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PROOF OF EVIDENCE

Taylor Wimpey and Homes England

Pickering's Farm Planning Appeal

July 2022

LPA Ref: 07/2021/00886/ORM and 07/2021/00887/ORM
PINS Ref: APP/F2360/W/22/3295498

Transport and Mobility Proof of Evidence
Volume 1

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1 Introduction

1.1 The transport issues between the Appellants and the Councils, and identified by the Inspector, relate to highway impact, highway infrastructure and the safety of pedestrians and cyclists at a specific location.

1.2 There is an issue between the Appellants and the Councils regarding the approach to the Transport Assessment and how, applying suitable professional judgement, to interpret what a 'severe' impact is on the highway network in the context of the National Planning Policy Framework.

1.3 In considering the approach and judgement required, there is a fundamental difference between the parties on the importance that the planning system attaches to the convenience of travelling by car in the traditional peak commuter periods, but also whether it is appropriate to undertake an assessment on the basis of what the effect of traffic is likely to be, rather than what might be if there ever were a theoretical worst case.

1.4 In considering the identified Reasons for Refusal, my evidence will firstly set out my qualifications and experience before turning to a review of policy and guidance. I then introduce the scheme before moving to consider the existing road network in the vicinity. I then assess the effects of the scheme on that road network.

1.5 The largest section of my Evidence is Section 7 where I give an overview of the case looking at: the 'Predict & Provide' and 'Vision & Validate' Models, the approach in this case, the characteristics of the development, Lancashire County Council's A582 dualling application, the Cross Borough Link Road, Public Transport, Place and Movement, Bee Lane & Leyland Road Junction, Traffic Assessments and Highway Safety before summarising the section.

1.6 I respond to the Reasons for Refusal in Section 8 and 3rd party comments in Section 9.

1.7 Section 10 provides my conclusions.

2 Qualifications and Experience

2.1 My name is Mike Axon. I have a degree in Civil Engineering from City University. I am a Fellow of the Chartered Institution of Highways and Transportation and a Member of the Transport Planning Society. I have over 30 years' experience in the design, implementation and assessment of mobility, transport and highway schemes in the public and private sectors.

2.2 I am the Global Director for Transport at SLR Consulting Ltd, an environmental focused organisation with a presence around the world. Prior to this, I was Managing Director of Vectos, a 160 strong company specialising in transport planning, highway engineering and research and demonstration, largely for the EU, in the social science, trends and psychology underpinning transport and mobility. Vectos was acquired by SLR in 2021.

2.3 My other roles include DCE (Design Council Expert) with The Design Council; a member of the NLA (New London Architecture) Expert Panel for Mobility; and current Chair Person of the OxCam Arc Leadership Group Future Mobility team. I am also Directors of two leisure businesses.

2.4 Separate outline planning applications were submitted to South Ribble Borough Council (SRBC) in August 2021 for a residential-led mixed-use development (Application A) and for a residential development (Application B). Both applications sit within the allocated site boundary of the Major development site known as Pickering's Farm in the SRBC Local Plan (Policy C1).

2.5 The Applications were refused permission on 30th November 2021. There are eleven reasons for refusal for each Application. The refusals were appealed on the 24th March 2022.

2.6 My Evidence is presented on behalf of the Appellants, Taylor Wimpey and Homes England, and sets out the context for determining the Applications. It assesses the characteristics of the two proposals in that context, and it addresses the transport and mobility reasons for refusal.

2.7 I was responsible for the original Transport Assessment that accompanied the planning applications (Ref: 07/2021/00886/ORM and 07/2021/00887/ORM). As part of my work, I have visited the site and surrounding area, collecting traffic observations relating to the movement of people, the operation of the site and activity associated with the surrounding area. I have a good understanding of the current accessibility, conditions and the development proposals that form the basis of this Appeal.

2.8 A draft Mobility Statement of Agreement and Disagreement is in circulation with the aim that this is finalised as soon as possible prior to the start of the Inquiry.

2.9 The Evidence which I have prepared and provide for this appeal, is true and has been prepared in accordance with the guidance of my professional institution. I confirm that the opinions expressed are true and professional opinions, irrespective of by whom I am instructed.

3 Planning Policy and Guidance

Relevant Planning Policy and Guidance

3.1 This is a summary of pertinent local and national planning policy with respect to the Scheme. It covers the specific policies referenced in the Council's Decision Notice which relate to transport and mobility. It also summarises industry guidance.

Local Planning Policy

South Ribble Local Plan

3.2 The South Ribble Local Plan (SRLP) was adopted in July 2015 (**CD5.2**) and forms part of the Development Plan for South Ribble. The Local Plan identifies five major sites for development, one of which is this site, Pickering's Farm. This is the largest housing allocation in the Borough.

3.3 Chapter A of the plan outlines two core strategy objectives. The plan outlines that sustainable development should provide new, well-planned, and accessible infrastructure upfront and make the optimum use of existing infrastructure.

3.4 The policies within the SRLP which are particularly relevant to this application are:

i) Policy A2 – Cross Borough Link Road;

ii) Policy C1 – Pickering's Farm, Penwortham; and,

3.5 Policy A2 states that land should be protected from physical development for the delivery of the Cross Borough Link Road (CBLR).

3.6 The CBLR has now been constructed from Carrwood Road to The Cawsey. The remaining section includes a section that passes through these sites, as shown in **Figure MA3-1**.

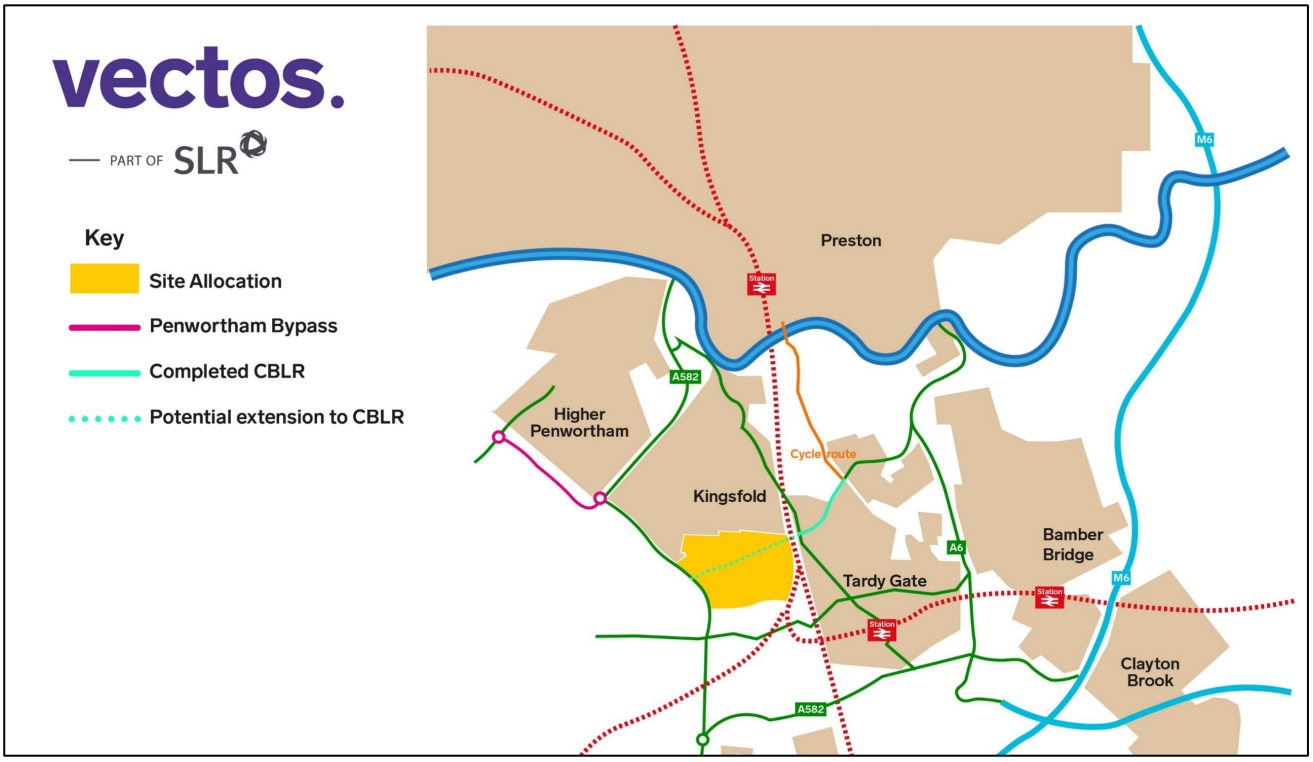

Figure MA3-1: CBLR Overview Plan

3.7 Mr Alsbury explains that the development proposals are required to safeguard the land in their control for the delivery of the CBLR. They do this. **Figure MA3-2** shows the corridor for the CBLR that we propose through the allocated site, and **Appendix MA-1** sets out the criteria for the corridor. The S106 document safeguards that part of the corridor that passes through the Application sites, and commits to the criteria in doing so.

