MAXI DEVELOPMENTS LTD

RESIDENTIAL DEVELOPMENT AT BRYN MORFA

TRANSPORT STATEMENT and TRAVEL PLAN

EEL.7698.R08.001 Rev B

APRIL 2021

Prepared for

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Document Review

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1.0 INTRODUCTION

1.1 Egniol were commissioned by Cadnant Planning acting on behalf of Maxi Developments to produce a Transport Statement to support an associated planning application in relation to a proposed residential development at Bryn Morfa in Bodelwyddan, Denbighshire, LL18 5TT.

1.2 The site is located adjacent to existing residential developments and highway access would be achieved via the construction of a new link road directly from Bryn Morfa. The proposed development will comprise of the demolition of one dwelling and erection of 28 dwellings, including the creation of a new vehicular access, internal access road and associated works.

Scope

1.3 The objective of a Transport Statement (TS) is to provide a description of the development and undertake an assessment of the accessibility of the site location. The TS should also determine if the future development is likely to result in a material increase in local traffic flows which subsequently could result in an adverse impact on the existing and future operational capability of the adjacent highway network. Where appropriate, this TS has also been produced in accordance with recommendations as identified in Technical Advice Note 18: Transport – Planning Policy Wales.

1.4 In relation to highway and transport matters, the TS is required to provide an overview of issues relating to:

- The existing site, including location, connection to the local highway network, the existing highway infra-structure and existing land uses in the vicinity;
- Existing background traffic movements including pedestrian and cyclist movements and associated facilities;
- A review of injury accident records in the vicinity of the site for the most recent 3 or 5 year period;
- Accessibility of the site to existing public transport facilities, including provision and frequency of services, and accessibility to the site;
- Details of the proposed development and associated parking provision;
- Identification of traffic generation estimates for the proposed development; and
- A review of the likely future traffic impact of the development.

1.5 A pre-application enquiry in support of the proposed development was made to the planning department at Denbighshire County Council (DCC) on the 3rd May 2019. The subsequent response from DCC, dated 19th June 2019 (reference 40/2019/0368) identified that any planning application should be supported by an associated Transport Plan/Assessment and Travel Plan. The response also included specific requirements as identified by DCC's highway officers, as detailed below:

- Visibility at the junction of Bryn Morfa shall be in accordance with TAN 18 Table B.
- The estate road shall be a minimum of 5.5m with 2.0m footway/service margins. It is noted that DCC has subsequently confirmed agreement to a reduced 4.8m wide access road.
- Parking shall be in accordance with Denbighshire County Councils parking standards.
- Forward visibility for vehicle turning right into the new estate road from Bryn Morfa shall be considered and identified.
- Submission of Construction Method Statement.

Report Structure

1.6 Following this introductory chapter, the structure of the report is as follows:

- Chapter 2 - The Local Area and Highway Network
- Chapter 3 - Accessibility of the Site
- Chapter 4 - Proposed Development and Associated Highway Impact;
- Chapter 5 – Transport Planning Policy,
- Chapter 6 – Summary and Conclusion;
- Chapter 7 – Travel Plan.

2.0 THE LOCAL AREA AND HIGHWAY NETWORK

2.1 The site is situated to the east of an established residential area which is served of Bryn Morfa, a cul-de-sac located to the northwest of Bodelwyddan. No existing buildings exist on the site with land currently being used for agriculture.

2.2 The site is located within some 400m of existing retail outlets (SPAR and Co-op) and is some 800m from the local primary school.

2.3 Bodelwyddan is a relatively small urban town though it does occupy a strategic location within the north of the County. It is easily accessible, adjoining the A55 North Wales Expressway and is some 5 miles south of Rhyl which provides access to the local and regional rail network.

2.4 Bodelwyddan is home to Ysbyty Glan Clwyd Hospital which is of regional significance and is the County's largest employer. The site is also within 4km of the St. Asaph Business Park. The approximate location of the site is shown in Figure 2.1.

Fig. 2.1 Site Location

Local Highway Network

2.5 The site will be accessed directly from Bryn Morfa, which is a cul-de-sac serving some 40 residential properties. The highway is approximately 6m wide, has footways on both sides, street lighting and is subject to a 30mph speed limit. The residential nature of the area and the alignment of the highway are such that it is likely that generated traffic will travel well below the prescribed speed limit.

Bryn Morfa looking from end of cul-de-sac to Nos 22

2.6 Bryn Morfa joins the local highway network at a priority-controlled junction with Ronaldsway, which runs north to St Asaph Avenue and then connects to the A548 at Kimnel Bay; and to Abergele Road, which provides a connection to the North Wales Expressway (A55) in the south. Visibility splays at the junction are in excess of 90m in both directions.

Ronaldsway looking south past junction at Bryn Morfa

2.7 The section of Ronaldsway in the vicinity of Bryn Morfa is a 30mph two-way urban road, with street lighting and footways. On-street parking is permitted and the road also has traffic calming measures in place (speed cushions). The road also has a 7.5 tonne (except for access) weight limit. North of the residential area, the road becomes more 'rural' in nature, with no footways or street lighting and is subject to the national speed limit.

2.8 In advance of the junction with Abergele Road, local services are present which include a public house and Co-op store with associated car park located to the north, a post office, SPAR, fast food outlets and off road parking to the south. A pedestrian crossing (zebra) on Ronaldsway is also located at the local shopping area providing a pedestrian linkage between the local services.

2.9 Bus stops with associated shelters are located on Abergele Road and a shared pedestrian/cycle path providing an off-road connection to the hospital commences in advance of the Ronaldsway/Abergele Road junction. This is a priority controlled junction which also has a dedicated right-turning pocket for traffic from Abergele Road.

