



Transportation Planning : Infrastructure Design

Transport Statement

**Proposed Residential Development
Stansty Fields, Gwersyllt**

Prepared for Castle Green Homes

April 2025

Doc Ref: LB/220743/TAS/1

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Document Revision Control

Revision	Date	Status	Prepared By	Approved By
00	25/11/22	Planning	LB	PT
01	29/04/25	Planning	LB	PT

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1.0 INTRODUCTION

General

- 1.1 SCP have been appointed by Castle Green Homes to provide specialist transport planning and engineering advice in support of a proposed residential development at Stansty Fields, Mold Road, Gwersyllt. The proposed development will provide 85 dwellings comprising a mix of 1-bedroom apartments and 2 to 4 bedroom houses. Further details of the proposed development are provided in Chapter 3 later.
- 1.2 Guidance contained in Technical Advice Note (TAN) 18: Transport Wales confirms that Transport Assessments (TAs) should be secured for developments that generate significant levels of movement or are likely to have significant effects on existing patterns of movement, suggesting a threshold of >100 dwellings for when a TA is required. The proposed development falls below the threshold for when a TA is required and therefore, the traffic impact of the proposed development is not likely to be significant and a Transport Statement (TS) is considered sufficient to support the planning application.
- 1.3 This TS has been prepared to support the planning application and demonstrates that the proposed development of this site can be accommodated without detriment to the operational capacity or safety of the local highway network and that it can be readily accessed on foot, by bicycle and by local public transport services.

Planning Background

- 1.4 A pre-application consultation (PAC) for 96 dwellings on the site was submitted to Wrexham Council (WC) in 2023 under application ref. P/2023/0050. The PAC was supported by a TS prepared by SCP and dated November 2022. The Local Highway Authority (LHA) at WC reviewed the supporting TS and provided a consultation response dated 13th August 2024, a copy of which is provided in **Appendix A** for reference. The LHA raised no objection to the scheme subject to amendments to the layout and off-site improvements, including the following:-
- Provision of parking in accordance with the LHA's standards
 - Amendments to the design of the internal footways and road layout so that the internal layout is considered adoptable;
 - Provision of a speed reduction scheme within the vicinity of the site access;

- Consideration of pedestrian infrastructure improvements between the application site, the nearby committed development located along Stansty Chain Road to the south-east and existing bus stops located along Old Mold Road to the south-west; and
- Provision of a Road Safety Audit (RSA).

1.5 The LHA's comments have been positively addressed in this report.

Structure of Report

1.6 The structure of this report is as follows:

- Chapter 2 – provides an appraisal of the existing conditions of the site including an appraisal of the local highway network, existing traffic conditions and road safety record;
- Chapter 3 – provides an appraisal of the development proposals including the proposed site access arrangements, servicing arrangements and car parking;
- Chapter 4 – presents a review of the accessibility of the site by walking, cycling and public transport modes;
- Chapter 5 – presents estimates of the trip generating potential of the scheme and provides an assessment of the impact on the local highway network; and
- Chapter 6 – provides the summary and conclusions to the above chapters.

2.0 EXISTING CONDITIONS

Site Location

- 2.1 The application site comprises an undeveloped plot of land located on the south-eastern edge of the town of Gwersyllt and less than 3km to the north-west of Wrexham Town Centre.
- 2.2 The site is bounded by the A541 Mold Road to the west, detached residential dwellings which form part of the recently built St Giles Park development to the north and undeveloped land to the east and south.
- 2.3 The location of the site in relation to the wider highway network is shown on **Figure 2.1** below and the site boundary in relation to the local highway network is shown in red on **Figure 2.2** overleaf.

Figure 2.1 – Site Location – Wider Highway Network

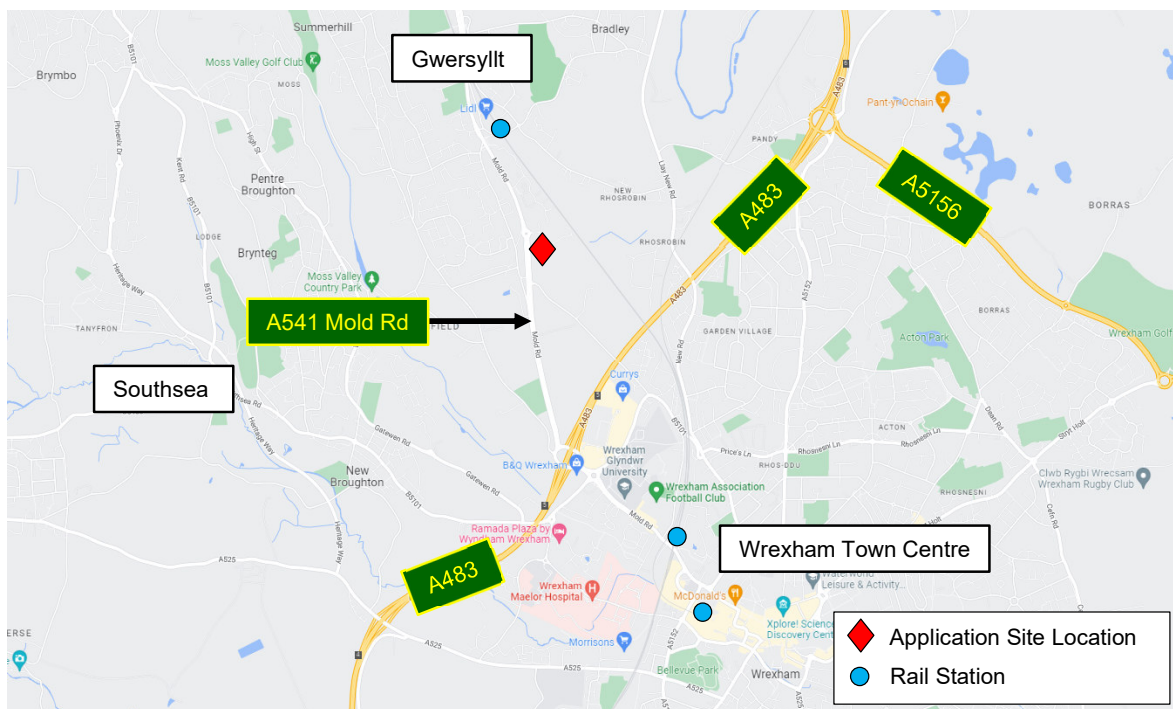
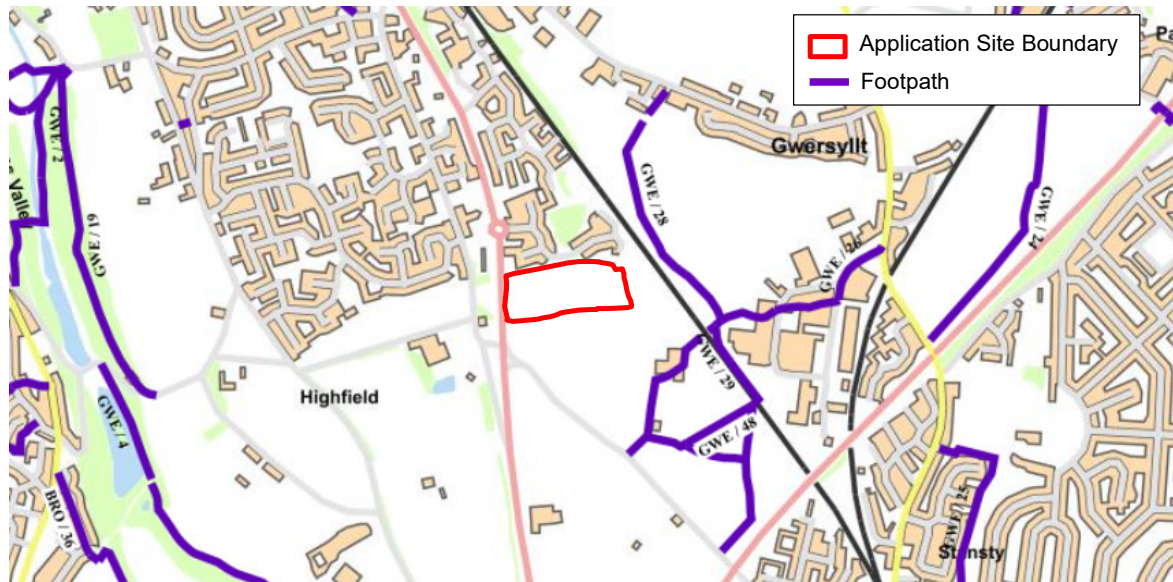


Figure 2.2 – Site Location Plan – Local View



- 2.4 The only existing vehicular access to the site is via a field access to the south. There is currently no vehicular access to the site via the surrounding adopted highway network.
- 2.5 The Public Right of Way within the vicinity of the site are shown on **Figure 2.3** below.

Figure 2.3 – Public Right of Way Plan



Source: WCBC

- 2.6 As shown on **Figure 2.3** above, footpath GWE / 28 runs to the east of the site and provides a link between Rhosrobin Road to the north-east and New Road to the east via footpath GWE / 26 as well as Stansty Chain Road to the south-east via footpaths GWE / 27 and GWE / 29.

Local Highway Network

- 2.7 The A541 Mold Road is located along the western boundary of the site and provides a link between the A5152 to the south-east in Wrexham Town Centre and the A525 in Trefnant to the north-west via Mold. Within the vicinity of the site, the A541 takes the form of a dual two carriageway and benefits from a shared footway/cycleway along the eastern side of the carriageway and is street lit.
- 2.8 The speed limit of the A541 varies within the vicinity of the site. As shown on **Figure 2.2** previously the speed limit changes from a mandatory 50mph to a mandatory 40mph at the north-western corner of the application site on the approach to the St Giles roundabout.

Traffic Data

- 2.9 Traffic flows along the A541 Mold Road have been taken from the Transport Assessment associated with the recently built residential development at Griffiths Road (LPA Ref: P/2015/0790) and in 2020 it is assessed that Mold Road will carry the following flows:

Table 2.1 – 2020 Surveyed Vehicular Flows along the A541

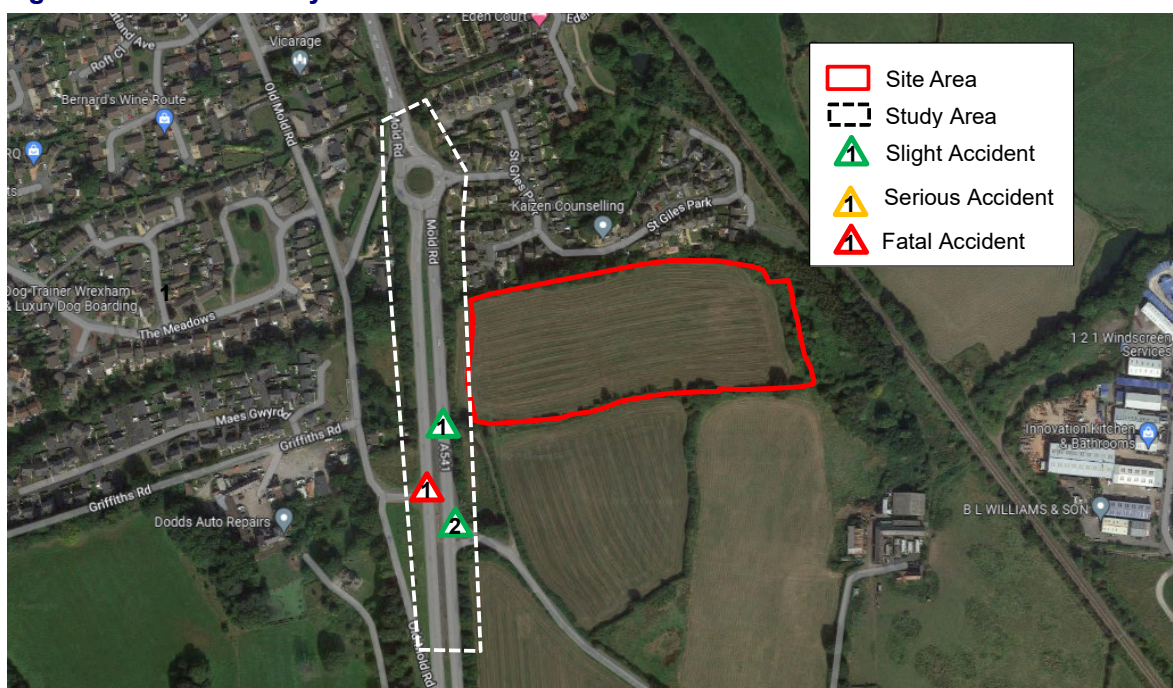
	Am Peak		Pm Peak	
Direction of Flow	Northbound	Southbound	Northbound	Southbound
Mold Road (North Of Stansty Chain Road)	849 pcu	1162 pcu	1215 pcu	827 pcu
Stansty Chain Road	2 pcu	226 pcu	13 pcu	69 pcu

Note pcu = passenger car unit

Road Safety

- 2.10 In order to identify critical locations on the network with a poor accident record, the personal injury accident data has been obtained from the online resource CrashMap for the most recently available 5-year period, ending in 31st December 2023. The location and severity of any accidents within the study area during this period, are shown on **Figure 2.4** below.