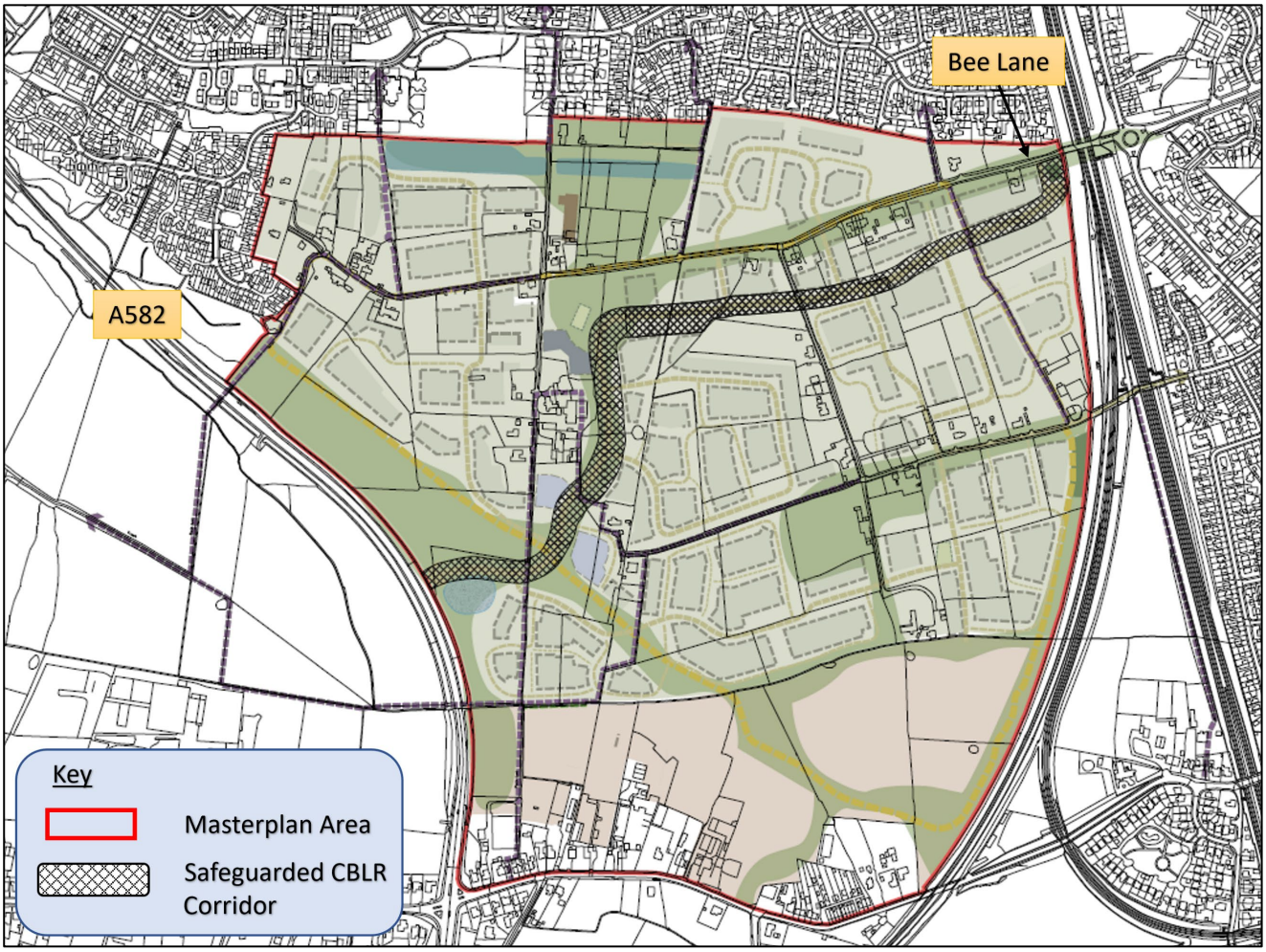

Figure MA3-2: CBLR Safeguarded Area

Penwortham Town Neighbourhood Development Plan 2016 – 2026

3.8 The Neighbourhood Plan (**CD5.6**) refers to the Penwortham Bypass and the CBLR when describing the character of the area. The Penwortham Bypass opened in December 2019 and the CBLR between Carrwood Road and The Cawsey opened in August 2020. The Bypass and the CBLR are shown in **Figure MA3-1**.

3.9 Policy 2 outlines the requirements for new large scale residential development, and states that the phased delivery of allocated large scale residential sites will be supported by the Town Council.

3.10 Policy 7 relates to cycle and walking routes including the identification of a new route which will be safeguarded for a dedicated circular route for cyclists and walkers. The southern part of the cycle and walking route passes through the Pickering's Farm site using the Bee Lane bridge over the railway, and along Bee Lane and Moss Lane (see **Figure MA3-3**)

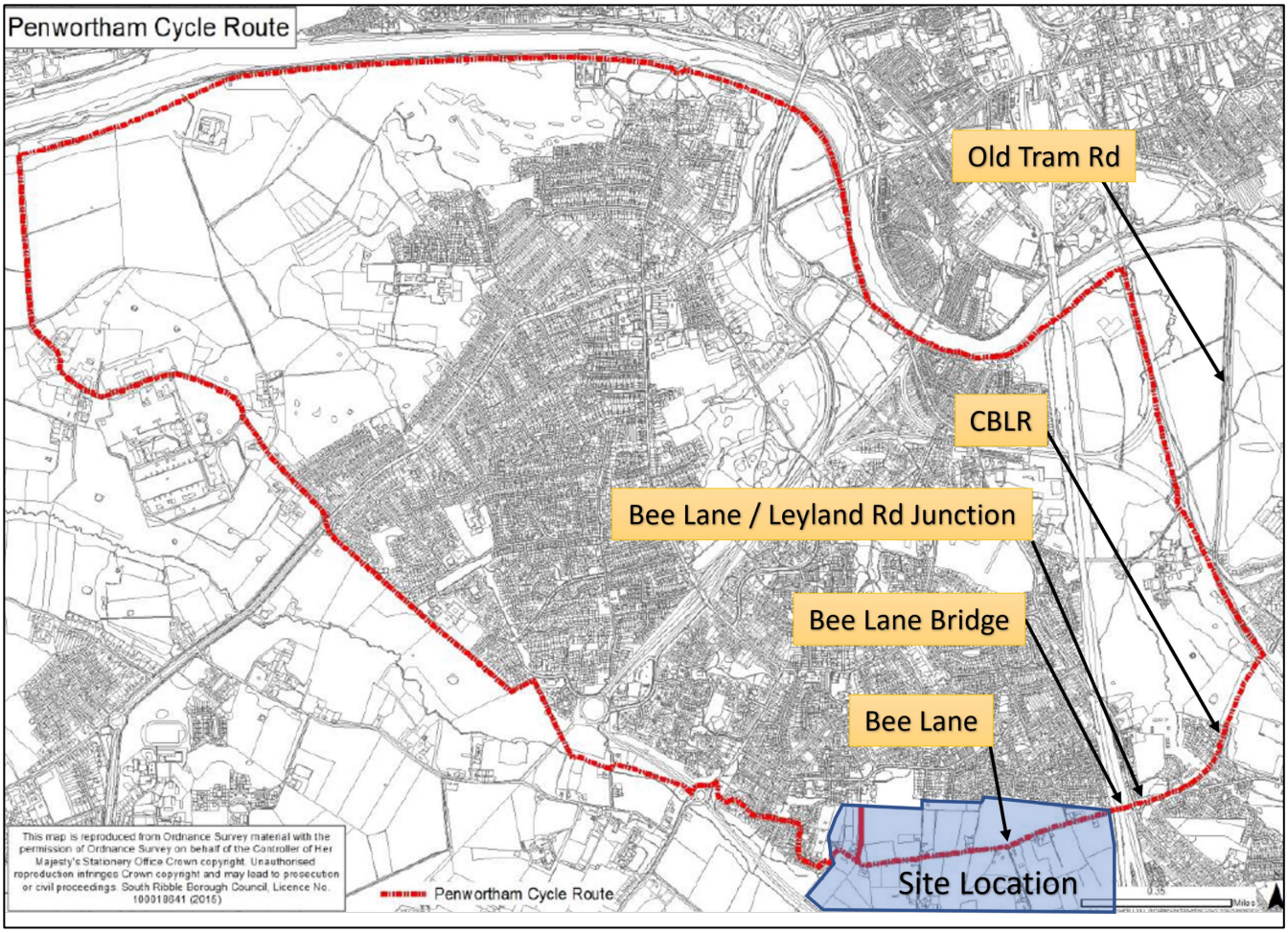

Figure MA3-3: Safeguarded Circular Route for Cyclists and Walkers

Central Lancashire Core Strategy

3.11 The Central Lancashire Core Strategy was adopted in July 2012 (**CD5.1**) and was produced by the Central Lancashire authorities of Preston, South Ribble and Chorley, with assistance from LCC.

3.12 Its main purpose was to help co-ordinate development in the area and contribute to boosting investment and employment.

3.13 The strategy refers to the site by its location as land to the south of Penwortham and North of Farrington and is one of three proposed strategic locations within Lancashire. The document explains that the location is of strategic significance due to its ability to significantly contribute to South Ribble's infrastructure and housing requirements. The Strategy's strategic objectives include:

i) SO3 – To reduce the need to travel, manage car use, promote sustainable modes of transport, and improve the road network to the north and south of Preston.

3.14 Policy 3 of the Core Strategy relates to travel. This policy states that the best approach to planning for travel will involve a series of measures which will include improving pedestrian facilities, improving opportunities for cycling by completing the Central Lancashire Cycle Network of off-road routes and supplementing this with an interconnected system of on-road cycle lanes and improving public transport.

National Planning Policy Framework (The Framework)

3.15 The Framework (**CD4.1**) at Chapter 8 sets out that planning policies should aim to achieve healthy, inclusive and safe places, achieved through the provision of local facilities and layouts that encourage walking and cycling.

3.16 This is a function of a well-designed movement network.

3.17 The Framework explains that designing for social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other, helps to achieve that aim.

3.18 Some of the best ways to do that include, as is proposed here, designing so that active travel is the primary means of moving around. The Mobility Hubs, which include parcel drop off points and are administered by the Community Concierge team, accentuate that character of place.

3.19 At Chapter 9 the Framework promotes and prioritises 'sustainable transport'.

3.20 It explains that significant development should be focussed on locations which are or can be made sustainable.

3.21 At Paragraph 110 it explains that in assessing applications for development it should be ensured that appropriate opportunities to promote sustainable transport can be taken up, that the design of transport elements reflects national guidance, including in the National Design Guide, and that any significant impacts on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

3.22 It explains at Paragraph 111 that, "development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

3.23 Paragraph 112 sets out the priority for designing for movement. The first priority is given to pedestrian and cycle movement, both within the scheme and with neighbouring areas.

3.24 The second priority is to facilitating access to high quality public transport and facilities that encourage public transport use.

3.25 It explains that the development should create places that are safe, secure and attractive, and which allow for the efficient delivery of goods and access by service and emergency vehicles.

The Strategic Road Network and the Delivery of Sustainable Development

3.26 The Department for Transport's Circular 02/2013 'The Strategic Road Network and the Delivery of Sustainable Development' (**CD10.49**) provides more detailed information relating to how National Highways engage with communities and the development industry to deliver sustainable development.

3.27 It highlights that development proposals are likely to be wholly acceptable if they can be accommodated within the existing capacity of a section of the strategic road network, or if they do not increase demand for use of the section that is already at full capacity. There is no definition of what 'capacity' means, and indeed the common acceptance of what this means has evolved, with the Vision & Validate approach in guidance, including guidance from the Department for Transport (DfT).

3.28 In terms of infrastructure, it is noted that any capacity enhancements or new infrastructure required to deliver strategic growth should be identified at the Local Plan stage.

3.29 I cannot find any evidence that National Highways identified a requirement for capacity enhancements or new infrastructure at the time of the SRBC Local Plan consideration.

3.30 The DfT has been reviewing this document in light of its Vision & Validate approach to transport as expressed in its Decarbonising Transport report. On 21st July 2022, the DfT published a draft of 'Circular 02/2013 Update: The Strategic Road Network and the delivery of sustainable development' (**CD10.50**). This shows the DfT's direction of travel.

3.31 In this document National Highways is known as 'The Company'.

3.32 The Company requires transport assessments to determine impacts relevant to the net zero principles, and that developers "*maximise opportunities for increasing access to walking, wheeling, cycling, public transport and shared travel, as early as possible*" (para 49). It says that development should start with a vision of what the development is seeking to achieve and determine the optimum design and infrastructure to realise this vision (para 50).

3.33 It refers to the Transport Decarbonisation Plan, explaining that it includes "*moving away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve and provides the transport solutions to deliver those outcomes (sometimes referred to as 'vision and validate')*" (para 15).

3.34 It explains that "*cycling and walking must be the natural first choice for all who can take it*" (para 13).

3.35 It says that "*new development should be facilitating a reduction in the need to travel by private car and focussed on locations that are or can be made sustainable*", and goes on to explain that "*development in the right places and served by the right sustainable infrastructure* [in the footnote it explains that this includes co-working/home office spaces] *delivered alongside or ahead of occupancy should have no significant impact on the SRN*". The principle of development in this way is an expectation of the Company (para 13).

