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May 2013

**LAND OFF
BANGOR ROAD,
JOHNSTOWN,
WREXHAM**

**travel
plan**

Client: Gladman Developments Ltd

ashleyhelme
a s s o c i a t e s



TRAVEL PLAN

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TRAVEL PLAN

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A Illustrative Masterplan layout

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1

introduction

1.1 Gladman Developments Ltd has submitted an outline planning application for proposed mixed-use development on land off Bangor Road, Johnstown, (henceforth referred to as the Site). The location of the Site is indicated on the Figure 1 Location Plan. This Framework Travel Plan (TP), supports the outline planning application (refer para 1.4.3).

1.2 OVERVIEW

1.2.1 The reason that this is a 'Framework ' TP is that the application is in outline. For the avoidance of doubt, this Framework TP applies to, and provides the context for, any and all future TPs prepared for the entirety of the outline application Site area; requirements of the Framework TP, and in particular the TP target, must relate to all dwellings constructed on the application Site area. Whilst there is employment and retail use included in the planning application (refer para 1.2.2), these are of modest scale, and are estimated to generate modest traffic flows. Consequently, as a pragmatic matter of practicality, the development TP is a residential TP, with a residential TP target. Notwithstanding this, all of the TP measures and improvements for sustainable transport options are similarly available for employees based at the Site.

1.2.2 The proposed development comprises:

- Up to 300 residential dwellings,
- 465sm GFA B2/B8 industrial, storage and distribution units,
- 235sm A1 retail unit (assumed convenience store) with ATM,
- Play space.

1.2.3 The Framework TP is informed by a separate Transport Assessment (TA) report prepared and submitted in support of the outline planning application. There is consistency between the Framework TP and the corresponding TA report.

1.2.4 The access strategy for the development is founded on the fundamental principle of encouraging travel by trips to/from the development uses to be made by

sustainable travel mode choices. The TP provides the context and means of achieving the development access strategy. The TP proposals ensure that, from the outset, sustainable travel choices are available for occupants and visitors of the development.

- 1.2.5 The access strategy for the development is illustrated on Figure 2. All vehicular access to the development via a Bangor Road/Site Access roundabout junction, that also accommodates pedestrians and cyclists. This is complemented by additional pedestrian/cycle links on Bangor Road (2no), Hafod Road (2no) and pedestrian/cycle links between the Site western boundary and the surrounding area (2no). The northernmost Hafod Road pedestrian/cycle access can also be constructed to a standard to provide emergency vehicular access, if this is required by WCBC.

1.3 TRAVEL PLAN OBJECTIVES

- 1.3.1 The TP provides the context and means of achieving the development access strategy and objectives, and its formulation is ongoing and dynamic, in accordance with best practice.
- 1.3.2 The key objectives of the TP are to:
- Contribute to traffic reduction and other sustainable transport objectives set out in national and local policies,
 - Improve accessibility of the Site by sustainable modes of transport,
 - Widen choice of travel mode for all those travelling to/from the Site.
- 1.3.3 It is imperative that the TP measures are effective and efficient.
- 1.3.4 The DfT 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process' (April 2009) provides the most up-to-date national guidance in England, setting out "*good practice actions that can be taken to produce high quality, robust travel plans*" (para 1.2). Whilst this applies in England, the principles of the guidance are similarly relevant in Wales, and are wholly consistent with the aims and objectives of travel planning pursued in Wales (eg the WAG Welsh Travel Plan Awards: Rewards and Recognition Scheme').

1.3.5 The DfT 2009 guidance clearly and unequivocally establishes that travel plans are "*an integral element in the planning process. They are not a soft option or a 'green wash' to deal with the transport implications of development.*" (para 1.7).

1.3.6 For the development residential use, the DfT 2009 guidance is also complemented by the (still current) DfT 'Making Residential Travel Plans Work: Good Practice Guidelines' (2005).

1.4 **SCOPE OF TRAVEL PLAN**

1.4.1 The DfT 2009 guidance sets out that there are two broad types of TP:

- 'Destination': designed to increase sustainable travel to a particular location, and
- 'Origin': residential Travel Plans where journeys are made to varied locations.

The proposed development is for residential use, and hence this Framework TP is an 'origin' TP.

1.4.2 The DfT 2009 guidance states that:

"Complex proposals, such as multi-occupied developments or speculative developments where the final occupier is not known, will usually require several different types of travel plans at different stages and for different uses (see Chapters 4 and 5 in relation to Framework travel plans and interim travel plans). The planning obligation should spell out the types of travel plans required (interim, Framework, or subsidiary to a Framework travel plan), include associated schedules for key elements, and specify timetables (e.g. 'before development commences' for interim and Framework plans, and 'within six months of occupation' for the final travel plan or the subsidiary travel plans)." (para 7.39)

1.4.3 The Framework TP sets out how the developer(s) will progress the TP, progressing from this Framework TP to the preparation and submission to the local authority of a "full travel plan", which is to be agreed with the local authority. This is in accordance with the DfT 2009 guidance.

- 1.4.4 The outcomes approach is adopted for the Framework TP, in accordance with the DfT 2009 guidance. This explains that:

"In the outcomes approach, the focus is on securing the performance of the travel plan through ensuring that modal split targets are met or identifying other specified outcomes related to travel mode share and vehicle trip levels. To work, the approach needs the applicant/developer to commit to achieving specific targets/outcomes and agree to a review and monitoring process" (para 2.17),

"The advantage of this approach is that it is objective led. The outcomes sought should relate to the local situation and local policy requirements. The approach provides scope for adjusting the means of achieving the outcomes over time in relation to experience at the site." (para 2.18)

- 1.4.5 The underlying purpose of the TP is to reduce car travel and encourage alternative modal choices that are more sustainable, such as walk, cycle and public transport, as well as car share.' The Welsh Travel Plan Awards: Rewards and Recognition Scheme' (WAG) explains that:

"A travel plan is a set of measures which improve travel choices, and provides more sustainable access for all. It should contain a mixture of initiatives for success which are tailored to the organisation and may include car sharing, promoting public transport, cycling, walking and support of alternative work practices."

- 1.4.6 The DfT 2005 'Making Residential Travel Plans Work: Good Practice Guidelines' (RTPG) clearly sets out that one of the main objectives of a residential TP is to:

"• reduce the traffic generated by the development to a significantly lower level of car trips than would be predicted for the site without the implementation of the travel plan".

Again, this DfT advice and guidance is wholly consistent with the aims and objectives of travel plans pursued in Wales.

1.4.7 The DfT RTPG sets out key principles that are helpful in deciding the choice of measures for an individual residential TP. This unequivocally identifies that a residential TP is site specific.

1.4.8 The other key principles of a residential TP, as set out in RTPG, are:

- "• Combine the "**hard measures**" - of site design, infrastructure and new services - with the '**soft measures**' - of marketing, promotion and awareness-raising among residents.
- Provide a **holistic package** in which individual measures are integrated into the design, marketing and occupation of the site rather than 'retrofitted' once the development is established. The measures should aim to achieve more sustainable travel plans **from the outset**, rather than cutting car use incrementally once the residents are in occupation,
- Include measures to support **walking, cycling and public transport** use.
- Include **parking restraint**. A degree of parking restraint is likely to be critical to the success of the plan in reducing car use."

1.5 COMPREHENSIVE STRATEGY

1.5.1 It is essential to recognise that in order to achieve the optimal benefits from a TP, there is more required than ensuring provision of facilities for sustainable modes of travel. What is required, to meet the Framework TP outcomes objectives (refer Chapter 4), is a shift in behavioural attitudes, leading consequently to a change in behaviour when choosing the mode for making journeys.

1.5.2 Achieving changes to behavioural attitudes to travel, and the achievement of the associated Framework TP targets, requires a considered approach comprising many strands. For example, for some people the highlighting of health benefits and/or environmental benefits may 'do the trick', but for others this will not be as successful, for a variety of reasons.

1.5.3 The role of the TPC (refer Chapters 5 & 8) in addressing this is critical to the degree of success of the TP. The TPC must explore and identify these 'other reasons', and

recognise that there is a need for a range of strategies to be employed to achieve the TP target result of people actually choosing to not make a journey driving alone, but rather to plan their travel needs in a more sustainable way.

- 1.5.4 It is imperative to understand and accept that behavioural change is for many people only achieved via a series of 'small steps'. In other words, there is a substantial body of people that will not take an 'overnight' decision to stop making journeys by driving alone (eg to work), but who can be gradually and positively influenced to change their attitudes and choices (to and for travel). The 'small steps' (nudge) approach forms a key part of the Framework TP comprehensive strategy, and is discussed further in Chapter 5.
- 1.5.5 The success of the TP is dependent upon the TP strategy proposals of the TPC. There is not a 'one size fits all formula' for a successful TP. Within the context of the overall principles that apply for any TP, the operation of a specific TP must be responsive to the specifics of individual sites. This approach is adopted for the development Framework TP.

2

policy context

2.1 The policy context for requiring a TP for a development is established across the board, at national, regional and local levels.

2.2 **WELSH NATIONAL POLICY**

2.2.1 The Government's sustainable development strategy aims to reduce the need to travel, influence the rate of traffic growth and reduce the environmental impacts of travel overall.

2.2.2 WAG recognises that travel plans have a positive role to play in contributing to the Government's sustainable strategy aims. This is evidenced by, for example, the WAG Welsh Travel Plan Awards scheme, which recognises best practice and excellence in Travel Planning.

2.2.3 The DfT 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process' (April 2009) provides the most up-to-date national guidance in England, setting out "*good practice actions that can be taken to produce high quality, robust travel plans*". (para 1.2). As explained in para 1.3.4, the principles of the guidance are similarly relevant in Wales, and are wholly consistent with the aims and objectives of travel planning pursued in Wales.

2.3 **LOCAL POLICY**

Similarly, local policy supports travel planning:

- Local planning policy is established through the adopted Unitary Development Plan (UDP). The UDP should seek to identify locations for development that reduce the need to travel and that are accessible by a range of means of transport,

- Regional Transport Plans (RTPs) need to include measures to address congestion and accessibility and generally consider ways of managing demand. This typically leads to inclusion of policies to promote implementation of travel plans.

2.4 WREXHAM UNITARY DEVELOPMENT PLAN (UDP)

2.4.1 The Wrexham Unitary Development Plan (UDP) 1996-2011 was adopted in February 2005, and at present remains in place.

2.4.2 Policy T9 sets out the requirement for development proposals to provide for non-car modes of transport. Policy T9 states:

“Development proposals will be required to provide walking and cycling routes, where feasible and appropriate, that link with existing or proposed walking and cycling routes, and integrate with the public transport system”.

2.5 WREXHAM LOCAL DEVELOPMENT PLAN 2 (LDP2)

The adopted UDP is due to be replaced by the Wrexham Local Development Plan 2 (LDP2), covering the period 2013 – 2028. Until the LDP2 is adopted, the UDP remains in place. The most recently available timetable for adoption of the LDP2 is December 2016, depending upon the Planning Inspectorate.

2.6 TAITH REGIONAL TRANSPORT PLAN (2009)

2.6.1 Regional Transport Plans (RTPs) replaced Local Transport Plans (LTPs) in 2008. The change reflects a need to plan transport improvements on a regional basis recognising that many transport issues across Wales raise cross-boundary issues for local authorities.

2.6.2 The Regional Transport Plan (RTP) is a strategy for delivering improvements to our transport system in North Wales over the next 5 years and is being developed by Taith. Taith is a transport partnership of the six Local Authorities in North Wales – Anglesey, Conwy, Denbighshire, Flintshire, Gwynedd and Wrexham.

2.6.3 The objectives of the Taith RTP are:

- *Provide, promote and improve sustainable forms of transport and infrastructure to minimise the negative impacts of transport on the local and global environment,*
- *Improve safety of all forms of transport,*
- *Enhance the efficiency and use of the transport network,*
- *Upgrade and maintain the transport infrastructure, providing significant new infrastructure where necessary"*

3

existing conditions: key information from TA

3.1 **SITE LOCATION**

The location of the Site is indicated on Figure 1 in the context of the local highway network.