Highway Safety

2.10 Personal Injury Accident (PIA) data for the highway network adjacent to the site has been obtained from the online CrashMap resource. Crashmap is a national database which contains records of all reported road accidents which involved personal injuries. The Crashmap database was interrogated to identify the location and number of accidents that had occurred on the local highway network in the vicinity of Bryn Morfa for the most recently available 5 year period (2013 – 2018 inclusive). The Crashmap output is shown in Fig. 2.2.

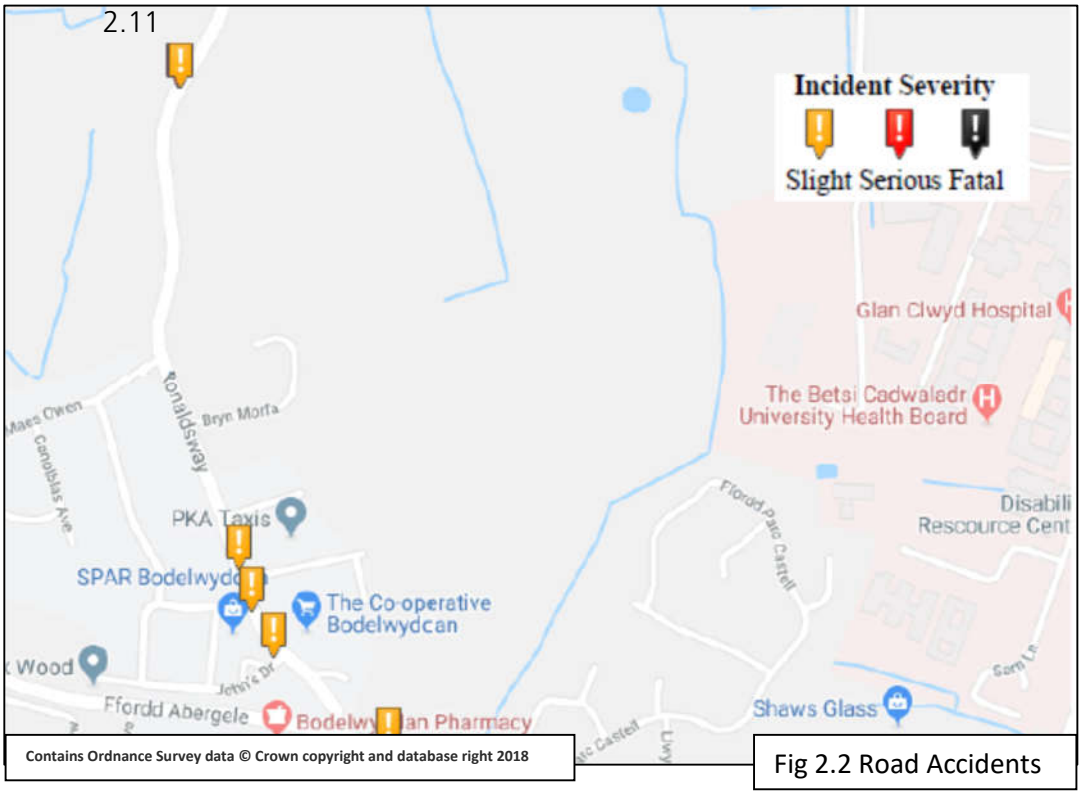


Fig 2.2 Road Accidents

2.11 With reference to the recorded accidents, it can be seen that there is no significant number or concentration of accidents which would suggest that the area has a road accident problem. The future increase in traffic volumes generated by the proposed development is unlikely to have any adverse impact on the operational safety of the local highway network.

3.0 ACCESSIBILITY OF THE SITE

Introduction

3.1 A key element of national, regional and local policy is to ensure that where feasible, new developments are located in areas where alternative modes of travel are available. It is also important to ensure that developments are not isolated but are located close to complementary land uses and services. This supports the aims of integrating planning and transport, providing more sustainable transport choices and reducing overall travel by car.

Pedestrian Access

3.2 Former PPG13 guidelines state that walking is the 'most important mode of travel at the local level and offers the greatest potential to replace short car journeys, particularly under 2 kilometres'. Further research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution for Highways and Transportation (CIHT) document entitled 'Providing for Journeys on Foot' suggests walking distances which are also relevant to this planning application. These are reproduced in Table 3.1.

Table 3.1 Suggested Acceptable Walking Distances (m)

	Town Centres	**Commuting/School** **Sight Seeing**	**Elsewhere** **Local Services**
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

3.3 The main employer in the area is the local hospital which is located approximately 1.75km from the site and thus is within the Preferred Maximum distance for commuting. The nearest shops and local services are approximately 400m and the primary school some 800m, all of which are within the Acceptable distance.

Cycle Access

3.4 Former PPG13 guidelines state that cycling has the 'potential to replace short car journeys, particularly those under 5 kilometres'. This distance equates to a journey time of around 25 minutes, while cycling at a leisurely speed of 12 kilometres per hour. Access to local services, the hospital and St Asaph Business Park are located within a 5km catchment area.