3.36 It says that capacity enhancements should be determined on a case-by-case basis, and that the general principle for capacity enhancements should be accepted where proposals include measures to improve community connectivity and public transport accessibility, these being weighed against any negative safety, traffic flow, environmental and deliverability considerations (para 24).

3.37 The Company expects demand forecasting models to now account for the effects of possible mitigation scenarios that shift demand into less carbon intensive forms of travel (para 35).

3.38 It expects developers to enable a reduction in the need to travel by private car and prioritise sustainable transport opportunities ahead of capacity enhancements (para 44). In this respect it gives weight to, and expects, mobility or micro-mobility hubs, access to local amenities and open space, broadband infrastructure and home and street layouts.

SRBC Climate Emergency and Climate Action Plan

3.39 In 2019, SRBC declared a climate emergency, pledging to make the Borough carbon neutral by 2030.

3.40 Within its July 2021 Climate Emergency Action Plan (**CD10.51**), it reports that the Intergovernmental Panel on Climate Change (IPCC) advised that global warming must be limited to 1.5^{o}C, and that even then there would be risks to health, livelihoods, food security, water supply, human security and economic growth. It reports that a rise to 2^{o}C would be even more catastrophic. It goes on to report the IPCC's warning that there are twelve years (from 2018) within which to take the serious action required to avert this crisis.

3.41 The Council acknowledges that it cannot deliver this target alone and that it will require the support and collaboration of residents, businesses and international governments. It explains that the plan is ambitious but necessary in order to provide a healthy and sustainable borough.

3.42 Its investigation has identified that the biggest contributions to cutting carbon emissions are the use of diesel and other fuels, and that these are the areas where it will concentrate its efforts.

3.43 Transport is identified as one of the four key areas for carbon reduction measures, noting that "the burden on transition and infrastructure development can be reduced in part by encouraging a shift to public transport and active travel (walking and cycling)".

3.44 Therefore, there is as strong emphasis on *shifting mode* from car to more sustainable transport, and obviously an expectation that this is deliverable and achievable in the short and medium term.

3.45 It goes on to state that, "the pandemic has required new ways of working for many people, including for some the ability to work from home or undertake less work-related travel. This reduction in work related travel should be supported as part of this action plan and the wider green recovery".

3.46 Therefore, there is a strong emphasis on *avoiding trips*, and an expectation that this is deliverable and achievable.

3.47 There is an expectation that transport characteristics post pandemic will not be the same as those pre-pandemic, in particular that more people will work remotely and that there will be less work related travel.

3.48 In terms of actions it includes:

i) Prioritising cycle parking and electric vehicle parking on Council owned car parks (short term)

ii) A review to consider prioritising car sharing parking too (short term)

iii) Completion of a programme to provide 8km cycle routes and 5km walking routes around the Borough (short term)

iv) Promoting car sharing in the future (short term)

v) Enabling remote staff working (ongoing)

vi) Reviewing current business travel and options for reductions in business travel (short term)

vii) Facilitating use of public transport, car sharing, active transport and electric vehicles (short term)

3.49 The Pickering's Farm scheme, by design, provides an environment that localises trips (*avoids* trips), and maximises the relative attractiveness of active travel and public transport (*shifts* modes). It embraces the 'new ways of working'.

3.50 The delivery of the allocated Pickering's Farm development site is a prime opportunity for SRBC to show that its climate ambitions are deliverable and achievable. This scheme can be used by SRBC as an example and a catalyst for the necessary changes that it identifies within the Borough.

Guidance - Vision & Validate

3.51 Recent guidance has reinforced what many had in any event interpreted from planning policy. As the guidance that I discuss below sets out, Predict & Provide has been abandoned, and Vision & Validate has been adopted. In this section I review that guidance from the professional bodies, the Think Tank Create Streets, and from the DfT.

3.52 Predict & Provide (P&P) was where we made an estimate of traffic demand, usually in the traditional peak commuter periods, and sought to accommodate it with convenience.

3.53 P&P led to more road building. More road building led to higher capacity road networks and these higher capacity networks attracted more traffic. Except in special circumstances, attracting traffic is considered contrary to the aims of climate change and healthy living.

3.54 A road scheme increases carbon in many ways[1]. It includes:

i) Embodied carbon in the steel, concrete, asphalt and other raw materials

ii) Land clearance

iii) Once a road is opened it may result in higher speeds and therefore higher emissions

iv) It generates more traffic as it encourages driving and enables car dependency (induced traffic)

3.55 P&P as it relates to new developments was predicated on the fear that if there transpired a demand to travel by car at a time in the day then that demand would be manifest whatever the situation. The fear was that unless that demand was satisfied conveniently it would continue adding to the network come what may, journey times would keep increasing, and the road network would be full of vehicles travelling very slowly, or not at all.

3.56 At this time, the convenience of car commuters was considered of prime importance and models of the day, if not used carefully, could easily forecast chaos where in practice none would occur.

3.57 However, that fear is manifestly not the case. This is a well-researched topic. As with many aspects of life, the evidence is that people act to minimise their inconvenience.

3.58 P&P has been replaced with a different approach, often called Vision & Validate.

3.59 Vision & Validate (V&V), or sometimes known as Decide & Provide (D&P) is that you start with the vision of what you want to achieve, and design accordingly. It encompasses all accessibility, including digital accessibility, and considers this across the day. In traffic terms it employs what is often called the 'first law of transport' which is that on a busy network the volume of traffic is increasingly a function of the available road space. If you want more vehicles then build more capacity, if you want less vehicles then reduce road space.

[1] The carbon impact of the national roads programme – July 2020

Create Streets Briefing Paper February 2022 – Computer Says Road; Why outdated transport models ruin new developments and how to fix them[2]

3.60 Create Streets is a social enterprise and a private limited company which works with local communities and policy makers. It aims to encourage urban homes in streets rather than multi-storey buildings. Create Streets is a respected voice in the sector, producing research and reports into a wide range of planning issues.

3.61 Create Streets explains that it exists to help solve the housing crisis and to help neighbourhood, communities, landowners, Councils and developers create and manage beautiful, sustainable places of gentle density that will be popular, and are likely to be correlated with good well-being and public health outcomes. It says that it has had a major impact on English planning policy and has helped many communities and Councils make the case for better and more popular development.

3.62 In the paper, Create Streets has expressed its view on the way traffic models are sometimes used, and how they should be used. It explains that we sometimes treat the results of transport prediction models as an uncontested fact, yet they are neither sophisticated enough to balance all the ways in which we travel around nor agile enough to adapt to changing technology and human behaviour.

3.63 Create Streets explains that good design principles are often cast aside under a P&P approach 'as we are told …. the junction can't take it'[3]. It goes on to say that a common assumption is that spending on more and wider roads will ease congestion, but references multiple studies that have found that building new roads does not achieve this goal, and is instead generating more traffic. It asserts that instead we should design better places where more journeys are by foot, bike or public transport and by siting amenities in communities.

3.64 It explains that we're bad at predictions, and that we should be creating places that can adapt to challenges and solutions we haven't thought of yet.

3.65 It compares the costs associated with roadbuilding with the costs of alternatively providing local facilities.

3.66 It makes the statement "you'd be forgiven for wondering if the new homes are being built to serve the roads rather than the roads serving the new homes".[4]

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[2] CD10.41 Create Streets Briefing Paper 'Computer Says Road'

[3] CD10.41, p7

[4] CD10.41, p12

3.67 It promotes and explains the Vision & Validate approach, and sets out a series of recommendations which include:

i) Dispense with 'Predict and Provide' traffic modelling and adopt the 'Vision and Validate' methodology for all schemes. Plan for the traffic and place your residents want

ii) Give traffic models the same weight as an expert opinion from your design team rather than as an exact science

iii) Plan for the whole day, not just peak hours. We should take a longer view of movement, ending our obsession with optimising transport between 08:30 and 09:30

iv) Treat movement (not transport) as a strategic outcome, not a series of disjointed infrastructure projects

v) Count people not cars. The metric used in transport models should be updated from asking for vehicle movements per hour to asking for people movements per hour

3.68 I was invited to endorse this document, and did. The document was also endorsed by a list of notable organisations and people, including:

i) Lynda Addison OBE. Chair of the Sustainable Transport Panel of CIHT

ii) Rory Stewart OBE. Senior Fellow at Yale University

iii) Crispin Truman OBE. CEO of CPRE The Countryside Charity

iv) Sam Hall. Conservative Environment Network

v) Richard Blyth. Head of Policy, Practice and Research RTPI

vi) Sian Berry. Green Party London Assembly Member. Former Leader of the national Green party

vii) Toby Lloyd. Chair of the No Place Left Behind Commission. Former Head of Policy at Shelter and No 10 Special Adviser on housing and local government to Prime Minister Theresa May

viii) Will Self. Novelist and journalist

ix) Andrew Cameron. Co-author Manual for Streets. Former government advisor on housing and sustainable communities

x) Xavier Brice. CEO Sustrans

xi) Christopher Martin. Vice Chair of the UK Urban Design Group

TCPA (Town and Country Planning Association)

3.69 The TCPA wrote the 'Garden City Standards for the 21st Century; Practical Guides For Creating Successful New Communities'. Guide 13 is 'Sustainable Transport' (**CD10.45**) and was published in September 2020. The DfT and the CIHT (Chartered Institution of Highways and Transportation) contributed to the Guide.

3.70 This site embraces the 'garden communities' principles which the Guide refers to. The context for the Guide is climate and health, with specific reference to transport's contribution to greenhouse emissions[5].

3.71 It requires a 'visionary mindset'[6]. It sets a goal that at least 60% of trips are made by non car means[7].

3.72 It says that decarbonisation of travel must be the focus; the precursor perhaps to the DfT's subsequent 'Decarbonisation of Transport' document.

3.73 A key action is that Transport Assessments ensure the delivery of the objectives and mode shares by taking a "vision & validate approach, not predict and provide, which historically has meant building more roads for cars"[8].

3.74 It highlights the NPPF[9], where that relates a mix of uses on a site, and larger scale sites, to minimising the number and length of journeys. This is relevant as it is not a relationship that we understand that LCC is willing to place mathematical weight on.

3.75 It forecasts the work published later (Decarbonisation of Transport 2021 report) by the DfT which has the aim of moving away from 'predict and provide' highway capacity to an approach that is more objective led, stating that the approach taken to date has reinforced current travel patterns to the detriment of other, wider objectives[10].

[5] Summary page; page 5

[6] Summary page; page 5

[7] Summary page

[8] Summary page

[9] The then current version at para 104, now para 106

[10] Page 6

3.76 It is consistent with our approach, in stating that "patterns of growth should be considered first in relation to accessibility and inclusivity"[11].

3.77 In the context of reducing the impact of climate change, improving health and well-being, and increasing social inclusion, it sets out three core aims;

i) Promote active travel

ii) Establish excellent public transport from the outset

iii) Reduce the use of private cars

3.78 All of this is consistent with the approach that this development has taken.

CIHT (Chartered Institution of Highways and Transportation)

3.79 The CIHT follows the same principles. It has strong guidance on interpreting policy as supporting V&V (or D&P as it often calls it) and the abandonment of P&P. This is articulated in amongst others the article (**CD10.42**) in its publication Transport Professional in October 2021, which was published following peer reviews and refinements from the CIHT's Urban Design and Sustainable Transport panels.