3.2 **LOCAL SERVICES AND FACILITIES**

3.2.1 It is widely recognised that commuting distances of up to about 2000m (which typically corresponds to about a 25 minute walk) can be acceptable. There are employment locations (which includes retail, school, etc, which all offer employment) within walking distance of the Site.

3.2.2 As well as places of employment, there are existing amenities available in Johnstown, near to the Site, as shown on Figure 3. This includes, for example, closest to the Site, local shops (eg convenience store, hairdresser, postbox), schools, bowling green, as well as a greater range of amenities including shops, post office, churches, pharmacy, public houses and a restaurant/takeaway just beyond a 1000m walk distance from the Site.

3.2.3 As can be seen from Figure 3, there is a substantial existing residential area within a walking commute distance of the Site, offering opportunities for existing local residents to walk to work at the proposed development's employment uses; (similarly there is opportunity for a much greater existing residential population to cycle to work at the development's employment locations, refer Section 3.4 below).

3.3 **ACCESSIBILITY BY WALK**

3.2.1 It is established and acknowledged that walking is the most important mode of travel at the local level, and offers the greatest potential to replace short car trips, particularly under 2km.

3.3.2 The CIHT provides guidance about journeys on foot. It does not provide a definitive view of distances, but does suggest a preferred maximum distance of 2000m for walk commuting trips. A 400m distance corresponds to a walk time of 5 minutes based upon typical normal walking speed. Walking can help to counteract problems of overweight and obesity as well as coronary heart disease, stroke, diabetes and cancer, in addition to improving mental wellbeing (DfT 'Walking and cycling: an action plan', 2004).

3.3.3 The 'walkable neighbourhood' concept is set out in MfS1 and endorsed in MfS2. MfS1 explains that:

*"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot. However, this is **not an upper limit** and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2 km."* (MfS1 para 4.4.1)

3.3.4 Figure 4 presents the 800m, 1000m and 2000m walk isochrones, (ie reflecting 10, 12 and 25 minute walk journeys), and taking account of the existing and development proposed pedestrian infrastructure (latter described in Chapter 7). The 1000m walk isochrone is similarly presented on Figure 3, which also indicates various existing amenities.

3.3.5 Figure 5 shows the existing Public Rights of Way (PROW) within/near to the Site. There are PROW routes passing through the Site as follows:

- PROW 117: along the Site's western boundary,
- PROW 128: along the Site's northwestern boundary, 'following on' from PROW 116 and continuing northwards within the northern area of the Site, leading to Hafod Road,
- PROW 29: between Bangor Road and Hafod Road, within the southeastern area of the Site.

Thus, existing PROW located within the Site/along the Site boundary provide pedestrian/cycle link opportunities between Bangor Road and Hafod Road.

3.3.6 These PROW are complemented by further nearby PROW located outside the Site, as follows and indicated on Figure 5:

- PROW 24: providing a route in a north/northeastern direction from PROW 28 (on the Site's northwest boundary) across the railway line with an uncontrolled at-grade crossing,
- PROW 31: provides a route from Hafod Road to the east, across the A483,
- PROW 25 & 116: north-south along the eastern side of the railway line, intersecting with PROW 24,
- PROW 27: east-west route on the western side of the railway line, including along Glasfryn and incorporating a link to a tunnel route across the rail line.

3.3.7 Additional to the PROW illustrated on Figure 5, there is observed to be existing pedestrian use of a walk link route between PROW 24 and the tunnel crossing of the rail line; this is also indicated on Figure 5 and referenced as 'observed pedestrian activity link route'. It is recognised that this crosses third party land and is not designated as a PROW; nevertheless, in custom and practice this is observed to presently be used by pedestrians, and as such is included for the derivation of the Figure 5 walk isochrones.

3.3.8 To the west of the Site, the railway line provides some severance between the Site and Johnstown. In the locality of the Site there are pedestrian routes across the railway line as follows:

- To the north: the existing PROW 24 provides a pedestrian route to the rail line that includes an uncontrolled at-grade crossing of the rail line,
- Still to the north of the Site: tunnel crossing of the rail line, between PROW 27 & 116,
- To the south: Bangor Road is routed beneath the railway line, and has a footway alongside the carriageway.

3.3.9 Measures proposed to improve pedestrian facilities/infrastructure, as part of the development proposals, are outlined in Section 7.1, Chapter 7.

3.4 ACCESSIBILITY BY CYCLE

3.4.1 It is recognised that cycling also has potential to substitute for short car trips, particularly those under 5km, and to form part of a longer journey by public transport.

3.4.2 The CIHT guidance 'Cycle Friendly Infrastructure' (2004) states that:

"Most journeys are short. Three quarters of journeys by all modes are less than five miles (8km) and half under two miles (3.2km) (DOT 1993, table 2a). These are distances that can be cycled comfortably by a reasonably fit person."(para 2.3)

3.4.3 Cycling can help to counteract problems of overweight and obesity as well as coronary heart disease, stroke, diabetes and cancer, in addition to improving mental wellbeing (DfT 'Walking and cycling: an action plan', 2004).

3.4.4 Figure 6 indicates the 2km and 5km cycle isochrones for the Site, reflecting typically 10 minute and 25 minute journeys. Review of Figure 6 highlights that all of Johnstown is within a 25 minute cycle journey and hence, a wide range of amenities are accessible by cycle. Indeed, beyond the environs of the built-up area of Johnstown itself, the roads and cycle route opportunities include a pleasant rural area that provides excellent opportunity for leisure cycling, with the attendant health benefits.

3.4.5 Figure 7 illustrates the cycle infrastructure/facilities in the vicinity of the Site, including linking to land to the west and south of the railway line.

3.4.6 In summary, the destination opportunities within a 5km cycle ride of the Site for residents of the development comprise a range of amenity and employment locations within Johnstown itself and beyond.

3.4.7 Measures proposed to improve cycle facilities/infrastructure, as part of the development proposals, are outlined in Section 7.2, Chapter 7.

3.5 ACCESSIBILITY BY PUBLIC TRANSPORT

3.5.1 Bus

3.5.1.1 Figure 9 shows the location of bus stops within 800m of the Site. As shown on Figure 9, the bus stops are only marked with a 'flag and pole' on one side of the road, buses call in both directions at these stops. The closest bus stops to the Site are located on Heol Orsaf within circa 600m of the Site. The bus service No 6 calls at the stops shown on Figure 9. The Service 6 route is indicated on Figure 10, between Wrexham (to the north) and Ruabon (to the south), calling at Ruabon rail station. Service 6 provides an hourly service Monday to Saturday during the day.

3.5.1.2 Additionally, there are bus stops along High Street. Table 1 provides a summary of the services calling on High Street. In a typical weekday situation there are circa 11 buses per hour calling on High Street, or circa 22 buses per hour taking into account journeys in both directions along the road. This provides opportunity for bus travel to a range of destinations including Wrexham, Oswestry, Llangollen, Ruabon, Cefn Mawr, Acrefair, Chirk, Barmouth and Glyn Ceirog.

3.5.1.3 Measures proposed to improve bus facilities/infrastructure, as part of the development proposals, are outlined in Section 7.4, Chapter 7.

3.5.2 Rail

3.5.2.1 The rail station closest to the Site is Ruabon, circa 3.6km to the south of the Site. This is on the Shrewsbury to Chester rail line.

3.5.2.2 There is 1 northbound train an hour to Wrexham General, that often continues on to Chester and Holyhead.

3.5.2.3 There is 1 southbound train an hour to Shrewsbury (circa 30 to 45 minute journey time). This train continues to Birmingham New Street (circa 1h 43 minutes journey time from Ruabon) or Cardiff Central (2h 35 minutes journey time) every 2 hours.

- 3.5.2.4 Passengers with destinations even further afield have ample opportunity to make such journeys by rail, with a change of train. For example, Birmingham New Street offers access to the inter-city rail routes.
- 3.5.2.5 Bus service 6, which calls within 600m of the Site, provides bus service access from the Site to Ruabon rail station.
- 3.5.2.6 Cycles are permitted on all services calling at Ruabon station. This provides opportunity journeys to be undertaken by combination of cycle and rail.

4

objectives & outcomes

4.1 The underlying objectives of the TP are to:

- Contribute to traffic reduction and other sustainable transport objectives set out in national, regional and local policies,
- Promote accessibility to the development by sustainable modes of transport.

4.2 A key objective is that the TP measures are effective and efficient.

4.3 Specific outcomes sought from the development TP are to:

- Achieve the minimum number of car traffic movements to/from the development,
- Address the access needs of Site users, by supporting walking, cycling and public transport and other sustainable transport options,
- Reduce the need for travel to/from the Site.

These outcomes are consistent with the underlying objectives of the TP (refer para 4.1).

4.4 The DfT 2009 TP guidance explicitly states that the outcomes approach specifies outcomes linked to specific targets and that:

- *"This approach is distinct from that which focuses wholly on the establishment of a list of measures, eg the provision of a shuttle bus or cycle shelter." (para 5.5),*
- *"This approach means it is less critical to know in advance whether or not a specific package of measures will achieve a specified target or other outcomes"(para 2.20).*

- 4.5 As explained in para 1.4.1, this Framework TP is an 'origin' TP.
- 4.6 It is important that, as far as possible, measures are in place that provide good active encouragement for sustainable transport choices, from the commencement of people residing at the Site. Thus, emphasis is placed on achieving, from the outset, a development 'culture' oriented to offering sustainable transport choices that are attractive to residents.
- 4.7 The Framework TP seeks to influence the choices made by people travelling to/from the Site, to favour selection of sustainable travel modes for journeys. Emphasis is to be placed on promoting all sustainable modes of travel.

5

targets & indicators

5.1 The term 'targets' is used in relation to a TP to cover any measurable aim that will be monitored and is agreed with local authority to be an important indicator to the TP's effectiveness.

5.2 The TP is a tool identified by the local authority to be employed to assist in supporting and promoting identified policies to reduce car travel. Similarly, at national level the TP is an identified instrument for pursuing sustainable transport policies. A general target for what such sustainable transport policies must achieve is represented by the SMART criteria (as defined for example by the DfT, 2004). The SMART criteria adopted for this Framework TP, that are consistent with the criteria identified by the DfT, are:

Specific	there must be no ambiguity in the output,
Measurable	the policy target(s) can be set against directly observable output(s),
Achievable	the policy must be feasible (rocket science should be avoided...),
Realistic	target should be within reasonable bounds and not too optimistic,
Time bound	the output of the policy should be observable over a pre-determined time frame.

The TP provides a mechanism for implementing the above SMART transport policies.

5.3 The DfT 2009 guidance provides assistance for the setting of TP targets and indicators. Key principles highlighted in the guidance are that:

- Outcome targets are best expressed in terms of maximum end (ie when development fully occupied) levels of car use, eg maximum 'allowable' modal share of car use, or number of vehicle trips generated by the development. This is distinct from a target in terms of a reduction in car use from a hypothetical baseline, which is not favoured in the guidance as a basis of target-setting,

- The target maximum car use (above) should be significantly lower than would be expected from the development without a TP, ie it will *"represent a reduction in car use against what would be expected to be achieved by 'business as usual'"*,
- Targets should be ambitious and *"correspond to the minimum number of journeys to and from the site by car that can be achieved in the context of the operation of the specific activity at the site. Benchmarking is important in informing this estimate, but it has to be recognised that each site is unique."*
- It is important to distinguish between outcome targets and indicators,
- Parking provision should be consistent with chosen targets in the context of local parking standards, ie parking provision should be limited to cater for planned levels of car use if targets are met.