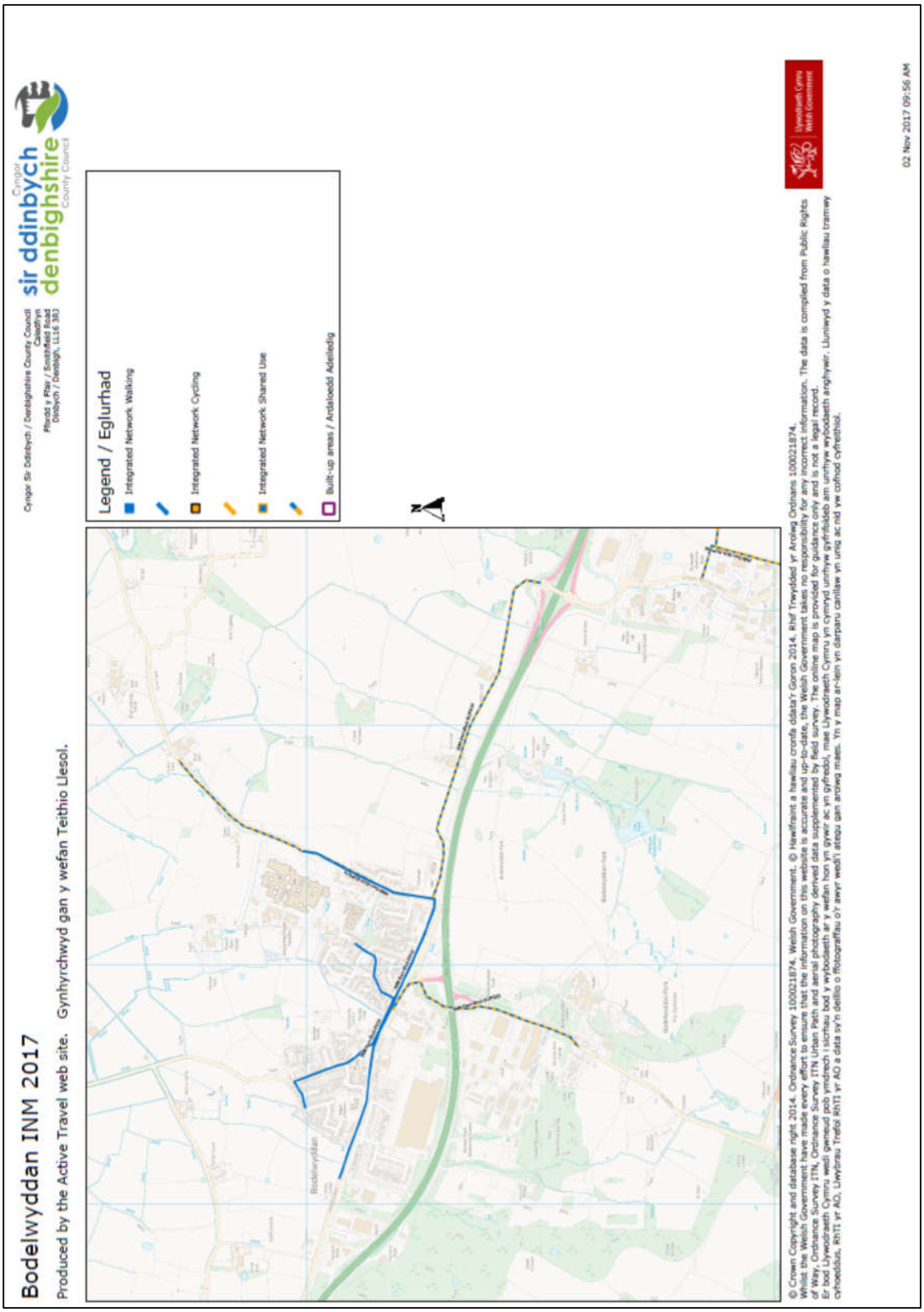
3.5 A shared pedestrian/cycle facility can be accessed near Abergele Road. A route plan of the local cycle network is shown at the end of this chapter.

Public Transport

3.6 The CIHT document, 'Planning for Public Transport in Developments', recommends that developments should ideally be located within 400m of a bus stop. The closest bus stops are located on Abergele Road, which are approximately 420m away from the site. These stops provide access to the Number 13 Llandudno – Prestatyn service, which operates every 40 minutes Monday – Saturday between 0700 – 2000 hours. A limited service is also provided on Sundays. The bus stops have shelters and seating.

3.7 More bus services can be accessed from bus stops located on Rhuddlan Road, located approximately 1km from the site. These stops provide access to the number 13 service and the number 45/46 Rhyl – hospital; and the number 51 service Rhyl – Denbigh. The number 51 service is a high frequency service operating between 0500 – 2300 hours Monday – Saturday and also serves the St Asaph Business Park.

3.8 The railway network can be accessed via Rhyl railway station which is situated on the Crewe – Holyhead railway line. Whilst the distance from the site to the railway station is some 10km away, it does provide access to both the local and national rail network.


Bodelwyddan INM 2017
Produced by the Active Travel web site. Gynhyrchwyd gan y wefan Teithio Llesol.
Cyngor Sir Ddinbych / Denbighshire County Council
Caledfryn
Ffordd y Parc / Smithfield Road
Dinbych / Denbigh, LL16 3RJ
sir ddinbych denbighshire
Legend / Eglurhad
Integrated Network Walking
Integrated Network Cycling
Integrated Network Shared Use
Built-up areas / Ardaloedd Adeiledig
Bodelwyddan
© Crown Copyright and database right 2014. Ordnance Survey 100021874. Welsh Government. © Hawlfraint a hawliau cronfa ddata'r Goron 2014. Rhif Trwydded yr Arolwg Ordnans 100021874.
Whilst the Welsh Government have made every effort to ensure that the information on this website is accurate and up-to-date, the Welsh Government takes no responsibility for any incorrect information. The data is compiled from Public Rights of Way, Ordnance Survey ITN, Ordnance Survey ITN Urban Path and aerial photography derived data supplemented by field survey. The online map is provided for guidance only and is not a legal record.
Er bod Llywodraeth Cymru wedi gwneud pob ymdrech i sicrhau bod y wybodaeth ar y wefan hon yn gywir ac yn gyfredol, mae Llywodraeth Cymru yn cymryd unrhyw gyfrifoldeb am unrhyw wybodaeth anghywir. Lluniwyd y data o hawliau tramwy cyhoeddus, Rhif TI yr AO, Llwybrau Trafod Rhif TI yr AO a data sy'n deillio o ffotograffiau o'r awyr wedi'i ategu gan arolwg maes. Yn y map ar-lein yn darparu canllaw yn unig ac nid yw cofnod cyfreithiol.
02 Nov 2017 09:56 AM

4.0 PROPOSED DEVELOPMENT AND ASSOCIATED HIGHWAY IMPACT

The Development

4.1 The proposed development is for the provision of 28 residential units on a site located to the east of existing residential properties situated on Bryn Morfa. Access to the site will be via a new highway link served directly from Bryn Morfa. The construction of the new link road will necessitate the demolition of an existing residence (number 22) on Bryn Morfa.