3.80 It is also in the older CIHT document (**CD10.48**) 'Better planning, better transport, better places – August 2019'. Amongst other things, it starts in the Executive Summary, with "far too many examples still exist where the long since discredited approach of 'predict and provide' is used to the detriment of planning better places".

3.81 It goes on to say that "we must fully abandon predict and provide models of transport planning, and assess the Local Plan against health and well-being, lifestyle and environmental criteria (including carbon emission) – not just standard demographic and transport information"[12], and that "policies are frequently being interpreted in a way that continues to foster car dependent lifestyles"[13].

3.82 It considers the "scourge of predict and provide" to be a barrier to better planning[14].

[11] Page 11

[12] Page 6

[13] Page 10

[14] Page 13

RTPI (Royal Town Planning Institute)

3.83 In January 2021, the RTPI issued a research paper called Net Zero Transport; The Role of Spatial Planning and Place Based Solutions (**CD10.47**). It explored how different places can achieve an 80% reduction in surface transport emission by 2030 as part of a pathway to net zero.

3.84 It says that it demonstrates the contribution of spatial planning and place based solutions to transport decarbonisation, reinforcing the point from the TCPA that place and design does affect demand.

3.85 It follows the same approach as TCPA and CIHT in saying that local living should be maximised, and that increased home working, digital service delivery, and new forms of flexible work and community space will play a key role[15].

3.86 It says that to meet the climate targets there needs to be a 'do everything' approach to transport. It explains an urgent need to move away from the traditional 'predict and provide' approach, which it says is an outdated assessment methodology which locks in and plans for high car dependency, and towards a 'vision and validate' approach which prioritises the identification and delivery of more sustainable outcomes[16].

DfT (Department of Transport)

3.87 Since the publication of these documents by the CIHT, TCPA and RTPI, the DfT has followed up with its guidance document Decarbonising Transport 2021 (**CD10.46**).

3.88 It explains that homeworking has changed traditional commuter and shopping trips probably for ever, and that video conferencing has changed business travel[17].

3.89 It references the pre pandemic trend prediction for road traffic to grow, and that this disadvantages communities, going on to say that we cannot pile ever more vehicles onto the same congested roads. It caps this with a statement that as we build back from the pandemic it will be essential to avoid a car led recovery[18].

[15] Page 1

[16] Page 12, 23

[17] Page 4

[18] Grant Shapps, Secretary of State for Transport page 6

3.90 Grant Shapps, the then Secretary of State for Transport, in the document, explains that we want to reduce urban road traffic, that we want more children to walk to school, more walking and cycling and public transport use, ridesharing, higher car occupancies and a reduction, or at least a stabilisation, in traffic more widely.

3.91 He explains that we know we can do this because it is already happening. He explains that travel is a blend and that it's about using cars less not giving them up completely, keeping cars for some journeys, or borrowing one from a car club. He explains that you may have an electric bike to get to the station, or use a new app to find someone in the same industrial estate to share a car with.

3.92 His position is that too many new developments are difficult to reach without a car, but if we do development in a greener way, and if we join it to existing places, we can make it lower carbon, lower emission and lower traffic[19].

3.93 The DfT recognises that it has a role in helping local planning and highway authorities to better plan for sustainable transport and develop innovative policies to reduce car dependency.

3.94 It is clear on the approach. It says that "we need to move away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve (vision and validate)".

3.95 It refers to monitoring local transport outcomes to deliver on the ambitions for sustainable transport use.

3.96 I set out later in my evidence the elements that make up the Application schemes. These accord with the advice from the DfT.

3.97 They give weight to the DfT's expectation that trends have changed, and can change, for instance in homeworking and shopping. I explain how the site design prioritises community and accessibility in the way the DfT expects, and that this location and connectivity does what is required in joining with existing communities, the consequence being lower carbon and lower traffic.

3.98 The scheme elements include the car clubs, active travel and micro-mobility measures mentioned by the DfT, as well as Mobility Hubs and Community Concierge to administer, manage and monitor these.

3.99 I explain how the schemes have been approached from a compliant Vision & Validate perspective, and not Predict & Provide.

[19] Page 8

3.100 I understand that LCC prefers the historic approach to traffic assessment. A historic approach to traffic assessment, where a prediction of future demand traffic is made, and capacity designed or built to accommodate it is a predict and provide approach and specifically inconsistent with the DfT guidance.

3.101 Furthermore, predicting future traffic demand expecting notional background traffic growth, and giving little or no weight to the characteristics of a development that contribute to local living and accessibility in the round, would be inconsistent with the DfT advice and expectation. At the first principle it is inconsistent with the basic aims of minimising climate change and maximising health, and indeed would undermine the DfT's objectives.

EU SUMP PLUS Developing Transition Pathways towards Sustainable Mobility in European Cities by 2050 – April 2022[20]

3.102 A Sustainable Urban Mobility Plan (SUMP) is a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life.

3.103 This document explains that climate change is a multi-sectorial problem, but links between mobility and other sectors that generate mobility demand (e.g. education, health, tourism, and spatial planning) or impact on transport carbon emissions (e.g., energy sector) are frequently underdeveloped. It says that to address long term carbon reduction targets and achieve sustainable mobility by reducing transport related carbon emissions generated or affected by decisions and actions across these sectors will require better alignment of visions.

3.104 To help bridge this gap a Carbon Policy Analysis tool has been developed as part of this EU SUMP PLUS research programme. It provides towns and cities with better intelligence on the impact of different mobility measures on carbon emissions. It is an evolution of the work reported in the RTPI document.

3.105 It identifies two factors that influence mobility related carbon emissions; **vehicle distance travelled** and amount of **carbon emitted per unit distance** travelled. It splits actions into three stages, in order of priority:

i) AVOID the need to travel

ii) SHIFT mode of travel

iii) IMPROVE and switch fuel

3.106 The strategies associated with those are in **Figure MA3-4**.

[20] CD10.43

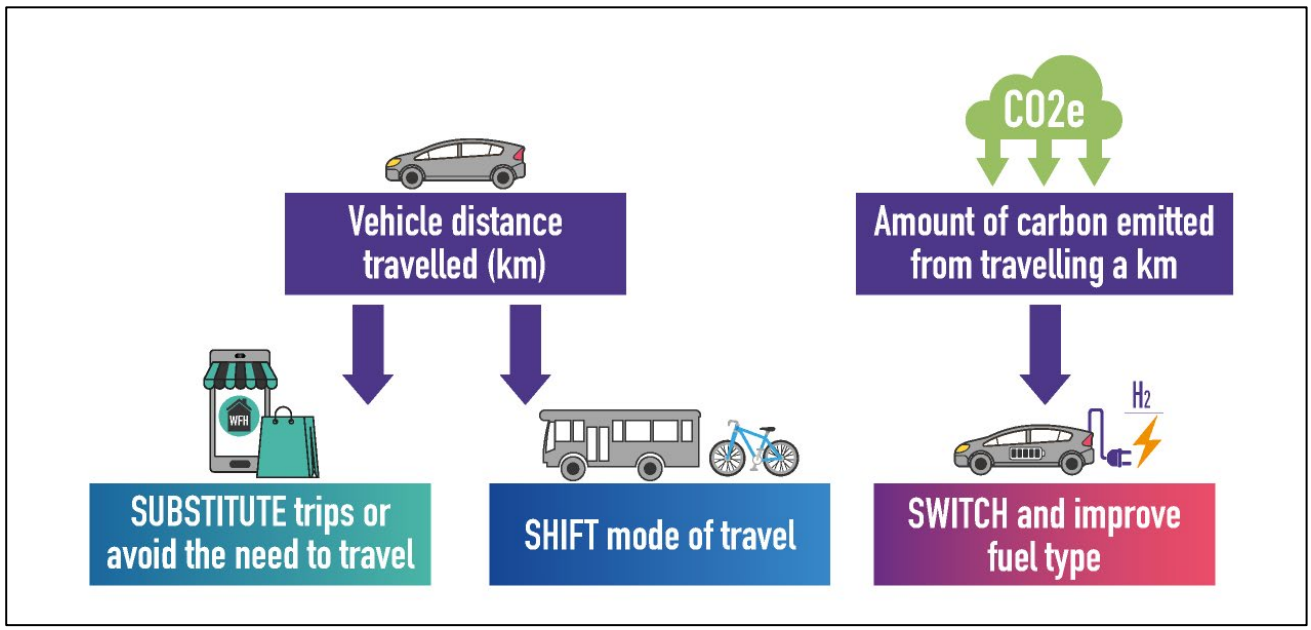

Figure MA3-4: Sustainable Urban Mobility Plan Action Stages

3.107 The Carbon Policy Analysis Support Tool allows the user to identify several possible policy mixes that could deliver defined carbon reduction targets. It does this by allowing the user to vary the scale of input/uptake of each policy strategy to better understand the impact this has on overall carbon emissions, how it contributes to carbon reduction targets, and its relative significance in comparison to other policy choices.

3.108 I have run a series of assumptions for South Ribble through this tool. They are:

i) A notional 10% increase in population by 2050

ii) A 20% increase in local living (which this development can contribute to, and be a catalyst for) by 2040

iii) A 20% shift in mode away from car use by 2040 (which this development can encourage and be a catalyst for)

iv) An 85% take up of electric cars by 2040

3.109 The results are summarised in **Figure MA3-5**. On this crude basis the targets set by SRBC are not met. It demonstrates the extent of the issue facing SRBC, and the country, and reinforces the 'do everything' advice from the RTPI.