Figure 2.4 – Road Safety Plan



- 2.11 The key points from the accident data analysis are as follows:-

- Three slight severity accidents occurred on the A541 Mold Road (southbound), of which two occurred at the A541 Mold Road (southbound) / Stansty Chain Road junction and one took place in the vicinity of the south-west corner of the site; and,

- One fatal accident involving a cyclist occurred at the A541 Mold Road (northbound) / Old Mold Road junction.
- 2.12 Whilst all accidents are regrettable, a total of 4 accidents over a 5-year period (average of 0.8 accidents per year) is not considered to be an unusual frequency, particularly given that there are clearly no accident cluster spots. It should also be noted that the fatal accident was the only accident which involved a cyclist, with none of the other recorded accidents involving pedestrians/cyclists or resulting in any child, pedestrian or cyclist injuries.
- 2.13 The evidence presented above and illustrated in **Figure 2.4** demonstrates that the area in the vicinity of the site does not have any recurring highway safety problems that could be affected by the development proposals.

3.0 PROPOSED DEVELOPMENT

General

3.1 The development proposals consist of the construction of a residential development, comprising 85 dwellings, on land located at Stansty Fields, Gwersyllt. The proposed site layout plan is contained in **Appendix B** and the proposed housing mix consists of:

- 8no. 1-bed apartments;
- 24no. 2-bed houses;
- 47no. 3-bed houses; and
- 6no. 4-bed houses.

3.2 All of the dwellings in the proposed scheme will be affordable.

Proposed Site Access Arrangements

3.3 Vehicular access to the site will be provided from the A541 Mold Road via a priority access arrangement. The proposed access arrangement will include a 5.5m carriageway, 3m wide shared footway/cycleway either side of the carriageway which will tie into the existing pedestrian/cycle facilities along the A541 Mold Road as well as the 2m footways within the site, as shown on Drawing Number SCP/220743/SK01 Rev A presented in **Appendix C**.

3.4 The proposed access arrangement has been designed to allow left and right turns out from the site with left turn into the site only. The access is located around 200m to the south of the St Giles Park roundabout and therefore it is considered that the right turn into the site can be accommodated via a U-turn at the roundabout without undue delay, as detailed later in this report. A separate right turn lane will be provided along the central reserve in order to allow vehicles to turn right from the proposed site access onto the A541 (northbound). The overall width available to accommodate the right turn out of the site is around 14m and is suitable to allow the right turn to take place in two movements. In addition, the width is suitable to allow a 12m long rigid HGV or a refuse vehicle to turn right out from the site and swept path analysis of a refuse vehicle is shown on Drawing Number SCP/220743/ATR02, presented in **Appendix D**.

- 3.5 As part of the Highways comments provided in the PAC, the Highway Officer has requested a 9m x 160m visibility splay to the north of the site. It should be noted that guidance in MfS2 states that an X distance of 2.4m should normally be used as this represents a reasonable maximum distance between the front of a car and the driver's eye. It also states that longer X distances increase the possibility that drivers on the minor approach will fail to take account of other road users, particularly pedestrians and cyclists, and increase the risk of collisions. Having regard to this, an X distance of 2.4m or 4.5m is considered more suitable, particularly given that a cycle route crosses the site access, and a 4.5m X distance has been shown on the drawing presented in **Appendix C**. This demonstrates that 4.5m x 158m visibility is achievable to the exit arm of the roundabout to the north of the site which is considered more than acceptable when considering the roundabout will also act as a traffic calming feature for southbound vehicles, resulting in speeds of vehicles exiting the roundabout well below 50mph.
- 3.6 The Highway Officer also noted that it would be advisable to reduce the speed limit from 50mph to 40mph along the sites frontage. Given that an acceptable level of visibility is achievable from the proposed site access and there is no road safety issue relating to speeding vehicles, there is no technical justification for the suggested change in speed limit. Notwithstanding this, the applicant is willing to fund the speed limit reduction in the vicinity of the site if it is considered necessary to the LHA for this application to be acceptable.
- 3.7 Pedestrian and cycle access into the site will be provided at the same location as the vehicular access via the provision of a 3m wide shared footway/cycleway either side of the carriageway which will tie into the existing pedestrian/cycle facilities along the A541 Mold Road. The footway will narrow down to 2m internally.
- 3.8 In the PAC response, the Highway Officer at WC requested that active travel improvements are considered to Stansty Chain Road (north of the boundary of application P/2019/0923) and to the bus stop on Old Mold Road. Providing a suitable pedestrian route to the bus stop on Old Mold Road is a reasonable request to support active travel to/from the site and on this basis, the existing cycle route/crossing across the A541 Mold Road is proposed to be upgraded to a shared footway/cycleway through the provision of an additional 2m wide footway and a series of dropped kerb crossings with tactile paving, as shown on Drawing Number SCP/220743/SK03 Rev A presented in **Appendix E**.

- 3.9 Additional pedestrian infrastructure along Stansty Chain Road up to the P/2019/0923 development has also been considered, however, this does not appear deliverable within the available verge/highway and would also result in a significant loss of mature hedgerow/trees which may have wider ecological impacts. Notwithstanding this, development of the application site would form an extension to the village of Gwersyllt, which benefits from an array of amenities such as a supermarket, education establishments, health care facilities, eateries, leisure facilities as well as transport links etc., as detailed earlier, which are much closer than facilities in Wrexham. Therefore, the majority of prospective residents would route north to access the facilities in Gwersyllt, which will meet the majority of their day to day needs so they would not be reliant on the private car. However, Mold Road offers an alternative pedestrian link to the south which also benefits from street lighting, unlike Stansty Chain Road, and provides an opportunity for prospective residents to route into Wrexham on foot should they wish too.
- 3.10 At the request of the Highway Officer at WC, the proposed site access arrangement and off-site works have been subject to a Stage 1 RSA, with the RSA and designers response presented in **Appendix F**. The key points highlighted in the RSA relate to obstructions in the footway, lack of crossing point/tactile paving and separation to the carriageway. All issues raised in the RSA can either be addressed at the detailed design stage or have been addressed through updated drawings, as detailed in the design team response.

Internal Site Layout and Servicing

- 3.11 The internal road network has been designed to ensure the movements of a refuse vehicle will be accommodated without allowing their requirements to dominate the layout of the site. Swept path analysis has been undertaken of the site access and internal road layout, as shown on the drawing presented in **Appendix D**, which demonstrates that the movements of a large refuse vehicle can be accommodated.
- 3.12 In addition and as requested by WC, swept path analysis of a 7.5t rigid delivery vehicle has been undertaken of the private drive turning head in the vicinity of plot 2, as shown on Drawing Number SCP/220743/ATR03 presented in **Appendix G**, which demonstrates that it can turn and exit in a forward gear. The other private drives shown on the layout are much shorter in length and turning areas should not be necessary.

Parking

- 3.13 Car Parking Standards for new developments in Wrexham are outlined in the Wrexham Local Planning Guidance Note No. 16 document and are summarised below:-

Figure 3.1 – Parking Standards Summary

Dwelling Type	Parking Standard		Parking Requirement	
	Car	Cycle	Car	Cycle
1 bedroom	1.5 car spaces per unit	2 cycle spaces per unit	12	16
2 bedrooms	2 car spaces per unit		48	48
3/4 bedrooms	3 car spaces per unit		159	106

* Parking standards/requirements for cars are expressed as a maximum

- 3.14 The parking spaces per dwelling is shown on the proposed site layout plan presented in **Appendix B** and demonstrates the proposals provide parking in accordance with WCBC's standards.

ACCESSIBILITY

- 4.1 This Chapter presents a review of the accessibility of the site by walking, cycling and public transport modes.
- 4.2 The accessibility of the site by non-car modes has been assessed by comparison with the following threshold distances, as set out by Andrew Davies AM 'Minister for Economic Development and Transport' in his foreword to the 2003 *"Walking and Cycling Strategy for Wales"* document:

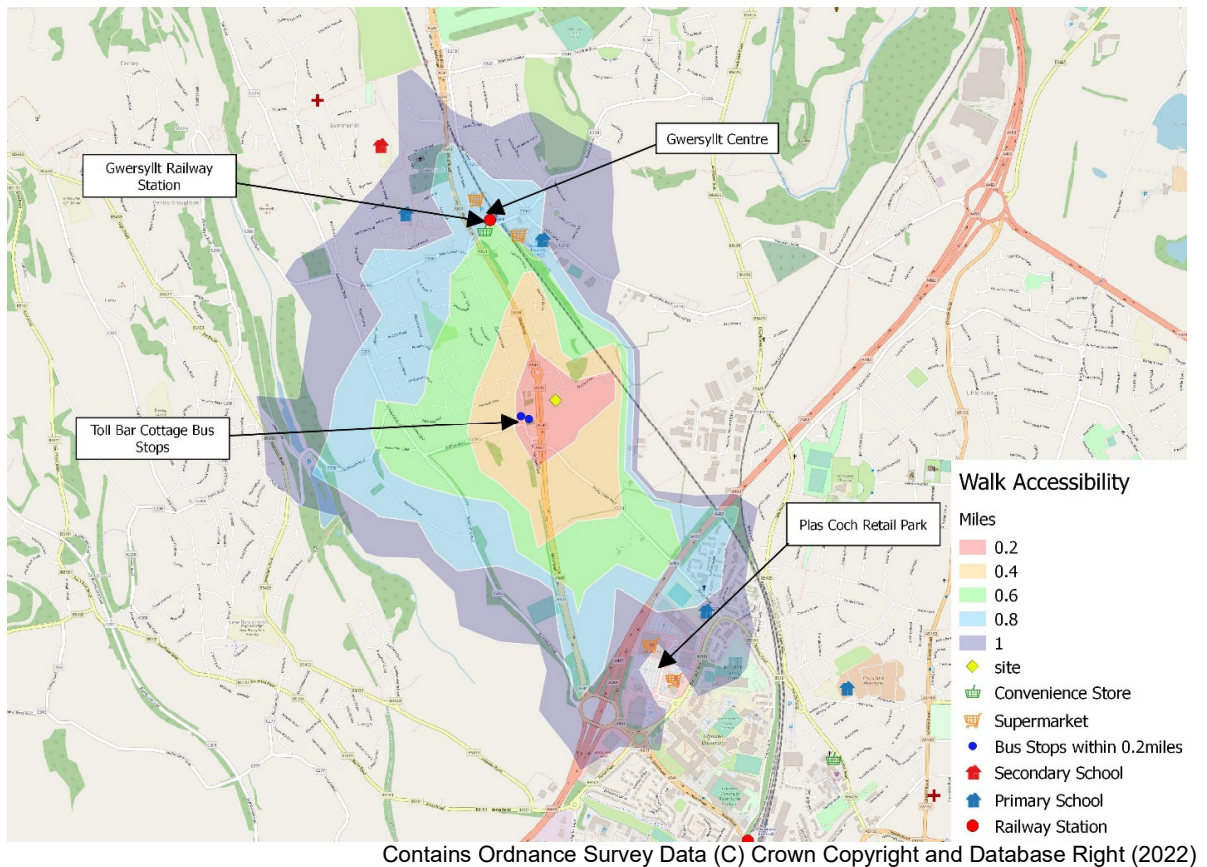
Table 5.1 – Walk / Cycle Distance Thresholds

Threshold Distance	Significance	Reference
1 mile	Walking can offer viable and attractive alternatives [to car trips]	Walking and Cycling Strategy for Wales
5 miles	Cycling can offer viable and attractive alternatives [to car trips]	Walking and Cycling Strategy for Wales

Pedestrian Accessibility

- 4.3 The pedestrian accessibility of the development has been modelled using the Geographical Information System (GIS) software TRACC to produce isochrone mapping figures. The purpose of the isochrones is to demonstrate the areas within an acceptable walking distance of 1 mile of the site. The areas located within 1-mile walking distance of the site are shown below on **Figure 4.1**.