5.4 The DfT 2009 guidance clearly sets out that:

"It is important to distinguish between outcomes targets and indicators. For example, the level of bus use is a useful indicator for understanding how the site is being accessed and how effectively the bus service is meeting travel demands. It may not be particularly helpful to set a target for bus use, since there is no reason to promote bus use at the expense of other sustainable modes. Some targets will also be non-quantifiable, eg setting up a car club by a particular time, but will still relate to the overall outcome target of reducing car trips." (para 5.10)

5.5 Further guidance specific to a residential TP is provided in RTPG, which suggests that:

"The main target in the travel plan will normally be a measure of the level of car trips originating from the site. This will usually be the number of car trips per unit per day..." (page 52).

5.6 The more recent DfT 2009 guidance includes this same suggestion for a residential TP target to be in terms of *"Number of vehicle trips per occupied unit per weekday will not exceed X"*, but also adds suggested alternatives as follows:

- "Number of weekday vehicle trips generated daily by the site once fully occupied will not exceed X."
- "Number of peak hour trips." (Table 5.1)

5.7 **BENCHMARKING: CENSUS DATA**

5.7.1 At present, prior to occupancy, there is no recorded information about modal choices for the residents of the development. However, there is recorded/published information that provides a context for considering the setting of targets within the Framework TP. The primary source of available information is the 2001 Census data.

5.7.2 The Census provides travel to work data for people living in an area and travelling to work at a variety of end destinations.

5.8 **CENSUS DATA**

5.8.1 Census modal split journey to work statistics is available for the scenario of 'Ward/Borough is the 'origin' of work trips': ie residents travel to work **from** here. This is applicable to the proposed residential use.

5.8.3 The 2001 Census is interrogated for recorded journey to work modal split for:

- Wrexham (Borough),
- Johnstown (ward).

5.8.4 The reason for selecting the above Census interrogations is as follows:

- Wrexham provides the overall Borough context,
- Johnstown: the Site is located on land next to this ward. Although the Site is actually located in Ruabon ward, the travel characteristics of a population resident at the Site are most likely to be more realistically represented by the resident population of Johnstown, because of the proximity to Johnstown.

This information is relevant to informing the selection of a suitable value for the TP targets.

5.8.5 The results of the Census journey to work interrogations are presented in Table 2.

5.9 RESIDENTS TRAVELLING FROM AREA

5.9.1 The reporting of the Census journey to work interrogations (presented in Table 2) includes people working 'at home'. These are included in the Census data, and clearly represent sustainable travel behaviour choices, in that the need to make a journey is removed.

5.9.2 Review of Table 2 identifies the following key information:

- Car driver: 66.5% of Johnstown ward journeys to work, slightly lower for Wrexham as a whole (63.3%),
- Car passenger: similarly high for Johnstown (10.9%) and for Wrexham as a whole (9.9%),
- 'Car driver + car passenger': 77.4% of Johnstown ward journeys to work, lower for Wrexham as a whole (73.2%),
- Cycle: uniformly modest mode share, being 2.1% for Johnstown and lower at 1.6% for Wrexham as a whole,
- Walk: Same in Johnstown ward (8.2%) and Wrexham as a whole (8.7%),
- Bus: Same in Johnstown ward (5.9%) and Wrexham as a whole (5.5%),
- Train: Uniformly extremely low, in effect negligible, being 0.2% for Johnstown ward and 0.4% for Wrexham as a whole,
- Working from Home: Similar to bus for Johnstown (4.7%) and higher (8.5%) for Wrexham as a whole.

5.9.3 In summary, the Census modal split interrogations and analysis for journey to work for people residing in Johnstown ward and Wrexham as a whole highlights that:

- The percentage of people living in Johnstown ward that drive is similar to, and typical of, people living in Wrexham as a whole,
- Car share is similar for ward and Borough,
- After car passenger, walking is the most popular sustainable travel mode, with the Johnstown mode share wholly typical of Wrexham as a whole,
- Uniformly rail has negligible mode share in Johnstown wards and Wrexham as a whole,
- Cycling is uniformly a very minor mode in Johnstown and Wrexham as a whole,
- Work at home and bus have similar mode share.

5.9.4 As well as providing information to inform the setting of the TP target, the above provides a valuable starting point for identifying the TP strategy for encouraging residents to adopt more sustainable travel choices.

5.10 **TRICS DATA: RESIDENTIAL**

5.10.1 The TRICS database provides recorded information about the volume/daily profile of household generated car journeys. The TRICS database was interrogated to identify residential vehicle generated trip rates to adopt for the TA. The results are included in the Scoping Study (AHA report ref 1232/1) for the Transport Assessment (TA). This was submitted to WCBC and the residential trip rates are agreed.

5.10.2 Criteria adopted for the TRICS interrogation include:

- Houses privately owned,
- 150-400 units,
- All surveys 2002 or more recent,
- Sites on the edge of town centre and within neighbourhood centres excluded,
- Sites in Greater London and Ireland excluded, on the basis that they may have significantly different travel characteristics than the Site,
- If a site has multiple survey date entries, include only the most recent survey used within the identified TRICS sample, (to avoid statistical bias in the trip rates identified for use in the analysis).

- 5.10.3 The vehicle (ie car driver mode) peak hour trip rates (vehicles/dwelling) derived from the TRICS data used in the Scoping Study are (repeated from TA Scoping Study, Table 1):

PEAK HOUR	ARR	DEP	2-WAY
AM	0.152	0.457	0.609
PM	0.439	0.249	0.688.

- 5.10.4 These vehicle trip rates are used to estimate the number of car trips generated by the proposed residential development. For example, for the outline application of up to 300 dwellings, there is estimated to be 137 vehicle Departures in the AM peak hour.

- 5.10.5 It should be noted that the recorded TRICS residential trip data is only for the 12 hour period 0700-1900 hours, ie data are not available for the full daily period of 24 hours.

5.11 TP TARGET METHODOLOGY

- 5.11.1 Benchmarking information has been investigated and analysed, to assist in informing the setting of targets and indicators for the Framework TP.

- 5.11.2 The information available for setting of the residential TP target is described above. In Sections 5.9 & 5.11. The options recommended in the DfT 2009 guidance (Table 5.1 thereof) for setting the residential TP target include:

- 'Number of car vehicle trips per occupied unit per weekday will not exceed X',
- 'Number of peak hour trips'.

- 5.11.3 The drawbacks to adopting the TP target based on the former approach are that:

- The Census data reported above relates to journeys to work (which primarily take place during the peak hours), ie Census data are neither available for the full weekday (ie 24 hour daily) or for other (ie non-work) trip purposes,
- TRICS residential trip data is only for the 12 hour period 0700-1900 hours, ie data are not available for the full daily period of 24 hours.

Hence, there are no recorded data available that inform the setting of the Framework TP target on a basis reflecting 'Number of car vehicle trips per occupied unit per weekday'. The only way to obtain such data would be to undertake a future travel survey of residents.

5.11.4 Notwithstanding the above, the Census data does provide information of assistance in setting a residential TP target on a basis reflecting 'Number of peak hour trips'. The Census data relates to journeys to work (which primarily take place during the peak hours). Some other journey purpose trips may also be undertaken during the peak hour(s), for example trips to school. In the absence of any other information, the assumption is (necessarily) made that these have the same modal split as the work trips. This is a robust assumption in terms of estimating car driver modal share, as most pupils can not drive,

5.11.5 The Census data records similar car driver modal share in WCBC as a whole and in Johnstown ward (which it is concluded is likely to be the most representative ward for residents at the Site), albeit that the WCBC mode share is 2.2% less than for Johnstown ward.

5.11.6 The approach/philosophy adopted for the Framework TP target setting is to:

- Set the Framework TP target in terms of the 'Number of peak hour trips' (2009 DfT Guidance, Table 5.1), taking account of the benchmarking information and the SMART criteria (refer para 5.2),
- Explicitly set out that, as part of the Monitoring & Review regime (refer Chapter 9), the Framework TP target for percentage of resident trips will be reviewed in the light of development-specific modal split data becoming available, to ensure that the target is appropriately challenging.

5.12 **TP RESIDENTIAL TARGET**

5.12.1 Clearly, the 'number' of car trips is a direct function of the number of dwellings. As explained in Chapter 1, this Framework TP is prepared to set the context and

requirements for the outline application development proposal of up to 300 dwellings.

5.12.2 The detailed Site layout must be the subject of a reserved matters application(s). It is possible that, arising out of this, less than 300 dwellings might be constructed. Therefore, if the Framework TP target is set in terms of 'number' of peak hour car trips derived on an assumption of the maximum 300 dwellings (for which outline permission is sought), and the actual number of dwelling built proved to be less than 300, then the Framework TP target may not be sufficiently challenging.

5.12.3 The approach adopted at this stage, with the Framework TP, to guard against the potential concern highlighted in para 5.12.2, is to set the Framework TP target in terms of 'peak hour vehicle trip rate'. As explained above, this is easily converted into a corresponding target 'number' of vehicle trips, (by multiplication of the trip rate and the number of dwellings). By adopting this target setting approach of trip rate, the TP target can apply to the Site irrespective of the final number of dwellings that are constructed.

5.12.4 Furthermore, a practical, and pragmatic, advantage of setting the TP target in terms that relates to peak hour vehicle trips is that this can be conveniently (and hence economically) measured, thereby providing an inherent assistance to the efficient and effective monitoring of the TP progress towards the TP target.

5.12.5 The residential TP target is set as **maximum AM peak hour 2-way vehicle trip rate of 0.548 vehicles/hour/dwelling.**

5.12.6 The explanation of how this is derived is as follows:

- Recorded (TRICS) 2-way AM peak hour vehicle trip rate, as adopted for TA estimate of traffic generated by the proposed residential development (refer para 5.10.3) is 0.609 vehicles/hour/dwelling: this represents the 'business as usual' situation,
- Apply reduction factor of 10% to the TRICS 2-way AM peak hour trip rate of 0.609, ie $0.9 \times 0.609 = \mathbf{0.548}$; the Framework TP target 2-way peak hour vehicle trip rate.

- 5.12.7 One of the varied advantages of setting the Framework TP target in this manner is that it obviates the need for setting interim TP targets. This is because there is an implicit interim target applying at any point in time/level of dwellings occupied, ie the interim target is the same as the 'ultimate' target, that the total number of peak hour car trips generated should correspond to an equivalent trip generation rate of no more than the Framework TP target rate of maximum peak hour 2-way vehicle trip rate of 0.548 vehicles/hour/dwelling.
- 5.12.8 An illustration of how the Framework TP target represents/is converted to 'number of vehicle trips' is set out below for the outline application and assuming 300 dwellings:
- TP target: $0.548 \times 300 \text{ dwellings} = 164 \text{ vehicles (total 2-way) in AM peak hour,}$
 - The TA estimates of peak hour traffic (total 2-way) generated by the proposed 300 dwellings (and that is used in all the TA modelling of junctions) is 183 vehicles in the AM peak hour, (refer TA report Table 3),
 - Hence, the TP target represents a **reduction of 19 vehicles** in the AM peak hour.
- 5.12.9 The above clearly complies with the DfT advice that targets should be set so as to be less than 'business as usual' (refer para 5.4 above), being a significant reduction in the AM peak hour.
- 5.12.10 There is no need, or requirement, to set associated TP targets for other mode choices. This is because the limiting of car driver mode in itself requires alternative more sustainable modes to be selected. For example, as set out in the DfT 2009 guidance:
- "It may not be particularly helpful to set a target for bus use, since there is no reason to promote bus use at the expense of other sustainable modes. Some targets will also be non-quantifiable, eg setting up a car club by a particular time, but will still relate to the overall outcome target of reducing car trips." (DfT, para 5.10)*
- 5.12.11 It is important to recognise that setting a TP target is not an end in itself - this has to be considered as to whether it is realistic (refer SMART criteria in para 5.2 above). Therefore, consideration is given as to what this would mean in terms of number of peak hour trips generated by the residential development.