4.2 The development also includes for the construction of a new pedestrian link to provide access to the existing allotments located to the north of the site.

4.3 The proposed layout of the site is shown at the end of this chapter on the masterplan as produced by Environmental Associates.

New Junction

4.4 The proposed link road serving the residential development will join Bryn Morfa at a new priority-controlled T junction located on a site which formerly was occupied by Number 22. Bryn Morfa is a cul-de-sac which currently serves some established 40 residential units. The number of existing residential properties that are located beyond the proposed site access junction is only 12 and thus associated generated traffic flows will be minimal.

Bryn Morfa looking north adjacent to Nos 22

4.5 The proposed access road is to be 4.8m wide, which has been agreed in principle with DCC Highways department. Vehicle tracking has been undertaken by SCP to confirm that a refuse vehicle can adequately manoeuvre in and out of the new development.

4.6 DCC's highway's department have asked for details regarding visibility splays at the proposed junction and stipulated that they should conform to values shown in Table B of TAN18. The values in Table B conform to those as contained in the Manual for Streets and are shown in Table 4.1.

Table 4.1 MfS Derived Stopping Distances

Main Road Speed Kmh	16	20	24	25	30	32	40	45	48	50	60
Main Road Speed mph	10	12	15	16	19	20	25	28	30	31	37
SSD Distance (m)	9	12	15	16	20	22	31	36	40	43	56
SSD (m) adjusted for bonnet length	11	14	17	18	23	25	33	39	43	45	59

4.7 In relation to Table 4.1, it should be noted that the speeds shown represent the speed vehicles will be travelling at on the main road when entering the visibility splay. Therefore, whilst Bryn Morfa is subject to a 30mph speed limit, application of visibility splays for such a speed would be inappropriate, as background traffic flows generated from the northern end of the cul-de-sac are unlikely to be travelling at such a speed.

4.8 Visibility splays from the proposed junction have been identified and are shown in The Design and Access Statement produced by Cadnant Planning. For ease of reference the respective drawing is shown at the end of this chapter. The visibility splays shown identify a distance of 25m which is satisfactory for vehicle speeds of up to 20mph. Actual measurements taken on site from a point where vehicles will be turning right into the new link road, identify a forward sight distance of some 26m.

4.9 Whilst Bryn Morfa has a speed limit of 30mph, it is unlikely that cars generated from the local residents will attain such a speed. In addition, there is only a maximum distance of some 40m from the proposed junction to the end of the cul-de-sac and thus vehicles (which will be starting from a standstill) generated by the local residents from this section of Bryn Morfa are unlikely to be travelling at 20 mph on approach to the proposed junction. Therefore, application of visibility splays as recommended for a 20mph highway would be more appropriate in this instance.

4.10 In summary, considering the character of the area and that the majority of traffic will be generated by local residents, then associated vehicle speeds on Bryn Morfa are likely to be less than 20mph and thus the visibility splays at the proposed junction should prove adequate.

Future Traffic Volumes

4.11 Estimating future volumes of traffic anticipated to be generated from new development is often undertaken based on information obtained from the TRICS database. TRICS is the industry recognised tool for calculating the future trip demand of new developments based on land use, size and location. However values derived from the TRICS database can be significantly influenced by the choice of parameters applied (e.g. range of GFA's considered, exclusion of specific regions, locations of sites etc.) when interrogating the database and subsequently, the derived rates may not prove to be representative of local trip patterns in relation to the proposed future developments.

4.12 To ensure greater confidence in establishing suitable trip generation rates, ideally discussions should be undertaken at the start of the application process with the local highway authority, which often have their preferred trip rates more suitable for the local region. Unfortunately such discussions have not been undertaken and therefore we have applied trip rates as used in a previous study undertaken in Ulverston, a market town located in the rural area of the south Lake District which we consider is a similar environment as the proposed development.

4.13 The trip rates as applied were found acceptable by both Cumbria County Council (the highway authority) and the Highways Agency (the sites were

located close to a national trunk road). To further reassure the suitability of our approach regarding the application of appropriate trip generation factors, trip rates were also obtained from the TRICS database for comparison.

4.14 The trip rates (TRICS data is shown in parenthesis) applied per residential unit were as follows:

- AM peak hour 0.14 (0.11) vehicles IN and 0.49 (0.33) vehicles OUT;
- PM peak hour 0.48 (0.29) vehicles IN and 0.21 (0.14) vehicles OUT.

4.15 Application of the identified trip rates would result in the generation of the following future traffic volumes as shown in Table 4.1.

Table 4.1 Predicted Traffic Flows

	AM Peak		PM Peak	
	IN	OUT	IN	OUT
USED	4	14	14	6
TRICS	3	10	8	4

4.16 With reference to the derived flows as shown in Table 4.1, it can be seen that the trip rates we have chosen to apply produce traffic flows greater than those produced by application of the TRICS generation rates. However, it is evident that the nature and scale of the proposed development will not produce any significant volumes of traffic, and subsequently their impact on the operational capability of the adjacent highway network, including the A55, is likely to be minimal.