Figure 4.1 – Walk Accessibility

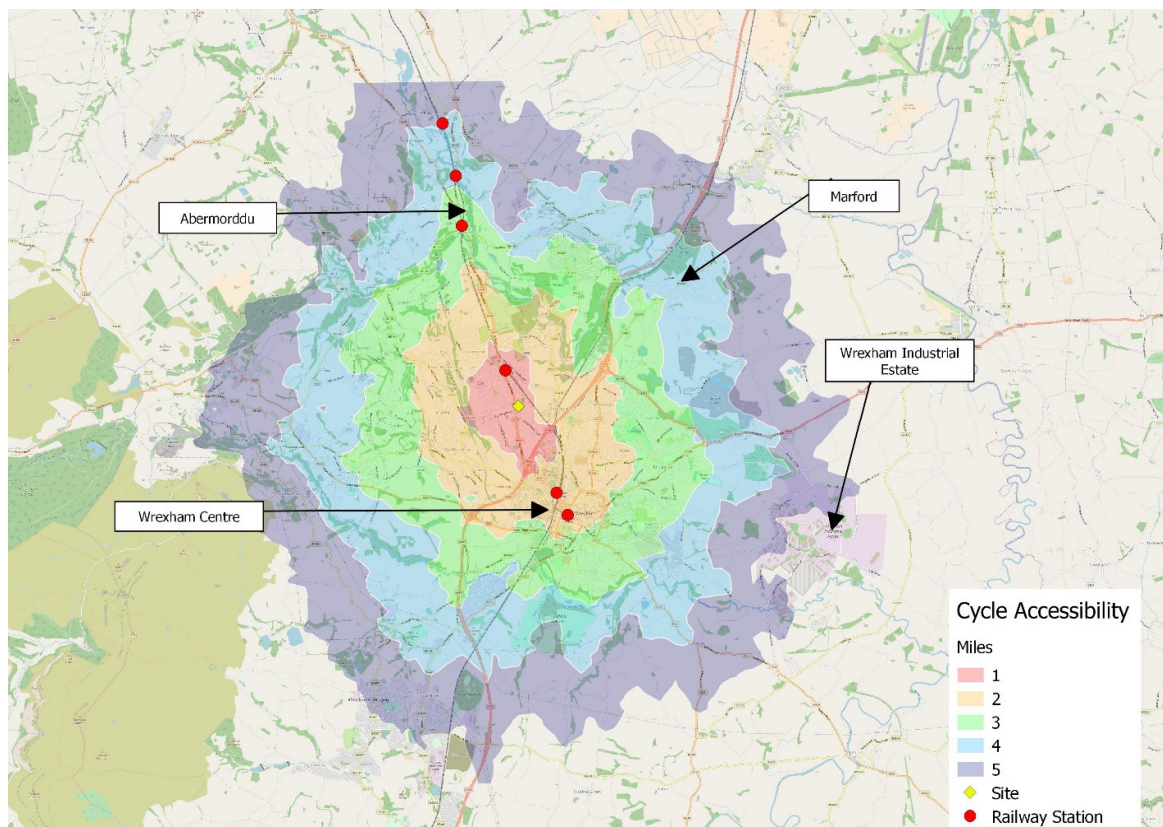


- 4.4 **Figure 4.1** illustrates walking distance from the centre of the site up to 1 mile in length. The majority of the available services within Gwersyllt are located to the north of the site. The facilities include a general store, discount food stores, ATM, employment sites, day nursery, primary and secondary schools, dental care centre, health centre, pub and restaurants, leisure centre, parks as well as bus stops and the train station.
- 4.5 It can be seen that the train station in Gwersyllt is around 0.6 mile from the site as is the discount foodstore. There is a primary school within 0.8 miles of the site and the secondary school is just over 1 mile for the site.

Cycle Accessibility

- 4.6 The Walking and Cycling Strategy for Wales identifies that “*Cycling can offer viable and attractive alternatives*” for short trips and as a substitute for shorter car journeys.
- 4.7 TRACC software has been used to assess the accessibility of the development by bicycle from the site. Isochrones illustrating the areas which lie within 5 miles of the site can be seen on the **Figure 4.2** below.

Figure 4.2 – Cycle Accessibility

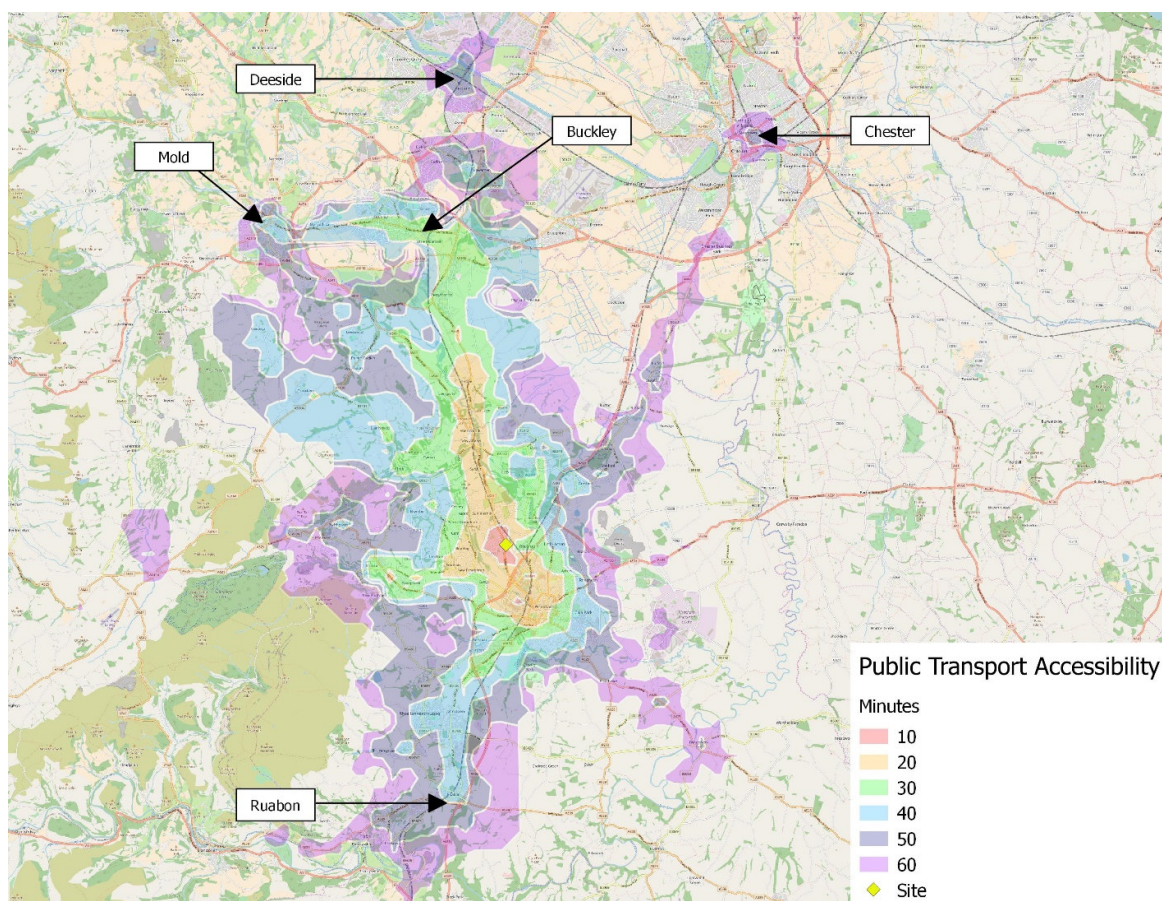


- 4.8 **Figure 4.2** demonstrates that, the whole of Gwersyllt is available within a suitable cycle distance as is Wrexham. There is a large variety of facilities available with Wrexham including Maelor Hospital, food and non food superstores, train station, and general retail, banking, leisure, University, employment and schools.
- 4.9 As noted previously cyclists would be able to benefit from the existing cycle infrastructure available in Gwersyllt and also the quiet route into Wrexham using Stansty Chain Road.

Public Transport

- 4.10 In terms of bus services, the Chartered Institute of Highways & Transportation's (CIHT's) *"Guidelines for Planning for Public Transport in Developments"* document identifies, at section 6.20, that *"Bus stops are located to minimise passengers' walking distance to their final destination. The maximum walking distance to a bus stop should not exceed 400m and preferably be no more than 300m."*
- 4.11 The nearest bus stops to the site are located along Old Mold Road, approximately 250m/0.2miles walking distance to the west of the site access. The nearby bus stops are therefore located within the recommended walking distance.
- 4.12 The bus stops are served by the 27 bus service which runs an hourly service Monday to Saturday between approximately 6:00am to 5:30pm.
- 4.13 Gwersyllt Railway Station is located approximately 0.8 miles walking distance to the north-west of the site and is therefore within an acceptable walking/cycling distance. The station can also be accessed via bus service 27 which routes past the site.
- 4.14 Gwersyllt Railway Station provides frequent services throughout the week between Bidston and Wrexham via Upton, Buckley and Hope, amongst other locations.
- 4.15 The level of accessibility by public transport has been analysed using GIS TRACC software to assess the accessibility of the site and is shown on **Figure 4.3** below. The figure illustrates the distance that can be travelled within 60 minutes by public transport to and from the site, which includes the time taken to walk to the bus stops and rail station.

Figure 4.3 – 60-minute Public Transport Accessibility



- 4.16 **Figure 4.3** shows that Wrexham is available within 20 minutes and the centre of Chester is available within 50 minutes by public transport.

Summary

- 4.17 It is considered that the site is situated in a suitable location to provide a realistic choice of mode of travel.

5.0 TRIP GENERATION AND HIGHWAY IMPACT

General

5.1 This Chapter provides an estimation and comparison of the trip generating potential of the proposed residential development during the worst-case weekday highway peak hours.

Trip Generation

5.2 In order to estimate the trip generating potential of the proposed development, average trip rates from the industry-standard TRICS Database have been obtained. The selection criteria for the TRICS based trip rates is as follows:-

- Residential;
- Houses Privately Owned;
- Multi modal surveys;
- Sites in Greater London, Ireland excluded;
- Selection by number of dwellings (50-100);
- Weekday surveys only; and
- Only sites in 'Edge of Town' locations have been selected.

5.3 The multi modal TRICS outputs for the proposed residential development are presented in **Appendix H** and are summarised in **Table 5.1** below:-

Table 5.1 - Estimated Trip Rates (Per Dwelling) Associated with the Proposed Development				
Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.135	0.350	0.297	0.143
Cycles	0.006	0.020	0.012	0.007
Pedestrians	0.046	0.102	0.057	0.030
Pub. Trans.	0.003	0.050	0.023	0.002

5.4 The estimated trip generation associated with the proposed 85 dwellings is therefore as summarised in **Table 5.2** below:-

Table 5.2 – Estimated Trip Generation – 85 Dwellings

Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	11	30	25	12
Cycles	1	2	1	1
Pedestrians	4	9	5	3
Pub. Trans.	0	4	2	0

- 5.5 As detailed above, it is estimated that the scheme will generate a total of 41 two-way vehicle movements in the AM peak hour and 37 two-way vehicle movements during the PM peak hour. Volumetrically, this equates to around 1 additional two-way vehicle movement every 1-2 minutes or so in both the AM and PM peak hours. The effect of this additional traffic on the local highway network will be barely perceptible during the peak hours and less so outside of the peak periods.
- 5.6 In addition, the above trip rates assume all dwellings to be privately owned houses that do not include affordable housing, apartments or bungalows which are considered likely to generate slightly less vehicular traffic. The above trip rates and trip generation analysis are considered highly robust, particularly given all of the dwellings in the proposed scheme are affordable.
- 5.7 The assumed assignment of traffic movement to and from the site has been based upon the work carried out in relation to the site at Griffiths Road which identified around 75% of the site generated traffic would travel south along the A541 Mold Road. This reflects the attraction of Wrexham and the A483.
- 5.8 **Table 5.3** below identifies the assumed turning movements associated with the site:

Table 5.3 – Assumed Turning Movements

	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Northbound	9	22	19	9
Southbound	3	7	6	3

- 5.9 As mentioned previously, the proposed access has been designed to allow left and right turns out from the site with left turn into the site only. The proposed access is located around 200m to the south of the St Giles Park roundabout and therefore it is considered that the right turn into the site can be accommodated via a U turn at the roundabout without undue delay. Based upon the assessment carried out previously the roundabout would experience an additional 3 vph undertaking a U turn during the AM peak hour and an additional 6 vph undertaking a U turn during the PM peak hour
- 5.10 The anticipated impact upon the A541 Mold Road of the site generated traffic has been assessed and based upon the above access proposal there would be no more than a 2.0% increase in flow along Mold Road during the AM peak hour and no more than a 1.8% increase during the PM peak hour.
- 5.11 This level of increase cannot be considered to represent a material impact along Mold Road and is lower than the day to day variation in flow that would normally be anticipated to be experienced along roads such as Mold Road.
- 5.12 The TS submitted with the PAC (ref. P/2023/0050) was for a 96-dwelling scheme and the Highway Officer raised no concern with the associated highway impact. Given the current scheme proposes a reduced number of 11 dwellings, the associated highway impact will be reduced and therefore is considered acceptable.

6.0 SUMMARY AND CONCLUSIONS

- 6.1 SCP have been appointed by Castle Green Homes to provide specialist transport planning and engineering advice in support of a proposed residential development for 85 dwellings at Stansty Fields, Mold Road, Gwersyllt.
- 6.2 A pre-application consultation (PAC) for 96 dwellings on the site was submitted to Wrexham Council (WC) in 2023 under application ref. P/2023/0050. The Local Highway Authority raised no objection to the scheme subject to amendments to the layout and consideration for off-site active travel improvements.
- 6.3 Vehicular access to the site will be provided from the A541 Mold Road via a priority access arrangement. The proposed access arrangement will include a 5.5m carriageway, 3m wide shared footway/cycleway either side of the carriageway which will tie into the existing pedestrian/cycle facilities along the A541 Mold Road as well as the 2m footways within the site. The proposed access arrangement has been designed to allow left and right turns out from the site with left turn into the site only. A separate right turn lane will be provided along the central reserve in order to allow vehicles to turn right from the proposed site access onto the A541 (northbound).
- 6.4 Following consideration of the Highway Officer's PAC comments, it is considered reasonable for the site to provide a suitable pedestrian route to the bus stop on Old Mold Road to support active travel to/from the site. On this basis, the existing cycle route/crossing across the A541 Mold Road is proposed to be upgraded to a shared footway/cycleway through the provision of an additional 2m wide footway and a series of dropped kerb crossings with tactile paving.
- 6.5 The most recently available five-year road safety record of the local highway network surrounding the site has been examined and does not represent a material concern in the context of the development.
- 6.6 The accessibility of the site has been assessed by walk, cycle, and bus and train modes. Overall, the site is considered to be well located in terms of its accessibility by all the major non-car modes of transport. These findings demonstrate that future residents will not be wholly reliant on the private car to travel for employment, education, leisure and retail purposes.