5.12.12 The TP promotion of sustainable travel choices, and facilitating sustainable transport measures provided with the development, provides a basis for it being concluded that the TP target complies with the SMART criterion of being 'realistic' (refer para 5.2).

5.13 **TIMESCALE**

5.13.1 A specified timescale is required to provide the context for aiming to achieve the TP targets. This is in accordance with the SMART criterion of 'time bound' (refer para 5.2 above). The initial TP target timescales are set out below. This can be kept under review with the Council on an ongoing basis as part of the TP monitoring and review regime (refer Chapter 9).

5.13.2 The Framework TP sets a timescale of 5 years from first occupation, for achievement of the TP residential target. The further ongoing target is for the TP target to be maintained as further residential occupation occurs (the monitoring regime to measure this). For the avoidance of doubt, the TP residential target applies to **all** residential developers at the Site.

5.14 **INDICATORS**

TP indicators will also be recorded through the monitoring process (refer para 9.12), including, but not necessarily exclusively:

- Pedestrian movements to/from the development,
- Cycle movements to/from the development.

6

management strategy

6.1 OVER-ARCHING STRATEGY

For the avoidance of doubt, if it transpires that there is more than a single residential developer at the Site, the Framework TP and targets apply to all residential development at the Site.

6.2 PRE-OCCUPATION

The DfT 2009 guidance highlights that:

"As far as possible, all sustainable transport measures should be in place prior to occupation or as soon as possible thereafter. This is to ensure that occupiers establish sustainable patterns of travel behaviour from the beginning, as research shows that retrofitting is not as effective." (para 8.10)

6.3 TRAVEL PLAN COORDINATOR (TPC)

6.3.1 A TP must have an appointed Travel Plan Coordinator (TPC). It is the responsibility of the developer of the Site to ensure that the TPC is appointed and remains in post.

6.3.2 It is a good practice requirement that the TPC is appointed and in-post prior to first occupation. This is necessary so that there is someone responsible for undertaking tasks prior to first occupation, to ensure that sustainable travel choices and information are available and people made aware of this. The TPC acts as the promoter of the TP to the residents, and provides a key point of contact.

6.3.3 The TPC will be appointed by the developer three months in advance of first occupation, to produce induction packs and work with the sales staff.

6.3.4 It is further required that the TPC details are provided in writing to the local authority 3 months prior to first occupation. The details to be provided include:

- Name,
- Telephone contact number,
- Email contact details,
- Date of taking up post.

6.3.5 There are a range of tasks that the TPC should undertake prior to first occupation, and this is why the TPC must be in post some months beforehand. Prior to first occupation the TPC will work in partnership with the local authority and others to undertake the following:

- Manage the implementation of measures set out in the Framework TP,
- Collect data and other information relevant to the implementation and future monitoring of the TP,
- Prepare and produce marketing material for residents and for the residential sales and marketing team, eg residents welcome/induction packs (refer paras 8.3, 8.4 & 8.5),
- Set up appropriate management arrangements, eg contact arrangements with local authority.

6.3.6 A key objective of the early stages of the TPC being in post is to provide the optimal platform for the TPC to work with the new residents before their travel habits are set.

6.3.7 In general terms, the duties of the TPC include:

- Identifying transport initiatives, including information and marketing, (refer Chapter 8),
- Arranging questionnaire Travel Surveys and statistical analysis of findings,
- Arranging other travel/monitoring surveys,
- Monitoring and review of TP,
- Preparation of annual Monitoring & Review report for submission to the Council,
- Liaison with the residents, local authority and other key stakeholders.

6.3.8 More specifically, the TPC responsibilities include inter alia:

- Day to day operation of the TP,
- Maintaining all public transport and database records up-to-date,

- Promotion of car sharing & ongoing promotion of the car share scheme,
- Liaison with local public transport operators,
- Promotion of bus and rail travel,
- Promotion of walking and cycling to work,
- Liaison with the local authority,
- Liaison with residents of the development, including for example promotional activities,
- Undertaking and analysing questionnaire Travel Surveys,
- Monitoring car and cycle usage,
- Preparing and maintaining information/promotional material for the TP,
- Undertaking annual Monitoring and Review of the TP and preparing the annual Monitoring & Review report for submission to the Council, including review of the TP targets.

6.3.9 As part of the ongoing management of the TP, the TPC will maintain a dialogue with the Council, and monitor emerging best practice information, to provide the most efficient platform for maximising the effectiveness of the TP.

6.4 **FINANCIAL ARRANGEMENTS**

6.4.1 As set out in para 6.3.3 above, it is the responsibility of the developer to ensure that the TPC is appointed and remains in post. This will be a requirement of all sale agreements with residential developer(s).

6.4.2 The TPC should be in post for a period of 5 years post-completion of the development. This means that the developer must identify a sufficient revenue budget to employ the TPC for a period of 5 years post-completion of the development. This is to be on a sufficient basis to cover employment costs of the TPC as well as to introduce and manage the TP initiatives, and thereafter as required to manage the initiatives, finance the measures identified in this and subsequent TP Monitoring and Review reports, and enable the TPC postholder to carry out the duties identified above.

6.5 **COMMUNITY INTERACTION**

The management strategy of the TP will include liaison with other interested parties and relevant bodies, eg local authority, local residents, bus operators, to seek to work with and support travel initiatives being developed for the wider community.

7

measures to encourage sustainable travel

7.1 WALK

7.1.1 The existing pedestrian infrastructure near the Site is described in Chapter 3.

7.1.2 Furthermore, as set out in the TA report, additional pedestrian infrastructure/enhancements are to be provided with the development.

7.1.3 Proposed Pedestrian Links & Improvements

7.1.3.1 The proposed development access strategy includes 7no pedestrian/cycle links with the surrounding area. These are indicated on Figure 2.

7.1.3.2 This pedestrian access strategy provides a good level of pedestrian linkage with the surrounding area and amenities, and also good pedestrian movement within and across/through the Site. In summary, the proposed development's pedestrian external links indicated on Figure 2 comprise:

- P1: Bangor Road/Site Access, that includes footway on both sides of the Site access road,
- P2: Bangor Road pedestrian/cycle access, towards eastern end of Site,
- P3: Hafod Road pedestrian/cycle access, opposite PROW 31,
- P4: Hafod Road pedestrian/cycle access at PROW 28. (This is capable of being constructed to a specification suitable to also provide emergency access, if required by WCBC),
- P5: Close to the intersection of PROW 24 & 28,
- P6: From northern end of PROW 117 westward across third party land, to land alongside the west side of the rail line (providing southward route to Bangor Road). The feasibility of this pedestrian link is dependent upon there being the right for unfettered pedestrian access to this route, and that remains to be established.
- P7: Bangor Road pedestrian/cycle access, towards the western end of the Site.

- 7.1.3.3 The above proposed pedestrian links between the Site and the surrounding area achieve excellent pedestrian connectivity for the proposed development.
- 7.1.3.4 As indicated on the illustrative masterplan layout in Appendix A, the masterplan on-Site access strategy includes pedestrian/cycle routes within an attractive landscaped green corridor setting that provides routes aligned north-south and east-west through the Site, and linking to the existing PROW network.
- 7.1.3.5 These are attractive pedestrian routes that fulfill the dual roles of:
- Functionality: enabling pedestrians to move around and through the masterplan area (connectivity and permeability) between homes and attractor destinations, eg shop, employment, and
 - Leisure: attractive routes encouraging healthy lifestyle habit of walking.
- 7.1.3.6 Complementarily, the roads to be provided within the development will include footways on both sides of the road, in accordance with good practice and the requirements of WCBC.
- 7.1.3.7 Complementary to the provision of pedestrian links between the Site and surrounding area outlined above, improvements for pedestrian infrastructure are proposed as part of the development. This comprises:
- Widen footway on the north side of Bangor Road to a minimum of 1.6m, at the railway bridge to the west of the Site, as shown on Drg 1232/16/A,
 - Existing tunnel crossing of the rail line, ie between PROW 27 & 116: introduce lighting. Also consider introducing CCTV, subject to agreement with WCBC,
 - Existing uncontrolled at-grade crossing of the rail line, ie along PROW 24: introduce signage, including electronic signage on both the east and west sides of the rail line, identifying time of next train,

- All development on-Site roads to include 2.0m wide footway on both sides of the road,
- Pedestrian/cycle routes within the Site (that do not also accommodate vehicles) to be minimum 3.0m wide, to a specification to be agreed with WCBC,
- Pedestrian signage, details of signs to be agreed with WCBC, identifying pedestrian routes, including to Johnstown and to leisure areas.

7.1.3.8 Promotional events and literature will be arranged by the TPC, to encourage walking, and emphasising the health benefits.

7.1.3.9 The TPC will prepare and arrange for distribution of maps showing safe local walking routes.

7.1.3.10 **Summary**

The masterplan pedestrian links and facilities provide a cohesive well-planned framework of pedestrian facilities that provides a favourable context for encouraging and achieving people choosing to walk for a range of everyday journeys.

7.2 **CYCLE**

7.2.1 Information about the existing cycle infrastructure and opportunities is provided in Chapter 3.

7.2.2 The Census data identifies that cycling to work is a minor mode choice for residents of Johnstown ward, and this is typical of Wrexham as a whole. Notwithstanding, encouragement of cycling is one of the tasks to be undertaken through the TP. This requires a multi-strand approach, encompassing practical measures such as cycle-friendly infrastructure, cycle parking, availability of a bicycle, behavioural attitudes to cycling, and promotional measures.

- 7.2.3 Residents of the development will have opportunity to park cycles at their homes, and similarly for their visitors. Similarly, the other development uses must provide cycle parking in accordance with the Council's standards.
- 7.2.4 The proposed development includes 7no pedestrian/cycle links between the Site and surrounding area, as outlined in para 7.1.3.2. The proposed cycle routes available within the masterplan area include along green corridors for pedestrians/cyclists only, as well as the road network also being available to cyclists.
- 7.2.5 Within the development, the infrastructure provided will accommodate cycling. The details will be the subject of reserved matters approval from the Council.
- 7.2.6 The TPC will provide information about the availability of cycle maps for the local area.
- 7.2.7 Awareness of cycling as a travel choice, for essential (eg work) as well as other journey purposes (eg leisure) is to be promoted to residents by the TPC from the outset, and indeed in advance, of their taking up occupation of the new dwellings.
- 7.2.8 The TPC will explore interest in setting up a Bicycle User Group (BUG), and the opportunities to liaise with other such established groups. This can be greatly assisted if even one or two residents with enthusiasm for cycling can be identified to 'champion' cycling amongst residents.
- 7.2.9 The TPC will establish a cycling action plan that identifies a range of measures to be explored/pursued. As well as the BUG referred to above, this includes, for example but not exclusively:
- Promotion of National Bike Week,
 - Bike buddy scheme, for those not confident about cycling.
- 7.2.10 Promotional events and literature will be arranged by the TPC, to encourage cycling, and emphasising the health benefits.

7.3 **PUBLIC TRANSPORT**

7.3.1 The Census data identifies that the bus travel to work is more popular than cycling, but less popular than walking or car passenger, and about as popular as working at home for Johnstown residents. The Census data evidence is that there is not a strong 'culture' of travelling to work by bus, either for residents of Johnstown or for the wider Wrexham borough as a whole.

7.3.2 However, bus travel to work is more popular than train travel. There is negligible travel to work by train for residents of Johnstown (0.2%) or Wrexham as a whole (0.4%).

7.3.3 Thus there is a lack of strong public transport 'culture' for travelling to work by existing residents of Wrexham as a whole, and Johnstown ward is typical in this regard. Notwithstanding this, an objective of the TP is to promote travel by bus and rail to residents.