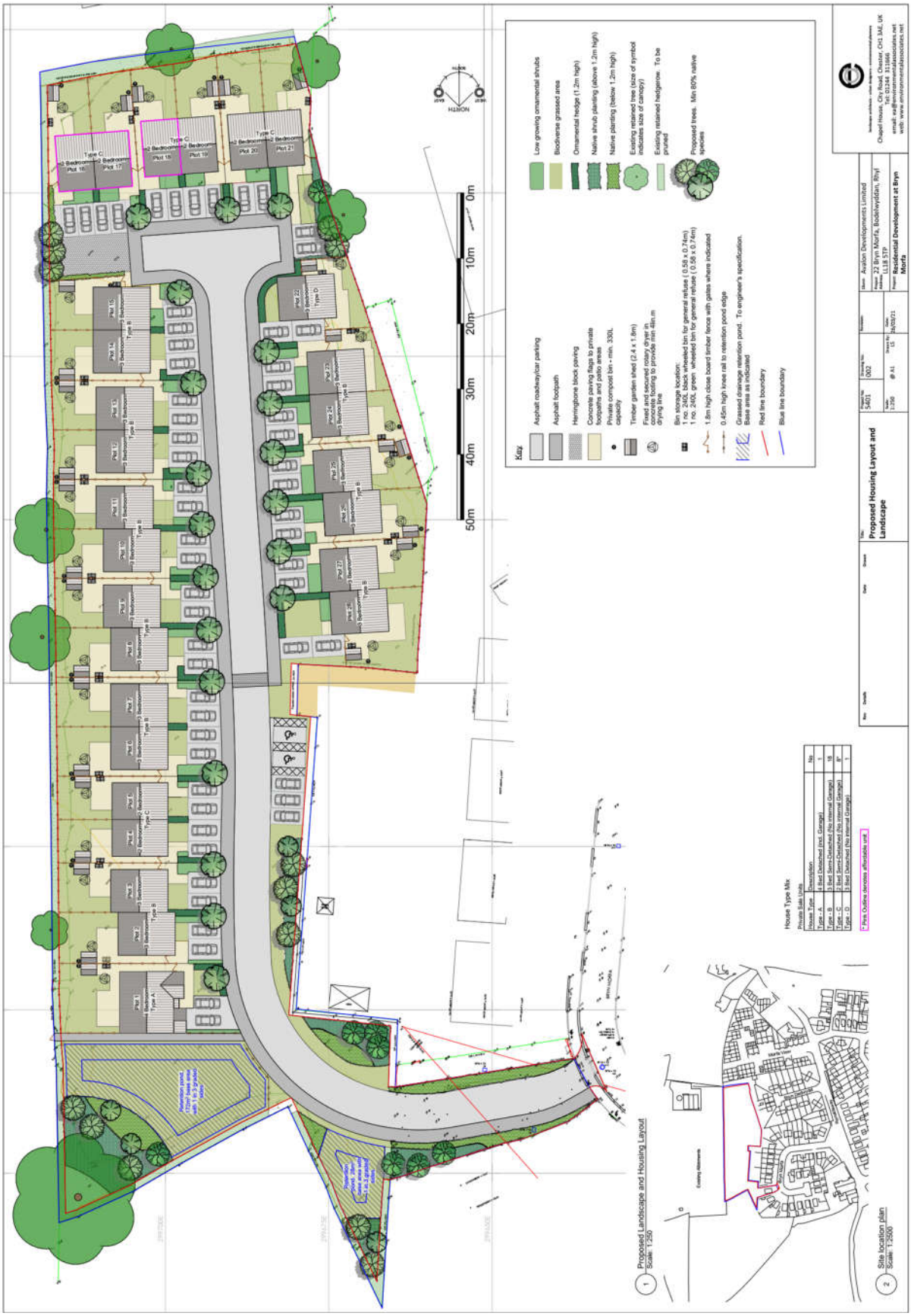
Parking Provision

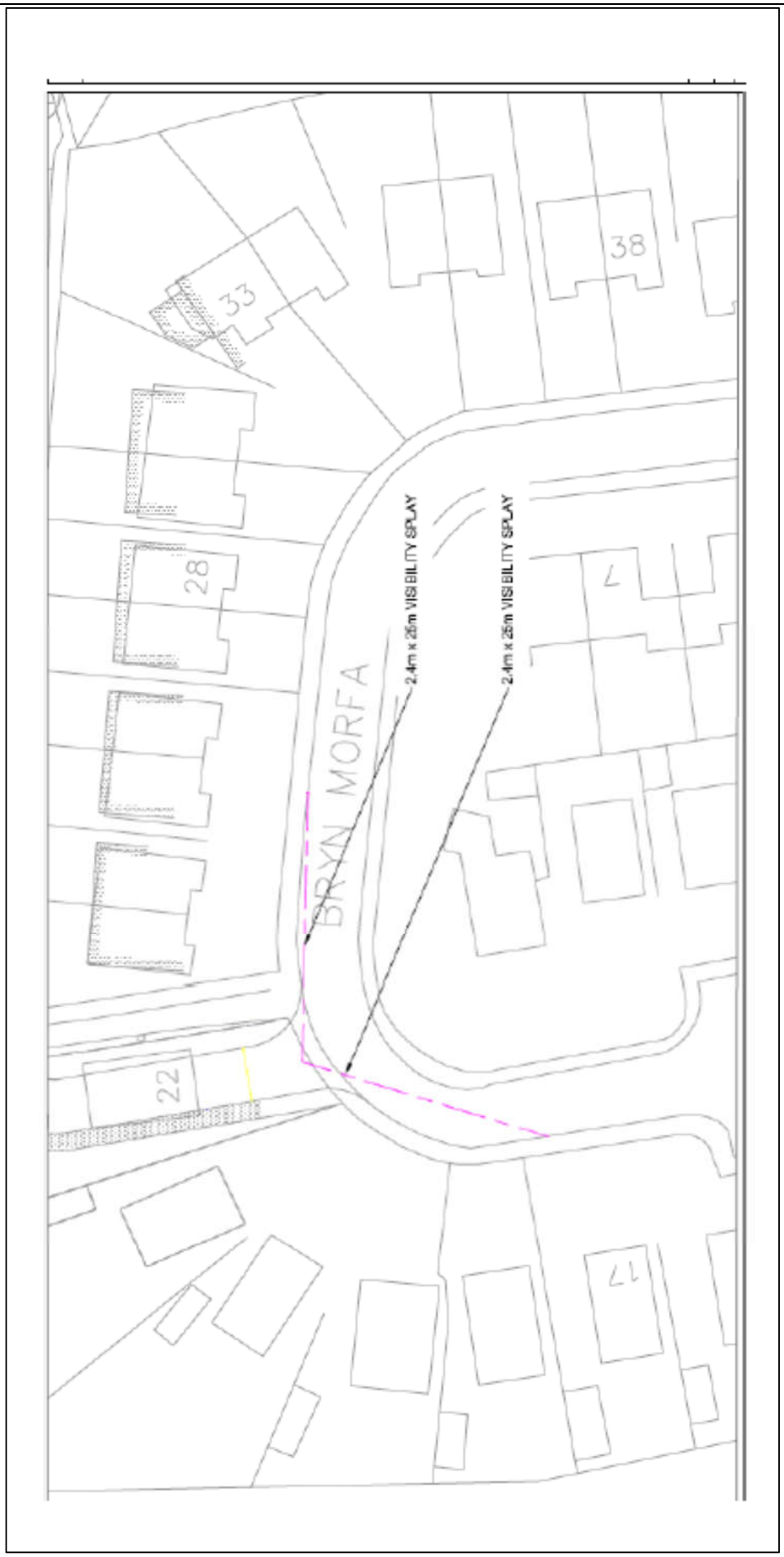
4.17 DCC's Supplementary Planning Guidance Note, 'Parking Requirements in New Developments' identifies that car parking provision at new residential developments should be based on 1 space per bedroom, up to a maximum of 3 spaces. The proposed development has identified provision of 2 spaces per residential development which is within the maximum standards. In addition, no parking restrictions are planned to be introduced and so some on-highway parking will be possible which would be capable of accommodating visitor parking demands.

Summary

4.18 The scale of the development is only for 28 residential units and subsequently, the associated volume of future generated traffic flows will be minimal. The additional traffic flows are unlikely to have any significant impact on the operational capability of the local highway network.

4.19 The new junction on Bryn Morfa has visibility splays which are acceptable for roads where background traffic speeds are less than 20mph. The speed of traffic flows on Bryn Morfa is unlikely to reach 20mph.


Key
Asphalt roadway/car parking
Asphalt footpath
Herringbone block paving
Concrete paving flags to private footpaths and patio areas
Private compost bin - min. 330L capacity
Timber garden shed (2.4 x 1.8m)
Fixed and secured rotary dryer in communal location to provide min 4lin.m drying line
Bin storage location:
1 no. 240L black wheeled bin for general refuse (1.5ft x 0.74m)
1 no. 240L green wheeled bin for general refuse (1.05ft x 0.74m)
1.8m high close board timber fence with gates where indicated
0.45m high knee rail to retention pond edge
Grassed drainage retention pond. To engineer's specification. Base area as indicated
Red line boundary
Blue line boundary
Low growing ornamental shrubs
Biodiverse grassed area
Ornamental hedge (1.2m high)
Native shrub planting (above 1.2m high)
Native planting (below 1.2m high)
Existing retained tree (size of symbol indicates size of canopy)
Existing retained hedgerow. To be pruned
Proposed trees. Min 80% native species
0m
10m
20m
30m
40m
50m
NORTH
House Type Mix
Private Sale Units
Proposed Landscape and Housing Layout
Scale: 1:250
Site location plan
Scale: 1:3500