- 6.7 It is estimated that the scheme will generate a total of 41 two-way vehicle movements in the AM peak hour and 37 two-way vehicle movements during the PM peak hour. Volumetrically, this equates to around 1 additional two-way vehicle movement every 1-2 minutes or so in both the AM and PM peak hours. The effect of this additional traffic on the local highway network will be barely perceptible during the peak hours and less so outside of the peak periods.
- 6.8 The proposed access is located around 200m to the south of the St Giles Park roundabout and therefore it is considered that the right turn into the site can be accommodated via a U turn at the roundabout without undue delay. Based upon the assessment carried out previously the roundabout would experience an additional 3 vph undertaking a U turn during the morning peak hour and an additional 6 vph undertaking a U turn during the evening peak hour. The anticipated impact upon the A541 Mold Road of the site generated traffic has been assessed and based upon the above access proposal there would be no more than a 2.0% increase in flow along Mold Road during the morning peak hour and no more than a 1.8% increase during the evening peak hour. This level of increase cannot be considered to represent a material impact along Mold Road and is lower than the day to day variation in flow that would normally be anticipated to be experienced along roads such as Mold Road. The TS submitted with the PAC (ref. P/2023/0050) was for a 96-dwelling scheme and the Highway Officer raised no concern with the associated highway impact. Given the current scheme proposes a reduced number of 11 dwellings, the associated highway impact will be reduced and therefore is considered acceptable.
- 6.9 Having regard to the above, it is concluded that there is no highway or transport related reason to withhold planning permission for the scheme and the proposed development is therefore recommended for approval.

S|C|P

APPENDIX A

MEMORANDUM

From:	Chief Officer, Environment & Technical	To:	Chief Officer Planning & Regulatory
		FAO::	Matthew Phillips
Our Ref:	ET/DC/MZ/P/2023/0050	Your Ref:	P/2023/0050
Date:	13 th August 2024		

TOWN AND COUNTRY PLANNING ACT 1990

DATBLYGIAD PRESWYL O 96 ANNEDD AC ISADEILEDD CYSYLLTIEDIG / RESIDENTIAL DEVELOPMENT OF 96 NO. DWELLINGS AND ASSOCIATED INFRASTRUCTURE

LAND AT STANSTY FIELDS MOLD ROAD WREXHAM

Grid Ref: E 332242.3 N 352545.83

I refer to your consultation / email dated 10/02/2023 in respect of the above, and have reviewed the following information when considering the impact of this application from a highways perspective:

- Castle Green Site Plan drawing MRGWR-SP.01 Rev D.
- SCP Transport Statement dated November 2022
- Grimster Planning: Planning, Design and Access Statement dated December 2022
- Grimster Planning: Pre App Community Consultation Report January 2023
- Cooper Engineering Drainage Strategy Layout 7956/SKo1 Rev D

Proposals

It is the Local Highway Authority's (LHA) understanding that the proposals are for the development of 96 dwellings and associated infrastructure. New roads are to be provided within the site alongside car parking.

The proposals state that the residential dwelling proposals are:

- 20 no 2 bedroom dwellinghouses,
- 47 no 3 bedroom dwellinghouses,
- 29 no 4 bedroom dwellinghouses,

Dwelling types

A general review of the dwelling types has demonstrated that:

- 4P2B is a two bedroom dwelling without a garage
- 5P3B is a three bedroom dwelling without a garage
- Highfield is a three bedroom dwelling without a garage
- Oakley is a two bedroom dwelling without a garage
- Marlow is a three bedroom dwelling without a garage
- Oxford is a three bedroom dwelling without a garage

- Henley is a three bedroom dwelling without a garage
- Evesham is a three bedroom dwelling with a single integral garage
- Beaumont is a four bedroom dwelling with a single integral garage
- Wentworth is a four bedroom dwelling with a single integral garage

The Councils car parking standards are set out within Local Planning Guidance Note No 16. It sets out that 2 car parking spaces are required per 2 bedroom dwelling, 3 car parking spaces are required per 3 or 4 bedroom dwelling.

Garages will not be counted as contributing to on-site parking provision.

The cycle parking standards set out in LPGN No 16 states space to provide at least 2 secure cycle parking spaces per dwelling. For those dwellings with communal gardens and without garages, cycle parking should be provided via safe and secure communal cycle parking areas.

Site access and visibility splay

The proposed site access is onto Mold Road, at the point of the proposed site access it is a 50mph classified road with a central reservation and a dual two carriageway with a shared footway and cycleway along the eastern side. It is effectively one-way on the nearside carriageway. As such the visibility splay is only required looking to the right side out of the site. The visibility splay shown is 120m to the nearside kerbline from a point 4.5m back, for a 50mph speed limit, DMRB states that a visibility splay of (desirably) 9m x 160m is required.

It could be advisable to look to reduce the speed limit to 40 mph within the vicinity of the site access, no mention is made of this in the submitted Transportation Statement, however the residential areas to the north of the site are currently 40mph and it would seem consistent to extend this further past the proposed site entrance.

The required amendments to lining and signing and the required Traffic Regulation Order would need to be undertaken at the cost of the developer.

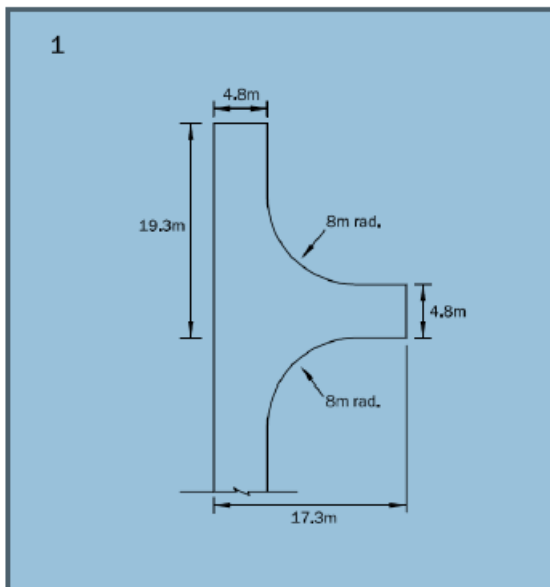
Updated plans are required to demonstrate this and it is considered that road safety audits stage 1,2 and 3 are required to assess the design of the proposed junction.

Access road layout

The proposed access road layout seems acceptable in principle, however the developer must ensure a width of 5.5m is maintained throughout the length of the access roads alongside 2m wide footways where there are residential frontages. Localised widening is likely to be required at bends in the road, swept paths should be provided, any cars tracked should be large in size.

Some of the turning heads provided do not meet the WCBC standards and therefore should be amended to ensure vehicles can turn acceptably within the site. The turning head closest to plot 51 appears undersized with a carriageway width of just 4.5m wide and a pump station is proposed in close proximity to this junction. It is requested that clarification is provided over the likely size of vehicle required to service the pump station and a swept path is required to ensure the vehicles can turn within the site and exit in forward gear.

Swept paths have been undertaken for a 11.5m long refuse vehicle which show the vehicle overhanging footways in the turning heads proposed which is not acceptable. All turning areas and private drives (excepting parking courtyards) are required to provide adequate turning space for a 7.5t rigid delivery vehicle.



It is noted that there is a private shared drive and access to a substation proposed within 15m of the main site access onto Mold Road which is a classified road. This is not acceptable on highway safety grounds and they should be set back to beyond 15m.

Site layout / car parking layout / parking

Plot 1 – A four bedroom dwelling with a single garage and driveway. 5.5m length is required for the driveway in front of the garage and 6m length in front of the doorway. A driveway width of 5.5m is required for a double driveway and a 6m aisle width is required behind the driveway, the standards have not been met and will need to be amended. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 2 – A three bedroom dwelling with a side driveway, two parking spaces proposed, require three and therefore driveway should be extended to 15m length with a 6m aisle width behind. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 3 – A three bedroom dwelling with a side driveway, two parking spaces proposed, require three and therefore driveway should be extended to 15m length with a 6m aisle width behind. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 4 - A four bedroom dwelling with a single garage and driveway. 5.5m length is required for the driveway in front of the garage and 6m length in front of the doorway. A driveway width of 5.5m is required for a double driveway and a 6m aisle width is required behind the driveway, the standards have not been met and will need to be amended. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 5 – A three bedroom dwelling with a side driveway, two parking spaces proposed, require three and therefore driveway should be extended to 15m length with a 6m aisle width behind.

Plot 6 – A four bedroom dwelling with a single garage and driveway. 5.5m length is required for the driveway in front of the garage and 6m length in front of the doorway. A driveway width of 5.5m is required for a double driveway and a 6m aisle width is required behind the driveway, the standards have not been met and will need to be amended. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 7 – A four bedroom dwelling with a single garage and driveway. 5.5m length is required for the driveway in front of the garage and 6m length in front of the doorway. A driveway width of 5.5m is required for a double driveway and a 6m aisle width is required behind the driveway, the standards

have not been met and will need to be amended. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 8 - A three bedroom dwelling with two car parking spaces located in front of the dwelling. Two parking spaces proposed, require three and therefore amendments are required

Plot 9 – A three bedroom dwelling with a side driveway, two parking spaces proposed, require three and therefore driveway should be extended to 15m length with a 6m aisle width behind.

Plot 10 - A three bedroom dwelling with a rear driveway, three parking spaces proposed which meets the Council's standards, however, parking isn't well overlooked as is located behind the dwelling and may encourage parking on the access road in front of the dwellings front door.

Plot 11 – A three bedroom dwelling with a side driveway, three parking spaces proposed, require three and therefore acceptable.

Plots within Courtyard 1 parking arrangements.

The proposed car park access is narrow and does not support simultaneous access and egress of two cars. Furthermore WCBC SPG24 states that for designing out crime the Council requires car parking and garages to be ideally provided within the residential curtilage and be overlooked by habitable rooms. In addition it states that communal car parking areas and garage courts should be well lit and unless they are secured by remote controlled gates should not be sited to the rear of buildings.

Plot 12 – A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a rear courtyard parking arrangement

Plot 13 - A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a rear courtyard parking arrangement

Plot 14 – A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a rear courtyard parking arrangement

Plot 15 – A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a rear courtyard parking arrangement

Plot 16 – A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a rear courtyard parking arrangement

Plot 17 - A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a rear courtyard parking arrangement

Plot 18 - A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a rear courtyard parking arrangement

Plot 19 - A three bedroom dwelling with a side driveway, two parking spaces proposed, the standards state three should be provided.

Plot 20 - A three bedroom dwelling with a side driveway, three parking spaces proposed, require three and therefore acceptable

Plot 21 – A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a double driveway which is acceptable

Plot 22 - A two bedroom dwelling requires two car parking spaces, two spaces are proposed in a double driveway which is acceptable, however, the pedestrian access is unclear, a path that doesn't pass through the driveway should be provided. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 23 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 24 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 25 – A three bedroom dwelling with a driveway for three vehicles which is acceptable. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 26 – A three bedroom dwelling with a driveway for two vehicles which falls below the WCBC standards, the standards state three car parking spaces should be provided. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 27 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 28 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 29 - A three bedroom dwelling with a driveway for three vehicles which is acceptable. The driveway should be 15m in length. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 30 - A three bedroom dwelling with a driveway for two vehicles which falls below the WCBC standards, the standards state three car parking spaces should be provided. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plots within Courtyard 2 parking arrangements:

The proposed car park access is narrow and seems quite tight for simultaneous access and egress of two cars. Furthermore WCBC SPG24 states that for designing out crime the Council requires car parking and garages to be ideally provided within the residential curtilage and be overlooked by habitable rooms. In addition it states that communal car parking areas and garage courts should be well lit and unless they are secured by remote controlled gates should not be sited to the rear of buildings.

Plot 31 - A three bedroom dwelling with two car parking spaces to the rear in a shared facility, falls short of the WCBC parking standards and could result in overflow parking.

Plot 32 - A two bedroom dwelling with two car parking spaces to the rear in a shared facility

Plot 33 - A two bedroom dwelling with two car parking spaces to the rear in a shared facility

Plot 34 - A two bedroom dwelling with two car parking spaces to the rear in a shared facility

Plot 35 - A two bedroom dwelling with two car parking spaces to the rear in a shared facility

Plot 36 - A two bedroom dwelling with two car parking spaces to the rear in a shared facility

Plot 37 - A two bedroom dwelling with two car parking spaces to the rear in a shared facility

Plot 38 - A two bedroom dwelling with two car parking spaces to the rear in a shared facility

Plot 39 – A three bedroom dwelling with two car parking spaces to the rear in a shared facility, falls short of the WCBC parking standards and could result in overflow parking.