7.3.4 The information and marketing aspects of the opportunity to make journeys by public transport to/from the development are important, and are discussed in Chapter 8. The welcome/induction pack prepared by the TPC, and issued to all new residents will include information on the bus and rail services. For buses this will include bus stop locations, routes & destinations, and frequency of services. For rail there will similarly be information about the services available at Ruabon rail station, and the opportunity for onward longer range rail destinations. This is aimed at creating, from the commencement of residence/employment at the Site, a public transport 'culture', highlighting the public transport options available.

7.3.5 The TPC will explore with the rail station operator measures to encourage residents to choose rail as the primary mode for journeys.

7.4 **CAR SHARE**

7.4.1 Car sharing is proven as an effective means of reducing the number of car trips generated by a Site, especially for commuting trips to work, and is thus an established sustainable travel choice. It is concluded that modal shift to passenger, from car driver travelling alone, ie single occupancy vehicle (SOV), is an important

component of the TP strategy. This is supported by evidence of successful car share schemes achieving significant modal shift and reducing car traffic.

- 7.4.2 The Census data records a good 'starting point' for the TP, that for existing residents of the Johnstown ward 10.9% travel to work as a car passenger. Thus there is a locally established 'culture' that is conducive to promoting car sharing for the residents of the proposed development.
- 7.4.3 The TPC will identify a car share scheme to be promoted to residents. For example, the scheme operated by Liftshare, a well established 'market-leader' in operating successful car share schemes, may be suitable. The car share scheme matches up car drivers and passengers who travel on similar routes at similar times. There is no fee for registering or using the website. There is no cost to the developer. This proposal has the advantage of the 'pool' of potential car sharers being able to also include existing residents of Johnstown ward, and indeed residents at other locations that may share a route for journey to work with residents of the development.
- 7.4.4 The car share scheme will be promoted by the TPC through a variety of means (refer Chapter 8), including for example sales literature, welcome packs, online resources.
- 7.4.5 Car sharers do not necessarily need to work for the same company, or even be based in the same building. In order to maximise this potential, the strategy is that, from initial occupation:
- A car share scheme is to be promoted to residents,
 - Information about this scheme is to be included in Welcome/Induction packs,
 - The benefits of car sharing are to be highlighted in the Welcome/Induction pack. This is to provide information to appeal to the widest range of reasons for deciding to car share, including for example, environmental, cost saving, potential to not need a car.
- 7.4.6 The car share scheme is available to, and valuable for, all those travelling to/from the Site.

7.5 **WORK AT HOME**

- 7.5.1 The 2001 Census data records that 4.7% of employed residents in the Johnstown ward work at home. This is only about half that for Wrexham as a whole (8.5%). Thus there appears to be some reasonable and realistic scope for the TPC to encourage residents of the proposed development to explore with their employers the opportunity for working at home, even if it is only for a proportion of the working week/month.
- 7.5.2 The development will include provision of infrastructure for broadband service to be delivered to the new houses.
- 7.5.3 The TPC will highlight to residents the benefits of working at home, including teleworking on a part-time basis, thereby reducing travel to work for a portion of the working week.

7.6 **BEHAVIOURAL STRATEGIES**

- 7.6.1 If the optimal benefits of the TP are to be achieved in respect of the identified TP outcomes objectives and targets, it is essential that the TP is operated in a way that recognises that, for many, substantial behavioural changes in attitudes to travelling choices are required. The role of the TPC is crucial to success in this endeavour.
- 7.6.2 A transformation of some peoples' behaviour may be achieved with simple strategies, such as, for example highlighting health or environmental benefits. However, it is certain that more sophisticated strategies will be needed for others.
- 7.6.3 An example of this is promoting the concept that travel choice for the journey to work can have inbuilt flexibility of mode choice, with not a single mode choice all of the time. The role of the TPC is essential in assisting people to understand this, and to empower them to find the means to achieve it in practice.
- 7.6.4 A 'small steps' (nudge) approach is a key part of the TP strategy for changing residents' attitudes to favour, and make, sustainable travel to work choices, as well as similarly for other journey purposes. This is especially important for people who

have been choosing to travel to work as a car driver on their own for some considerable time (to/from a different location than the new development).

- 7.6.5 Information gathering from residents is important to inform the 'small steps' strategy, and to ensure that residents feel 'engaged with', rather than the objects of a 'big brother/nanny' style approach that endeavours to tell them what they 'should do'. The TPC role in developing and overseeing this is critical.

7.7 **SUMMARY**

A comprehensive TP strategy is needed for encouraging and achieving sustainable travel choices for people living at the development. This must recognise that a sustainable journey can be made by a variety of options, and one sustainable mode choice should not be promoted at the 'expense' of another. It is a crucial task of the TPC to ensure this strategy is taken forward. A key aspect of this is identifying strategies and initiatives to address the issue of behavioural change of attitudes that is required; in which the 'small steps' approach has a key role to play.

8

marketing strategy

- 8.1 The information and marketing aspects of the TP are crucial to its success. It is of little use having TP initiatives if people are not adequately informed of them and persuaded to try them. The marketing strategy for the TP aims to:
- Raise awareness of sustainable travel options,
 - Promote individual measures and initiatives,
 - Disseminate travel information from the outset of first occupation, and indeed in advance of occupation (through the residential sales and marketing literature), and on an ongoing basis.
- 8.2 The first step is to ensure that good quality information is readily available and well disseminated, and this will be administered by the TPC. Information will be provided by a variety of means including:
- At the residential sales marketing suite(s),
 - Occasional promotional initiatives,
 - Residents Welcome/Induction 'Travel Pack',
 - Computer.
- 8.3 It is the responsibility of the TPC to set up and oversee arrangements for every new household to receive an Induction 'Welcome/Travel Pack' prior to their residency commencing.
- 8.4 The Induction packs will be prepared and kept up-to-date by the TPC, who will maintain a stock. These can be available in hard copy and/or electronic format.
- 8.5 The objective of the Induction pack is twofold: to inform and to promote. The latter aspects of the Induction pack are aimed at promoting and achieving sustainable travel choices for trips to/from the development. It is anticipated that the TP Induction Pack will include items such as, but not exclusively:

- TP objectives,
- TPC: description of role and contact details,
- Walk: health benefits of walking, maps showing safe local walking routes,
- Cycle: health benefits of cycling, information about secure cycle parking, sources of cycle route information, BUG and bike buddy schemes,
- Public Transport: information about range of bus and rail services,
- Car share scheme: information about the financial benefits/incentives, and the environmental benefits. Details of registering,
- Information sources: eg residential sales office, websites, etc.

8.6 Targeted promotional events and literature will be arranged by the TPC, to promote sustainable travel initiatives and options. This will include, inter alia, encouraging walking and cycling, and emphasising the health benefits, taking advantage of the platform of national and local initiatives, such as National Bike Week, as well as arranging development specific events. Similarly events/promotional activities will be aimed at promoting public transport and car sharing.

9

monitoring & review

- 9.1 Implementation of the TP must be monitored and reviewed if the intended and optimum benefits are to be secured. This is a requirement of the DfT 2009 guidance.
- 9.2 Key points about the TP monitoring and review regime are that this:
- Is essential to ensure that the TP objectives are being met,
 - Assesses the effectiveness of the TP measures and provides opportunity for review,
 - Must be done over time, and hence requires action and resources.
- 9.3 The monitoring and review process needs to be systematic and planned. The role of the TPC in leading this is crucial.
- 9.4 The monitoring and review process provides the mechanism for identifying amendments to the TP that are agreed with the Council. The optimal approach for the effectiveness of the TP, in achieving the agreed TP outcomes, is that the ongoing management process (throughout the year) led by the TPC includes liaison with the relevant local authority officer.
- 9.5 The key objective of the monitoring of the TP is to measure the effectiveness and to ensure that it remains relevant over time. It is also important that flexibility is retained to amend the TP to respond to changing/emerging circumstances, and that the monitoring and review process provides the mechanism for this.
- 9.6 Monitoring of the TP is to employ two types of survey:
- Traffic count surveys: recording the morning (0800-0900) peak hour vehicle trip generation of the residential development,
 - Residential questionnaire survey: recording travel mode choices and exploring factors that may influence residents to make more sustainable travel choices.

9.7 The survey methodology must be submitted to the local authority for approval 3 months prior to first occupation.

9.8 The initial travel survey will:

- Be the vehicle traffic counts during the AM peak hour,
- Be undertaken at the proposed development access on Warmingham Lane,
- Establish the baseline travel characteristics of the residential development,
- Be undertaken within 3 months of the occupation of 50 dwellings on the development; (this is to ensure that there is a sufficient development occupancy to yield worthwhile survey results).

9.9 Subsequently, peak hour vehicle traffic count surveys will then be undertaken:

- Annually on the anniversary of the initial survey, until completion of the development,
- Biannually until 5 years post-completion of the development. This will allow the review of how the Travel Plan targets are being met and extends well beyond final completion of the development.

9.10 The residential questionnaire travel surveys will be undertaken:

- First survey within 9 months of first occupation of 50 dwellings on the development (ie 6 months after the vehicle peak hour traffic count survey, thereby providing complementary 'follow-on' up-to-date information),
- Subsequently, annually on the anniversary of the initial survey until completion of the development,
- Biannually until 5 years post-completion of the development.

This is consistent with the programme of peak hour vehicle traffic count survey.

9.11 Details of the questionnaire content will be discussed and agreed with the local authority, but may include, inter alia, the following:

- Residents' work journey distance and/or location,
- Travel mode choice,

- Time taken for journey,
- Number of car owners and cars per household,
- Resident parking habits on Site,
- Any barriers (perceived/real) to particular modes of travel,
- Number of primary school children who walk to school,
- Factors influencing willingness to consider/change of travel mode choices.

9.12 TP indicators will also be recorded through the monitoring process (refer para 5.14), including, but not necessarily exclusively:

- Pedestrian movements to/from the development,
- Cycle movements to/from the development.

9.13 Data collected from all the surveys will comply with the Data Protection Act. Residents will be identified only by numbers in the database, and data will not be used or disclosed except for the purpose it was collected.

9.14 The residential travel surveys will not only provide information about residents' travel choices and habits, but also, and importantly, about attitudes to change in choice of travel mode. This is vital information for optimising the effectiveness of the targeting of the TP marketing strategy.

9.15 The monitoring process is not something that is done at a single point in time annually, albeit there is a requirement for a single formal report (refer para 9.16). TP monitoring is a dynamic process led by the TPC, that must be undertaken on an ongoing manner throughout the year. This is so that the effectiveness of the TP measures and financial resources can be optimised. The ongoing monitoring process throughout the year includes elements such as the promotional activities and mechanisms - if a particular form of promotion is not yielding benefits, then alternatives should be considered and employed. The key to all this is that the TP measures, be it promotion and/or services/facilities, are not an end in themselves, they are only the means to reach the TP target, and if a measure/activity is not yielding positive results, then the reasons for this should be examined and changes to the strategy and measures implemented to address this, in agreement with the local authority.

9.16 An annual 'Monitoring & Review' report will be prepared by the TPC and submitted to the local authority. This will set out the way in which the TP has been operated throughout the year, providing, inter alia:

- A record of key information collected throughout the year, including results of monitoring surveys (refer para 9.6) and analysis (if applicable),
- A schedule of meetings held throughout the year, and other key contact information,
- A record of TP initiatives introduced/operated during the year, and information about initiatives considered but not implemented (if applicable),
- A record of promotional activities,
- Assess efficacy of TP measures that have been pursued throughout the year and, on the basis of this, reach conclusions about measures to be taken forward for the coming year. This may reflect positive results and/or the need to revise the TP measures/strategy in pursuit of the TP target.

