination matrix of where people commute to work. There are various tables that have been released. Figure 3.10 shows Method of Travel to Work and visualised the flows, for the study area. The map uses OpenLayers, with an OpenStreetMap background for context. Blue lines represent flows coming into a selected place, that people work in. Red lines show flows out from the selected location, to work elsewhere.

This information is tabulated below.

Mode	Number	Percentage
Metro	0	0.00%
Train	6	0.16%
Bus/Coach	325	8.76%
Taxi	6	0.16%
Motor Bike	0	0.00%
Car	2805	75.63%
Car Passengers	203	5.47%
Bike	48	1.29%
Foot	316	8.52%
Other	0	0.00%

Table 3.2 Existing Modal Share

3.6 Summary

In summary, the existing site benefits from limited levels of existing bus services and walking/cycling infrastructure which will mean that initially, and pending investment in local public transport, the development will likely be car dependent.

4 PROPOSED DEVELOPMENT

4.1 Introduction

It is intended to re-purpose Quinn Radiator factory into a data centre campus. The new scheme will be designed to sit well within its context and to maximise the operational and energy efficiency. The expansion project will be developed to maximise IT capacity for the new data centre development whilst ensuring the campus can be extended in a way that ensures safe, uninterrupted operation of the existing adjacent data centre facility which is currently under construction on site.

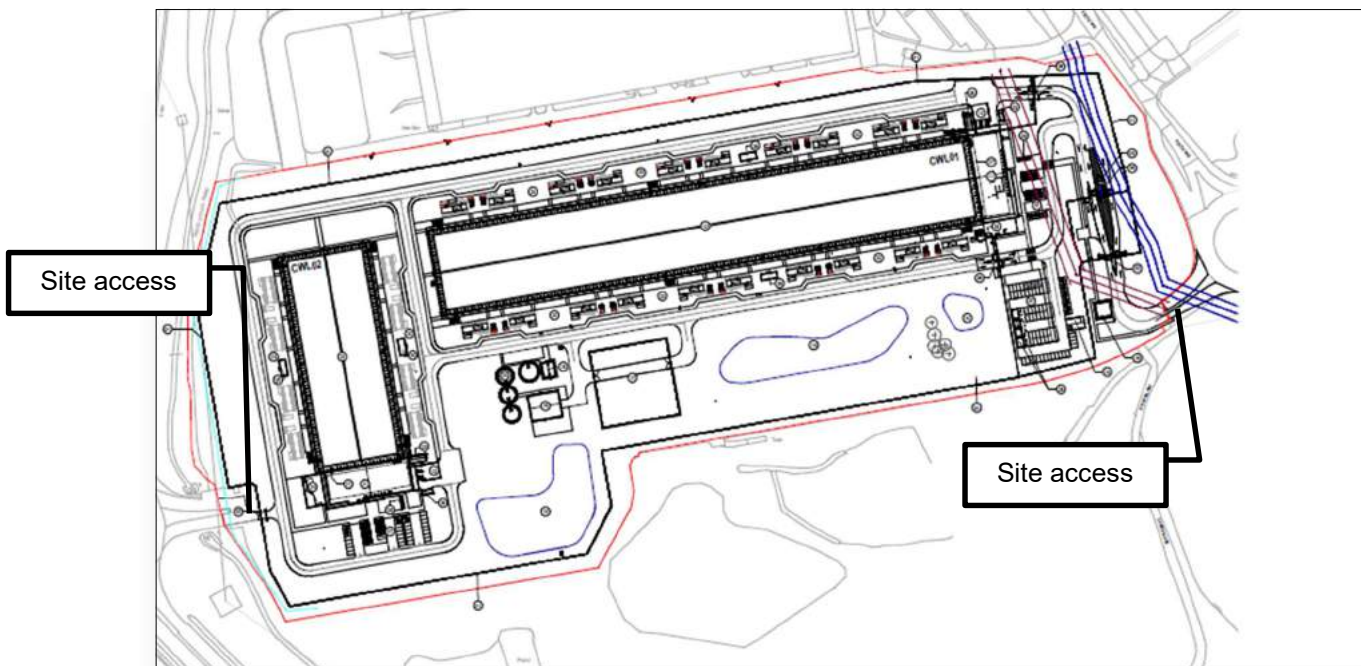


Figure 4.1 - Proposed Layout.

4.2 Access Arrangement

It is proposed that vehicles enter and exit the site via the existing accesses on via Dyffryn Lane, Church Lane and Celtic Way. Vehicle entry will be controlled by a new, double line of security gates forming an 'air lock' holding area in which security checks can take place.

Large vehicles will visit site infrequently and will be directed to the relevant loading positions under supervision.

Vehicle swept path analysis using maximum legal permitted articulated truck on UK roads and 7.5 tonne vehicle is provided in appendix C. Normal procedure will be for large vehicles within the compound to exit via the way they came in.

4.3 Parking Arrangement

4.3.1 Standards

The development is located adjacent to Parking Zone 5, as illustrated in mapping provided by Supplementary Planning Guidance Newport City Council.

The parking requirement for B3-B7 lands use in Zone 5 is illustrated below.

Type of development Operational Non-operational	Type of development Operational Non-operational	Type of development Operational Non-operational
Small industry (< 100 m2)	1 van space	1 space
Small industry (< 235 m2)	1 van space	2 spaces
Industry	See Note 5	5 1 space per 80 m2
Highly technical industry	See Note 5	1 space per 20 m2
Industrial warehouses	See Note 5	1 space per 140 m2
Storage warehouses	1 space per 500 m2	1 space per 500 m2 Nil
Distribution centres	35% of GFA	1 space per 80 m2
Distribution centres	25% of GFA	1 space per 80 m2

Table 4.1 Car Parking Standards

Based on the Supplementary Planning Guidance published Newport City Council a total of 233 car parking spaces is required at rate of 1 per 140 sq. m based on the Industrial warehouses land use.

It is argued that this rate of car parking provision is unsustainable and will only encourage single car occupancy trips. Reducing the availability of parking is closely linked with reducing vehicle trips, so many of the programs recommended for reducing parking demand are the same ones recommended for trip reduction through Transportation Demand Management. In this instance, TDM is being led by the availability of car parking spaces on site. The availability of spaces can be reduced or repurposed i.e., allocating traditional car parking spaces to other uses such as bike parking, pool car spaces only, ride share spaces only, etc.

Parking restraint measures include pricing and supply controls which make car use more expensive and less convenient, thereby increasing the attractiveness of non-car modes. Parking has a significant influence on people's travel behaviour as has been demonstrated over many years in in many cities across the UK.

In this entrance, transport demand management through parking restraint can is targeted at this location locations where accessibility by alternative modes is high thereby encouraging mode shift to public transport, walking and cycling.

The quantum of car parking is based on the expected number of employees and visitors that will access the site. Once completed, it is estimated that there would be Up to 120 staff across 2 buildings at busiest period giving a peak parking demand of 120 car parking spaces.

4.3.2 EV Charing Spaces

Planning Policy Wales 10 (PPW 10) states that the policy on ultra-low emission vehicles, which requires new non-residential developments to have charging points in at least 10% of the parking spaces available.

Based on 121 car parking spaces, A total of 12 EV charring spaces will be provided. All spaces will have the ability to be upgraded in the future.

4.3.3 Cycle Parking

Cycle parking will be provided in accordance with Table 1 of Sustainable Travel Supplementary Planning Guidance July 2020. A summary of the parking requirements is outlined below.

Development Type	Long Stay Requirement (secure and ideally covered)	Short Stay Requirement (obvious, easily accessed, and close to destination)
Business offices	1 space per 4 staff	1 space per 20 staff

Table 1 Cycle Parking Standards

A minimum of 27 cycle parking spaces are required for the site as illustrated below.

Development Type	Long Stay Requirement	Short Stay Requirement
Business offices	22.5	4.5

Table 2 Cycle Parking Provision

Given the reduction in car parking spaces, are suggested in the development plan standards, it is proposed to provide 40 spaces which would help encourage more sustainable commute options to the development.

5 HEALTHY STREETS ASSESSMENT

5.1 Introduction

As part of the pre planning process, the LHA requested that the existing active travel infrastructure surrounding the site be assessed and where there are deficiencies corrective measures applied.

The Health Street Check for Designers was used to assess the existing active travel infrastructure and guide the designers to design for local needs.

The Health Street Check for Designers was produced by the Mayor Of London for London, but the principles are applicable throughout the UK.

The Healthy Streets Approach aims to put people and their health at the centre of decisions about how we design, manage, and use public spaces. It aims to make streets healthy, safe, and welcoming for everyone. The Approach is based on the Healthy Streets Indicators which focus on the experience of people using streets.

5.2 How to interpret the results

The Healthy Streets Check score does not show whether a street is healthy or not but indicates the strengths and weaknesses of a scheme/street.

It is not possible to achieve an overall score of 100%. To score well against some metrics, compromise will be needed with other metrics. This reflects the compromises inherent in any street. Should the assessment reveal one or more metrics scoring '0' the design should be reviewed to consider whether the '0' score can be improved. In some cases, this will not be possible, and if so, the reasons should be recorded in the spreadsheet.

The Healthy Streets Check is not a scientific assessment of how healthy a street is. It is not the case that a street with a 10% increase in Healthy Streets Check score confers 10% greater health benefit to people who use it. It is also not the case that a 10% increase in Healthy Streets Check score will deliver a 10% uplift in active travel.

The metrics included in the Healthy Streets Check are the best available quantifiable and evidence-based standards that are within the gift of the traffic engineer or urban designer to influence through the design of the street. The numbers must therefore not be given any undue weight in the interpretation of the results.

The objective is to optimise the score for a given project, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated, where possible. In a complex street environment, a balanced approach must be taken; freeing up space for cycling or extending crossing times for pedestrians may produce delays for buses.

Likewise removing a pinch point for cycles or buses may mean removing an island refuge for pedestrians or from the reverse perspective installing an island refuge may introduce a pinch point for buses and cycles. To be transparent and promote the best possible outcome in the round, recognising the difficult decisions designers must weigh up, the Check aims to identify and highlight these decisions so that stakeholders are informed as to what compromises have been made.

5.3 Defining the study area

The definition of the study area is based on connecting the proposed development to local active travel infrastructure. In this case, area is defined by the route likely taken to the nearest footpath/cycle track from the development to local amenities.

There are two bus stops located in proximity to the development:

1. Located on the A48 c. 600m from site.

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2. Located on Duffryn Way c. 1000m from site.