Proposed Housing Layout and Landscape
Residential Development at Bryn Morfa
Avalon Developments Limited
Egniol Consulting Ltd


33
38
28
BRYN MORFA
2.4m x 25m VISIBILITY SPLAY
2.4m x 25m VISIBILITY SPLAY
22

5.0 TRANSPORT PLANNING POLICY

Introduction

5.1 This chapter describes the key national and local traffic and transport policies that are relevant to this application.

PLANNING POLICY WALES (EDITION 9)

5.2 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. The document comprises of a total of 14 subject-specific chapters, which are supported by a series of Technical Advice Notes (TANs).

PPW CHAPTER 8: TRANSPORT

5.3 Chapter 8 of PPW concerns Transport. The document sets out the aim of extending choice in transport and to increase accessibility in a way that supports sustainable development by:

"…encouraging a more effective and efficient transport system, with greater use of the more sustainable and healthy forms of travel, and minimising the need to travel."

5.4 It is recognised that land use planning can help to achieve the above aims in the following ways:

- Reducing the need to travel, especially by private car, by locating development where there is good access by public transport, walking and cycling;
- Locating development near other related land uses to encourage multi-purpose trips and reduce the length of journeys;
- Improving accessibility by walking, cycling and public transport;
- Ensuring that transport is accessible to all, taking into account the needs of the mobility impaired;
- Promoting walking and cycling;
- Supporting the provision of high quality public transport;
- Supporting appropriate traffic management measures;
- Supporting sustainable travel options in rural areas;
- Supporting necessary infrastructure improvements; and
- Ensuring that as far as possible, transport infrastructure does not contribute to land take, urban sprawl or neighbourhood severance.

5.5 It is considered that the proposed development is consistent with these objectives. There is good access to local facilities and amenities, including employment sources, by both bicycle and walk modes.

5.6 The site is accessible to the local bus services which also provide access to neighbouring towns and employment opportunities.