10

action plan & budget

- 10.1 It is essential that key tasks in connection with the TP are commenced (and some completed) prior to first occupation. This is so that TP measures are in place prior to the travel habits of the residents being set. It is also important that there is ongoing TP activity that seeks to influence the modal choice of residents to achieve the residential TP target of: **maximum AM peak hour 2-way vehicle trip rate of 0.548 vehicles/hour/dwelling.**

10.2 **ACTION PLAN**

Key elements of the Action Plan for the development's TP are set out below, as well as some examples of specific measures to be pursued. This is **not** an exhaustive list, but is intended to confirm that the intention is for the TP to deploy a variety of measures and strategies:

Prior to occupation:

- Residential TPC appointed by the developer 3 months prior to first occupation. TPC contact information to be provided to local authority 3 months prior to first occupation,
- TPC establishes contact with relevant Council officer,
- Resident welcome/Induction Travel Pack prepared by TPC and stock readied for distribution to each household prior to taking up residence at the Site,
- TPC to prepare and provide information for residential sales marketing team, and to hold an induction meeting for sales staff, informing them about the TP and the TP measures,
- Provisional date for peak hours vehicle traffic count survey, based upon residential sales projections. This will need to be kept under ongoing review in the light of actual sales and occupancy data,
- TPC to liaise with bus and rail station operators,
- Car share scheme arrangements, and in particular promotional strategy, to be established by TPC;

Upon occupation and subsequently:

- Each new household to have been provided with a Welcome/Induction pack prior to moving in. TPC to liaise with sales team to ensure suitable arrangements in place,
- TPC to arrange an online TP resource,
- Promotional activities to residents, by a variety of means (and ongoing),
- TPC to pursue and promote to residents cycle incentives, eg BUG, bike buddy scheme, etc;

Within 3 months of occupation of 50 houses:

- Peak hours vehicle traffic count survey to be undertaken and subsequently analysed,

Within 1 month of first year's anniversary of first occupation:

- TPC to prepare and submit Annual Monitoring & Review report to Council,

Within 9 months of occupation of 50 houses:

- Questionnaire Travel Survey to be undertake and subsequently analysed,
- Ongoing monitoring, by a variety of means, of TP indicators,
- Ongoing promotional activities arranged by the TPC,

Annually, within 1 month of anniversary of first occupation:

- TPC to prepare and submit Annual Monitoring & Review report to Council,

Subsequent **traffic count surveys** as follows:

- Annually on the anniversary of the initial survey, until completion of the development,
- Then, biannually until 5 years post-completion of the development. This will allow the review of how the Travel Plan targets are being met and extends well beyond final completion of the development.

Subsequent residential **questionnaire travel surveys:**

- Annually on the anniversary of the initial survey until completion of the development,
- Then, biannually until 5 years post-completion of the development.

Thereafter the operation of the TP will continue in a similar manner, guided by the evidence that accrues through operation of the TP and the contributions of the local authority. The timing of subsequent monitoring surveys is as set out in paras 9.8-9.10. An annual Monitoring & Review report is to be prepared by the TPC and submitted to the Council.

10.3 **FUNDING/BUDGET**

10.3.1 The residential developer(s) is responsible for the appointment of the TPC and other monetary aspects of the funding of the TP. It will be a requirement of all sale agreements with residential developer(s) that they either appoint their own TPC, or contribute financially to a joint/shared TPC post.

10.3.2 A sufficient revenue budget must be identified by the developer(s) to employ the residential TPC for a period of 5 years post-completion of the development, and commencing minimum 3 months prior to first occupation. The budget is to be on a sufficient basis to cover employment costs of the TPC as well as to introduce and manage the TP initiatives, and thereafter as required to manage the initiatives, finance the measures identified in this and subsequent TP Monitoring and Review reports, and enable the TPC postholder to carry out the duties identified above.

10.3.3 In practice, if there is more than a single residential developer, then:

- The '5 years post-completion of the development' relates to their specific development, and
- That developer's TP financial liabilities relate to a timeframe based on the occupation of their final dwelling for the commencement of their period of '5 years post-completion of the development'.

10.4 **SUMMARY**

Table 3 presents a summary of the proposed residential TP measures with associated timescale, responsibility and funding/budget information.

11

conclusions

- 11.1 A Travel Plan (TP) promotes sustainable travel awareness and encourages sustainable travel choices. This Framework TP is prepared taking account of currently available best practice guidance and experience (DfT 2009), and the complementary residential guidance (DfT 2005).
- 11.2 This Framework TP report is prepared to support the current outline planning application for up to 300 dwellings. For the avoidance of doubt, this Framework TP relates to all dwellings at the Site and, if there is more than one, each and every developer.
- 11.3 The TP will be managed and operated by the Travel Plan Coordinator (TPC,) to be appointed by the residential developer(s), and to be in post 3 months prior to first occupation of a house at the Site.
- 11.4 The outcomes approach is adopted for the TP.
- 11.5 A residential TP target is set of: **maximum AM peak hour 2-way vehicle trip rate of 0.548 vehicles/hour/dwelling.**
- 11.6 Chapter 10 sets out the Action Plan and Funding/Budget arrangements for the TP. This summarises identified measures that are proposed, and indicates the timing for the measures. This illustrates the holistic approach adopted for the TP, aimed at encouraging from the outset a positive sustainable transport awareness and culture for the development. The TP measures will be reviewed and amended as appropriate as part of the ongoing dynamic monitoring and review process for the TP.

figures



Notes:

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KEY:



Pedestrian/cycle/
vehicular access



Pedestrian/cycle
access



Pedestrian/emergency
access

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ACCESS STRATEGY

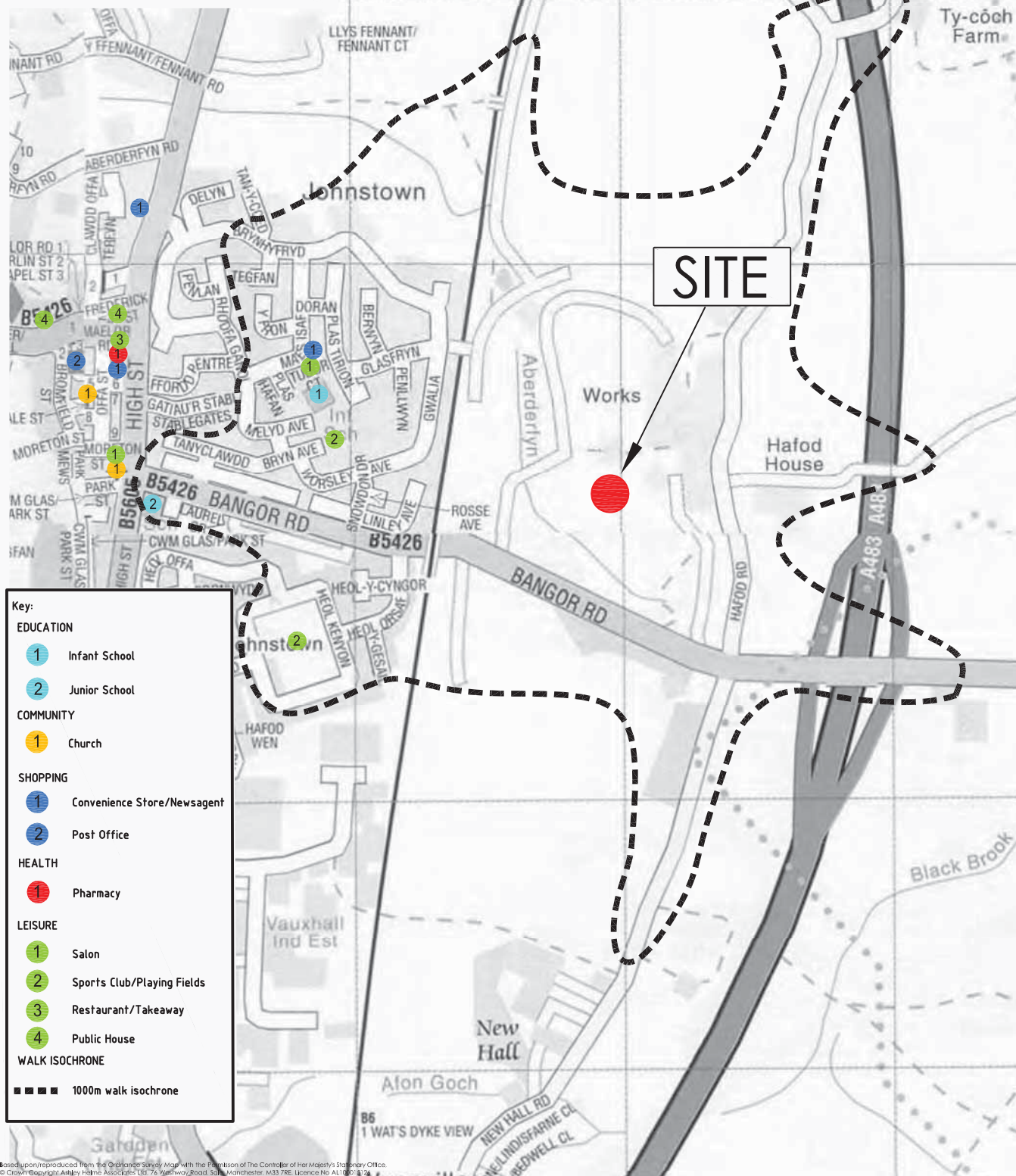
FIGURE 2

ashleyhelme
a s s o c i a t e s

76 washway road, sale, manchester, m33 7re
e: aha@ashleyhelme.co.uk t: 0161 972 0552 f: 0161 972 0553

Notes:

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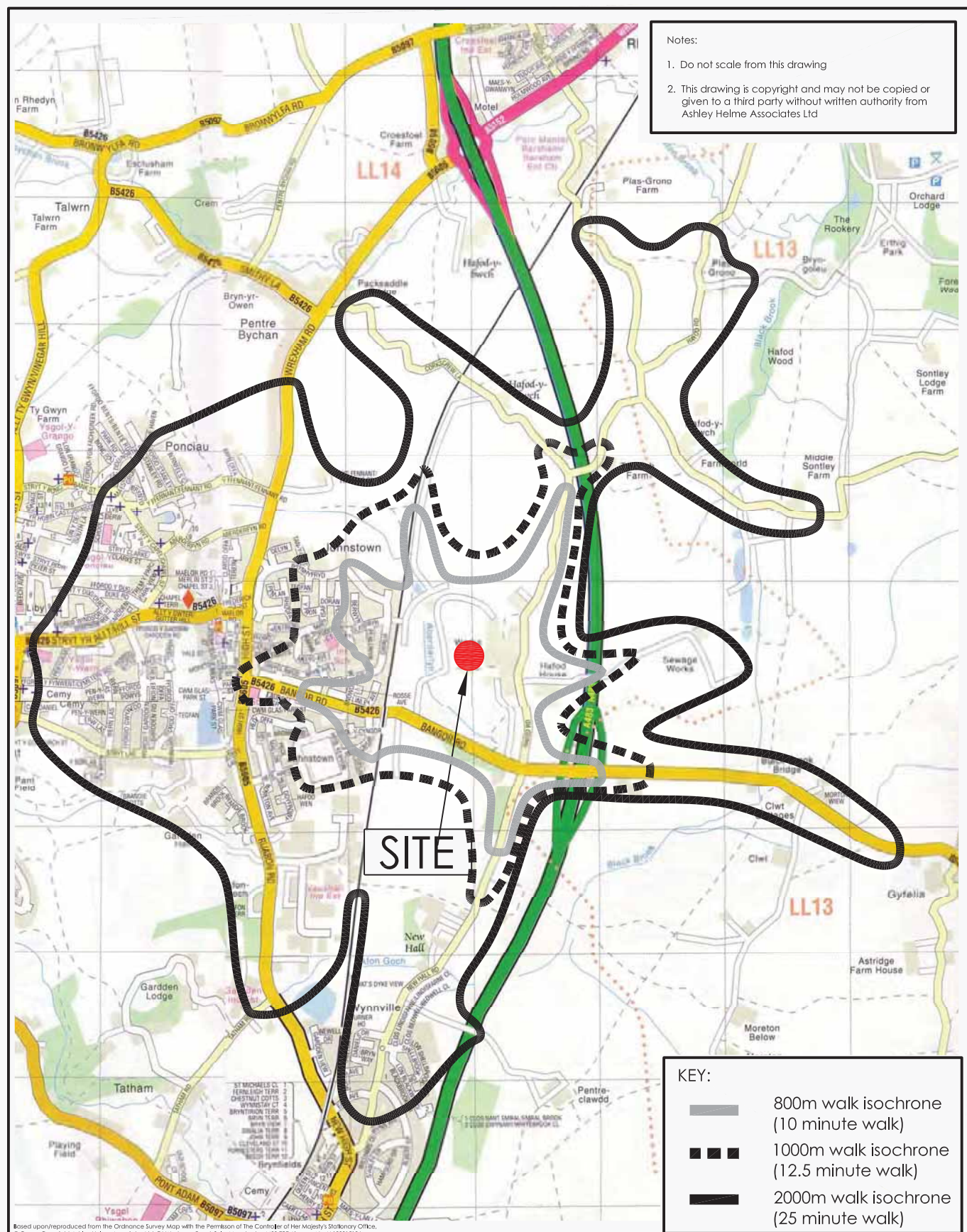
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LOCAL AMENITIES