The study area was defined as the following:

- The route from the development to the bus stop located on A48

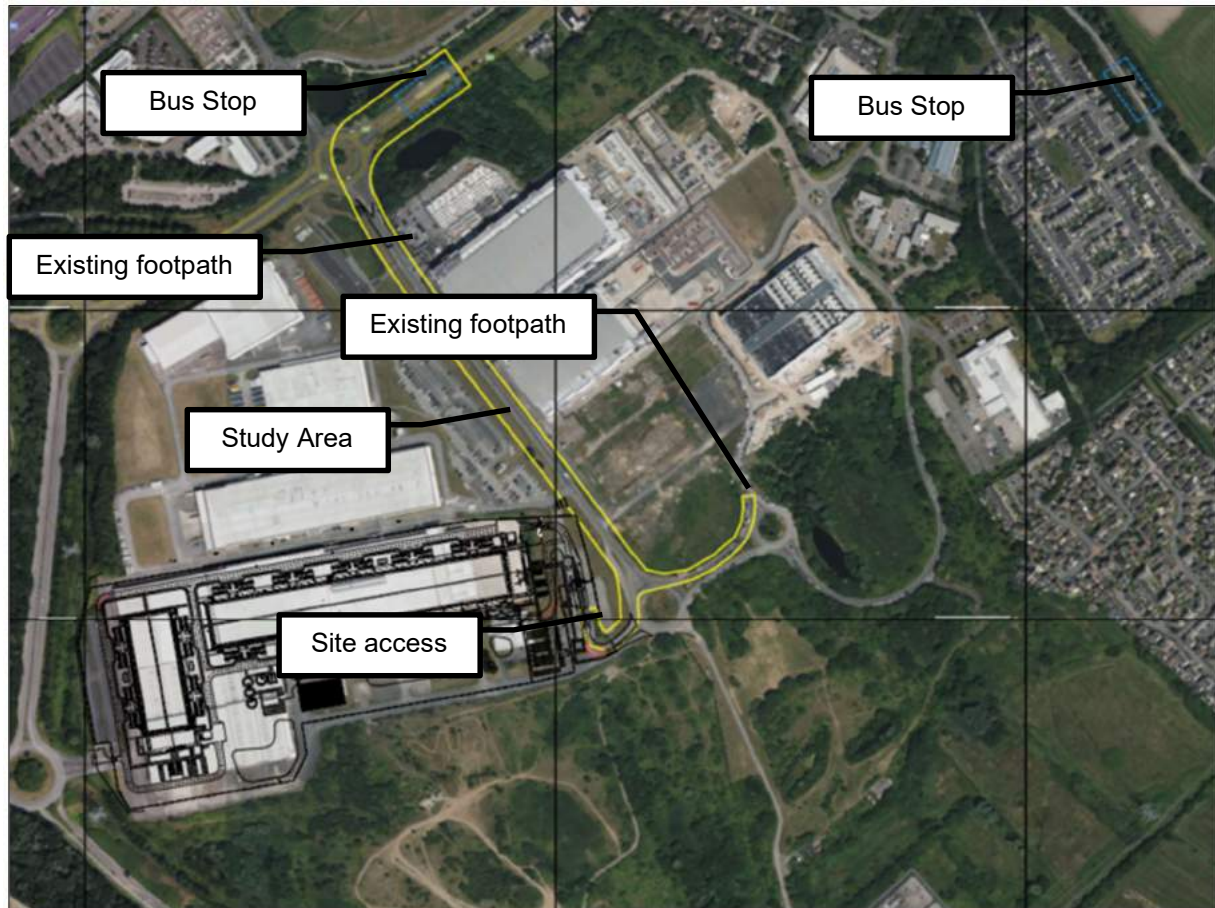


Figure 5.1 Study Area

5.4 Collecting the data

A site visit was carried out in October 2023 to review existing local active travel infrastructure. Samples of local active travel infrastructure are illustrated below.



Figure 5.2 Celtic Way looking north



Figure 5.3 Access to NHS facility



Figure 5.4 Possible footpath reservation



Figure 5.5 Pedestrian access to NHS facility



Figure 5.6 Access to Vantage DC



Figure 5.7 Existing Footpath



Figure 5.8 Crossing Point



Figure 5.9 Bus Stop on A48



Figure 5.8 Existing footpaths at Vantage CWL13

5.5 Mitigation Measures and Results

A summary of the health streets assessment is outlined below.

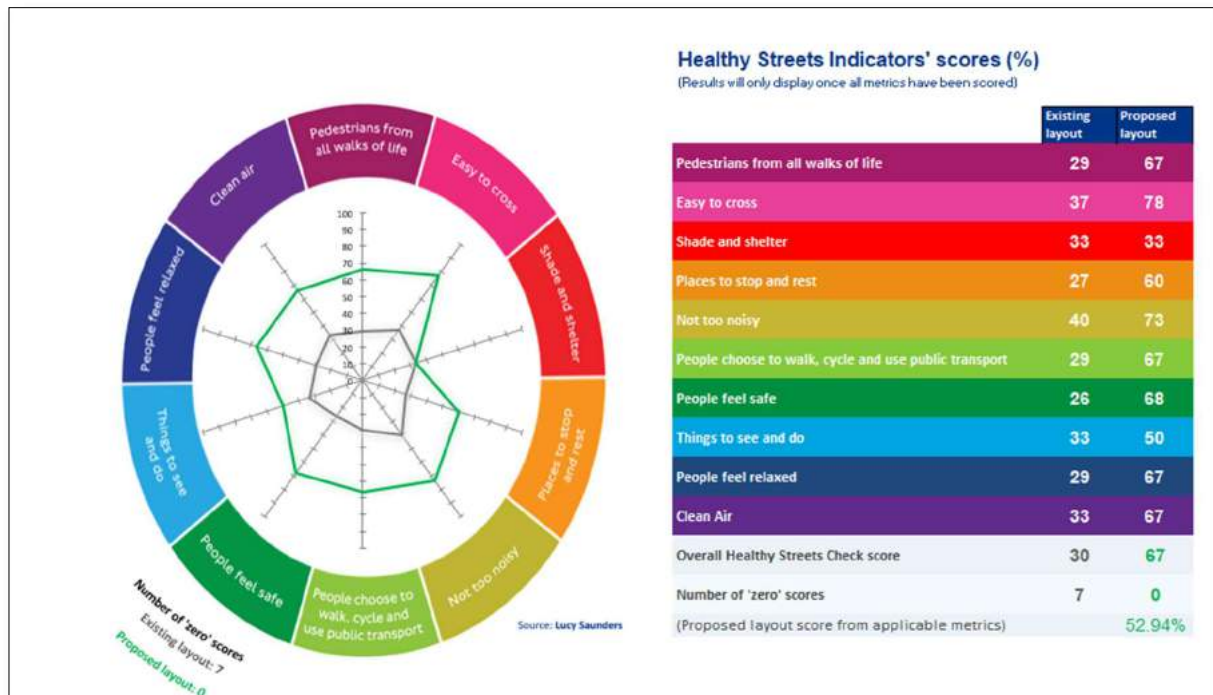


Figure 5.3 Health Street Indicators Score

The Health Street Indicators Score rises from 30% to 67% based on the following:

- A new footpath to be built from site access to the existing footpath on Celtic Way measuring c. 570m
- Uncontrolled crossing provided to all pedestrians to cross carriageway to/from bus stop towards site.

The contributions required to deliver the above will be negotiated with the LHA post planning.

6 PREDICTED POST-DEVELOPMENT TRAVEL PATTERNS

6.1 Introduction

The current modal share is illustrated in Table 3.2 Existing Modal Share.

Table 5.1 below indicates a target profile for the future staff at the proposed development both on the day of opening and five years thereafter:

Transport Mode Commuter Usage (%)	Commuter Usage (%) (Day-of-opening)	Commuter Usage (%) (+ 5 years)	Commuter Usage (%) (+ 10 years)
Metro	0.00%	0.00%	0.00%
Train	0.16%	0.58%	1.00%
Bus/Coach	8.76%	11.88%	15.00%
Taxi	0.16%	0.08%	0.00%
Motor Bike	0.00%	0.00%	0.00%
Car	75.63%	65.31%	55.00%
Car Passengers	5.47%	6.24%	7.00%
Bike	1.29%	3.15%	5.00%
Foot	8.52%	10.26%	12.00%
Other	0.00%	2.50%	5.00%
Total	100%	100%	100%

Table 5.1 – Modal Target

It is also assumed that, on the day of opening of the proposed development, the public transport, walking and cycling patterns of the staff will mirror the existing travel patterns in the local area.

It can be seen that targets for 5 and 10 years after the day of opening of the proposed development indicate commuting by private car decreasing from 75% to 65% and 55% respectively.

The following sections of the report will demonstrate how the setting of appropriate objectives and the appointment of a Travel Plan Coordinator to oversee their implementation will ensure that these targets are achieved.

7 OBJECTIVES OF TRAVEL PLAN STRATEGY

7.1 Introduction

A Travel Plan Framework is a tool that brings together site management issues relating to transport in a coordinated manner. This document puts in place the objectives of the mobility management strategy for the subject site and the specific measures designed to achieve these objectives.

While recognising that not all car trips can be eliminated, this strategy aims to provide sustainable transport choices for workers and visitors at the site, thus leading to a reduction in private car use for the trip to and from the workplace. Specific measures for achieving effective modal shift away from the private car will be detailed.

The aim of this strategy is thus to introduce measures which will maximise the chances that the modal split targets for year of opening and 10 years later at a minimum are met and ideally exceeded.

The objectives of the Travel Plan Strategy for the proposed development to meet the stated targets for the subject site are as follows:

- To manage the car parking resources in such a manner that generally discourages use of the private car for the journey to work and maximises the efficient use of the limited on-site spaces available (**Objective No. 1**);
- To encourage staff to use public transport by providing information on the services available as well as financial incentives to use public transport. New public transport schemes coming on stream will further aid the achievement of this objective (**Objective No. 2**);
- To encourage staff to cycle to work, if appropriate, by providing safe parking, appropriate showering facilities, financial subsidies, and general information on the health benefits of cycling (**Objective No. 3**);
- To encourage to walk to work if appropriate, by providing all necessary information on this mode of travel (**Objective No. 4**).

Table 5.1 'Modal Targets' assumes that those measures will be taken within 10 years of opening to reduce the modal split for car travel down to 55%, to increase public transport to 16%, and to increase the cycling/walking modal split marginally to 17%

A number of the proposals listed to achieve these modal splits are easy and inexpensive to implement. Other measures require initial co-operation and co-ordination both within and between organisations or require an initial investment where this outlay is greatly outweighed by the subsequent benefits both to commuters and the environment.

7.2 Objective No. 1 - Maximising the Efficient Use of Car Parking Facilities

7.2.1 Introduction

Given the limited availability of on-site car parking at the subject site (reducing from 233 spaces suggested in the development plan to 121 spaces provided), the following measures will help both to generally discourage use of the private car for the journey to work and to maximise the use made of the limited on-site spaces available:

7.2.2 Increasing Car Occupancy Rates

The day-of-opening modal splits, based on Statista Research Department, the average car and van occupancy in England amounted to roughly 1.6 in 2018. That year, the source rounded figures to the nearest decimal, making a comparison with previous years difficult. In 2017, there were 1.55 people in a car or van per journey. Between 2002 and 2017, figures oscillated between 1.59 and 1.55, with highest figures recorded for 2002 and 2008.

For the local area, the day-of-opening modal splits, based on 2011 Census information, indicate an occupancy rate of 1.05 persons per car. The 10-year modal split targets indicate an increased occupancy rate of 1.6 in line with national levels.