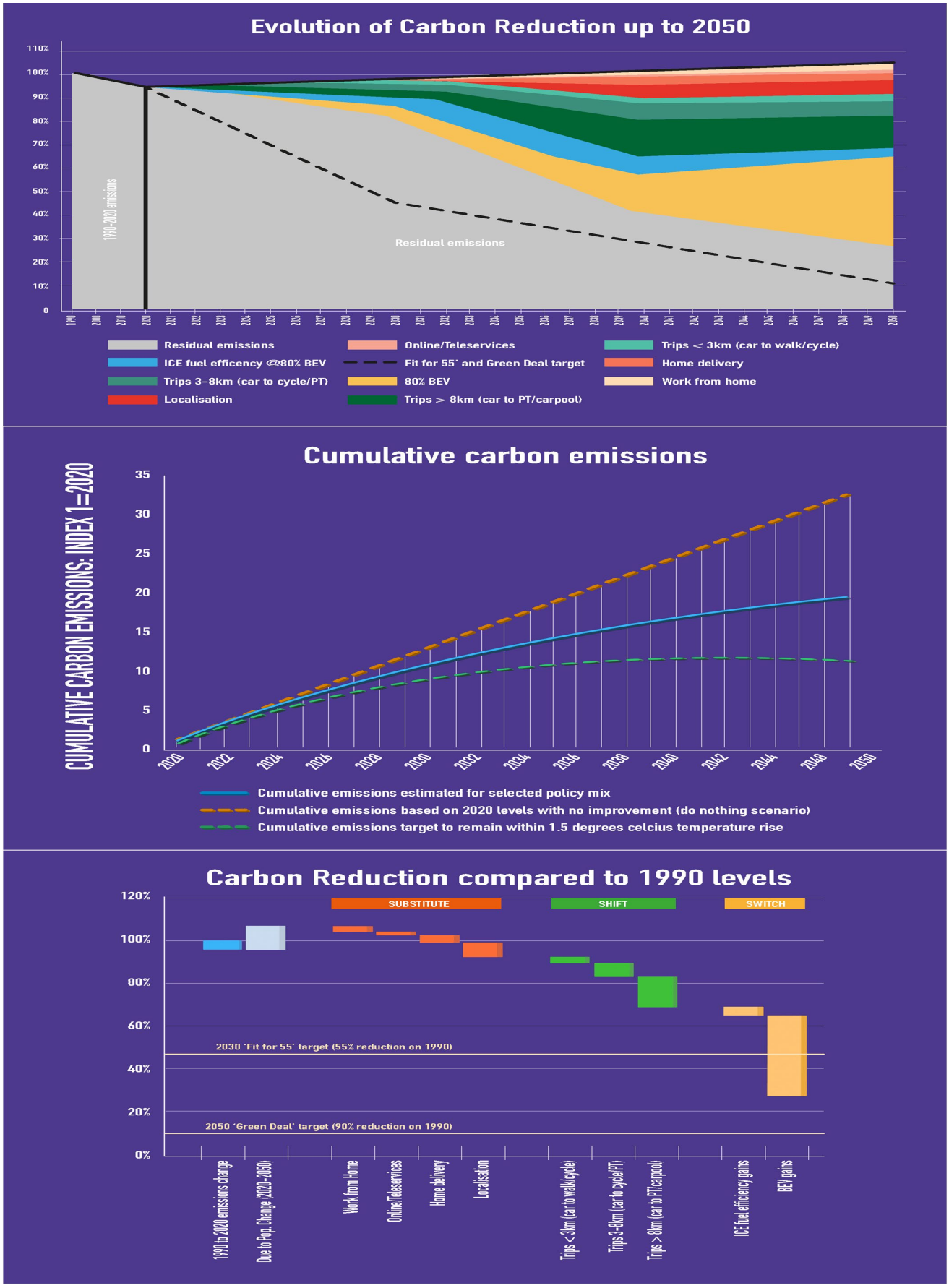

Figure MA3-5: Carbon Policy Analysis Support Tool

3.110 A historic predict and provide approach to designing for commuter traffic would not be consistent with this.

Hartford, Cheshire West and Chester Planning Decision 2013

3.111 At the end of 2012, a Planning Inquiry was held into two housing applications[21] totalling 650 homes in Hartford, which was a location of substantial traffic congestion in the morning and evening commuter peak periods. The Inspector's context was that this was a sustainable location with a wide range of day to day facilities and services available in the village.

3.112 There was no proposal from either application to increase traffic capacity on the highway network. This was a purposeful approach, where the focus of the proposals was on integrating with the community.

3.113 The schemes were determined by the Secretary of State (SoS), who approved both appeals, following the Inspector's recommendation that both appeals are allowed (**CD10.44**).

3.114 The SoS agreed with the Inspector's conclusion that the proposals would not have a severe impact on the transportation network and that they do not conflict with the Framework in this regard. He agreed with the Inspector that the proposals would have an adverse but limited impact. He agreed with the Inspector's conclusion that the traffic impact in combination or individually would not significantly and demonstrably outweigh the benefits of the proposal.

3.115 The Inspector in his conclusions found that Hartford suffers from congestion. He judged it likely that in light of congestion, trips to school from the new homes would tend to switch from car to non-car use.

3.116 In considering the weight to be applied to forecast traffic delay and increased queuing, the conclusion that the Inspector drew was that "any additional delay however carries less weight as it is not the aim of policy to protect the convenience of commuting car drivers"[22].

3.117 The approach by the Inspector, and endorsed by the SoS, in this case was a V&V style approach. The Inspector judged that forecast traffic demands were affected by conditions, in this case congestion. He interpreted the Framework to mean that it is not the purpose of policy to protect the convenience of the car commuter, and that as a result, the convenience of using the road network in the commuter peaks had less weight when balancing the benefits of the proposals.

[21] Application References 11/05765/OUT and 11/05805/OUT

[22] Paragraph 14.45

National Guidance: The National Design Guide

3.118 Borrowing from the National Design Guide (**CD10.20**), a well-designed movement network provides a place that:

i) Is safe and accessible

ii) Provides a genuine choice of 'sustainable transport modes'

iii) Limits the impacts of car use by prioritising and encouraging walking, cycling and public transport

iv) Promotes activity and social interaction, contributing to health, well-being and inclusion

v) Should not need to rely on the car for everyday journeys including getting to schools, shops, workplaces, or the natural environment

3.119 Patterns of movement for people are integral to well-designed places. Successful communities provide for 'accessibility', and the way in which they provide this affects the quality and character of the places that they become.

3.120 Accessibility can come in many forms, including 'virtual travel', for instance, use of the internet for interacting with friends, shopping or working; 'active travel', walking or cycling (electric assisted or not); shared travel, including buses, demand responsive services, car-pooling, and car sharing; and single occupancy car travel.

4 The Scheme

Masterplan Principles and Mobility Strategy

4.1 Transport and accessibility is a function of masterplanning.

4.2 The two Applications together incorporate up to 1,100 homes, 30% of which are affordable. There will be a local centre with some employment facilities. There will be a Primary School and open space. There will be Third Place facilities in the local centre, where Third Place means a place in the local community from which to work (First Place being company office or other centralised facility, and Second Place home working).

4.3 A Primary Mobility Hub, or Community Hub, will be located in the local centre, and there will be Secondary Mobility Hubs dispersed around the settlement. These will be administered by the Community Concierge team.

4.4 The Primary Mobility Hub is a building in the Local Centre location with a Community Concierge presence providing for all things mobility and community. This is explained in more detail in the Mobility: Monitor and Manage document (**Appendix MA-2**), and the S106 document.

4.5 The Secondary Mobility Hubs are locations within the community for picking up or dropping off hire bikes, car share vehicles and other micro-mobility.

Box 9
Mobility hubs

(Source: TCPA Garden City Standards for the 21st Century: Guide 13 Sustainable Transport)

Mobility hub in a proposed 'garden town' in Hertfordshire

Figure MA4-1: Illustrative Mobility Hub

4.6 With the modern policy world prioritising sustainable movement, the aim is firstly to maximise local living and avoid trip making, then where trips are being made, to maximise the use of sustainable modes, and then where that doesn't happen to maximise use of the best fuels, typically sustainably sourced electricity, in accord with the Avoid, Shift, Improve Fuel approach articulated by the EU's SUMP Plus programme, and also by the RTPI in its Net Zero Transport report , where it calls it Substitute, Shift Mode, Shift Fuel.

4.7 These initiatives maximise the attractiveness of local living, and likelihood of interaction at the community scale in accord with the aims of the Framework[23].

4.8 By community scale we include the communities of Kingsfold and Tardy Gate of which this will form part. **Appendix MA-3** explains how the active travel connections will be formed with these areas.

4.9 As sustainable design and measures are the priority, multiple mobility measures and interventions play a part. The value and effectiveness of these many measures will fluctuate with changing conditions. To make the most of these there should be a mechanism that monitors this, with the ability to make changes to maximise effectiveness.

4.10 Therefore, inherent within the scheme is a Monitor and Manage mechanism, with a Flexible Transport Fund of £1m. This will be managed in accordance with a mechanism set out in the proposed S106 document. In summary it does this:

i) Monitors all aspects of mobility, transport and travel behaviour at specified intervals

ii) Establishes a Steering Group, which includes SRBC, LCC, The Community Concierge and the Appellant to interpret the results of the monitoring and to make decisions within the framework set out by the document

iii) Uses the Flexible Transport Fund to invest in those measures performing well, other measures that may as yet not be part of the scheme, or to change the effectiveness of those measures that aren't doing so well and in the view of the Steering Group will be effective with that investment, noting that the trends may change over time.

[23] NPPF Paragraph 92

4.11 A summary of the mobility related elements set out in the S106 document is:

i) Delivery of basic day to day facilities (basic shopping) from the outset, where 'outset' means before occupation of the 50th home. In the beginning this will be from a temporary location.

ii) Delivery of a Primary Mobility Hub, with associated bike fixing, e-bike hire, other micro-mobility, micro-consolidation (parcel drop off) and basic café from the outset. In the beginning this will be a temporary Hub.

iii) Provision of the Community Concierge team presence on the site from the outset, supporting all things community and mobility, including liaison with schools and businesses, bespoke travel planning, and administration of car sharing and carpooling platforms.

iv) Provision of a public transport service from the outset connecting the site with Preston city centre at a weekday daytime frequency of not less than half an hour, or otherwise on a Demand Responsive basis. For efficiency, the type and size of vehicle may fluctuate based on demand.

v) Provision of car sharing (car club) vehicles from the outset

vi) Effective active travel connections to Kingsfold and Tardy Gate from the outset

4.12 The masterplan and the approach has been prepared in the context of the health and climate agenda, acknowledging national policy as well as SRBC's Climate Emergency declaration and commitment to work towards being carbon neutral by 2030. It allows for the promotion of a healthy living agenda built around an understanding of why and how people access facilities, as well as what this might look like in a post-COVID-19 world.

4.13 The vision is to embrace local living and virtual mobility where that is most appropriate, achieving excellent accessibility by the highest priority forms of mobility and minimising road capacity increases, particularly where these are likely to encourage and generate private vehicular traffic.

4.14 There are multiple access points to the Allocation land and the Application sites, both existing and proposed, and both sites are proposed to be connected by active travel and shared travel (including bus) routes. The access points are in **Figure MA4-2**.