Plot 40 – A three bedroom dwelling with car parking for three cars on a side driveway, this should be extended to 15m length. A separate pedestrian access should be provided that doesn't pass through the driveway. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 41 - A two bedroom dwelling with car parking to the front providing two car parking spaces, a segregated pedestrian paths should be provided incase cars are parked on the driveway blocking access. The driveway should be extended to ensure that 4.8m length is provided as a minimum. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 42 - A two bedroom dwelling with a side driveway providing two car parking spaces which is acceptable. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 43 - A three bedroom dwelling with a side driveway providing two car parking spaces. WCBC standards state that three car parking spaces should be provided and it is felt this can be delivered by extending the length of the driveway.

Plot 44 - A three bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls shorts of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 45 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls shorts of the Councils standards. There is a substandard aisle width less than 6m provided this should be increased to ensure egress. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 46 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls shorts of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 47 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls shorts of the Councils standards. There is a substandard aisle width less than 6m provided this should be increased to ensure egress. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 48 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls shorts of the Councils standards. There is a substandard aisle width less than 6m provided this should be increased to ensure egress. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 49 - A three bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls shorts of the Councils standards. There is a substandard aisle width less than 6m provided this should be increased to ensure egress. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 50 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 51 - A three bedroom dwelling with car parking to the rear. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards.

Plot 52 - A three bedroom dwelling with car parking to the side, the driveway is not at 90 degrees to the footway and so will encourage manoeuvres on an oblique angle which reduces visibility and may compromise safety.

Plot 53 - A two bedroom dwelling with two car parking spaces to the front, meets the car parking standards of WCBC but there is concern that long lengths of parking spaces remove the availability of on-street parking spaces.

Plot 54 - A two bedroom dwelling with two car parking spaces to the front, meets the car parking standards of WCBC but there is concern that long lengths of parking spaces remove the availability of on-street parking spaces.

Plot 55 - A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC and there is a concern that long lengths of parking spaces remove the availability of on-street parking spaces.

Plot 56 - A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 57 - A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 58 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 59 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 60 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 61 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 62 - A three bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 63 - A three bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking

spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 64 – A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 65 - A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 66 - A three bedroom dwelling with a side driveway for two vehicles, this falls short of the car parking standards of WCBC which states that three car parking spaces should be provided and the driveway is located an awkward arrangement which will lead to vehicles reversing out on an oblique angle and should be amended on safety grounds.

Plot 67 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. The driveway requires a 6m aisle width behind and therefore the private drive requires widening. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 68 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. The driveway requires a 6m aisle width behind and therefore the private drive requires widening. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 69 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. The driveway requires a 6m aisle width behind and therefore the private drive requires widening, furthermore a 2m footway is required on this frontage. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 70 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. The driveway requires a 6m aisle width behind and therefore the private drive requires widening, furthermore a 2m footway is required on this frontage. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 71 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. The driveway requires a 6m aisle width behind and therefore the private drive requires widening. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 72 – A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided. The driveway requires a 6m aisle width behind and therefore the private drive requires widening. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 73 – A three bedroom dwelling with two car parking spaces provided in a side driveway, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided. The driveway is located an awkward arrangement which will lead to vehicles reversing out on an oblique angle and should be amended on safety grounds. Furthermore a 2m footway is required on this frontage.

Plot 74 - A three bedroom dwelling with three car parking spaces access via a rear driveway. WCBC SPG24 states that for designing out crime the Council requires car parking and garages to be ideally provided within the residential curtilage and be overlooked by habitable rooms.

Plot 75 – A three bedroom dwelling with three car parking spaces access via a rear driveway. WCBC SPG24 states that for designing out crime the Council requires car parking and garages to be ideally provided within the residential curtilage and be overlooked by habitable rooms.

Plot 76 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 77 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 78 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 79 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 80 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 81 - A three bedroom dwelling with two car parking spaces to the side, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 82 - A three bedroom dwelling with two car parking spaces to the side, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 83 – A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 84 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 85 - A three bedroom dwelling with a side driveway is proposed for three vehicles which meets the standards.

Plot 86 – A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided. A separate pedestrian access should be provided that doesn't pass through the driveway.

Plot 87 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards.

Plot 88 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards.

Plot 89 – A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided. There is concern that long lengths of parking spaces remove the availability of on-street parking spaces.

Plot 90 – A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided. There is concern that long lengths of parking spaces remove the availability of on-street parking spaces.

Plot 91 - A three bedroom dwelling with a side driveway providing two car parking spaces, which falls short of the WCBC standards, the driveway is not at 90 degrees to the footway and so will encourage manoeuvres on an oblique angle which reduces visibility and may compromise safety.

Plot 92 – A three bedroom dwelling with two car parking spaces to the front, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Plot 93 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards.

Plot 94 - A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards.

Plot 95 – A four bedroom dwelling with an integral garage. A double driveway is proposed. WCBC don't accept garages as available for parking. The WCBC standards state that three car parking spaces should be provided and therefore the parking falls short of the Councils standards.

Plot 96 – A three bedroom dwelling with two car parking spaces to the side, the driveway should be 15m long to provide three car parking spaces, falls short of the car parking standards of WCBC which states that three car parking spaces should be provided.

Active Travel

Active Travel improvements to Stansty Chain Rd north of the boundary of the application P/2019/0923 linking up to this site boundary and across the frontage of the site should be considered. This is key to being able to demonstrate that this site can be classed as development in a sustainable location. Currently the northern section of Stansty Chain Rd could not be exposed to the potential for increased pedestrian traffic. Other Active Travel improvements such as improving the crossing to access the bus stop on Old Mold Rd should be considered as at present there is no designated safe crossing point for pedestrians. The applicant should coordinate any proposals with WCBC's Active Travel Lead officer Gwen Thomas on gwen.thomas@wrexham.gov.uk and the Transport Officer Andrew Mytton on Andrew.Mytton@Wrexham.gov.uk to discuss bus stop improvements.

Drainage

The eastern end of the site sits within a known boggy / waterlogged ground close to the a watercourse, therefore the LHA would remind the applicant that if our flood concerns aren't resolved satisfactorily within the design of the scheme, then WCBC may decline adoption of the proposed highway within the site.

Refuse

Bin collection and storage locations should be added to the proposals. The WCBC Waste Management team do not reverse vehicles further than 12m and operatives will walk no further than

15m to collect a bin, and it is considered that 15m is the maximum distance a resident should walk to move a bin. The Waste Management team may choose not to access private roads.

Landscaping

There are areas of landscaping shown within the site, the LHA requests confirmation that a management company will maintain all landscaping within the site and within the required visibility splays.

Transport modeling / junction assessment

A transportation statement has been submitted with the application which states that the proposed trips to the site will result in 47 two way trips in the AM peak and 43 two way trips in the PM peak. The data used within TRICS to generate the trip results has not been supplied and therefore is requested to ensure the data supplied is robust, The peak hours are also requested to be clarified.

The assumed turning movements are also detailed indicating that northbound there will be approximately 10 arrivals and 25 departures in the AM peak and 21 arrivals and 10 departures in the PM peak. In terms of southbound movements there are proposed to be 3 arrivals and 8 departures in the AM peak and 7 arrivals and 3 departures in the PM peak.

The Mold Road arrangements would mean an increase in U turn movements at the roundabout to the north, an increase of 3 vehicles in the AM peak and 7 in the PM peak. The TS states there will be an increase in flow along Mold Road of 2.3% in the AM peak and 2.1% in the PM peak which is likely to be imperceptible should the data be robust.

Summary

The LHA has no objection in principle to the proposed residential development, however the proposals fall short of the Council's car parking standards, the road layout and footways require amendment from their current form and many plots need amendments to their parking arrangements and pedestrian access arrangements in order to be acceptable on highways grounds. If the issues listed above can be addressed fully then there would be no objections to the proposals on highways grounds.



Chief Officer, Environment & Technical

S|C|P

APPENDIX B



SCHEDULE OF ACCOMMODATION				
HOUSETYPE	DESCRIPTION	SQFT	NUMBER	PERCENTAGE
2P1B	1 Bed, Walk up flat - Ground Floor	578 SQFT	4	4.71
2P1B	1 Bed, Walk up flat - First Floor	648 SQFT	4	4.71
3B Bungalow	3 Bed, 1 Storey, Semi-Detached	637 SQFT	2	2.35
4P2B	2 Bed, 2 Storey, Mid Terrace	884 SQFT	22	25.86
4P2B	3 Bed, 2 Storey, End Terrace	879 SQFT	13	15.29
5P3B	3 Bed, 2 Storey, Mid Terrace	999 SQFT	1	1.18
5P3B	3 Bed, 2 Storey, End Terrace/Semi	1004 SQFT	23	27.06
5P3B CT	3 Bed, 2 Storey, Corner Turner	1004 SQFT	10	11.76
6P4B	4 Bed, 2 Storey, Semi-Detached	1197 SQFT	6	7.06
TOTAL		78346	SQFT	85
Gross Site Area		7.73 Acres	3.13	Hectares
GCN Mitigation area		1.45 Acres	0.59	Hectares
POS / Pump Station / Sub-station		1.09 Acres	0.44	Hectares
Existing Landscaping & Buffer zone		0.21 Acres	0.08	Hectares
Site Entrance & Single-Sided Road		0.045 Acres	0.02	Hectares
NETT SITE AREA:		4.936 ACRES	2.00	HECTARES
Gross Density:		11.00 Units/Acre	27.17	Units/Hectare
NETT DENSITY:		17.22 UNITS/ACRE	42.66	UNITS/HECTARE
Gross Footage:		101135.32 SQFT/Acre	2326.73	SQM/Hectare
NETT FOOTAGE:		15875.88 SQFT/ACRE	3644.50	SQM/HECTARE

- Key:
- Site Boundary
 - 1.8m high boundary fence
 - 1.8m high screen wall / fence
 - Private Drive
 - Visibility Spills -
 - 4.5x120m to Site Entrance
 - 2.4x25m to all internal estate road junctions and private drives, as shown. Private vehicle entrances to have visibility spill of 2.4x2.4m onto footways (not shown) to ensure pedestrian/ cyclist safety.
 - Indicative Landscaping
 - Number of parking spaces proposed to Dwellings noted thus. In accordance with WCBC LPGN 16 this does not include parking within a garage. All garage internal dimensions, both detached and integral, to be in excess of 2.7x5.5m. All driveways to be minimum width of 3.2m (single drives) and 5.6m (double drives), and a minimum length of 5.5m where in front of a garage, all in accordance with WCBC LPGN 16 minimum standards.
 - Parking space allocation to Dwellings in leu of driveway. Each bay size to be a minimum of 2.4m x 4.8m in accordance with WCBC LPGN 16.
 - Knee rails to parking bays to terraced House types
 - Affordable Housing to WCBC Policy
 - Additional Affordable Housing
 - Existing retained hedges/landscaping

Rev:	Description:	Date:
A	Layout revised, latest product added.	02.03.22
B	Sub station added, Pump station added, affordable units mixed up.	06.04.22
C	Pump Station adjusted to suit vehicle tracking.	26.04.22
D	Mixed amended, numbers increased from 90 to 96	11.10.22
E	Amends following planning officer comments	17.11.22
F	Amends following meeting with Local Authority re: GCN	01.10.24
G	Mix changed and numbers increased from 72 to 85	18.02.25