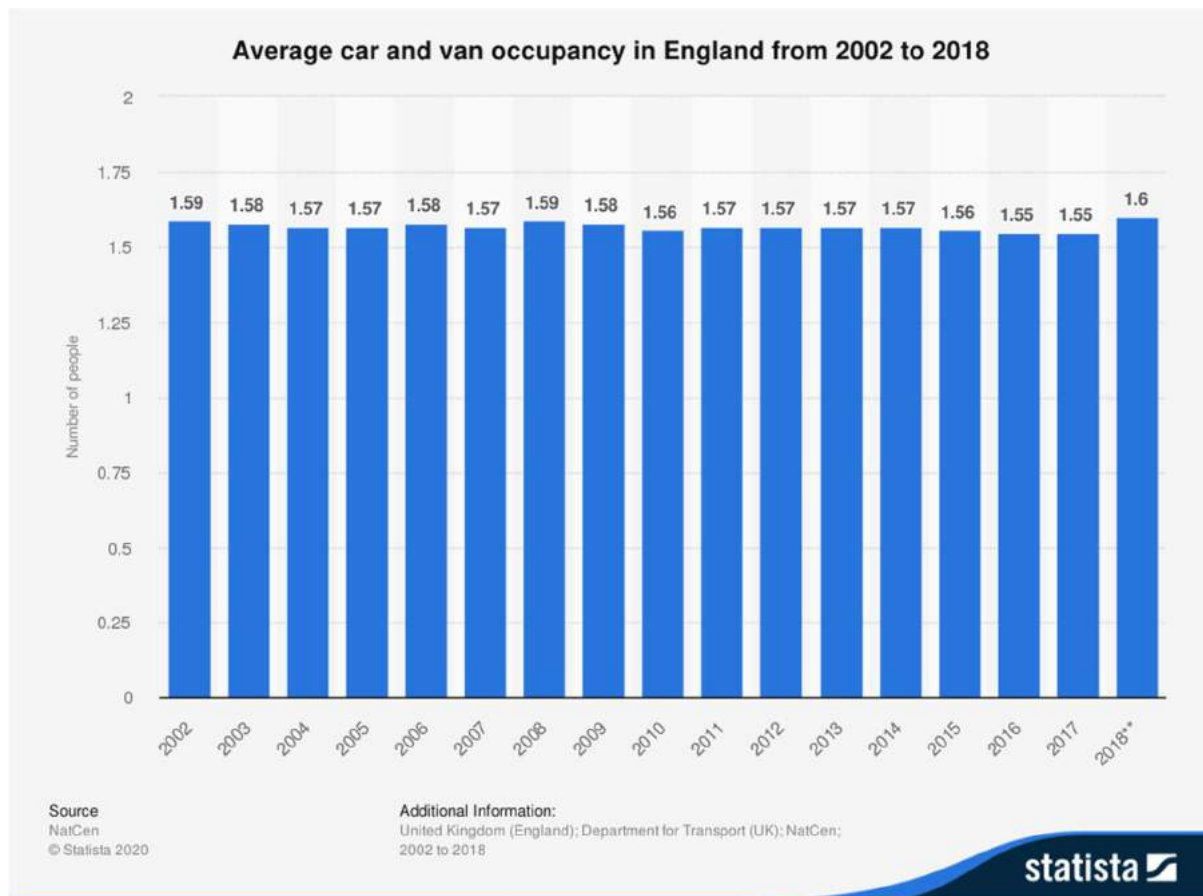


Figure 6.1 – Average Car/Van Occupancy Rates

The ‘Review of The UK Passenger Road Transport Network’ published by Government Office for Science suggest the following:

‘Car occupancy varies significantly for car trips of different purposes; average rates are around 2 people for school and holiday trips, between 1.6-1.7 for shopping and leisure trips and only 1.2 for commuting and business trips. The data indicate that people are more likely to share trips for leisure. These figures are indicative of barriers and other practical factors that limit sharing for commuting car trips.

Therefore, for the purpose of this report, the 10-year modal split targets are to increase the occupancy rate from 1.05 commuting and business trips to 1.6-1.7 in line with shopping and leisure trips and the overall average.

7.2.3 Car Club Usage

Rather than requiring access to a parking space to have a car available for commuting, an alternative and more sustainable approach is proposed involving the provision of dedicated car club spaces within the development to cater for the non-trip-to-work-related car demand of staff and visitors.

Car clubs provide vehicles (usually cars and vans) to members on a pay-as-you-drive basis. Clubs tend to be organised on a community basis with cars being located as close to a cluster of members as possible – members typically live within 10 minutes' walk from the nearest car station. A large city may operate several car stations as part of one scheme. Vehicles are usually owned by the company 'service provider', but in some cases are owned by members of the club.

Car clubs best match the needs of drivers who need to use a car or van on an occasional basis, but who don't want the expense and responsibility of owning a vehicle. Car clubs make most financial sense for:

- motorists who drive less than around 8,000 miles per year; t
- wo and three-car households who have non-essential use of a second or third car; and
- businesses that can use a car club vehicle to replace pool cars and/or staff's own vehicles for business trips.

While car clubs operate in both urban and rural areas, most service providers operate most of their fleet in highly populated urban areas.

There are six main Car club operators in the UK:

- City Car Club
- Zipcar
- Co-Wheels
- Hertz 24/7
- E-Car Club
- Easy Car Club
- HiyaCar

Once a member, vehicles can be booked by the hour (or half hour) either by telephone or on the Internet – depending on availability the notice required can be as little as a few minutes. Subject to the vehicle being available, the booking time is then confirmed by the call centre (if booking by phone), or by text and/or email (if booking using a mobile or the Internet) and the vehicle reserved.

In most cases, vehicles are then accessed from a car station using a smart 'proximity' card that, after identifying the member, automatically unlocks the vehicle and initiates the booking. The car or van is then started in the normal way using an ignition key usually kept inside the vehicle. The smart card is again used to lock the vehicle at the end of the booking when the vehicle automatically sends all the user and mileage information back to a central computer for billing.

Like mobile phone packages, each car club has its own set of tariffs, and to become a member of a car club usually requires a joining and/or annual fee and, in some cases, a returnable deposit.

Once a member, access to vehicles is paid for by the hour (or half hour) and/or by the mile. Hourly rates range from around £4 for a city car to £9 for a van or MPV. Mileage rates to cover fuel may apply. In some clubs, the first 30-60 miles are 'free' (i.e., only time is paid for).

Indicative Costs			
Service provider	Joining / annual fee*	Per-hour charge*	Per-mile charge*
<u>City Car Club</u>	£60 per year	From £4.95	23p/mile (EVs 5p/mile)
<u>Co-Wheels</u>	£25 one-off and £5 per month	From £3.75; Daily rate: £17.50	13p/mile (EVs 0p/mile)
<u>E-Car Club</u>	£50 per year	From £5.50	0p/mile
<u>ZipCar</u>	£50 per year	From £4.95	60 miles free, then 23p/mile
<u>Hertz 24/7</u>	Free	From £4.50	20 miles free, then 25p/mile

Table 6.1 – Indicative Costs

Evidence in the UK and mainland Europe clearly shows that, once established, car clubs reduce total car miles driven, with members walking, cycling, and using public transport more often, as well as travelling less. The research also shows that this reduction of car miles is a direct result of breaking the link between car use and car ownership – exactly the service that clubs provide.

In the UK, several studies show that former car owners increase their use of non-car transport modes by around 40% after joining a car club. Members who owned a car before joining see their mileage fall, by an average of around 25%, with some research showing a reduction of up to two-thirds. Evidence from Europe also shows car mileage reductions of 28% (Belgium) and 45% (Bremen, Germany). At least 30% of members in both these areas reported using trains and buses more, on average by 680 miles per year.

Car clubs also encourage a shift to newer, more fuel efficient (lower CO2 emissions) and better maintained vehicles. The use of newer cars also means lower non-carbon emissions such as NOx and particulates (responsible for local air pollution). A common scenario is for new members to give up a more polluting older vehicle when they join a car club. Figures from one UK car club reveal that 45% of the private cars replaced were more than 10 years old.

Car clubs also have the effect of reducing the number of cars on the road. Car club users typically give up owning a first or second car on joining; others defer purchasing one, preferring to use the car club vehicle instead. Although it is difficult to quantify the exact number of cars

taken off the road for each club, there is evidence that 72% of members of a car club with locations in Bristol and London have given up one or more of their privately owned vehicles or deferred the purchase of a vehicle. In general, UK studies suggest that each car club car typically replaces at least 6 private cars. Some research puts the number of vehicles replaced as high as 20. Whatever the exact figure, taken overall, it is estimated that by 2010 there will be 300,000 fewer cars on the road because of car club development.

The effect of reducing car mileage, increasing the use of non-car travel, reducing the average age of vehicles driven, and of removing some cars from the road is to significantly reduce overall environmental impacts. While these are difficult to quantify exactly for every club, European research estimates that car club members reduce their total travel CO2 emissions by 40% to 50%.

The demand for onsite car sharing will be monitored on an ongoing basis by the Travel Plan Coordinator, and spaces can be provided if demand requires it.

The provision of car club spaces will result in the elimination of the necessity to own a car (and the associated expense) where use of it will be relatively infrequent and in access to car transport for those using a car infrequently

7.2.4 Car Sharing

Car Sharing Schemes provide a matching service for all who live, work and travel in and around the borough as well as for longer journeys to London or other locations outside the county.

Individual schemes will match participants up with potential partners as a driver or passenger. Once matched, you can choose to car share as little or often as you like, with whomever you like. Visit the site now to find drivers and passengers online instantly for free. It's a great way to reduce the costs of fuel and parking, cut levels of congestion around towns and pollution, and reduce the stress of driving.

7.2.5 Electric Vehicles

It is proposed to provide 6 No. EV car parking spaces.

7.3 Objective No. 2 - Encouraging Greater Use of Public Transport for The Journey to Work

7.3.1 Introduction

The public transport modal split will increase from 8% to 16% is based on expected local improvements to the public transport access that will come on stream over the coming years, together with upgrades and increased efficiencies within the existing infrastructure as well as additional infrastructure indicated in by the South East Wales Transport Commission recommends major improvements for transport in the region including proposals is for a 'network of alternatives', providing a comprehensive and coordinated public transport alternative to the M4. The network is designed to give people and businesses new transport options that do not use the motorway – or indeed a car. '

7.3.2 Public Transport Information

It is vital that timetable information is available to staff to encourage maximum usage of the public transport system. Train, metro, and bus timetables should be posted on the notice board within the development and / or the web site to be set up by on-site management.

7.4 Objective No. 3 - Encouraging More Staff to Cycle to Work

Cycling will be a favoured transport option for a predicted 1% of staff at the proposed development on its day of opening. It is hoped to increase to 5% over the next 10 years.

It is reasonable to assume a slight increase in this modal share over values pertaining in the locality, within the first 10 years after the opening of the development given the provision of 40 No. parking spaces for bikes throughout the subject site.



Figure 6.2 Proposals to transform a stretch of the A48 between Newport and Cardiff by adding bus and cycle lanes. (Source: Welsh Government)

THE A48 between Newport and Cardiff is planned to be upgraded to include bus lanes and cycle paths in a bid to improve active travel options between the two major population centres.

The proposals form part of wider plans to reduce our region's reliance on the car and develop what the Southeast Wales Transport Commission called a "network of alternatives".

7.5 Objective No. 4 - Encouraging More Staff to Walk to Work

Walking will be a favoured transport option for a predicted 8% of staff at the proposed development on its day of opening, increasing to 12% then years thereafter (when combined with cycling).

This increase will be facilitated by linkage the proposed development to the Newport City Council Active Travel Plan . This Active Travel Plan provides a framework for Newport City Council to implement these goals in a transparent way and prioritise funds to schemes which support an increase in walking throughout the borough.

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By aligning the scheme to this strategy, the up take in walking to/from the development will increase as staff become aware of how accessible the site is. As the scheme is development, staff will be informed of key milestones with applicable routes displayed on internal staff notice boards.

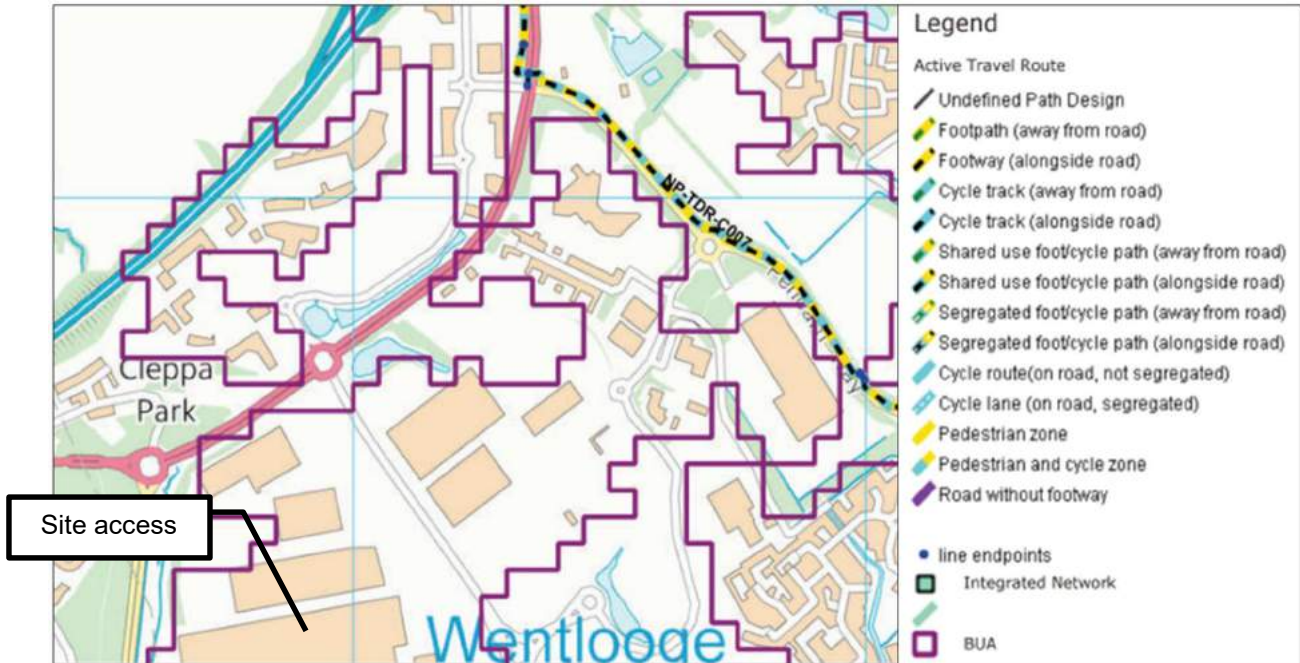


Figure 6.3 Extract from Download Newport south west ERM (Source: Newport City Council)

7.6 Measures

7.6.1 Introduction

The below measures are suggested only, and future changes may be made over the course of the travel plan in conjunction with the local authority, to ensure that appropriate measures are in place.