Planning Policy Wales, Technical Advice Note 18: Transport

5.7 Chapter 8 of PPW is supplemented by Technical Advisory Note (TAN) 18 which provides detailed guidance on implementing the transport objectives contained in PPW Chapter 8.

5.8 TAN 18 (Annex D) outlines the need for Transport Assessments (TAs) in relation to the majority of different land-uses (and associated sizes) in Wales. With reference to Annex D it is evident that the proposed development does not require a supporting TA as the threshold for residential land-uses is identified as 100+ dwellings.

Transport Planning Policy Summary

5.9 In summary, it is considered that the development proposals accord with relevant local and national transport planning policy.

6.0 SUMMARY AND CONCLUSION

Summary

6.1 This Transport Statement has been produced to support the planning application for the proposed provision of 28 residential units, located on a site adjacent to existing residential development. The proposed development is consistent in relation to the nature and scale of adjacent land-uses.

The site will require the construction of a new link road and associated junction, which will be accessed directly of Bryn Morfa. The existing adjacent highway network and the future site access junction are suitable to accommodate the anticipated volumes of traffic the future residential development will generate. We also consider the proposed junction design to be capable of safely accommodating future traffic movements. If deemed necessary, supporting measures e.g. the introduction of a 20mph speed limit, traffic calming measures etc. could be introduced to mitigate against any concerns DCC may have.

6.2 The volume of vehicles which the site is expected to generate is not significant, and thus is unlikely to have any significant impact on the operational capability of the existing wider highway network.

6.3 The review of the local road accident records has not identified any significant number or cluster of accidents which would give rise for further investigation. Future traffic flows generated from the proposed residential development are unlikely to adversely impact accident frequencies.

6.4 The site is located within acceptable cycling and walking distances of the local amenities and services. It also has pedestrian linkages to existing bus services providing connections to nearby employment opportunities and regional towns.

6.5 The location of the proposed development is in keeping with adjacent land-uses and it conforms to and supports current regional and national planning policies.

Conclusion

6.6 Based on the review of existing highway and traffic operations in the area and in relation to the future traffic flows anticipated to be generated by the proposed development, it is evident that there are no highway grounds on which to oppose the associated planning application.

7.0 Travel Plan

Introduction

7.1 The response to the pre-enquiry letter from the DCC's Planning Department identified that the planning application should also be accompanied by a Travel Plan. As the end users of this development are not yet known and no existing travel data exists for the site, it has not been feasible to produce a fully detailed travel plan and thus a Framework Travel Plan (FTP) has been prepared to accompany the planning application.

7.2 With regard to a FTP, planning authorities usually recognise that in circumstances where it is not possible to submit a full detailed travel plan, the developer can prepare and submit an FTP. This would identify all potential measures which could be incorporated in a formal TP which would be produced and applied once the proposed development is completed.

7.3 Whilst we have produced a FTP, to accord with Planning Department's requirements, it should be noted that the relatively small scale of the proposed development is such that the impact of any associated Travel Plan is unlikely to prove to be significant.

Overview

7.4 A Travel Plan involves the development of a set of mechanisms, initiatives and targets to improve the local environment by attempting to reduce the level of usage of the private car for journeys to work and leisure. Travel Plans tend to be more successful when associated with places of employment as the demand for travel tends to be concentrated on a single site/unit, involves greater demands for travel, and the respective employer can exert more control over factors which effect travel patterns. However, it is also recognised that other non-employment related land-uses can also provide positive contributions to help reduce the need for travel, though in such instances it is sometimes more appropriate to adopt a more minimalistic approach to travel planning, rather than impose the development of a full blown travel plan. Adopting such a minimalistic approach is in keeping with the recognition that the transport implications will not be substantial but are important, and thus the approach to be taken should focus on an overall approach to raise awareness of the potential to use non-car travel modes for access to and from the site.

7.5 The preparation of a Travel Plan involves the development of a set of mechanisms, initiatives and targets to improve the local environment by attempting to reduce the level of usage of the private car for journeys to work. However, it is important that any proposed measures should be SMART (**S**pecific, **M**easurable, **A**chievable, **R**ealistic, **T**imed) and targets should comply with any appropriate National and Local Guidelines. Successful Travel Plans can have beneficial impacts for both residents and visitors of the development itself.

7.6 In general, the objectives of a Travel Plan will seek to:

- Reduce the need to travel to and from the site by private car;
- Reduce the volume of traffic and pollution in the area;
- Improve the safety and security of people who live within and travel to and from the area;
- Identify improvements for accessing the area for all modes of transport;
- Identify and encourage the use of transport modes other than private car to access the area; and

- Provide information to assist residents and visitors in their journeys, particularly in relation to sustainable modes of transport.

7.7 A Travel Plan should be considered as a 'living document' in the sense that it needs to be monitored regularly and, where necessary, targets and measures are reviewed and updated. There are numerous potential benefits from implementing a successful Travel Plan for the local community and for the development itself. These benefits include reduced local congestion and air pollution, improved health, reduced parking problems and an improved public image for the new development.

7.8 It will also be important to liaise fully with DCC's Travel Planning officer and investigate the potential for utilizing the County's current car-sharing database (if one exists).

7.9 In relation to the proposed development, initial measures which could be considered as part of any potential Travel Plan condition include:

- The identification of a Travel Plan coordinator for the development;
- Car sharing;
- Promotion of bus modes;
- Provision of appropriate material regarding travel to and from the site via community notice boards; and
- Provision of cycling and pedestrian facilities.

7.10 Measures and actions to be undertaken in relation to the above are discussed in the following paragraphs.

Travel Plan Coordinator

7.11 A Travel Plan Co-ordinator should be identified in advance of the development being ready for occupancy and would be responsible for introducing, promoting and monitoring such a plan at the site. It should be noted that this need not be a new appointment but could be an extension of the responsibilities of the development's project manager for example.