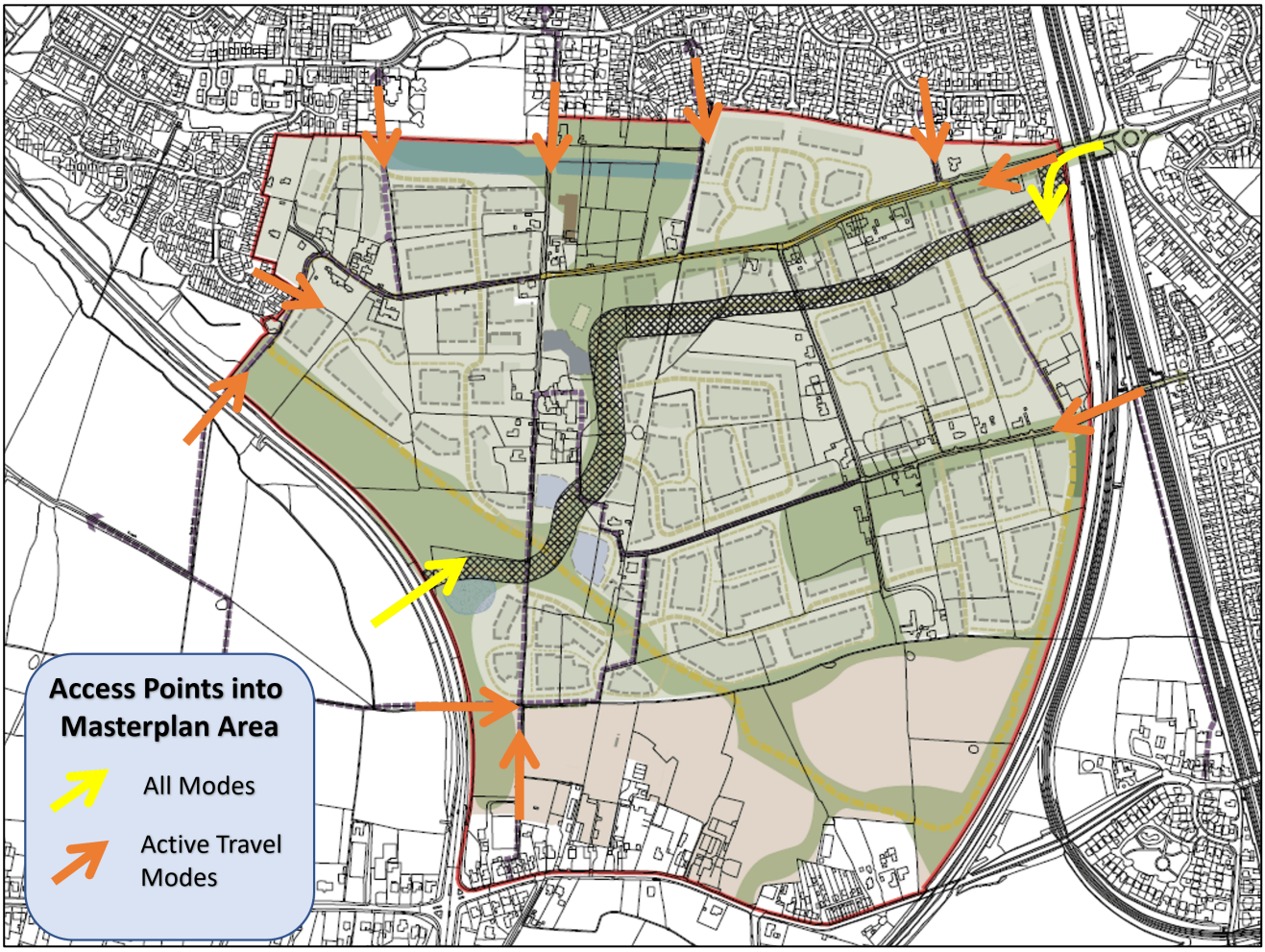

Figure MA4-2: Access Points into Masterplan Area

4.15 There is an existing network of lanes, some of which are public highway of some form. These lanes are used by cyclists, walkers and equestrians at the moment, with occasional vehicle use mainly to the existing premises. **Figure MA4-3** shows the lanes.

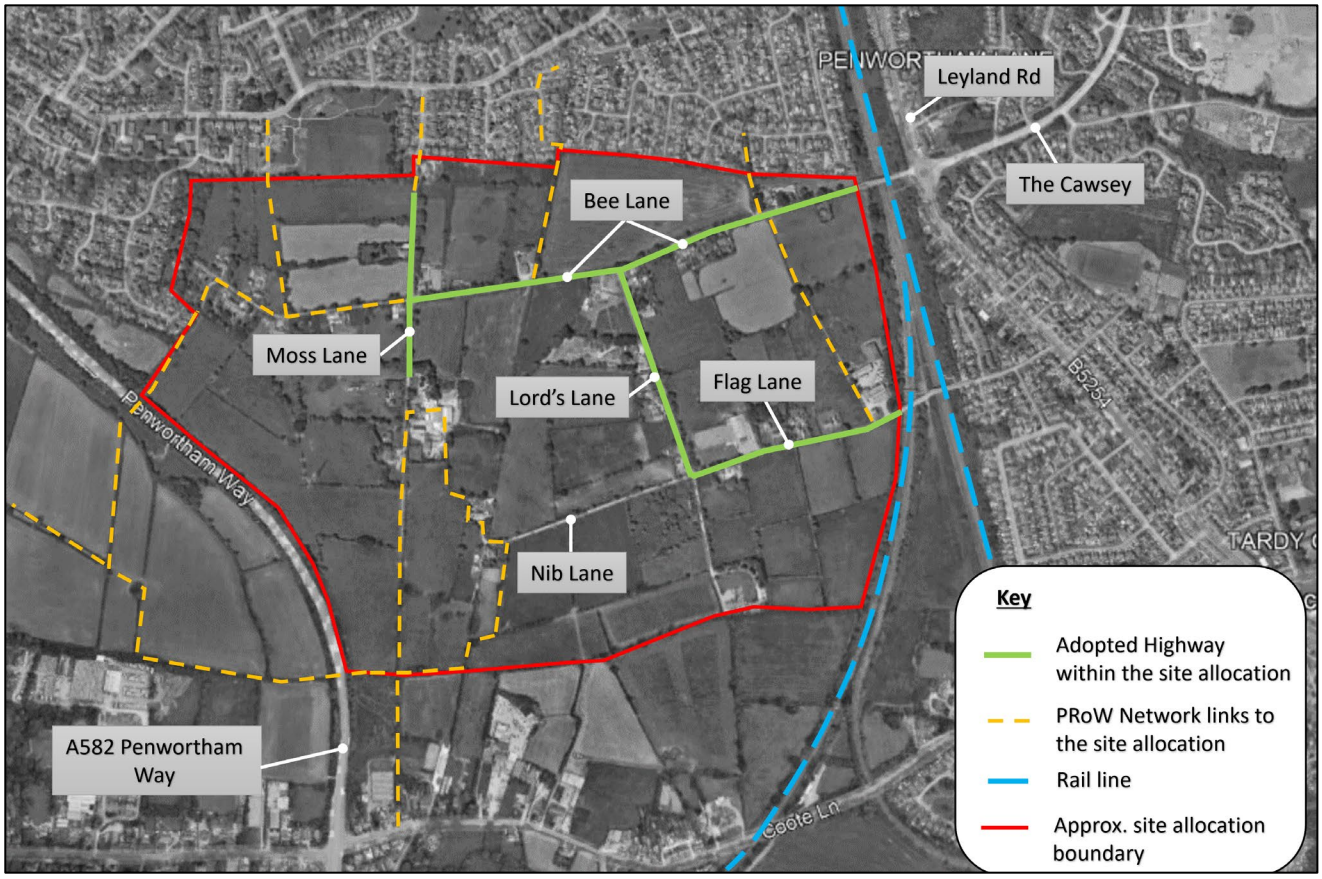

Figure MA4-3: Existing Roads and Routes in the Vicinity of the Site Allocation

4.16 These lanes are retained within the masterplan. Existing access to existing properties will be retained via these lanes, and the routes will form part of the active travel network, with additional access for shared travel (including buses).

4.17 There will be no vehicular access to the sites along these lanes, except for Bee Lane west of the Bee Lane bridge for access to part of Application A, and for bus (shared travel) movement.

4.18 Network Rail did comment on the Application, raising a concern that additional active travel and vehicular movement over the Bee Lane bridge may increase the risk of vehicles swerving to avoid pedestrians and colliding with the bridge parapet, although they recognise that the risk level is low.

4.19 As a result, we commissioned the safety risk assessor to quantify this risk should the carriageway remain a shared surface, as it is at the moment. The assessor rated this as 'low risk', which carries the safety risk assessment label 'acceptable'.

4.20 In addition, we looked at options for mitigation. There is no reason to assume that there is only a unique solution. We developed one option that segregated the carriageway from the parapets and pedestrians, shown in **Figure MA4-4,** not dissimilar in character to that at the nearby Coote Lane bridge over the railway. The safety risk assessor also rated this option 'low risk' with the safety risk assessment label 'acceptable'.

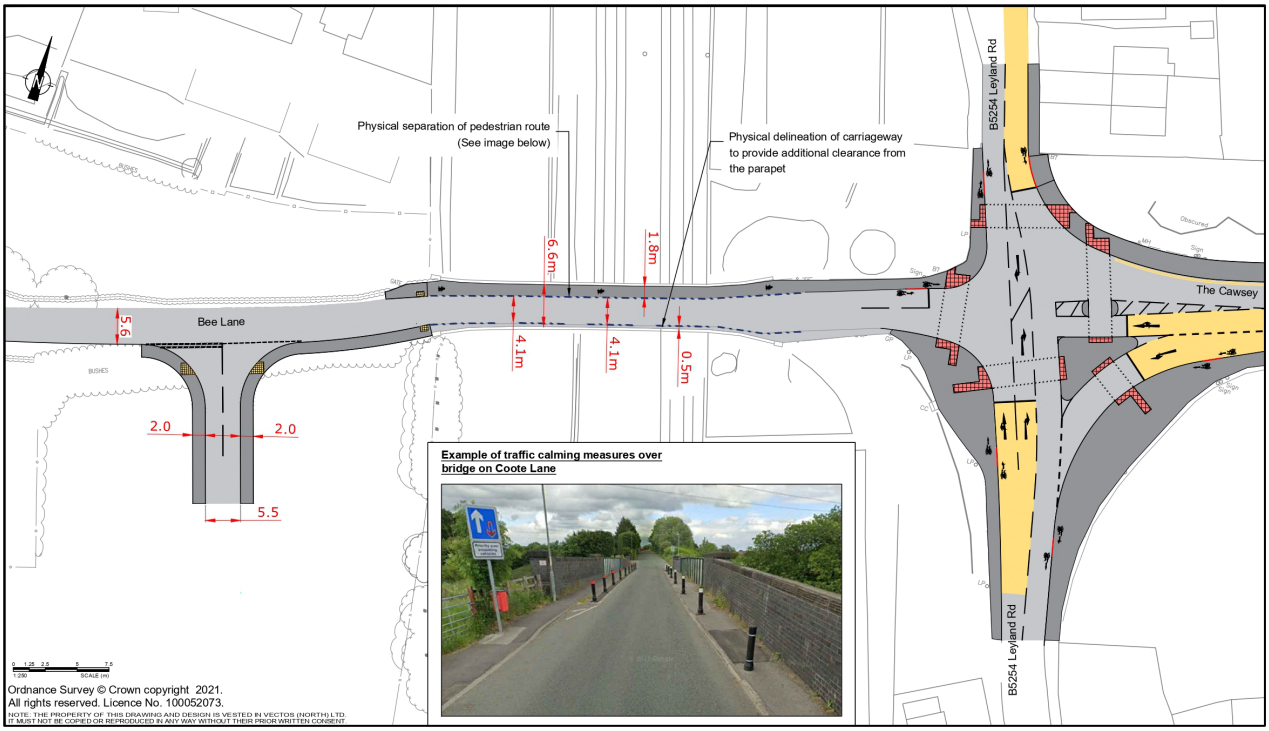

Figure MA4-4: Bee Lane Bridge Improvement Option

4.21 The access from Bee Lane therefore can incorporate improvements to the bridge over the railway, but also the Bee Lane/Leyland Road junction in the interests of promoting and enhancing active travel movements.

4.22 Community infrastructure, along with sustainable and active travel routes have been considered before any internal highway layouts for motor vehicles. The provision of a local centre (with Primary Mobility Hub and Third Place working environment), primary school and other community uses as part of the proposed development, accessed via a network of internal active travel routes (both new and existing), will incentivise local living, and active travel.