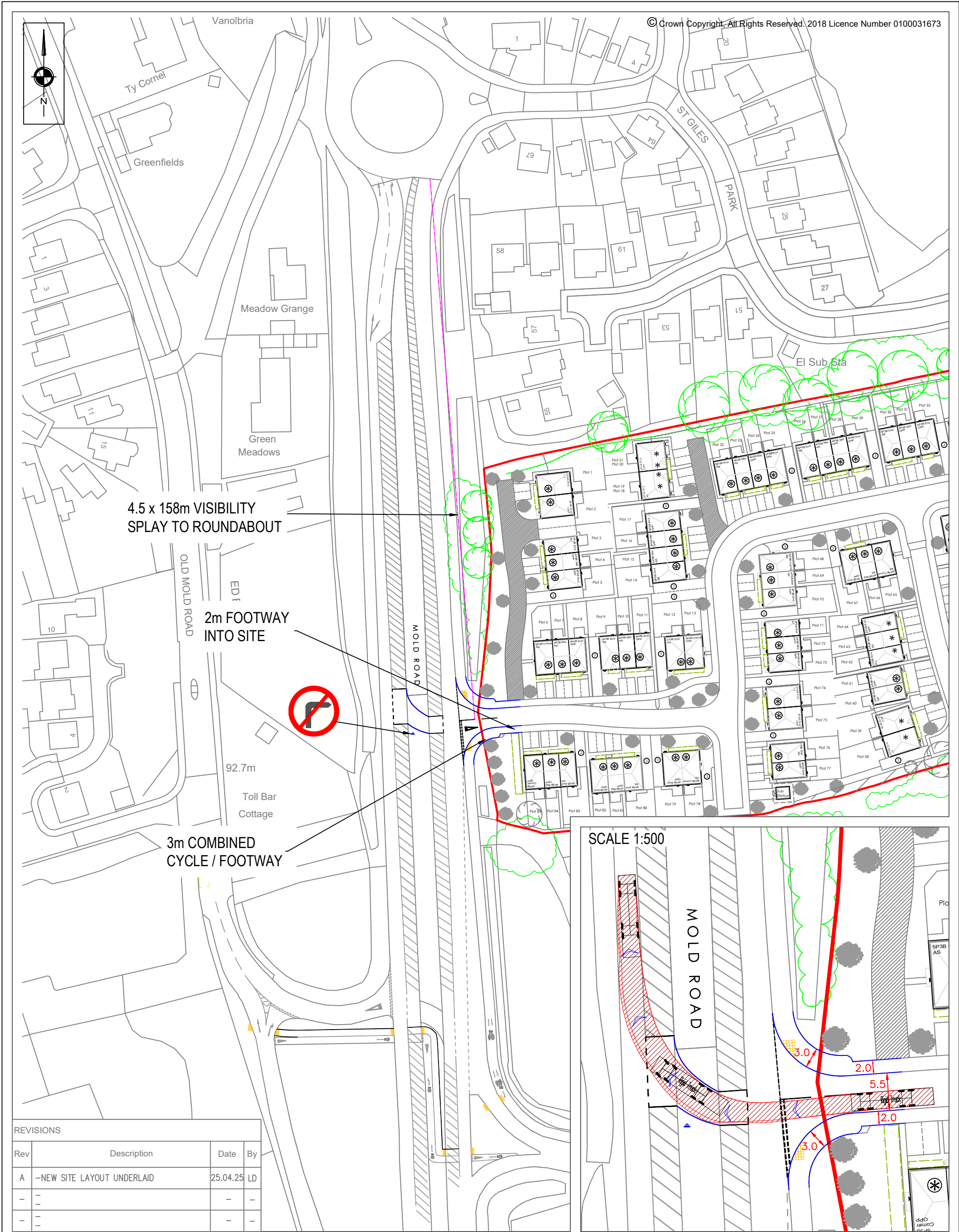


Castle Green
Unit 20,
St. Asaph Business Park, St Asaph,
Denbighshire. LL17 0LJ.
Tel. 01745 536677

Site:	Mold Road, Gwersyllt
Title:	Site Layout
Scale:	1:500 at A1
Date:	26/02/2020
Ref:	MRGWR-SP.01
Rev:	G

S|C|P

APPENDIX C



SCP Transportation Planning : Infrastructure Design Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk	Client CASTLE GREEN HOMES LTD	Drawing Title PROPOSED ACCESS ARRANGEMENT	Scale 1:1000 @ A3 UNLESS STATED	By WB	Drawing No. SCP/220743/SK01
	Project Title MOLD ROAD, GWERSYLLT, WREXHAM		Date 25.11.2022	Checked LB	
			Approved/ Unapproved -	Status PLANNING	
				Status PLANNING	Revision A

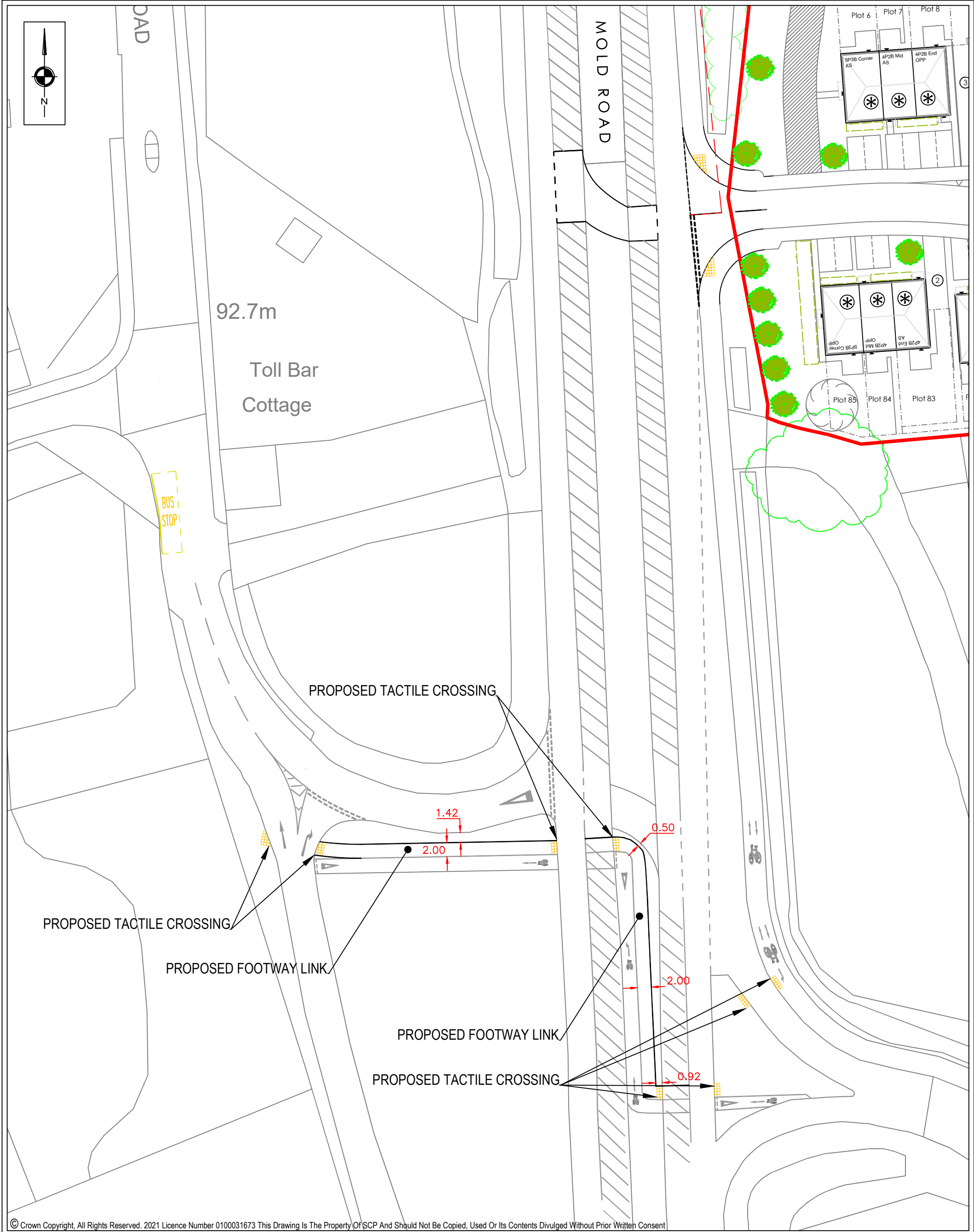
S|C|P

APPENDIX D

S|C|P

APPENDIX E

scp-dc0\projects\Job Library\2022\220743 - Mold Road, Gwersyllt, Wrexham\Drawings in Progress



© Crown Copyright, All Rights Reserved. 2021 Licence Number 0100031673 This Drawing Is The Property Of SCP And Should Not Be Copied, Used Or Its Contents Divulged Without Prior Written Consent

-	-	-	-	Client Name:		Project Title:	
-	-	-	-	CASTLE GREEN HOMES LIMITED		MOLD ROAD, GWERSYLLT, WREXHAM	
-	-	-	-	Drawn By:	Date:	Drawing Title:	
A	0.5m FOOTWAY/ HIGHWAY SEGREGATION	25.04.25	LD	LD	08.04.2025		
Rev	Description	Date	By	Checked:	Scale@A3:	PROPOSED FOOTWAY LINK TO NEAREST BUS STOP	
				LB	1:500		
REVISIONS				Approved:	Status:	Drawing No.	Rev.
				PT	PLANNING	SCP/220743/SK03	A

SCP
an RSK company

Office of Origin: Manchester Tel: 0161 832 4400
www.scptransport.co.uk - www.rskgroup.com

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APPENDIX F



meraki alliance

Highways, Transportation & Safety Consulting

Proposed Access Arrangements & Footway Improvements: Development - East of Mold Road, Gwersyllt

Stage 1 Road Safety Audit

Jonathan Birkett
Meraki Alliance Ltd
Riverview Court,
Castle Gate
Wetherby
LS22 6LE

Tel: +44 (0) 7966296302

Email: jon@merakialliance.co.uk

Proposed Access Arrangements & Footway Improvements: Development - East of Mold Road, Gwersyllt

Stage 1 Road Safety Audit

Report Title:	Proposed Access Arrangements and Footway Improvements: Development - East of Mold Road, Gwersyllt.
Report Produced for:	Wrexham County Borough Council, The Guildhall, Wrexham, LL11 1AY
Report Dated:	25 April 2025
Document Reference & Revision:	MAL/MRGRSA1Rev 0
Report Produced by:	Meraki Alliance - Jonathan Birkett
On behalf of:	SCP

Contents Amendment Record

Rev:	Issue status:	Prepared by / date:	Checked by/ Date:
0	Draft Report	Jonathan Birkett 24 April 2025	
1	FINAL REPORT	Jonathan Birkett 25 April 2025	Gillian Kidd 25 April 2025

This report has been issued & amended as follows:

Report Circulation Record

This report has been circulated, as follows:

Person	Organisation	No. of Copies	Date
	Wrexham County Borough Council		
Liam Bessell	SCP	Electronic	25 April 2025
G Kidd	Meraki Alliance Ltd	Electronic	25 April 2025

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1 Introduction

1.1 General

This report has been prepared in response to a request to undertake a Stage 1 Road Safety Audit (RSA), (i.e., carried out prior to detailed design), by Liam Bessell of SCP on behalf of Wrexham County Borough Council.

The scheme submitted for Audit is the proposed access arrangements and improvements associated with a new development, Land to the east of Mold Road, Gwersyllt. The site access onto Mold Road is within a 50mph speed limit.

The scope of the proposed highway works includes:

- Construction of a new site access off Mold Road,
- Limited movements junction (left out/right out and left in – no right in from Mold Road),
- Uncontrolled crossing of Stansty Chain Road, Mold Road and Old Mold Road,
- Road markings.

The items raised in the RSA are outlined within Section 2 of this report, together with recommendations for alterations or improvements to the proposals with the aim of improving highway safety and aiding collision prevention.

Overseeing Organisation: Wrexham County Borough Council

Client: Castle Green Homes Limited

Design Organisation: SCP

1.2 Road Safety Audit Team

The Road Safety Audit Team membership approved was:

Audit Team Leader: **JONATHAN BIRKETT** IENG, MICE, FIHE, MSORSA
Holder of HE RSA Certificate of Competency

Audit Team Member: **G KIDD** BSc (HONS), MIHE, MCIHT

1.3 Documents Forming the Brief

The documents were made available to the Road Safety Audit Team by Liam Bessell of SCP on behalf of Wrexham County Borough Council.

The total documents forming the Audit Brief are listed in Appendix 1:

Generally, the Brief comprised:

- Drawings

1.4 Collision, Traffic and Speed Data

Collision data: was not available as part of the Brief.

Personal injury collision data has been obtained from the online Crashmap.co.uk database, for the most recent 5 years of data available, as shown in Figure 1 below.

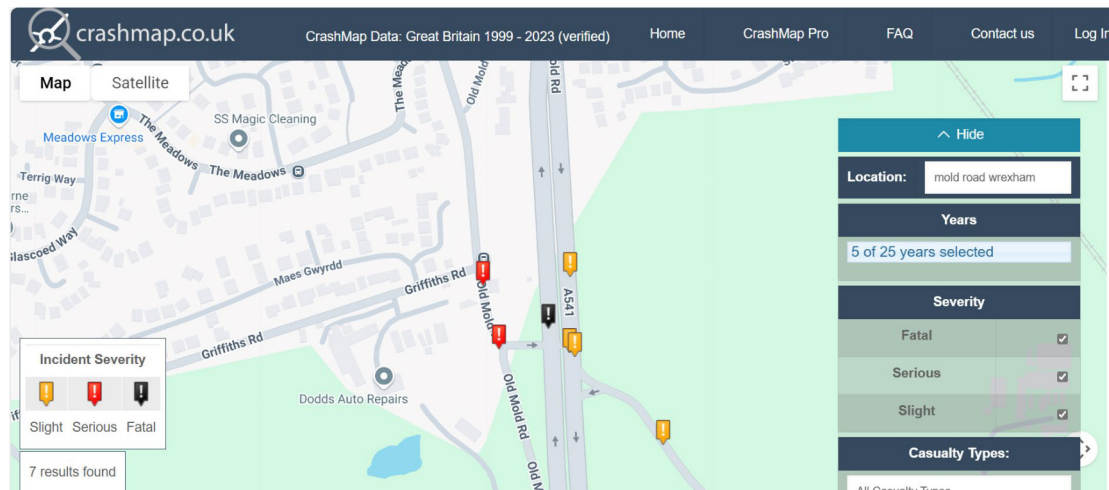


Figure 1 - Collision data 2019 - 2023

The data shows that there have been seven collisions resulting in one fatal, two serious and four slight in severity.