7.6.2 Travel Awareness

Good accurate information on the range of services and travel initiatives available at the site will be a critical element of a successful travel plan.

The Travel Plan Coordinator will make new employees aware of the existence of the travel plan by producing an information leaflet summarising the travel plan. The leaflet will be provided to new staff as part of a welcome pack, which would be issued on appointment of each position, prior to occupation, to ensure that sustainable travel patterns are created from the outset.

It is likely that staff will live near the site, which provides employment for the local area. This should result in most employees living within an acceptable walk and cycle distance (2km and 5km respectively).

The welcome pack will include, though not exclusively, the following:

- Introductory leaflet providing a summary of the travel plan, listing any key measures along with the contact details for the Travel Plan Coordinator;

- A map showing the location of the development in relation to the local area, highlighting the nearby bus and Luas stops and key local facilities within easy walking distance of the site;
- Public transport information, including:
 - A map showing the location of the store in relation to the local area, highlighting nearby bus and Luas stops;
 - Bus and Luas timetables of existing local services from nearby bus and Luas stops;
- Active travel information, including:
 - A map showing local cycle and walking routes, which would also indicate the locations of cycle parking and cycle shops in the area.
 - Details of local bike repair shops/retailers and available discounts/promotions, along with available training and maintenance sessions;
 - Health information and details of local walk buddy and bike buddy groups.
- Information about car sharing.
- Details of local taxi firms.

The Travel Plan Coordinator will ensure that any changes to the travel plan or any relevant information such as timetable seasonal changes are passed on to members of staff on a biannual basis in leaflet form or via noticeboards.

The Travel Plan Coordinator will promote and encourage staff to participate in national and local events, organised by local groups or the local authority, aimed at promoting awareness of sustainable transport.

The range of events that will be promoted will be agreed and co-ordinated with Dublin City Council.

7.6.3 Walking

The Travel Plan Coordinator will encourage walking as a mode of travel to work. The following initiatives will be implemented:

- Provide a map showing walking routes as part of the welcome pack, indicating distances and times to key local facilities near to the site;
- Raise awareness of the health benefits of walking through promotional material in the welcome pack and on noticeboards;
- Encourage employees to sign up to the 'Carma' or similar schemes which offers a journey matching service for journeys to work, or other journeys such as leisure / recreation;
- Audit the local footway and footpath network on an annual basis and report any defects and/or maintenance issues to the highway authority; and
- Liaise with a local taxi firm to provide competitive rates for employees in case of emergency to replace the work walk journey.
-

7.6.4 Cycling

The Travel Plan Coordinator will encourage cycling as an alternative mode of travel to work:

- Provide parking for up to 40 staff/visitor cycles at any one time on the site;
- Provide and promote personal storage areas for employees' cycle kit;
- Arrange and promote discounts for staff for purchase of cycles and accessories at a local store i.e., Bike to work scheme;
- Promote the availability of cycling information, including route maps and useful tips and guidance,
- Provide information to staff and visitors on any local cycle proficiency 'Bikeability' courses;
- Promote Bike to Work Week
- Set up a Bicycle User Group (BUG);
- Audit the local cycleway network on an annual basis and report any defects and / or maintenance issues to the highway authority;
- Liaise regularly with the cycling officer at the local authority to ensure that up-to-date information is available regarding cycle routes, proficiency classes and other facilities for cyclists in the vicinity of the site; and,
- Liaise with a local taxi firm to provide competitive rates for employees in case of emergency
- to replace the work cycle journey.

7.6.5 Public Transport

The Travel Plan Coordinator will actively promote public transport with the following specific measures to be implemented:

- Provide up-to-date public transport information, including route maps and timetables, within welcome packs and on-site noticeboards;
- Provide details of season tickets and any discounts that can be secured for staff with the local public transport operators;
- Details of local taxi firms will be provided within the welcome pack;
- The Travel Plan Coordinator will provide details of websites and telephone advice services to enable employees to obtain details on their individual journey requirements; and,
- Liaise regularly with public transport operators to ensure that information remains valid.

7.6.6 Personalised Journey Planning

Targeting individual journeys can be the most effective way of reducing car travel and encouraging use of sustainable modes. This initiative is most effective for those who currently travel by car and have no constraints to travel by sustainable modes.

The Travel Plan Coordinator will assist staff in the development of a personalised journey plan for staff regular commute journeys. The journey plan could include (dependent on which modes of transport are identified as being of most interest):

- Maps showing the location of the bus and Luas stops to use at either end of the journey, along with the accompanying walk route to their origin and destination;
- Details of how and where to buy tickets, including the current cost for travel;
- Suggestions of how to incorporate elements of the journey to sustainable modes; and
- Timetable information for public transport services used on their journey.
- Offer information relating to tax saver commuter tickets.

8 ROLE OF THE TRAVEL PLAN COORDINATOR FOR THE PROPOSED DEVELOPMENT

8.1 Appointment Of Travel Plan Coordinator

It will be the intention of on-site management at the proposed development' that a Travel Plan Coordinator be appointed to administer, implement, monitor, and review travel plan management issues within the proposed development. The coordinator will also liaise with the local authority, public transport companies and facility managers on issues relevant to the maximisation by commuters of non-car-based journeys to work.

8.2 Duties Of the Travel Plan Coordinator

The application is founded on minimal use of the private car by all staff and the maximization of travel by soft modes and public transport.

It will be the intention of the on-site management team that a Travel Plan Framework Coordinator be appointed to administer, implement, monitor and review mobility management issues within the residential component of the proposed development. The coordinator will also liaise with the local authority, public transport companies and facility managers on issues relevant to the maximisation by commuters of non-car-based journeys to work.

There are a range of measures that will be undertaken by facility managers to aid in the reduction of car-based journeys to work.

The co-ordinator will have a vital role in encouraging and enabling organisations on the subject site to adopt the measures listed within the document to achieve the objectives listed above within Section 6. The duties of the co-ordinator are detailed below under the following headings:

- Promoting the environmental and health benefits of their travel choices
- Promoting bike use
- Promoting walking to work
- Promoting rail and bus-based travel

8.3 Promoting The Environmental and Health Benefits of Their Travel Choices

It will be the duty of the coordinator to make staff aware of the environmental and health consequences of their travel choices. Various media should be employed to communicate this message. These could include a newsletter and a mobility website, providing information on issues such as available public transport services, where to buy a bike, the health benefits of cycling / walking, and a list of co-staff who might potentially car-share.

8.4 Promoting Bike Use

The coordinator can promote the use of this mode of travel using other measures such as the setting-up of a cycle users' group so that experienced cyclists within the development can help encourage newcomers to the mode of travel. The coordinator can also help by keeping tool kits and spare parts on site for cyclists to avail of. The web site and newsletter could also be an aid to encouraging the mode of travel by encouraging the potential time savings involved. Also, the coordinator can keep in contact with the local authority to monitor the progress in implementation of the proposed cycle track network in the locality.

It would also be possible for management at the proposed residential development to agree a group bicycle insurance scheme for staff at preferential rates to maximise its use as a mode of travel to work.

8.5 Promoting Walking to Work

As with cycling, the coordinator should promote the health and fitness benefits of walking and its general viability as a method of getting to work. The coordinator can also liaise with the local authority on work being done in the vicinity of the candidate site to make the local road network more pedestrian friendly.

8.6 Promoting Rail and Bus Based Travel

The coordinator will promote a public transport culture among staff. The coordinator can use the newsletter and website to provide information on public transport, in particular timetable information, local public transport stops and route planning, together with information on annual and monthly public transport tickets, carrying potential tax benefits for commuters.

8.7 Monitoring The Modal Splits for The Staff' Journey to Work

8.7.1 Introduction

To maximise the effectiveness of the Travel Plan Framework, the coordinator should be responsible for the ongoing monitoring of the modal splits within the plan, including the carrying out on a regular basis of travel surveys of all on-site staff.

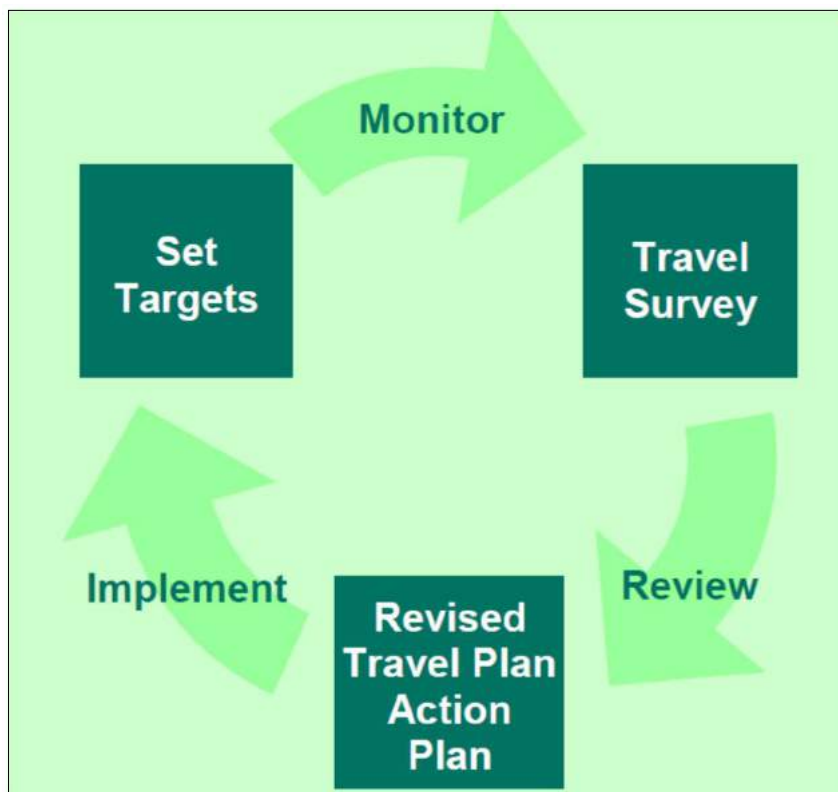


Figure 7.1 – Monitoring Process

Monitoring this Travel Plan is an essential part of the whole process. Monitoring means regularly checking the progress towards the targets with activities such as staff travel surveys or vehicle

counts. It enables the Travel Plan Coordinator to see whether the Travel Plan initiatives are having the desired effect on people's travel behaviour.