4.23 There are already good bus services in the surrounding communities. Other shared travel measures will include car sharing and car pooling, administered through the community concierge team at the Primary Mobility Hub, as well as shared use of e-bikes and micro-mobility systems. The Mobility Hub, and the Monitor and Manage strategy, which comes with a funding package, provides the flexibility to introduce other systems as attitudes and technology dictate.

4.24 In addition to existing services, I have spoken with two bus operators. Arriva Click provide fixed route and demand responsive bus services. It has expressed particular enthusiasm for operating services connecting this site with neighbouring communities and Preston city centre. Its proposal is to operate fixed route services at times of greatest demand, including the peak commuter periods to Preston railway station, and demand responsive services at other times, which react in both size of vehicle and provision to the level of demand. It explains that in this new way of operating buses, the climate and social benefits of public transport are maximised.

4.25 The local operator, Stagecoach, has also expressed interest in operating buses that incorporate this site. It is currently working on a proposal, but my understanding is that from its perspective, operating buses through this site may unlock substantial advantage for public transport opportunity in the area.

4.26 A new vehicular access is proposed on Penwortham Way in the form of a traffic signal-controlled junction. This will provide vehicular access to the majority of the proposed development and will also serve as the main vehicular access for the majority of the site allocation. There are two designs. The first (**Figure MA4-5**) connects with Penwortham Way as it is. The second (**Figure MA4-6**) shows how it can be designed to connect with a widened Penwortham Way as proposed by LCC in its application for dualling.

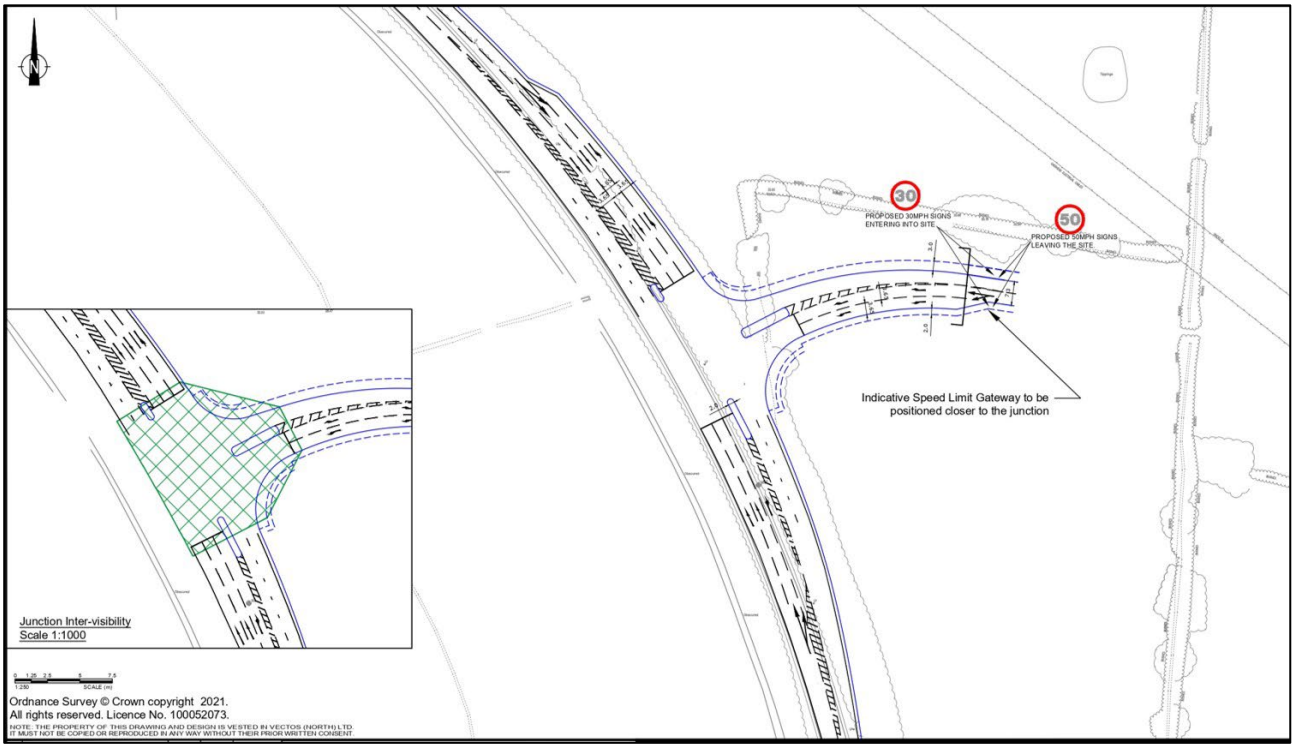

Figure MA4-5: Site Access Design – Penwortham Way Single Lane

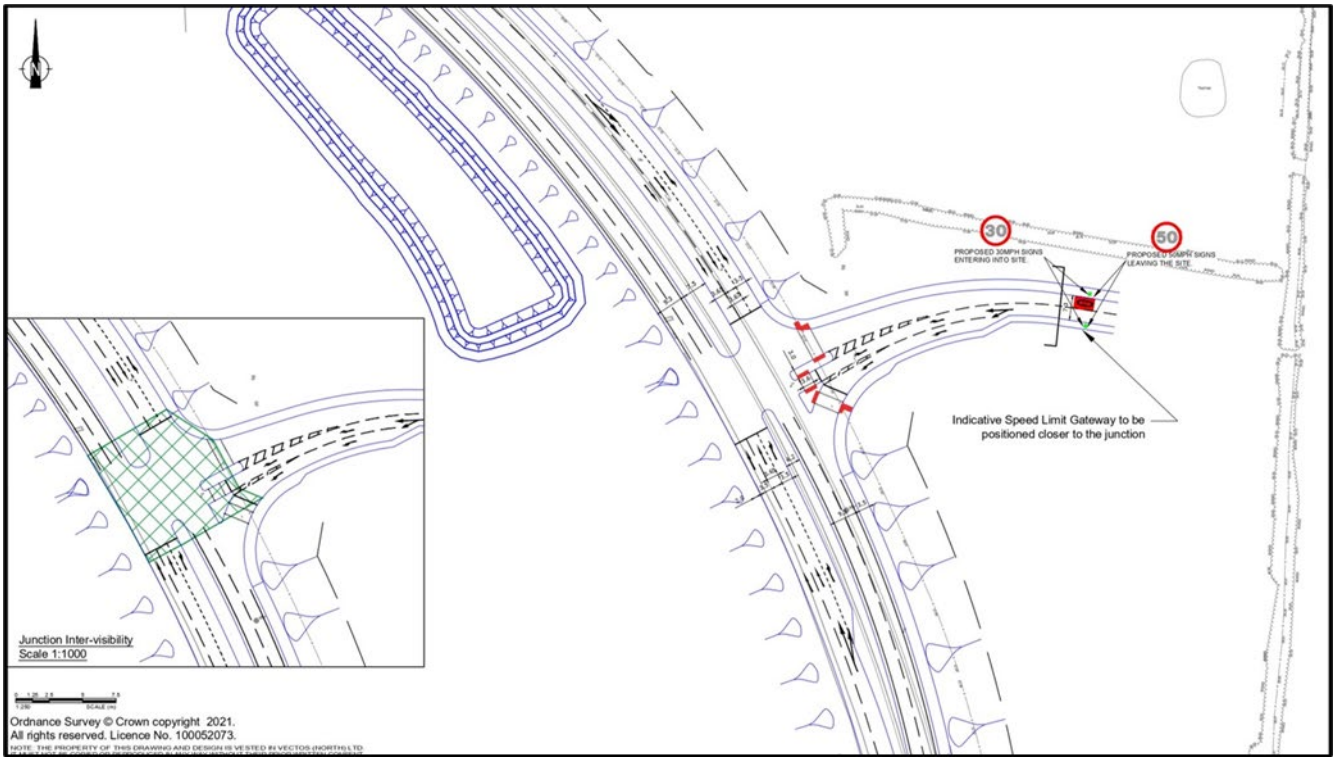

Figure MA4-6: Site Access Design - Penwortham Way Dualling

4.27 Shared travel, in the form of buses, are provided for via either or both the Penwortham Way access and the Bee Lane access. It will be possible for buses and active travel users, but not private cars, to connect the Application site A, and the A582, in the west with Leyland Road and beyond in the east using largely the spine road for the schemes (the line of the CBLR) and the existing lanes. Connectivity for buses, where private vehicles cannot, will be controlled with a bus gate.

4.28 In the early phases temporary turning areas will be provided to enable buses to enter and leave the site.

4.29 Land is safeguarded from development for the delivery of the CBLR in accord with the criteria set out in **Appendix MA-1**. Mr Alsbury explains that Local Plan policy does not require delivery of the CBLR in association with the Allocation, however, the delivery of the CBLR is protected. The development does create a route for active travel and shared travel that provides for connectivity by these modes as the CBLR would. The CBLR would in addition provide for private vehicle movement.

4.30 The site design and criteria facilitate a CBLR, in such a way that it does not form a barrier to community movement and ambience.

4.31 The detail of the commitments made in respect of the masterplan and the associated transport facilities are in the s106 document.

Discussions and Consultation

4.32 Discussions have been coordinated with LCC (Lancashire County Council) and NH (National Highways) regarding the proposed development, building upon consultations that informed previous planning applications (Ref: 07/2020/00014/FUL and 07/2020/00015/ORM).

4.33 A tracker for discussions and tasks relevant to each organisation had been prepared and was being worked through. The current position in respect of these trackers is in **Appendix MA-4**.

4.34 A timeline of key planning milestones, meetings with the various Authorities, receipt of statutory comments and submission of information is presented in **Figure MA4-7**.

4.35 At present National Highways does not accept the use of the Vectos Paramics model to assess impacts. There is disagreement on detailed model construction aspects. National Highways has set out its concerns. Vectos has responded to each point raised. Discussions between modellers are ongoing. The exchange is in **Appendix MA-5**. If it becomes necessary, my colleague Mr Edwards is available to give evidence on these detailed matters.