One fatal and one slight involved cyclists, one serious involved a motorcycle and one serious involved a pedestrian.

Traffic data was not available.

Speed data was not available, but the road is straight, and the speed limit is 50mph. Even though there are no visibility splays shown the audit team were content that the visibility available exceeds what is required under DMRB for a 50mph road.

1.5 Departures or Relaxations from Standards

No Departures or Relaxations from Standard were submitted to the Road Safety Audit Team.

1.6 Issues Raised in Previous Road Safety Audit(s)

No previous RSA stages have been undertaken.

1.7 Elements not Provided as Part of this Stage 1 Road Safety Audit

- Drainage

- Lighting
- Fencing
- Site Clearance
- Resurfacing
- Construction Details

It was considered that the information provided was sufficient for the purpose of carrying out the Road Safety Audit Stage 1 requested.

1.8 Details of Site Visit

A site inspection was undertaken on the morning of 17 April 2025 between 09:00hrs and 10:00hrs. The RSA team spent 60 minutes on site understanding the proposed works and their interaction with the local road network.

During the site visit, the weather was fine, and the carriageway was dry. No incidents were noted whilst on site.

1.9 Items Outside the Scope of the Road Safety Audit

It was noted during the site visit that pedestrians are walking within the verge (photos) and crossing Mold Road to the north of Old Mold Road junction.



1.10 Disclaimer

This Audit is restricted to the main site access with Mold Road and the uncontrolled crossings listed above.

The Road Safety Audit comprised an examination of the documents and drawings supplied to the Road Safety Audit Team (referenced in Appendix 1 of this report). No member of the Road Safety Audit Team has had any previous input to the design of the scheme.

The Terms of Reference are as described in the National Highways Design Manual for Roads and Bridges document GG 119 'Road Safety Audit '. The scheme has been examined and this report compiled only with regard to safety implications to road users of the scheme as presented. It has not been verified for compliance with any other Standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have

referred to a design standard for information only. However, any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.

Therefore, any recommendations included within this report should not be regarded as being prescriptive design solution to the problem raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, as stipulated in GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which should be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

It is the Project Sponsor's responsibility to ensure that all problems raised by the Road Safety Audit Team are given due consideration.

In the event of a collision and any resulting legal action, Meraki Alliance Ltd would have to defend its actions on the basis that it took such care, as in all circumstances was reasonably required, to ensure that the highway was not dangerous to road users. It is important therefore that recommendations contained in the report are acted upon wherever possible.

2 Items Raised at Stage 1 Road Safety Audit

This section details the findings of this Stage 1 Road Safety Audit. All locations of identified problems are illustrated on the plan included at **Appendix 2**.

2.1 Road Safety Audit - Problems

PROBLEM		1-1
Location:	Issues with proposed pedestrian footway.	
Summary:	Obstructed footways and lack of uncontrolled crossings that meet the required DfT standards will increase the risk of injuries to non-motorised users.	
It is proposed to provide a footway between Old Mold Road and Stansty Chain Road following the route of the existing cycle facilities. Two issues have been identified: 1. There is a sign, signposts, lamp column and bollard located within the new footway (photos). 2. There is no tactile paving associated with the existing crossing over Old Mold Road (photo)		
		
Obstructed footways and lack of uncontrolled crossings that meet the required DfT standards will increase the risk of injuries to non-motorised users.		
RECOMMENDATION		
It is recommended that all obstructions are removed from the proposed footway and that the existing crossing over Old Mold Road is brought up to current standards with the introduction of tactile paving.		

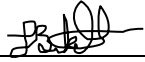
PROBLEM		1-2
Location:	Central reservation Mold Road	
Summary:	A lack of clear separation between the new footway and carriageway will increase the risk of vehicles striking pedestrians on the new footway increasing the risk of injury.	
It is proposed to provide a footway between Old Mold Road and Stansty Chain Road following the route of the existing cycle facilities. Where the footway crosses the central reservation, it is noted that the footway will be very close to the right turn (central reservation crossing) for vehicles exiting Old Mold Road. A lack of clear separation between the new footway and carriageway will increase the risk of vehicles striking pedestrians on the new footway increasing the risk of injury.		
RECOMMENDATION		
It is recommended that as a minimum at least 500mm is provided between the edge of the footway and the carriageway to create an area of separation.		

PROBLEM		1-3
Location:	Site access.	
Summary:	A lack of NMU crossing points at the site access will increase the risk of NMU/vehicle collisions.	
A new access will be created from the development onto Mold Road, this access will bisect the existing shared use route running along the eastern side of Mold Road. No facilities for NMUs to cross the site access have been shown. A lack of NMU crossing points at the site access will increase the risk of NMU/vehicle collisions.		
RECOMMENDATION		
It is recommended that a suitable shared use crossing is provided over the site access.		

PROBLEM		1-4
Location:	Route of new footway.	
Summary:	A lack of edging kerbs and pedestrian guard railing will increase the risk of injury to visually impaired pedestrians.	
New footway is to be created across Mold Road. It is unclear how visually impaired pedestrians will be accommodated over the various islands as there is limited guidance in the form of kerbing and pedestrian guard railing to ensure that they can safely locate the various crossing points and negotiate the 90-degree bends currently proposed. A lack of edging kerbs and pedestrian guard railing will increase the risk of injury to visually impaired pedestrians.		
RECOMMENDATION		
Consider at detailed design how the visually impaired will be accommodated along the new footpath and how they will be guided between the uncontrolled crossings.		

**END OF PROBLEMS IDENTIFIED AND RECOMMENDATIONS PRESENTED IN THIS
STAGE 1 ROAD SAFETY AUDIT**

3 Audit Team Statement

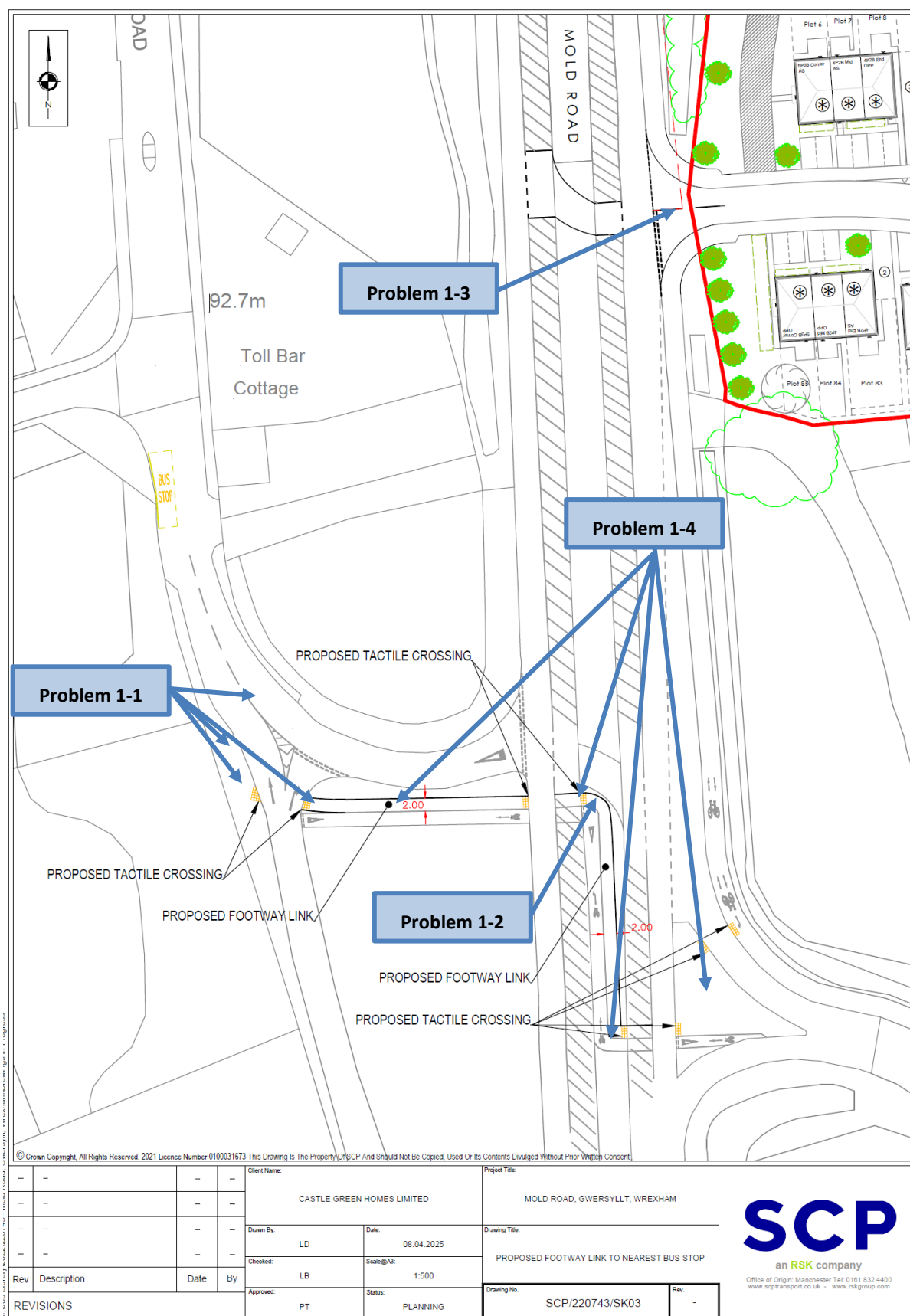
We certify that this Road Safety Audit has been carried out in accordance with GG119	
ROAD SAFETY AUDIT TEAM LEADER	
NAME:	JONATHAN BIRKETT
SIGNED:	
POSITION:	DIRECTOR
ORGANISATION	MERAKI ALLIANCE LTD
DATE:	25 APRIL 2025
ROAD SAFETY AUDIT TEAM MEMBER	
NAME:	GILLIAN KIDD
SIGNED:	
POSITION:	AUDIT TEAM MEMBER
ORGANISATION	MERAKI ALLIANCE LTD
DATE:	25 APRIL 2025

Appendix 1 - Audited Drawings

SCP_220743_SK03_Proposed_Footway_Link

Site Layout - Gwersyllt Rev G

Appendix 2 - Problem Location Plan



ROAD SAFETY AUDIT (RSA) DESIGNERS RESPONSE FORM - STANSTY FIELDS, GWERSYLLT

RSA Ref No : MAL/MRGRSA1Rev 0

RSA Stage : One

RSA Auditors : MERAKI ALLIANCE



Scheme : Proposed Residential Development, Stansty Fields, Gwersyllt

Response By: Craig Thomson

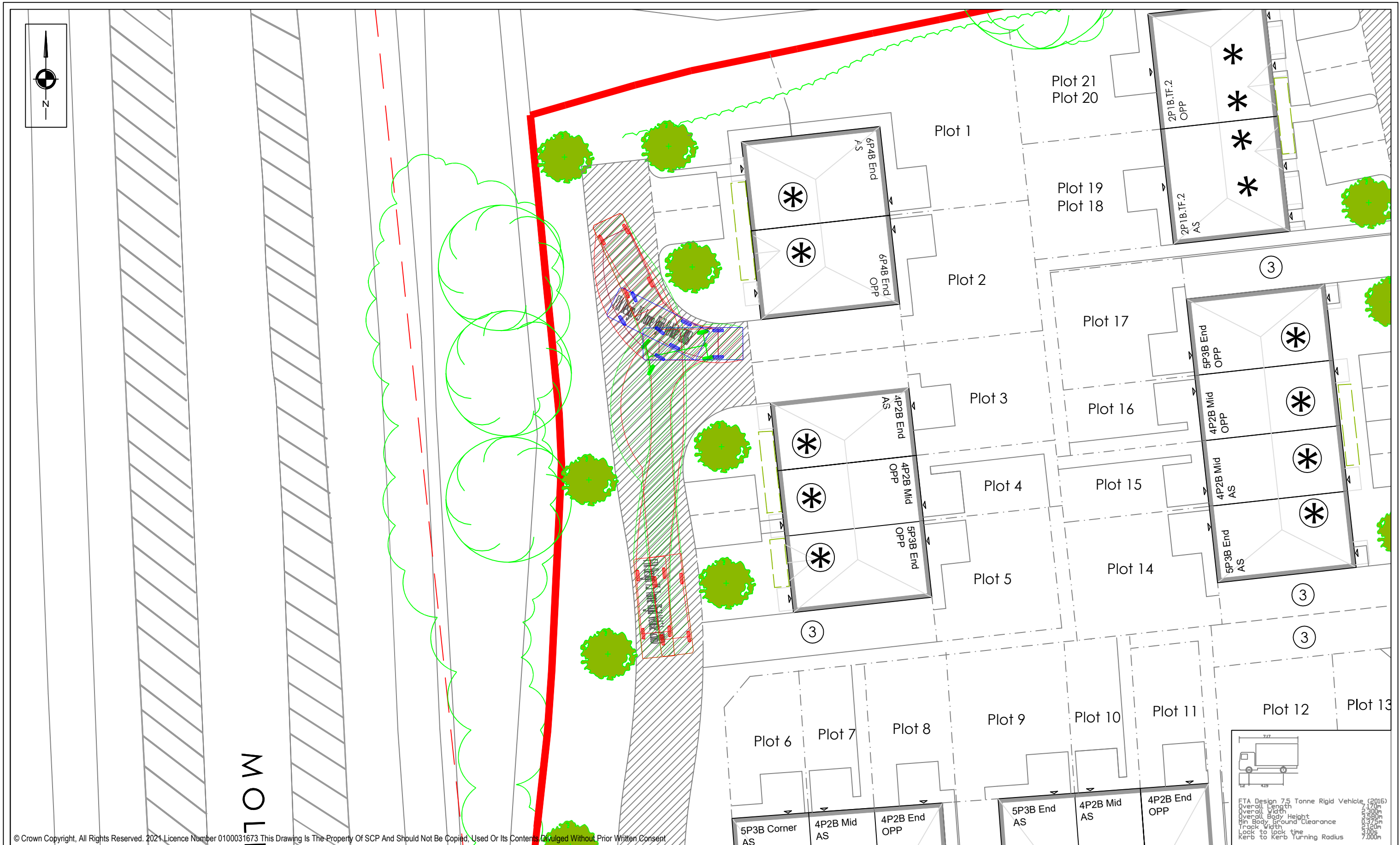
Problem No. in RSA Report	Problem Accepted (Yes/No)	Recommended Measure Accepted (Yes/No)	Alternative Measure / Design Team Response
1.1	Yes	Yes	To be addressed at detailed design stage.
1.2	Yes	Yes	Drawing number SCP/220743/SK03 has been updated (Rev A) as recommended to provide a minimum 0.5m separation between the edge of the footway and carriageway.
1.3	Yes	Yes	Drawing number SCP/220743/SK01 has been updated (Rev A) as recommended to provide a dropped kerb crossing with tactile paving across the access, the design of which can be agreed at the detailed design stage.
1.4	Yes	Yes	To be addressed at detailed design stage.