The following will be the key cornerstones of how the Travel Plan will be monitored:

- Baseline travel figures need to be established very early on so that there is something to benchmark your progress against.
- Travel Plan monitoring needs to take place at regular, agreed intervals (1,3,5 & 10 years). Monitoring enables you to test whether the Travel Plan initiatives have been a success or whether interventions are required.
- Monitoring allows the Travel Plan Co Ordinator to review your progress towards the targets and objectives.
- Regular monitoring is a requirement for Travel Plans secured through the planning process and the frequency of reports needs to be agreed with the Local Authority.
- Travel Plan objectives and targets should form the basis of the monitoring strategy as it is these that you are monitoring your progress against.
- Different types of monitoring tools can be used to collect the travel data required.

8.7.2 Responsibility

Monitoring is generally the responsibility of the Travel Plan Coordinator, which will be supplemented by external parties to undertake traffic counts, surveys, or questionnaires on your behalf if required.

This Travel Plan accompanies a planning application, therefore responsibility for monitoring lies with the developer or occupier. It's their responsibility to provide the Local Authority with the monitoring results, including a written report at each of the agreed monitoring dates as outlined in Table 5.1.

8.7.3 Baseline

For this application, general modal data has been used to assess the opening year modal split. To monitor a Travel Plan's success, it's important to get accurate baseline modal figures in year 1.

A staff travel survey will be carried out within 12 months of opening to establish an accurate baseline figure on how staff get to work, so future success can be compared with these results.

Baseline travel numbers are also essential for setting Travel Plan targets, therefore, the targets referenced in Table 5.1 will be reassessed.

Monitoring needs to take place at regular, agreed intervals. It is advised that monitoring is carried out annually for the first few years so you can see if the Travel Plan measures are working.

Monitoring should be carried out at the same time each year. It is recommended that surveys are carried out during the spring and autumn, and that school holiday periods are avoided.

It's a good idea to keep the format of questionnaires and surveys similar year on year to ensure that the results are comparable to your previous findings.

8.7.4 Tool Kits

There are several different methods of gathering the data that you will need to monitor your travel plan:

- Travel questionnaires aimed at staff or customers. An example survey is in Appendices.
- On site vehicle counts.
- Business travel audits that look at mileage claims, requests for public transport tickets, cycle mileage claims, and distances travelled.
- Accessibility assessment – how accessible is your site for all different modes of transport?

At the intervals to be agreed with the LHA, the Occupier will submit a monitoring report which will contain:

- Details of progress made since the submission of the previous annual report and any other changes which have occurred over the year which are significant to the Plan.
- An assessment of travel survey results and any other monitoring such as vehicle counts.
- An assessment of whether targets have been met or are on track to be met.
- Any revisions to be made to the Travel Plan.
- Whether or not remedial measures are to be implemented at this stage.
- Actions for the forthcoming year which should be set out in a Travel Plan Action Plan.

8.7.5 Corrective Actions

It is important to establish a remedial strategy within the Travel Plan document so that all interested parties are clear what you will do if targets are not achieved, or if it looks unlikely that they will be achieved.

By including a remedial strategy in the Travel Plan, it also helps to demonstrate the Applicant's commitment to achieving these targets.

The remedial strategy will include specific ideas for actions, access controls or the addition of extra measures. The aim of any remedial strategy should be to ensure that the organisation can work to meet the objectives of their Travel Plan.

If the Travel Plan is failing to meet the agreed targets, the remedial strategy should be put into practice to help get the Travel Plan 'back on track' as soon as possible.

9 CONCLUSION & SUMMARY

9.1 Introduction

This Travel Plan framework is required to insure the sustainability of the limited parking provision at the subject site.

This Travel Plan Framework will actively manage the parking provision and further reduce car usage at the subject site by detailing objectives for the achievement of a sustainable travel culture for staff at the development, by listing measures to achieve these objectives and by committing to appoint a travel plan coordinator to oversee and monitor progress towards the improved modal splits predicted for the site five years after opening and in the longer term into the future.

APPENDIX A - SAMPLE SURVEY

EVERYONE TO COMPLETE:

About your travel:

Do you nearly always travel to work using the same mode of transport?

- Yes
- No

How do you currently get to work?

Please tick the modes of transport that you use to come to work in the correct columns to show how often you use each mode.

	Everyday	More than once week	About once per week	Few times per month	Less than once per month
Bus					
Car					
Car Share					
Cycle					
Motorcycle					
Park and Ride					
Taxi					
Train					
Walk					
Combination (e.g., train <i>and</i> cycle)					

How far do you live from your normal place of work?

- Less than 1 KM
- Between 1 and 2 KMs
- Between 2 and 5 KMs
- Between 5 and 10 KMs
- Between 10 and 25 KMs
- More than 25 KMs

How long does it currently take you to travel to work on an average day?

- Less than 15 minutes
- Between 15 and 30 minutes
- Between 30 and 45 minutes
- Between 45 and 60 minutes
- Over an hour

Do you consider that you could walk to work?

- Yes
- No

Do you consider that you could cycle to work?

- Yes
- No

What time do you leave your home for work each morning? (Please tick)

	Mon	Tues	Wed	Thurs	Fri
Before 7am					
Between 7am and 7.30am					
Between 7.30am and 8am					
Between 8am and 8.30am					
Between 8.30am and 9am					
Between 9am and 10am					
After 10am					
It varies	Comments				

What time do you arrive home from work each day? (Please tick)

		Mon	Tues	Wed	Thurs	Fri
Before 3pm						
Between 3pm and 4pm						
Between 4pm and 4.30pm						
Between 4.30pm and 5pm						
Between 5pm and 5.30pm						
Between 5.30pm and 6pm						
After 6pm						
It varies	Comments					

Is the area you live in served by a regular bus service?

- Yes
- No
- Don't Know

If there is a bus, approximately how often does this service run?

- Every 10 Minutes
- Every 20 Minutes
- Every 30 Minutes
- Every 60 Minutes
- Less than hourly
- I don't know/Not applicable as there is no bus

How close do you live to your nearest railway station?

- Less than 2 KM
- Between 2KM and 5KM
- Between 5 & 10 KM
- More than 10KM
- Don't know

Does your nearest railway station have a direct line to the site?

- Yes
- No
- Don't Know

How close do you live to your nearest Luas stop?

- Less than 2 KM
- Between 2KM and 5KM
- Between 5 & 10 KM
- More than 10KM
- Don't know

Does your nearest Luas stop have a direct line to the site?

- Yes
- No
- Don't Know

ONLY CAR COMMUTERS TO COMPLETE:

Car users:

If you currently drive to work, what are your main reasons for doing so?

- Drop off/collect children on the way to/from work
- I use the car for other personal business on the way to/from work
- I use my vehicle during the day for work purposes
- I car share/give a lift/get a lift
- It's quicker than other modes
- It's cheaper than other modes
- I have a lot to carry

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Travel Plan

- I have no alternative
- Personal security
- General convenience
- I have a disability that affects my travel choice Other

Where do you normally park your car when you come to work?

- Onsite parking
- Park and Ride site
- Nearby pay and display car park
- Nearby free public car park
- Nearby on street parking

Do you ever have difficulty finding a parking space?

- Yes – frequently
- Yes – Occasionally
- No

On your journey to work do you ever get stuck in a level of traffic that you feel is unacceptable?

- Yes – frequently
- Yes – Occasionally
- No

On your journey home from work do you ever get stuck in a level of traffic that you feel is unacceptable?

- Yes – frequently
- Yes – Occasionally
- No

If you bring your car for work purposes, would having access to company vehicles make it possible for you to leave your car at home?

- Yes
- No
- Not Applicable, that's not why I bring my car

EVERYONE TO COMPLETE:**Cycling Measures:**

Would you consider cycling to work?

- Yes
- No

If you would consider cycling, which of the following possible measures would give you enough motivation to try it?

- More readily available information on cycle routes
- Safer cycle routes near to where I live
- Safer cycle routes around work
- More cycle storage facilities
- Safer cycle storage facilities
- Modern showering/changing facilities
- Lockers for cycling gear and clothes
- A scheme that allows me to buy a bike and pay through my salary over instalments
- Employer discounts at cycle shops
- Not applicable as I live too far away to cycle to work
- Even though I live close enough, nothing would encourage me to cycle to work

If you would never consider cycling to work, which of the following statements do you think most sum up the reasons for this?

- I live too far away
- It would not fit in with my lifestyle
- I don't like the idea of walking around on my own
- It would take too long
- The weather is too unpredictable
- The city air is too polluted
- I have too much to carry
- Don't feel safe (road safety)
- Other commitments

EVERYONE TO COMPLETE:**Walking Measures:**

Would you consider walking to work?

- Yes
- No

If you would consider walking, which of the following possible measures would give you enough motivation to try it?

- More readily available information on walking routes
- Improvements to the quality of footpaths
- More lighting in pedestrian areas
- More CCTV covering pedestrian areas
- Modern showering/changing facilities
- Lockers for walking gear and clothes
- Free issue of pedometers
- Free issue of personal safety alarms
- Interest free salary loans payable over 12 months for purchase of walking/outdoor gear
- Employer discounts at outdoor gear shops
- Not applicable as I live too far away to walk to work
- Nothing would encourage me to walk to work

If you would never consider walking to work, which of the following statements do you think most sum up the reasons for this?

- I live too far away
- It would not fit in with my lifestyle
- I don't like the idea of walking around on my own
- It would take too long
- The weather is too unpredictable
- The city air is too polluted
- I have too much to carry
- Don't feel safe (road safety)
- Commitments outside of work

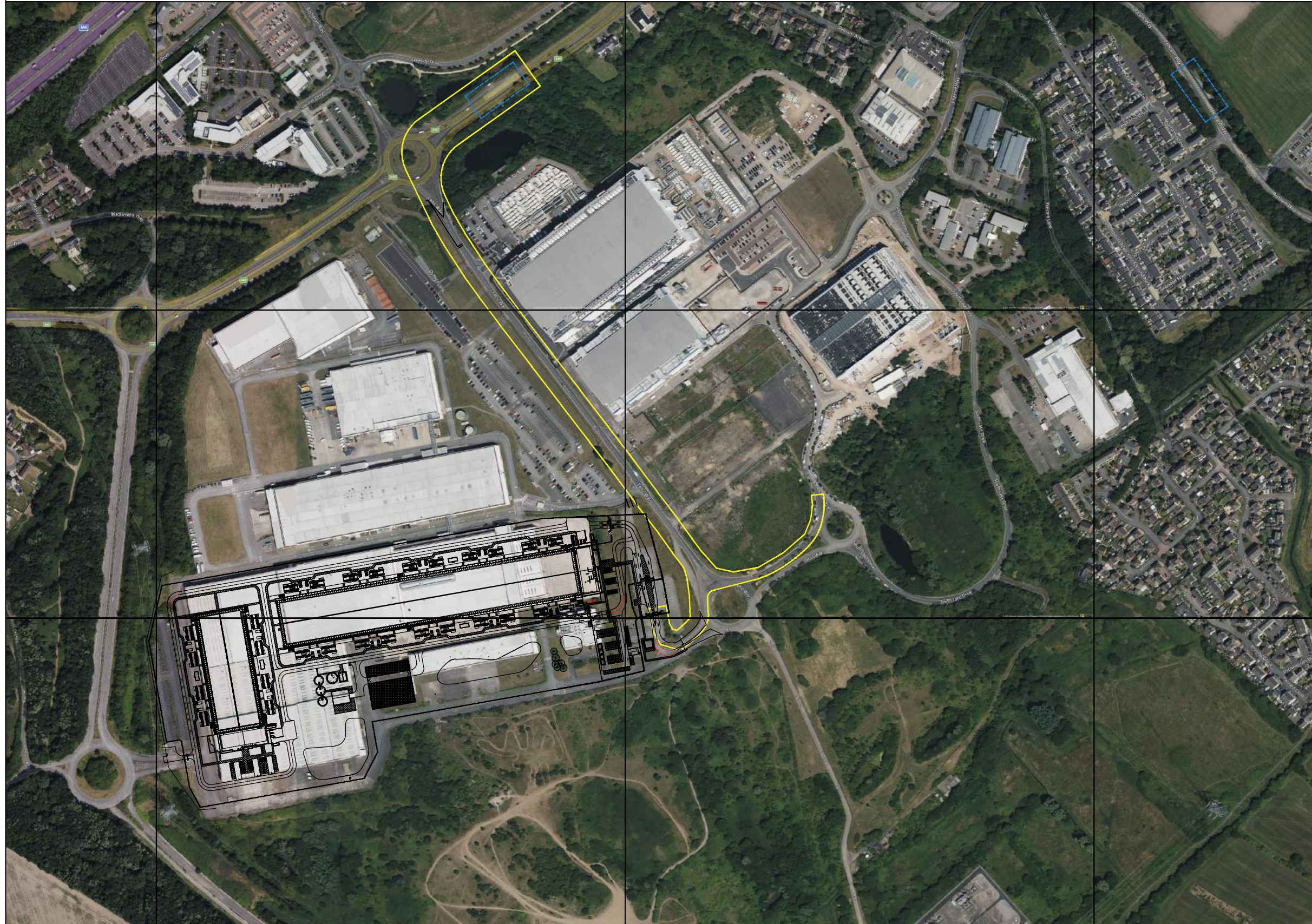
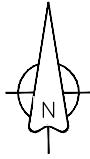
APPENDIX B – SAMPLE ACTION PLAN