FIGURE 3

ashleyhelme
associates

76 washway road, sale, manchester, m33 7re
e: aha@ashleyhelme.co.uk t: 0161 972 0552 f: 0161 972 0553



WALK ISOCHRONES

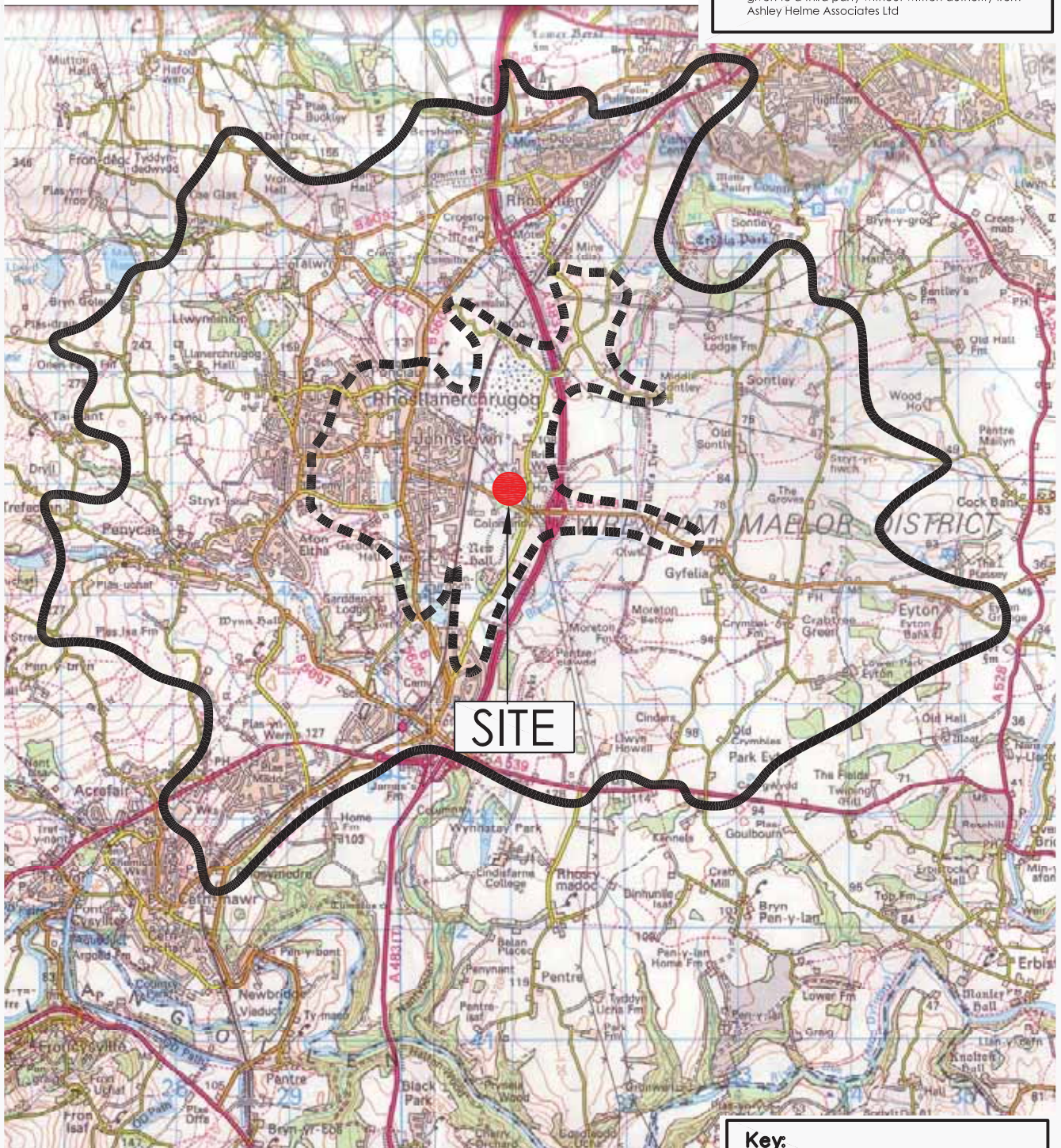
FIGURE 4

ashleyhelme
 associates

76 washway road, sale, manchester, m33 7re
 e: aha@ashleyhelme.co.uk t: 0161 972 0552 f: 0161 972 0553

Notes:

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Key:

- 2000m cycle isochrone (10 minute cycle isochrone)
- 5000m cycle isochrone (25 minute cycle isochrone)

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CYCLE ISOCHRONES

FIGURE 6

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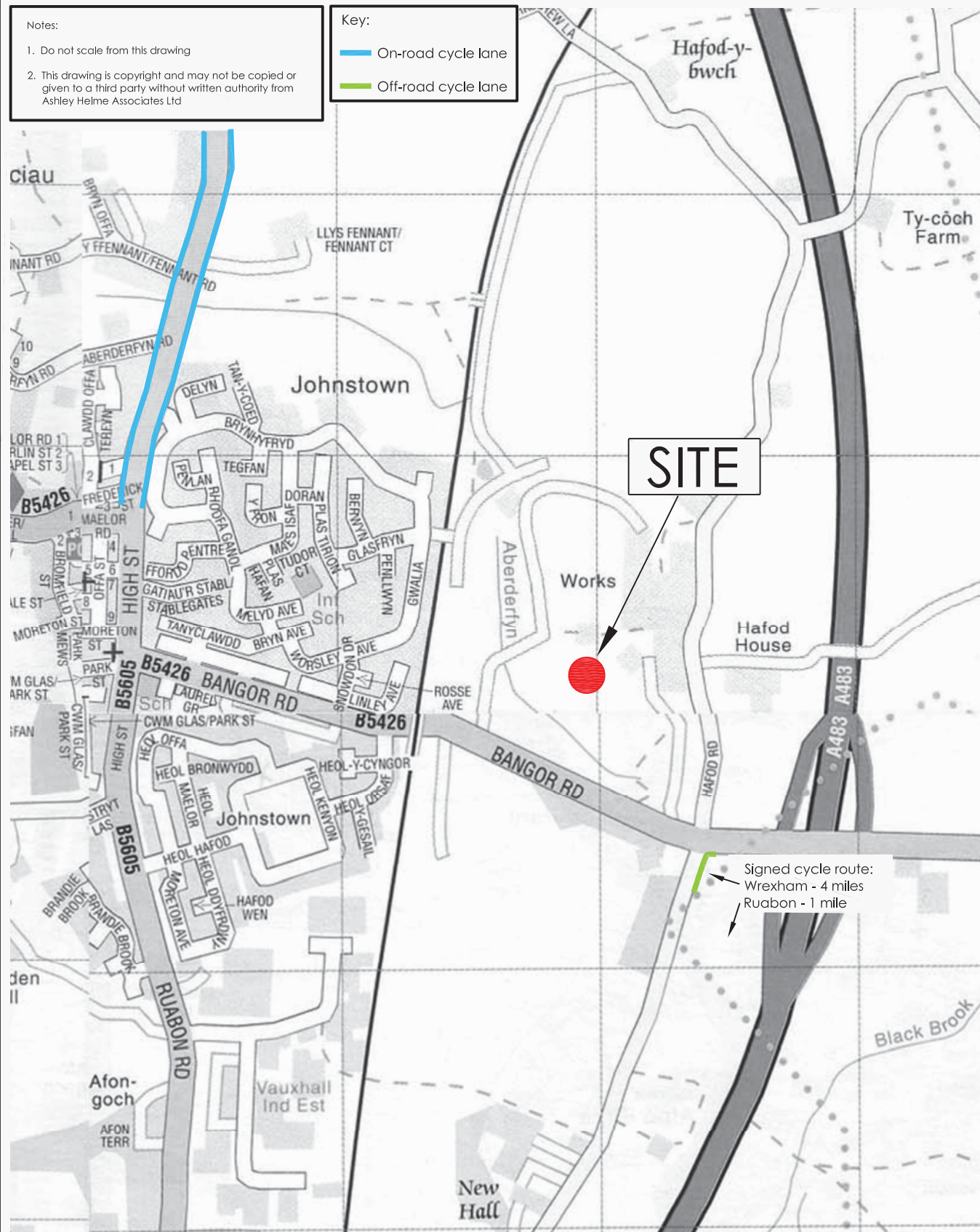
76 washway road, sale, manchester, m33 7re
e: aha@ashleyhelme.co.uk t: 0161 972 0552 f: 0161 972 0553

Notes:

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Key:

- On-road cycle lane
- Off-road cycle lane



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EXISTING CYCLE ROUTES

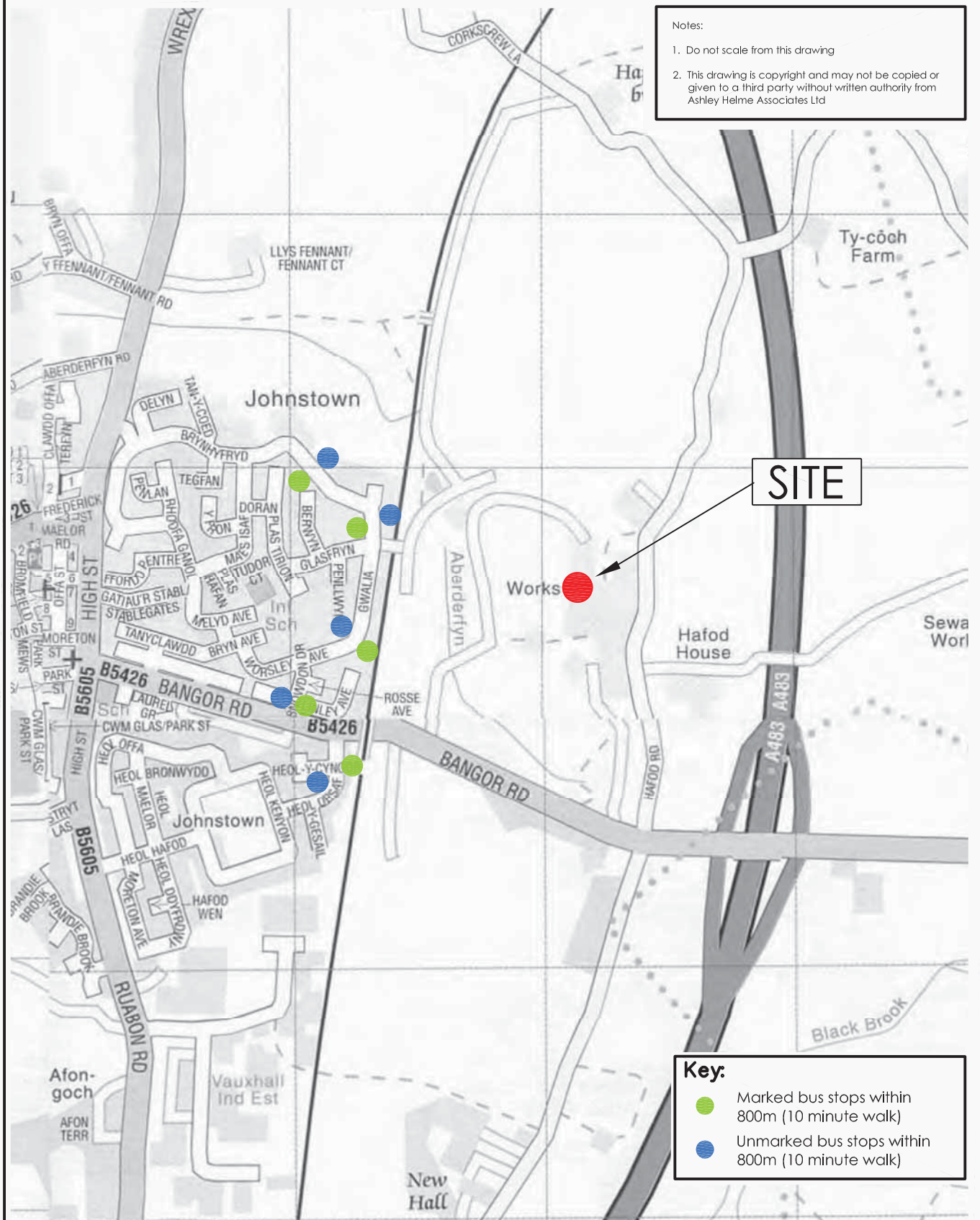
FIGURE 7

ashleyhelme
associates

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e: aha@ashleyhelme.co.uk t: 0161 972 0552 f: 0161 972 0553

Notes:

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Key:

- Marked bus stops within 800m (10 minute walk)
- Unmarked bus stops within 800m (10 minute walk)

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BUS STOPS

FIGURE 8

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Source: www.wrexham.gov.uk

FIGURE 9

ashleyhelme
a s s o c i a t e s
76 washway road, sale, manchester, m33 7re
e: aha@ashleyhelme.co.uk t: 0161 972 0552 f: 0161 972 0553

tables

BUS No	Route	FREQUENCY			OPERATOR
		Mon- Sat		Sun	
		Day	Eve		
Services calling within a 10 minute walk					
6	Wrexham – Johnstown – Ruabon	60 mins	-	-	GHA
Services calling on High Street					
2	Wrexham – Oswestry ⁽¹⁾	60 mins	-	-	ARR
2A	Wrexham – Oswestry	60 mins	-	-	ARR
2C	Wrexham – Cefn Mawr	30 mins	-	-	ARR
2E	Wrexham – Chirk (eve)	-	120 mins	-	GHA
2V	Wrexham – Cefn Mawr	30 mins	-	-	V
5	Wrexham Llangollen	15 mins	60 mins	-	BM/GHA
5A	Wrexham - Llangollen	-	-	60 mins	GHA
5W	Acrefair – Wrexham	1 trip	-	-	GHA
6	Wrexham – Ruabon	60 mins	-	-	GHA
J50	Wrexham – Acrefair	4 trips ⁽²⁾	2 trips ⁽²⁾	-	DJ
65	Wrexham – Glyn Ceirog	4 trips	-	-	GHA
X94	Wrexham – Barmouth	120 mins	120 mins	4 trips	ARR/GHA

Source: www.wrexham.gov.uk

Key:

BM Bryn Melyn
ARR Arriva
GHA GHA Coaches
V Vale
DJ D Jones & Son

Notes:

1. Continues on to Gobowen.
2. Operates during peak times only.

TABLE 1 BUS SERVICES AND FREQUENCIES

DISTRICT	WARD	TOTAL		WORK AT HOME		TRAM etc.		TRAIN		BUS		MOTOR CYCLE		CAR DRIVER	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Wrexham		57080	100	4849	8.5	23	0.0	208	0.4	3149	5.5	494	0.9	36116	63.3
Wrexham	Johnstown	1589	100	75	4.7	0	0.0	3	0.2	94	5.9	10	0.6	1057	66.5

(cont)

DISTRICT	WARD	TOTAL		CAR PASSENGER		TAXI		CYCLE		WALK		OTHER	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Wrexham		57080	100	5671	9.9	396	0.7	908	1.6	4989	8.7	277	0.5
Wrexham	Johnstown	1589	100	173	10.9	6	0.4	33	2.1	130	8.2	8	0.5

Notes:

- Source: 2001 Census

TABLE 2

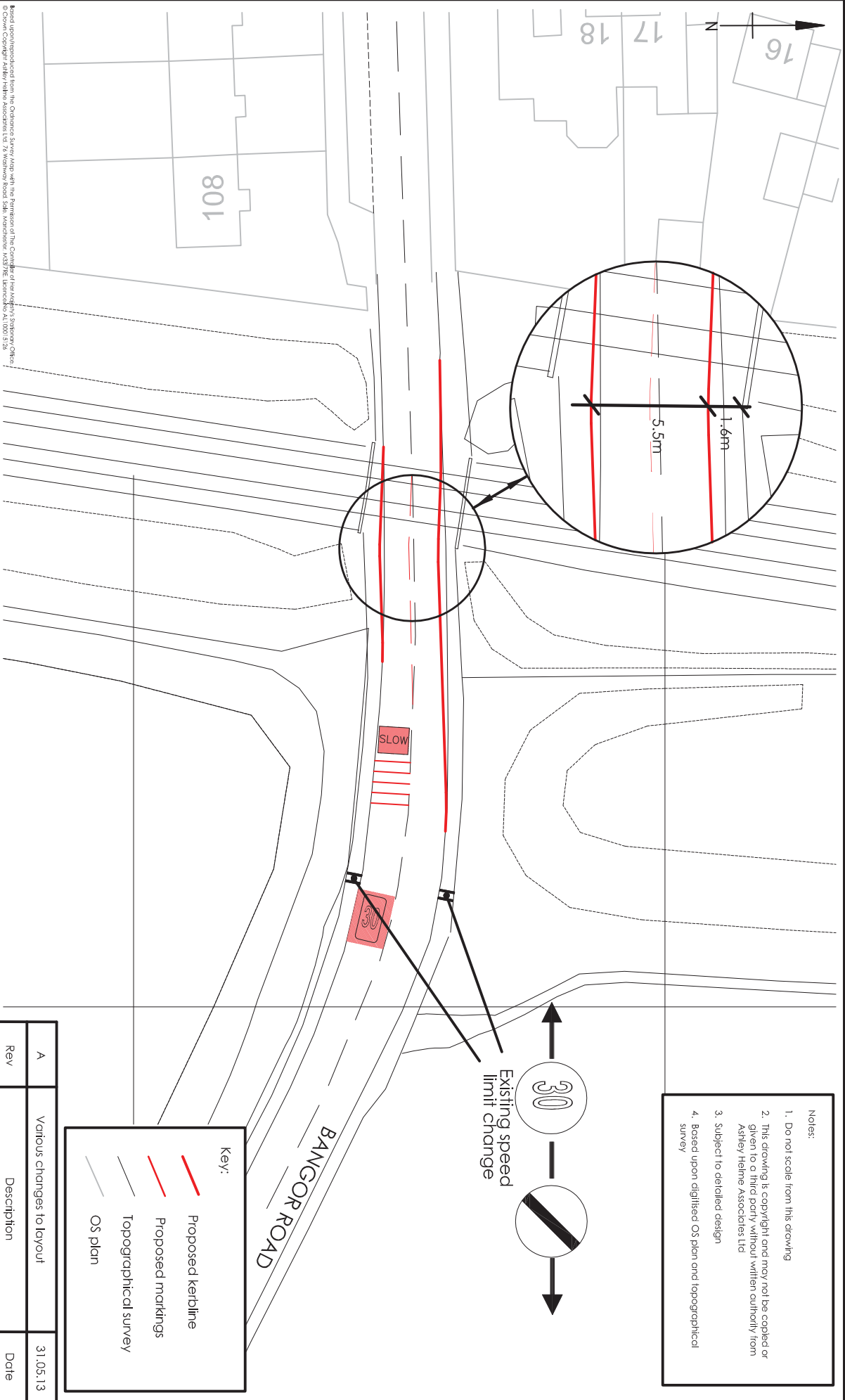
TRAVEL TO WORK (RESIDENT POPULATION)

EMPLOYED PERSONS AGE 16-74

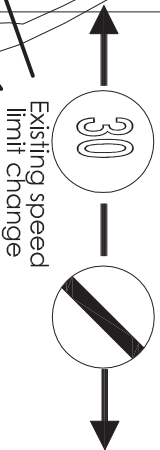
ITEM	MEASURE	TIMESCALE	RESPONSIBILITY	FUNDING/BUDGET
Bus/rail	Public transport information to be distributed to residents as part of TP induction pack	Prior to occupation of each individual dwelling	TPC	TPC staff time
Car Share	Car share arrangements and promotional strategy to be established	Prior to first occupation	TPC	TPC staff time
Cycle	Introduce Cycle Action Plan	Within 3 months of first questionnaire survey	TPC	TPC staff time
	Explore interest in setting up BUG	Prior to first occupation and reviewed as part of Cycle Action Plan	TPC	TPC staff time
	Cycle parking to provided at convenience store and employment uses, in accordance with council standards	Prior to first occupation	Developer	Developer funding
Infrastructure	Car parking provision to comply with Council standards	Prior to first occupation	Developer	Developer funding
	Introduce 7no pedestrian/cycle accesses	Prior to first occupation	Developer	Developer funding
	Widen footway on north side of Bangor Road, in vicinity of railway bridge	Prior to first occupation	Developer	Developer funding
	Introduce lighting and, if agreed with WCBC, CCTV, in exiting pedestrian underpass beneath railway	Prior to first occupation	Developer/LPA	Developer funding
	Introduce electronic signage at existing pedestrian at-grade railway crossing	Prior to first occupation	Developer	Developer funding
	Introduce pedestrian signage to on walk routes to local amenities, details to be agreed with WCBC	Prior to first occupation	Developer/LPA	Developer funding
	Provision of broadband to each dwelling to facilitate home working	Prior to first occupation	Developer	Developer funding
Management	Residential TPC to be appointed	3 months prior to first occupation	Developer	Developer funding. Sufficient revenue budget for 5 years post-completion
	TPC establishes contact with relevant Council officer	Prior to first occupation	TPC	TPC staff time

TABLE 3 **RESIDENTIAL TP ACTION PLAN SUMMARY**

drawings



- Notes:
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 3. Subject to detailed design
 4. Based upon digitised OS plan and topographical survey



Key:

- Proposed kerbline
- Proposed markings
- Topographical survey
- OS plan

Rev	Description	Date
A	Various changes to layout	31.05.13

Project		Title	
BANGOR ROAD, JOHNSTOWN		INDICATIVE FOOTWAY WIDENING	
Client		Drawing No	Rev
GLADMAN DEVELOPMENTS		1232/16	A
		Date	Scale
		JANUARY 2013	1:500@A4
ashleyhelme associates 76 washway road, sale, manchester, m33 7te ae:ahin@ashleyhelme.co.uk t:0161 972 0557 f:0161 972 0553			

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A

illustrative masterplan



Application Site (Area 17.34ha)



Proposed residential (7.0ha)
Up to 300 dwellings



Proposed Employment (0.29ha)



Local Store (0.11ha)



Proposed Vehicular Route



Proposed GCN Reserve (5.78ha)



Proposed Amenity Space (3.87ha)



Proposed Informal Play



Indicative location of equipped
children's play area



Proposed vehicular access



Indicative location of proposed
emergency access from Hafod
Road



Power lines



Proposed Structure Planting



Proposed Attenuation Pond