Craig Thomson
Principal Transport Planner
SCP

Signed: 
Date: 29/04/2025

S|C|P

APPENDIX G



-	-	-	-	Drawn By: LD	Date: 29.04.2025	Client Name: CASTLE GREEN HOMES LIMITED	Drawing Title: SWEPT PATH ANALYSIS - 7.5t RIGID VEHICLE	Drawing No. SCP/220743/ATR03	 an RSK company Office of Origin: Manchester Tel: 0161 832 4400 www.scptransport.co.uk - www.rskgroup.com
-	-	-	-						
-	-	-	-	Checked: LB	Scale@A3: 1:250	Project Title: MOLD ROAD, GWERSYLLT, WREXHAM			
-	-	-	-						
Rev	Description	Date	By	Approved: PT	Status: PLANNING			Rev. -	
REVISIONS									

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APPENDIX H

Calculation Reference: AUDIT-726001-221125-1146

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	EX ESSEX	1 days
	HC HAMPSHIRE	3 days
	HF HERTFORDSHIRE	1 days
	KC KENT	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	5 days
03	SOUTH WEST	
	DC DORSET	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	TE TELFORD & WREKIN	1 days
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	DH DURHAM	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 49 to 197 (units:)
 Range Selected by User: 48 to 200 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 30/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	4 days
Wednesday	5 days
Thursday	6 days
Friday	6 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	24 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town

SCP York Street Manchester

Licence No: 726001

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	20
Village	1
No Sub Category	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	24 days
----	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	8 days
10,001 to 15,000	7 days
15,001 to 20,000	3 days
20,001 to 25,000	5 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	4 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
100,001 to 125,000	1 days
125,001 to 250,000	7 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	16 days
1.6 to 2.0	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	12 days
No	12 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	24 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
-----------------------	-----	--

SCP York Street Manchester

Licence No: 726001

LIST OF SITES relevant to selection parameters

1	CB-03-A-04 MOORCLOSE ROAD WORKINGTON SALTERBACK Edge of Town No Sub Category Total No of Dwellings: 82 Survey date: FRIDAY 24/04/09	SEMI DETACHED	CUMBRIA	Survey Type: MANUAL
2	DC-03-A-09 A350 SHAFTESBURY Edge of Town No Sub Category Total No of Dwellings: 50 Survey date: FRIDAY 19/11/21	MIXED HOUSES	DORSET	Survey Type: MANUAL
3	DH-03-A-03 PILGRIMS WAY DURHAM Edge of Town Residential Zone Total No of Dwellings: 57 Survey date: FRIDAY 19/10/18	SEMI-DETACHED & TERRACED	DURHAM	Survey Type: MANUAL
4	ES-03-A-04 NEW LYDD ROAD CAMBER Edge of Town Residential Zone Total No of Dwellings: 134 Survey date: FRIDAY 15/07/16	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
5	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS Edge of Town Residential Zone Total No of Dwellings: 99 Survey date: WEDNESDAY 05/06/19	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
6	ES-03-A-07 NEW ROAD HAILSHAM HELLINGLY Edge of Town Residential Zone Total No of Dwellings: 91 Survey date: THURSDAY 07/11/19	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
7	EX-03-A-03 KESTREL GROVE RAYLEIGH Edge of Town Residential Zone Total No of Dwellings: 123 Survey date: MONDAY 27/09/21	MIXED HOUSES	ESSEX	Survey Type: MANUAL

SCP York Street Manchester

Licence No: 726001

LIST OF SITES relevant to selection parameters (Cont.)

8	HC-03-A-27 DAIRY ROAD ANDOVER	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 73 Survey date: TUESDAY 16/11/21		Survey Type: MANUAL
9	HC-03-A-28 EAGLE AVENUE WATERLOOVILLE LOVEDEAN	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 125 Survey date: MONDAY 08/11/21		Survey Type: MANUAL
10	HC-03-A-29 CROW LANE RINGWOOD CROW	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 195 Survey date: THURSDAY 30/06/22		Survey Type: MANUAL
11	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 160 Survey date: MONDAY 08/07/19		Survey Type: MANUAL
12	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON	SEMI-DETACHED & TERRACED	KENT
	Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: FRIDAY 22/09/17		Survey Type: MANUAL
13	NF-03-A-04 NORTH WALSHAM ROAD NORTH WALSHAM	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 70 Survey date: WEDNESDAY 18/09/19		Survey Type: MANUAL
14	NF-03-A-25 WOODFARM LANE GORLESTON-ON-SEA	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 55 Survey date: TUESDAY 21/09/21		Survey Type: MANUAL
15	NY-03-A-10 BOROUGHBRIDGE ROAD RIPON	HOUSES AND FLATS	NORTH YORKSHIRE
	Edge of Town No Sub Category Total No of Dwellings: 71 Survey date: TUESDAY 17/09/13		Survey Type: MANUAL

SCP York Street Manchester

Licence No: 726001

LIST OF SITES relevant to selection parameters (Cont.)

16	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED	SURREY
	Edge of Town Residential Zone Total No of Dwellings: 71 Survey date: THURSDAY 23/01/14		Survey Type: MANUAL
17	SF-03-A-10 LOVETOFTS DRIVE IPSWICH WHITEHOUSE	TERRACED & SEMI-DETACHED	SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings: 149 Survey date: TUESDAY 22/06/21		Survey Type: MANUAL
18	TE-03-A-03 SANDCROFT TELFORD SUTTON HILL	SEMI-DETACHED/ TERRACED	TELFORD & WREKIN
	Edge of Town Residential Zone Total No of Dwellings: 54 Survey date: THURSDAY 24/10/13		Survey Type: MANUAL
19	WK-03-A-04 DALEHOUSE LANE KENILWORTH	DETACHED HOUSES	WARWICKSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 49 Survey date: FRIDAY 27/09/19		Survey Type: MANUAL
20	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 151 Survey date: THURSDAY 11/12/14		Survey Type: MANUAL
21	WS-03-A-08 ROUNDSTONE LANE ANGMERING	MIXED HOUSES	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 180 Survey date: THURSDAY 19/04/18		Survey Type: MANUAL
22	WS-03-A-12 MADGWICK LANE CHICHESTER WESTHAMPNETT	MIXED HOUSES	WEST SUSSEX
	Edge of Town Village Total No of Dwellings: 152 Survey date: WEDNESDAY 16/06/21		Survey Type: MANUAL

SCP York Street Manchester

Licence No: 726001

LIST OF SITES relevant to selection parameters (Cont.)

23	WS-03-A-13	MIXED HOUSES & FLATS	WEST SUSSEX
	LITTLEHAMPTON ROAD		
	WORTHING		
	WEST DURREINGTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	197	
	Survey date: WEDNESDAY	23/06/21	Survey Type: MANUAL
24	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	117	
	Survey date: WEDNESDAY	20/10/21	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

SCP York Street Manchester

Licence No: 726001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.74

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	24	109	0.065	24	109	0.283	24	109	0.348
08:00 - 09:00	24	109	0.135	24	109	0.350	24	109	0.485
09:00 - 10:00	24	109	0.137	24	109	0.171	24	109	0.308
10:00 - 11:00	24	109	0.138	24	109	0.169	24	109	0.307
11:00 - 12:00	24	109	0.139	24	109	0.154	24	109	0.293
12:00 - 13:00	24	109	0.153	24	109	0.152	24	109	0.305
13:00 - 14:00	24	109	0.170	24	109	0.152	24	109	0.322
14:00 - 15:00	24	109	0.169	24	109	0.194	24	109	0.363
15:00 - 16:00	24	109	0.260	24	109	0.168	24	109	0.428
16:00 - 17:00	24	109	0.266	24	109	0.151	24	109	0.417
17:00 - 18:00	24	109	0.297	24	109	0.143	24	109	0.440
18:00 - 19:00	24	109	0.245	24	109	0.138	24	109	0.383
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.174			2.225			4.399

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP * FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	49 - 197 (units:)
Survey date range:	01/01/08 - 30/06/22
Number of weekdays (Monday-Friday):	24
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

SCP York Street Manchester

Licence No: 726001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	24	109	0.006	24	109	0.011	24	109	0.017
08:00 - 09:00	24	109	0.006	24	109	0.020	24	109	0.026
09:00 - 10:00	24	109	0.003	24	109	0.004	24	109	0.007
10:00 - 11:00	24	109	0.003	24	109	0.007	24	109	0.010
11:00 - 12:00	24	109	0.003	24	109	0.006	24	109	0.009
12:00 - 13:00	24	109	0.006	24	109	0.005	24	109	0.011
13:00 - 14:00	24	109	0.004	24	109	0.004	24	109	0.008
14:00 - 15:00	24	109	0.006	24	109	0.003	24	109	0.009
15:00 - 16:00	24	109	0.011	24	109	0.008	24	109	0.019
16:00 - 17:00	24	109	0.012	24	109	0.005	24	109	0.017
17:00 - 18:00	24	109	0.012	24	109	0.007	24	109	0.019
18:00 - 19:00	24	109	0.008	24	109	0.003	24	109	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.080			0.083			0.163

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP * FACT$. Trip rates are then rounded to 3 decimal places.

SCP York Street Manchester

Licence No: 726001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	24	109	0.021	24	109	0.040	24	109	0.061
08:00 - 09:00	24	109	0.046	24	109	0.102	24	109	0.148
09:00 - 10:00	24	109	0.050	24	109	0.042	24	109	0.092
10:00 - 11:00	24	109	0.035	24	109	0.045	24	109	0.080
11:00 - 12:00	24	109	0.037	24	109	0.038	24	109	0.075
12:00 - 13:00	24	109	0.028	24	109	0.038	24	109	0.066
13:00 - 14:00	24	109	0.033	24	109	0.025	24	109	0.058
14:00 - 15:00	24	109	0.037	24	109	0.036	24	109	0.073
15:00 - 16:00	24	109	0.086	24	109	0.052	24	109	0.138
16:00 - 17:00	24	109	0.061	24	109	0.042	24	109	0.103
17:00 - 18:00	24	109	0.057	24	109	0.030	24	109	0.087
18:00 - 19:00	24	109	0.044	24	109	0.037	24	109	0.081
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.535			0.527			1.062

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

SCP York Street Manchester

Licence No: 726001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	24	109	0.002	24	109	0.026	24	109	0.028
08:00 - 09:00	24	109	0.003	24	109	0.050	24	109	0.053
09:00 - 10:00	24	109	0.002	24	109	0.010	24	109	0.012
10:00 - 11:00	24	109	0.005	24	109	0.006	24	109	0.011
11:00 - 12:00	24	109	0.006	24	109	0.009	24	109	0.015
12:00 - 13:00	24	109	0.006	24	109	0.008	24	109	0.014
13:00 - 14:00	24	109	0.006	24	109	0.005	24	109	0.011
14:00 - 15:00	24	109	0.010	24	109	0.007	24	109	0.017
15:00 - 16:00	24	109	0.029	24	109	0.008	24	109	0.037
16:00 - 17:00	24	109	0.019	24	109	0.004	24	109	0.023
17:00 - 18:00	24	109	0.023	24	109	0.002	24	109	0.025
18:00 - 19:00	24	109	0.024	24	109	0.003	24	109	0.027
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.135			0.138			0.273

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.