Objective	Target	Measure	Timescale	Responsibility	Monitoring Towards Progress	Cost
Objective 1 - Maximizing the Efficient Use of Car Parking Facilities	Increasing Car Occupancy Rates	Increase car occupancy from 1.05 per car to 1.6/1.7 per car.	10 Years	Mobility Manager	Annual survey/Uptake in Car Sharing	Admin cost of carrying out surveys
	Promote Car Club	Use of 'Car Club'	1 Year	Mobility Manager	Demand for car sharing spaces	Cost of lining 'Car Club' space
	Establish Car Sharing Data Base	Number of volunteers	1 Year	Mobility Manager	Number of people offering car sharing / Uptake in car share offer	Cost of lining 'Car Share' space
Objective 2 - Encouraging Greater Use of Public Transport for The Journey to Work	Provide public transport information too all staff	Day 1 user survey or assume locally demographics are representative / Repeat survey at 12 months	Prior to full site occupation	Mobility Manager	Compare Day 1 survey to 12 Month Survey	Admin cost of design of information/printing of information
	Tax Saver /Season Ticket Scheme	Uptake in Scheme	Administered as per the rules of the Bike to Work Scheme	Mobility Manager/Pay Roll	Number of users	Admin costs running scheme
Objective 3 - Encouraging More	Provide public cycle information too all	Day 1 user survey or assume locally	Prior to full site occupation	Mobility Manager	Compare Day 1 survey to 12	Admin cost of design of information/prin

Staff to Cycle to Work	staff/Offer general biking information	demographics are representative / Repeat survey at 12 months			Month Survey	ting of information
	Provide cycle parking/Lockers	Demand of use	Initially up to 5 spaces. Within 12 months full allocation of spaces	Mobility Manager	Number of users	Cost of providing bike stands, lockers etc
	Bike User Group	Demand of use	Within 12 months of full site occupation	Mobility Manager	Number of users	Admin costs of setting up/managing group
	Cycle Network Audit	Ensure that up-to-date information is available regarding cycle routes, proficiency classes and other facilities for cyclists in the vicinity of the sit	Every 12 months	Mobility Manager	Overall number of cyclists to/from work	Admin cost of carrying out survey
	Bike to Work Scheme	Uptake in Scheme	Administered as per the rules of the Bike to Work Scheme	Mobility Manager/Pay Roll	Number of users	Admin costs running scheme

Objective 4 - Encouraging More Staff to Walk to Work	Provide walking information to all staff indicating distances and times to key local facilities near to the site;	Day 1 user survey or assume locally demographics are representative / Repeat survey at 12 months	Prior to full site occupation	Mobility Manager	Compare Day 1 survey to 12 Month Survey	Admin cost of design of information/printing of information
	Footpath Network Audit	Ensure that up-to-date information is available regarding walking routes, proficiency classes and other facilities for cyclists in the vicinity of the sit	Every 12 months	Mobility Manager	Overall number of walkers to/from work	Admin cost of carrying out survey

APPENDIX C – HEALTHY STREETS REVIEW



GENERAL NOTES

1. DO NOT SCALE THIS DRAWING. WORK ONLY TO FIGURED DIMENSIONS.
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CLIENT
MFST

PROJECT
CWL01 CWL02

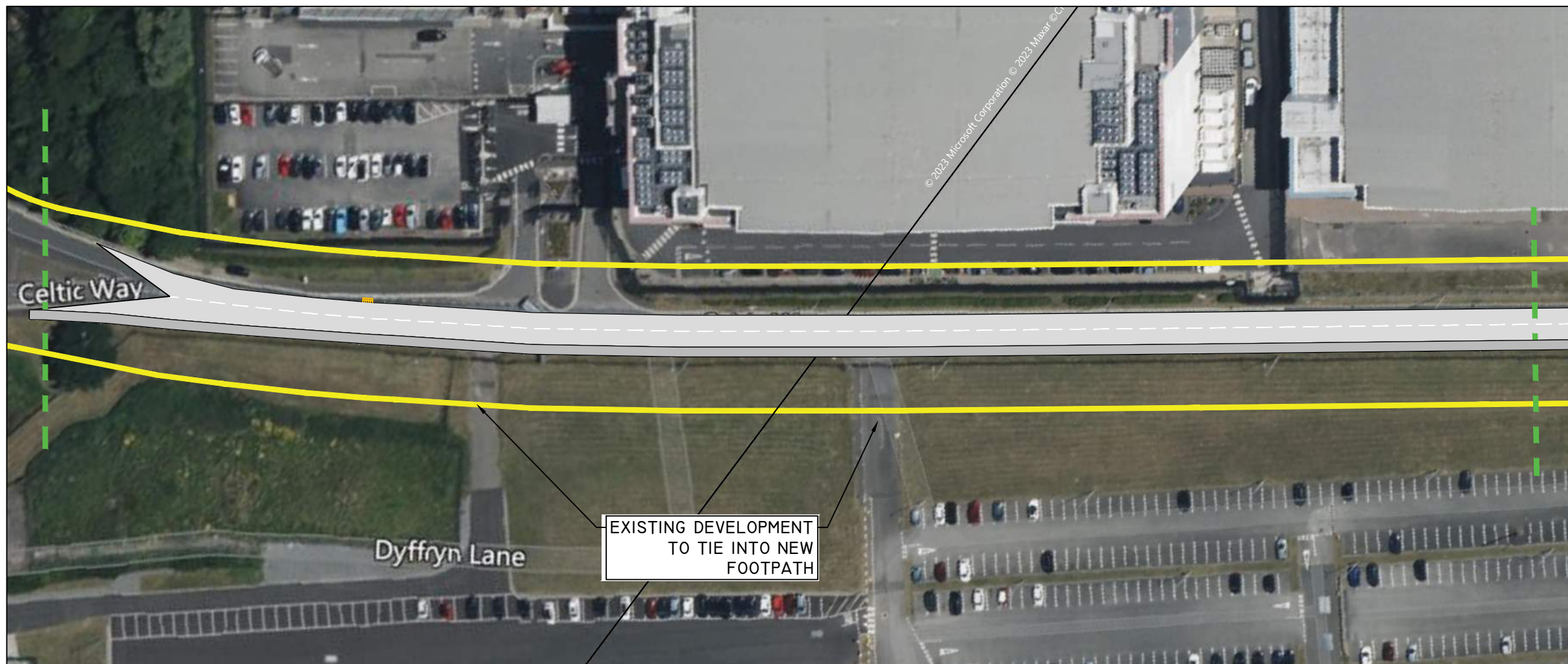
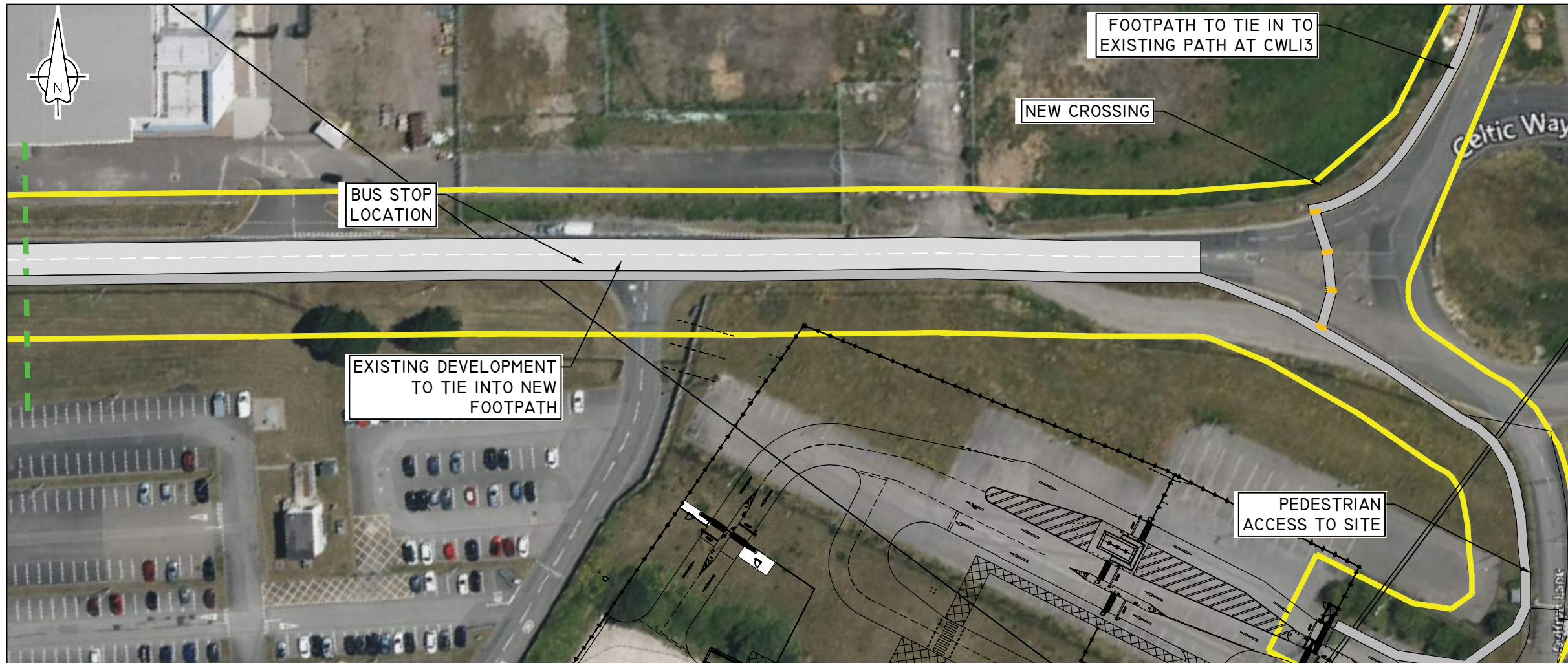
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REV	DESCRIPTION	BY	CHK	DATE
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CLIENT
MFST