7.12 In addition to introducing and identifying alternative measures to encourage residents not to drive to work, the Travel Plan Coordinator will also be responsible for the management and monitoring of the Travel Plan. Tasks to be undertaken are likely to include the following:

- To actively promote and encourage the use of modes of transport other than the car, and to lead by example;
- Day-to-day management, ensuring that relevant information is provided and widely circulated and that information is kept up-to-date and is clearly displayed on local notice boards or community web sites;
- To arrange/record surveys of residents to identify travel patterns. The surveys to be undertaken in accordance with a period specified by the planning authority;
- Survey and record level of cycle usage at 3 monthly intervals and continually review for any increased provision that might be required;
- Link/liaise with subsidiary travel plans e.g. local schools, leisure centres etc.;
- Maintain a database of car sharing availability;
- Manage residential parking;

- Establish working relationships with local taxi firms and coach operators that can be recommended to residents; and
- Identify potential for residents to utilise existing public transport services.

Car Sharing

7.13 Initial action requires the establishing of a database of residents to identify opportunities for individuals to participate in a car sharing scheme. The database initially is likely to relate to the new development, though opportunities may exist to extend any car sharing scheme between neighbouring areas.

Electric Vehicles

7.14 The use of electric vehicles is growing, and therefore consideration should be given to the setting up an electric vehicle car club (if sufficient numbers) serving residents. Consideration should also be given to providing electric vehicle charging facilities at the new residential units as future residents may already have electric vehicles.

Promotion of Bus Modes

7.15 Measures for consideration, which will need to be conveyed to both residents and potential visitors include:

- Provision of up-to-date timetable leaflets for all regular bus services operating in the area;
- Identification of appropriate bus and taxi firms who can serve the site;
- Collaboration with the DCC/bus companies to investigate the potential to deliver enhancements to the local bus network, with a particular focus on increasing frequencies of some services; and
- Interest free loans for season ticket purchase on the local bus network.

Cycling and Pedestrian Measures

7.16 Measures should be introduced to encourage residents to cycle or walk to work. Measures to be considered include:

- Holding promotional events, such as Bike2Work days etc. to encourage residents to cycle;
- Arranging discounts with local suppliers in relation to the purchase of cycling equipment or repair, and walking equipment;
- Cycle training for school children;
- Creation of bicycle user groups or development of cycle 'buddy' schemes to encourage more people to take-up cycling;
- Regular meetings with residents and community groups to encourage cycling and walking as an alternative to using cars;
- Creation of community travel forums through which advice can be given and also provides a medium for residents to provide feedback;
- Provision of maps showing routes for cyclists and walkers; and
- Provision of improved facilities on-site to advantage cyclists and pedestrians over car users.

Marketing and Promotion

7.17 If a Travel Plan is to be successful, it will also be necessary to undertake a robust marketing plan in order to inform prospective residents of available facilities and services, especially if people need to be made aware of the associated benefits if they are to embrace them. Measures to be considered to aid promotion include:

- Engage with residents on a personal level prior to their occupation of new residences in order to encourage new travel habits and outline the benefits of using more sustainable travel modes;
- Personal travel planning, informing residents of specific alternative travel options;
- Promoting the travel plan through the selling process. Sales staff can be trained to help 'sell' the area as being one which considers and promotes sustainable travel;
- Providing details of the sites' sustainable transport facilities as part of any associated advertising packages.

7.18 In addition to promoting sustainable travel options at the point of sale, the developer can also be made responsible for including 'welcome packs' for residents, which could include:

- Free/discounted tickets for local bus services;
- Information relating to available car clubs;
- Discounted bicycle (and associated equipment) purchase;
- Arrange for visits from personal travel advisor;
- Offer cycle training or identify cycle groups/bike buddy schemes;
- Provide local walking and cycling maps;
- Provide timetables for local bus services;
- Provide information regarding the objectives of the travel plan, emphasising the positive benefits both in relation to the local environment and in terms of personal health;
- Provide feedback surveys to gather initial views of residents and seek suggestions for improvements;
- Identify web-based travel planning sources.

Targets, Monitoring and Management

7.19 The long term success of any Travel Plan will rely on efficient monitoring and management, and appropriate arrangements need to be established at the out-set, especially as ultimately, responsibility will be passed from the developer to residents (or the local authorities travel plan co-ordinator).

7.20 Primarily targets will be set which are aimed at reducing the amount of trips undertaken by private cars. However, it will be necessary to identify both realistic and achievable targets and need to be compared against baseline data prior to the Travel Plan being introduced. Indicators which can help establish if targets are being met include:

- Monitoring of car trips from the residential developments for AM peak period;

- Monitoring of public transport patronage;
- Cycle counts;
- Membership numbers of car sharing clubs;
- Uptake of cycle training;
- Pedestrian surveys;
- Car ownership levels;
- Travel to work/school modes;
- Use of the site's travel plan website;
- User satisfaction surveys.

Summary

7.21 The recognition and encouragement of measures to reduce travel by private car is important and a range of potential measures have been identified which if applied, will help to reduce the dependency on car travel by residents in the new developments. At this stage it somewhat premature to be very prescriptive regarding what measures should be introduced, and this will require further negotiation between the developer and the local authority as the planning process progresses.

7.22 However, if the Travel Plan is to be successful, then it is important that:

- That the proposals are appropriate and deliverable. Emphasis needs to be placed on the future design to aid the development of more sustainable modes of travel;
- The plan needs to be an integral component of the development from the outset. This includes consideration of both physical measures (cycle and pedestrian routes, bus services etc.) and promotional measures (car sharing, details of bus services etc.);
- Partnership and commitment is established, between the developer and the local authority;
- Marketing is undertaken to promote the concept and the facilities available. It is important that residents are successfully encouraged to adopt more sustainable forms of transport;
- Funding is available to help support the Travel Plan.