PROJECT
CWL01 CWL02

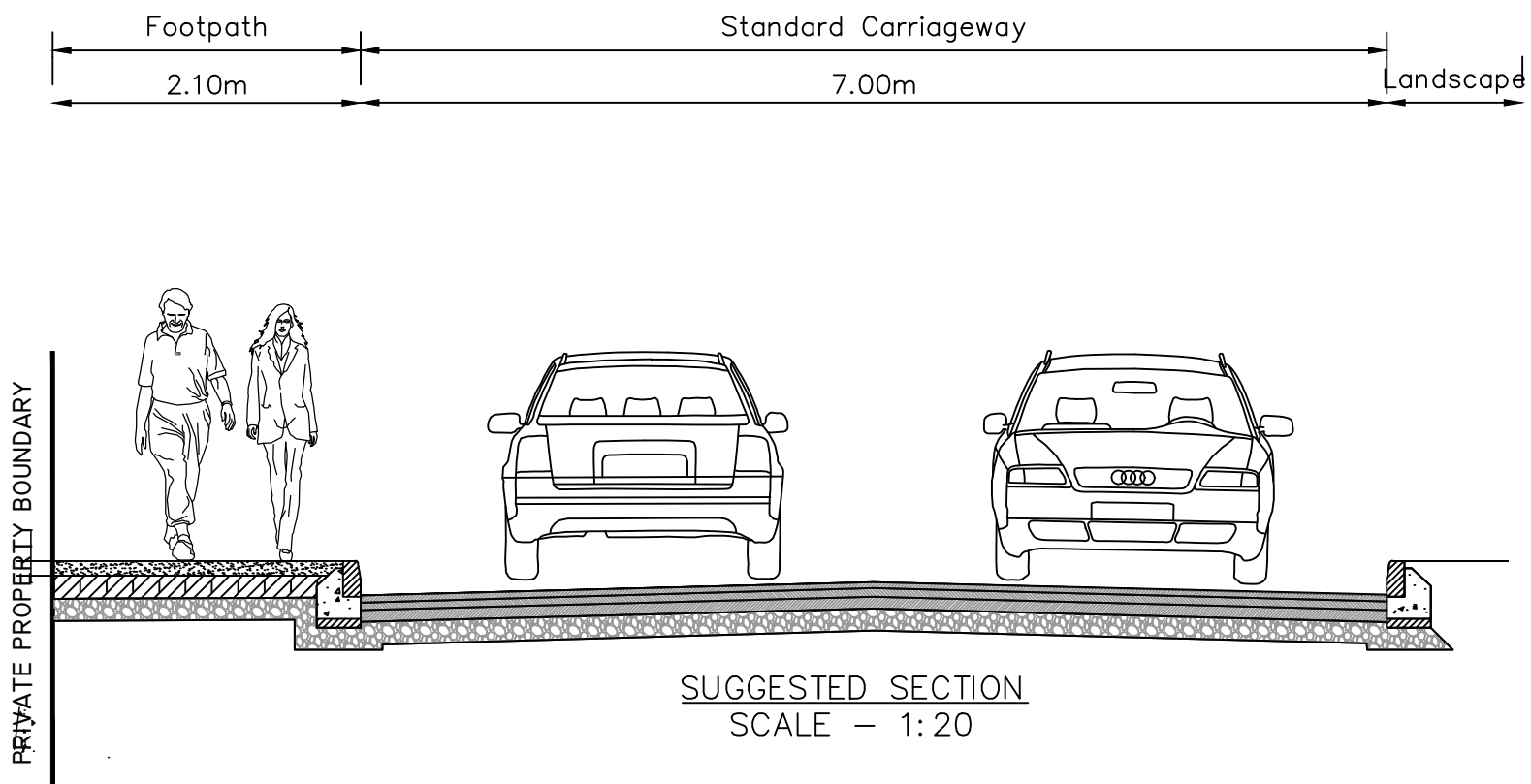
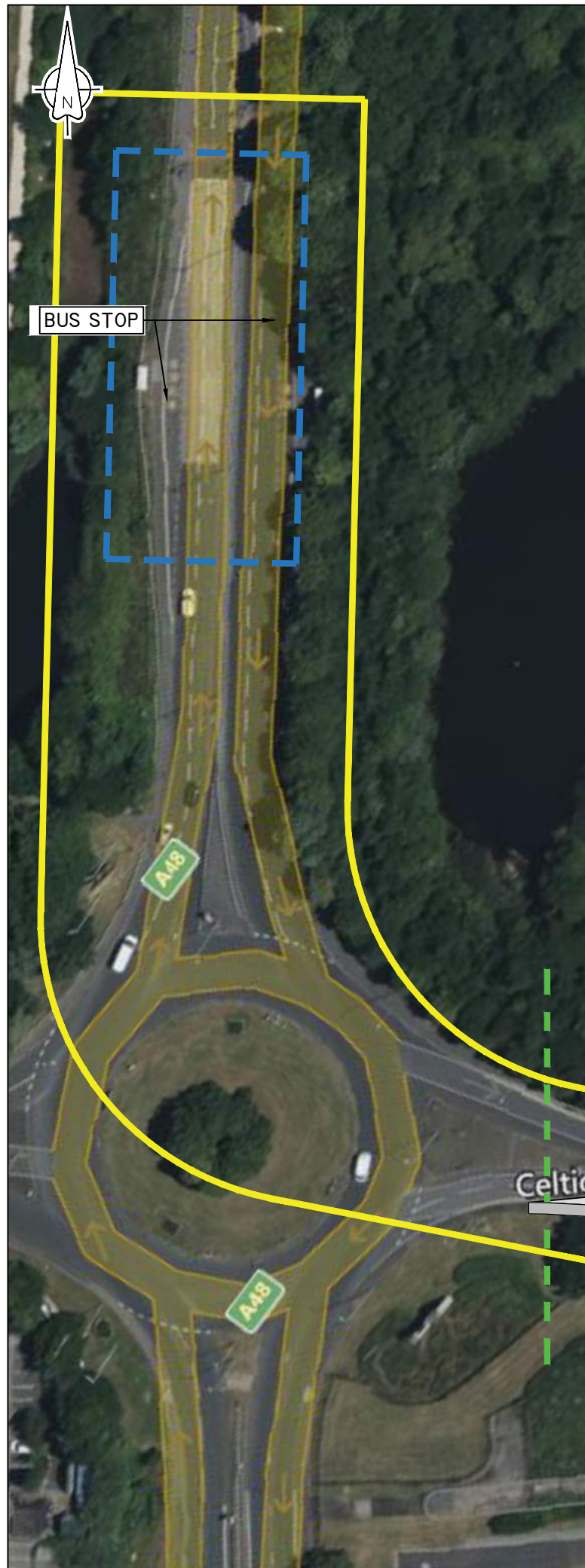
DRAWING TITLE
PROPOSED ACTIVE TRAVEL INFRASTRUCTURE UPGRADE SHEET 1 OF 2

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PLANNING			
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DRG NO. PIN-XX-DR-D-101-SI		REV P01	

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REV	DESCRIPTION	BY	CHK	DATE
-	-	-	-	-

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PROJECT
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DRAWING TITLE
PROPOSED ACTIVE
TRAVEL INFRASTRUCTURE
UPGRADE SHEET 2 OF 2

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DRG NO. PIN-XX-DR-D-101-SI		REV P01	

REF: P2207118

Healthy Streets Check

		Scoring System					Enter score here		Notes Please supplement your answers with detailed notes where possible
		3	2	1	0	More info on each question	Existing layout	Proposed layout	
1	Total volume of two way motorised traffic	There are fewer than 500 vehicles per hour at peak.	There are 500 to 1000 vehicles per hour at peak.	There are more than 1000 vehicles per hour at peak, where people cycling are separated from motorised traffic.	There are more than 1000 vehicles per hour at peak, where people cycling are mixed with motorised traffic.		3	3	
2	Interaction between large vehicles and people cycling	No large vehicles are using the street, or cycle traffic is separated from motorised traffic.	The proportion of large vehicles is less than 2% of motorised traffic, 7am to 7pm.	The proportion of large vehicles is 2% to 5% of motorised traffic, 7am to 7pm. <u>or</u> The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane at least 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is at least 4.5m.	The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane less than 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is less than 4.5m.		0	1	
3	Speed of motorised traffic	85th percentile speed is less than 20mph. <u>or</u> Existing 85th percentile speed is 20 to 25 mph, but there are some proposals to reduce speed further. <u>or</u> Existing 85th percentile speed is over 25 mph but a complete redesign of the street environment should reduce this to below 20mph.	85th percentile speed is 20 to 25mph. <u>or</u> Existing 85th percentile speed is 25 to 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is 25 to 30mph. <u>or</u> Existing 85th percentile speed is greater than 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is greater than 30mph. <u>or</u> Existing 85th percentile speed is greater than 30 mph, and there are no proposals to reduce this speed.		1	1	
4	Traffic noise based on peak hour motorised traffic volumes	There are fewer than 55 vehicles per hour (c. <58 DB).	There are 55 to 450 vehicles per hour (c. 58-70 DB).	There are more than 450 vehicles per hour (c. >70 DB).	-		1	2	
5	Noise from large vehicles	The proportion of large vehicles is less than 5% (c. +0 to +3DB).	The proportion of large vehicles is 5 to 10% (c. +3 to +5 DB).	The proportion of large vehicles is greater than 10% (c. +5 DB and over).	-		2	3	

6	NO2 concentration (from London Atmospheric Emission Inventory)	<p>If assessing existing: The NO2 concentration is less than 32µg/m3.</p> <p>If assessing proposal: The existing NO2 concentration is less than 32µg/m3 <u>or</u> the existing concentration is 32 to 40µg/m3 with local traffic volume reduction measures proposed.</p>	<p>If assessing existing: The NO2 concentration is 32 to 40µg/m3.</p> <p>If assessing proposal: The existing NO2 concentration is 32 to 40µg/m3 with no proposal to reduce local traffic volume <u>or</u> the existing NO2 concentration is greater than 40µg/m3 with local traffic volume reduction measures proposed.</p>	<p>If assessing existing: The NO2 concentration is greater than 40µg/m3 (legal limit value).</p> <p>If assessing proposal: The existing NO2 concentration is greater than 40µg/m3 with no proposal to reduce local traffic volume.</p>	-	ⓘ	1	2	Assumed
7	Reducing private car use	There is no through-movement for motorised traffic, with access limited to local residents, deliveries and public service vehicles.	There are some time or movement restrictions for motorised traffic.	There are no access restrictions for motorised traffic.	-	ⓘ	1	2	
8	Ease of crossing side roads for people walking	Side roads are closed to motor traffic. <u>or</u> Side roads are one-way out for motor vehicles and have features to encourage drivers to turn cautiously.	Side roads are two-way or one-way in for motor vehicles, and have features to encourage drivers to turn cautiously.	Side roads have dropped kerbs only.	Side roads have no dropped kerbs.	ⓘ	0	2	
9	Controlled crossings to meet pedestrian desire lines	<p>If assessing existing: All main pedestrian desire lines are provided for with controlled crossings.</p> <p>If assessing proposal: A new controlled crossing(s) is proposed or crossing(s) relocated to meet all main desire lines.</p>	Only some of the main pedestrian desire lines are provided for with controlled pedestrian crossings.	No main pedestrian desire lines are provided for with controlled pedestrian crossings.	-	ⓘ	1	3	
10	Type and suitability of pedestrian crossings away from junctions	<p>Crossing is uncontrolled, with conflicting traffic volume less than 200 vehicles per hour.</p> <p><u>or</u> A Zebra or parallel crossing is provided.</p> <p><u>or</u> Crossing is signalised so that people crossing the main carriageway have priority, while traffic on the main carriageway has on-demand green.</p>	<p>Crossing is uncontrolled, with conflicting traffic volume between 200 and 1000 vehicles per hour.</p> <p><u>or</u> Crossing is signalised and straight-across where the distance to cross is less than 15m or greater than 15m in a 20mph speed limit.</p> <p><u>or</u> Crossing is signalised and staggered where the distance to cross is greater than 15m in a 30mph+ speed limit.</p>	<p>Crossing is uncontrolled, with conflicting traffic volume greater than 1000 vehicles per hour.</p> <p><u>or</u> Crossing is signalised and straight-across where the distance to cross is greater than 15m in a 30mph+ speed limit.</p>	-	ⓘ	2	3	

11	Additional features to support people using controlled crossings	Controlled crossings have many additional features to enhance their quality (please see scoring guidance).	Controlled crossings have some additional features to enhance their quality (please see scoring guidance).	Controlled crossings have no additional features to enhance their quality (please see scoring guidance). <u>or</u> There is no step-free access at the crossing point and/or there is no physical delineation between the footway and carriageway away from crossing points.	-	i	1	2	
12	Width of clear continuous walking space	There is 2m or more clear width for walking in quiet locations (flows of <600 pedestrians an hour). <u>or</u> There is 2.5m or more clear width for walking in moderately busy locations (flows of 600-1200 pedestrians an hour). <u>or</u> There is 3m or more in busy locations (flows of >1200 pedestrians an hour).	There is 2m to 2.5m clear width for walking in moderately busy locations (flows of 600-1200 pedestrians an hour). <u>or</u> There is 2.5m to 3m in busy locations (flows of >1200 pedestrians an hour).	There is 1.5m to 2m clear width for walking in quiet and moderate locations (flows of <1200 pedestrians an hour). <u>or</u> There is 2m to 2.5m clear width for walking in busy locations (flows of >1200 pedestrians an hour).	There is less than 1.5m clear width for walking.	i	0	2	
13	Sharing of footway with people cycling	No part of the footway is designated as shared use for walking and cycling.	Part or all of a footway wider than 3m with fewer than 200 pedestrians per hour is designated as shared use.	Part or all of a footway used by more than 200 pedestrians per hour is designated as shared use. <u>or</u> Part or all of a footway less than 3m wide is designated as shared use.	-	i	1	2	
14	Collision risk between people cycling and turning motor vehicles	Side roads are closed to motorised traffic, or turning movements by motor vehicles are minimised. <u>and</u> At signal-controlled junctions, all conflicting movements between cycle traffic and turning motor traffic are separated.	Some measures are in place to reduce turning movements by motor vehicles at priority junctions. <u>and</u> At signal-controlled junctions, cycle movements are not separated and fewer than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	There are no restrictions on turning movements by motor vehicles at side roads and other uncontrolled accesses. <u>and</u> At signal-controlled junctions, cycle movements are not separated and more than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	At signal-controlled junctions, cycle movements are not separated, more than 5% of turning vehicle movements are made by larger vehicles and there are no mitigation measures in place.	i	0	1	

15	Effective width for cycling	<p>Where cycles are separated from other traffic, the width of the lane or track is 2.2m or more (one-way) or 3.5m or more (two-way).</p> <p>Otherwise: Width of the nearside bus lane, general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is 4.5m or more.</p>	<p>Where cycles are separated from other traffic, the width of the lane or track is 1.5m to 2.2m (one-way) or 2.5m to 3.5m (two-way).</p> <p>Otherwise: Width of the nearside bus lane, general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 4m and 4.5m.</p>	<p>Where cycles are separated from other traffic, the width of the lane or track is less than 1.5m (one-way) or less than 2.5m (two-way).</p> <p>Otherwise: Width of the nearside bus lane, general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is 3.2m or less.</p>	<p>Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 3.2m and 3.9m.</p>	<p>①</p>	0	1	
16	Impact of kerbside activity on cycling	<p>There is no kerbside activity.</p> <p>or People cycling are physically separated from parking or loading facilities.</p>	<p>There is occasional kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.</p>	<p>There is frequent or continuous kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.</p>	<p>People cycling cannot maintain at least 1.0m clearance from vehicles parked or loading, or they are required to change lane to do so.</p>	<p>①</p>	0	3	
17	Quality of carriageway surface	<p>The carriageway surface is even and smooth, with sufficient skid resistance.</p> <p>or There are defects but resurfacing of the whole carriageway is proposed.</p>	<p>There are a few minor defects in the carriageway surface (please see scoring guidance).</p>	<p>There are many minor defects in the carriageway surface (please see scoring guidance).</p>	<p>There are major defects in the carriageway surface (please see scoring guidance).</p>	<p>①</p>	1	1	
18	Quality of footway surface	<p>There is an even and level surface for walking on footways.</p> <p>or There are defects but resurfacing of the whole footway is proposed.</p>	<p>There are a few minor defects in the footway surface (please see scoring guidance).</p>	<p>There are many minor defects in the footway surface (please see scoring guidance).</p>	<p>There are major defects in the footway surface (please see scoring guidance).</p>	<p>①</p>	0	3	
19	Surveillance of public spaces	<p>There is constant surveillance – because mixed use buildings overlook the street or space, or because there are many people using the space or walking through.</p>	<p>There is intermittent surveillance – because surrounding buildings are single-use or do not completely overlook the street, or because there are few people using the space or walking through.</p>	<p>There is poor surveillance – because few buildings overlook the street or space, there is little activity.</p>		<p>①</p>	1	2	
20	Provision of cycle parking	<p>Cycle parking exceeds existing demand and is accessible by all.</p>	<p>Cycle parking meets existing demand and is accessible by all.</p>	<p>Cycle parking does not meet existing demand.</p> <p>or Cycle parking meets existing demand but is not accessible by all.</p>		<p>①</p>	1	3	

21	Street trees	<p>If assessing existing: There are multiple trees, with canopies spaced less than 15m apart on average.</p> <p>If assessing proposal: All existing trees are to be retained and the street is already tree-lined with less than 15m between tree canopies.</p> <p><u>or</u> All existing trees are to be retained, with planting of new trees designed to reduce the average canopy spacing to less than 15m.</p>	<p>If assessing existing: There are multiple trees, with canopies spaced more than 15m apart on average.</p> <p>If assessing proposal: Not all existing trees are to be retained, however new planting will ensure the overall number of trees is maintained or increased.</p> <p><u>or</u> All existing trees are to be retained, however the canopy spacing will remain more than 15m on average.</p>	<p>If assessing existing: There are no trees, or only one tree.</p> <p>If assessing proposal: There are no existing or proposed trees.</p> <p><u>or</u> The number of trees has been reduced.</p>	-	ⓘ	1	1		
22	Planting at footway-level (excluding trees)	<p>If assessing existing: There is substantial planting in good condition designed to create or improve social space and/or act as a connection between other green spaces (eg pocket park, rain garden, community garden area).</p> <p>If assessing proposal: Existing greenery is to be enhanced with integrated SuDS features or new planting or new areas of greenery are proposed.</p>	<p>If assessing existing: There is some planting, eg shrubs, verges, hedges, ornamental flower beds, or adaptation for some animal species.</p> <p>If assessing proposal: Existing standalone greenery is to be retained.</p>	<p>If assessing existing: There is no planting, or existing planting is in a poor condition.</p> <p>If assessing proposal: No green infrastructure is proposed, or the size of existing greenery is to be reduced.</p>	-	ⓘ	1	3		
23	Walking distance between resting points (benches and other informal seating)	There is less than 50m between resting points on both sides of the road.	There is between 50m and 150m between resting points on at least one side of the road.	There is more than 150m between resting points on at least one side of the road.	-	ⓘ	1	1		
24	Walking distance between sheltered areas protecting from rain. Including fixed awning or other shelter provided by buildings/infrastructure	There is less than 50m between sheltered areas.	There is between 50m and 150m between sheltered areas.	There is more than 150m between sheltered areas.	-	ⓘ	1	1		
Are there any bus services running on this street? (Y/N) If not, do not complete metrics 25-28							N	N	An answer is required here in order to generate results	
25	Factors influencing bus passenger journey time	There are positive influences on bus journey time, e.g. bus lanes, and/or exemptions for buses from movement bans for general traffic.	Buses are mixed with traffic but not significantly delayed.	There are negative influences on bus journey time, e.g. unclear markings, narrow lane width, parking/loading issues, short cage length, mixing with congested traffic.	-	ⓘ				

26	Bus stop accessibility	Bus stop is wheelchair accessible, with a shelter, clear space for boarding and alighting and there is a clearway in place at the bus stop.	Bus stop is wheelchair accessible but either there is no shelter or the cage length is insufficient for the bus service frequency.	Bus stop is not wheelchair accessible, i.e. the kerb height is less than 100mm and/or there is a lack of boarding or alighting space for a wheelchair user.	-	ⓘ			
27	Bus lane operation	Bus lanes operate 24/7.	Bus lane hours of operation are limited and do not cover all hours of the day / week.	There are no bus lanes.	-	ⓘ			
28	Impact of kerbside activity on bus operations	There is no parking or loading that adversely impacts on bus performance.	There is occasional parking or loading activity, but with minimal impact on bus operations.	There is frequent or continuous kerbside activity, regularly impacting on bus performance.	-	ⓘ			
Are there any rail/underground/bus stations accessible from this street? (Y/N) If not, do not complete metrics 29-31							N	N	An answer is required here in order to generate results
29	Bus stop connectivity with other public transport services	The bus stop is within sight of another service – less than 50m away.	The bus stop is between 50m and 150m away from another service.	The bus stop is more than 150m away from another service.	-	ⓘ			
30	Step-free access from the street to the station entrance	All entry points to the station are step-free.	The main entry point to the station is not step-free but step-free alternatives are provided.	There is no step-free access to the station.	-	ⓘ			
31	Support for interchange between cycling and underground/rail	Secure cycle parking is provided close to station access points, and suitably exceeds existing demand.	Cycle parking is available close to station access points that meets existing demand.	There is insufficient cycle parking to meet demand, or cycle parking is poorly located for station access points.	-	ⓘ			
If 'zero' scores (known road danger issues) remain, please explain why opposite:							7	0	Insert design response for 'zero' scores here

Healthy Streets Check Summary Results

Indicators explained >

An overview of how each metric aligns with different Indicators

Interpreting results >

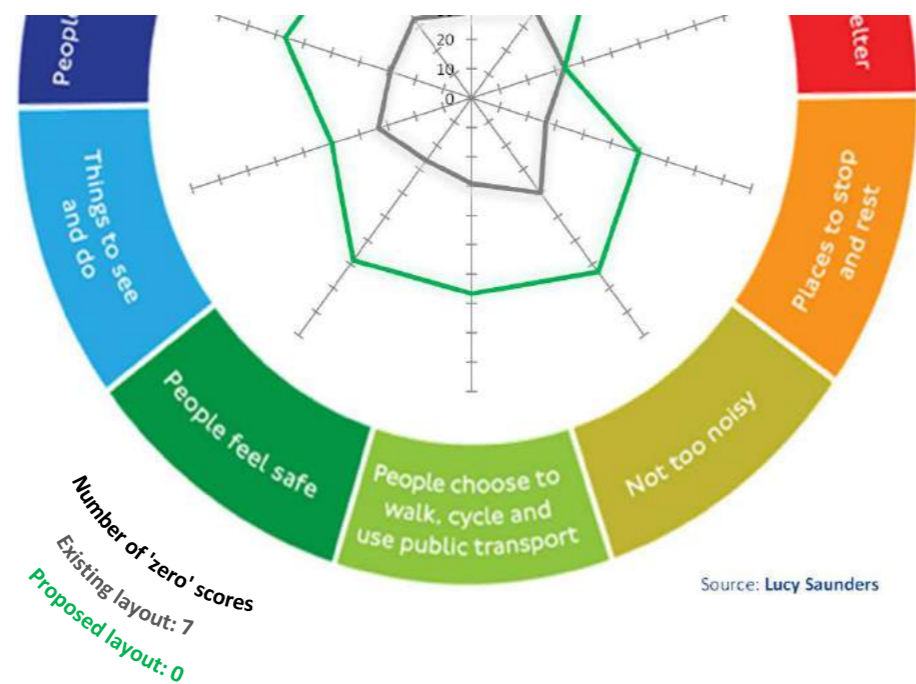


Healthy Streets Indicator scores (%)

(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	29	67
Easy to cross	37	78
Shade and shelter	33	33
Places to stop and rest	27	60
Not too noisy	40	73

A summary of how to use and improve on your results



People choose to walk, cycle and use public transport	29	67
People feel safe	26	68
Things to see and do	33	50
People feel relaxed	29	67
Clean air	33	67
Overall Healthy Streets Check score	30	67
Number of 'zero' scores	7	0

(Proposed layout score from applicable metrics) **53%**

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