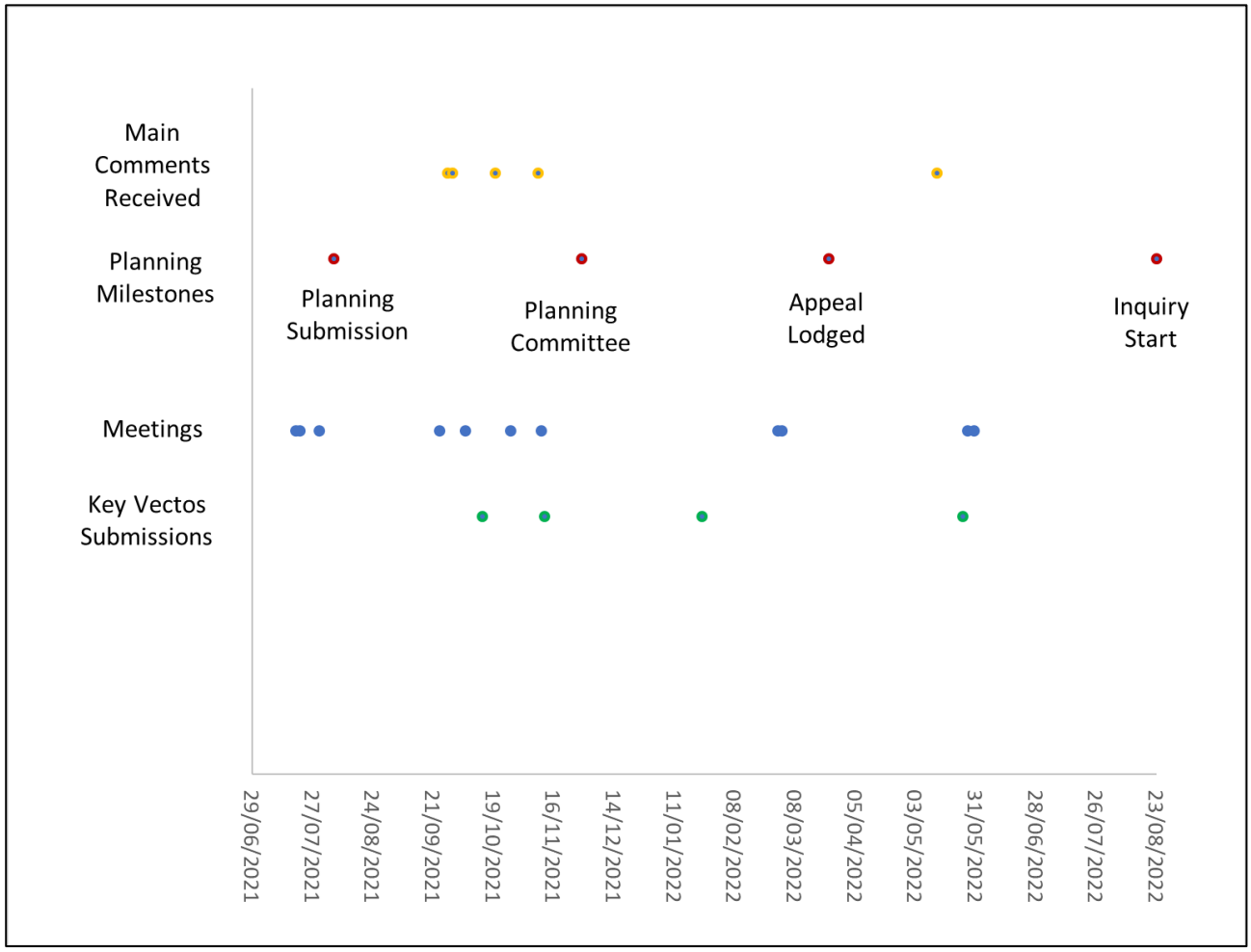

Figure MA4-7: Planning Milestones Timeline

5 Local Transport Network Context

Site Location

5.1 The TA at Section 2 describes the characteristics of the site location. It is adjacent to existing urban areas, is approximately 3.5km south of Preston city centre, and is generally flat.

5.2 It is immediately south of the existing residential area of Kingsfold and west of Tardy Gate. Kingsfold has a local centre and Tardy Gate a district centre providing a range of shops, services, and facilities.

5.3 To the west of the site is Penwortham Way (part of the A582 corridor) which connects the site by vehicle to Preston, Leyland and the M6/M65 motorway. The West Coast Mainline forms the eastern boundary with agricultural land forming the southern boundary.

5.4 The existing Bee Lane and Flag Lane bridges which cross the West Coast Mainline are the only current points of access for motor vehicles. These routes then serve a number of smaller roads (many of which are adopted) which provide access to existing residents and landowners (**Figure MA5-1**). There are many additional public rights of way and active travel connections located to the west, north and east providing connectivity options to connect to existing communities on foot and by bike.

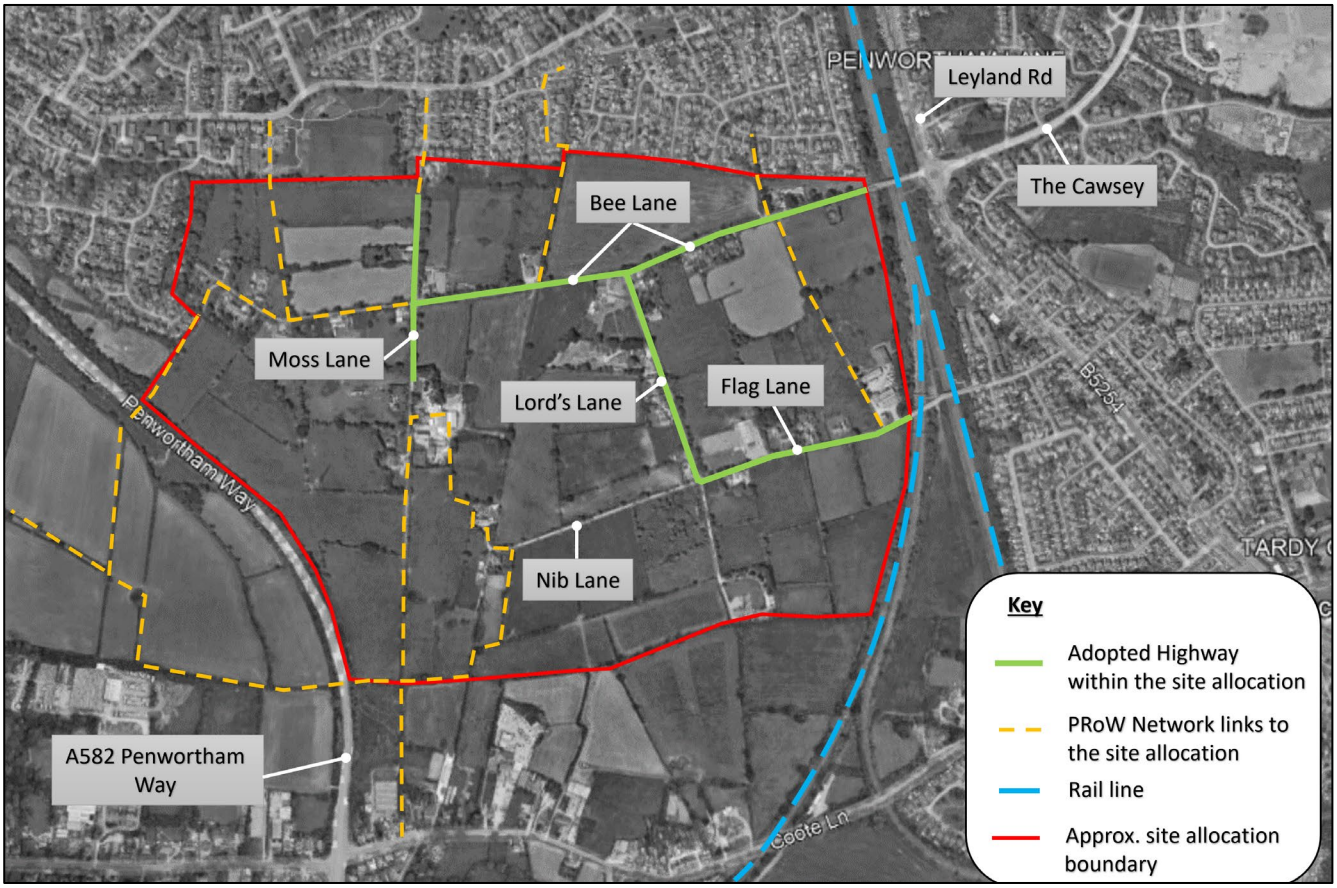

Figure MA5-1: Existing Roads and Routes in the Vicinity of the Site Allocation

5.5 The sites are the substantial part of the site allocation know as Pickering's Farm (Policy C1) in the SRBC Local Plan. **Figure MA 5-2** shows the Allocation location in the context of the local area along with the two sites in the context of the Allocation. **Figure MA 5-3** shows the communities and facilities within the local area.

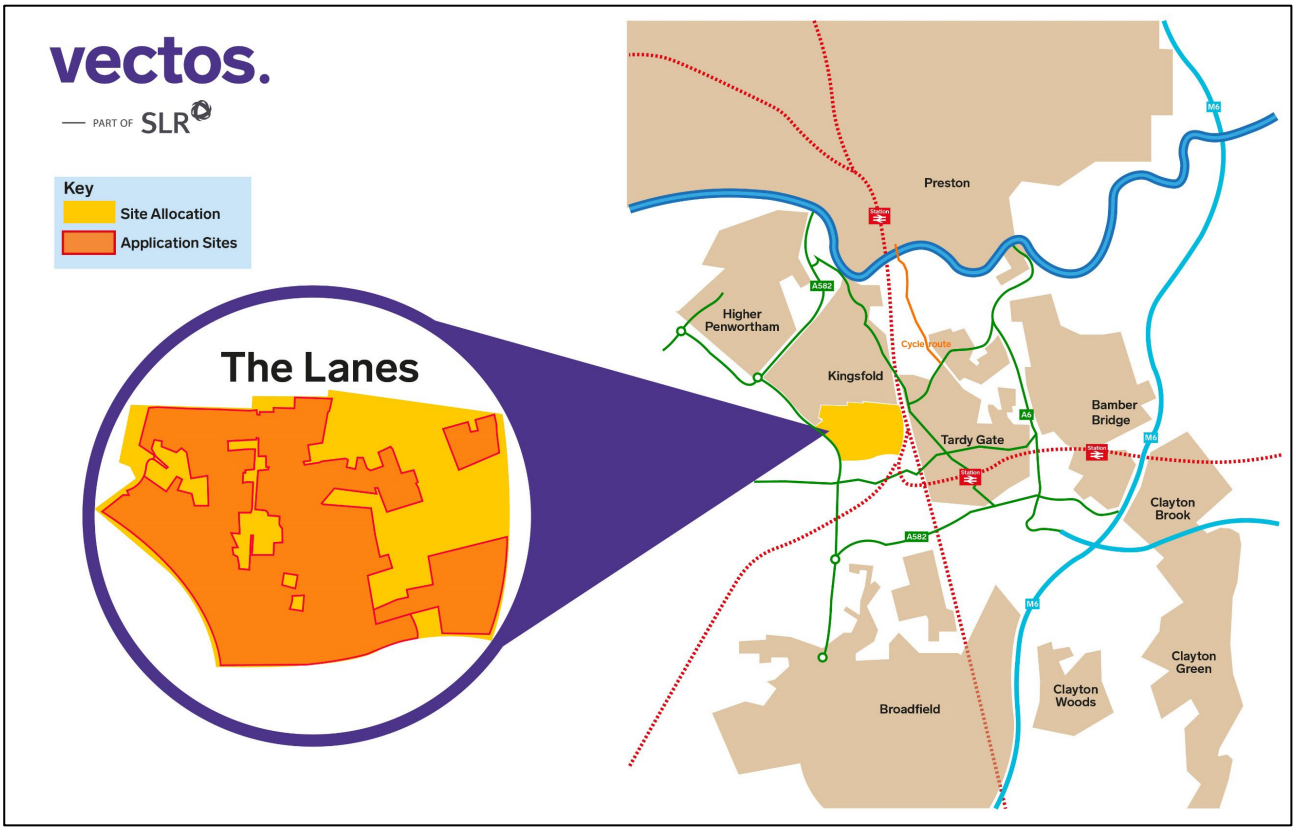

Figure MA 5-2: Allocation Location in Local Context

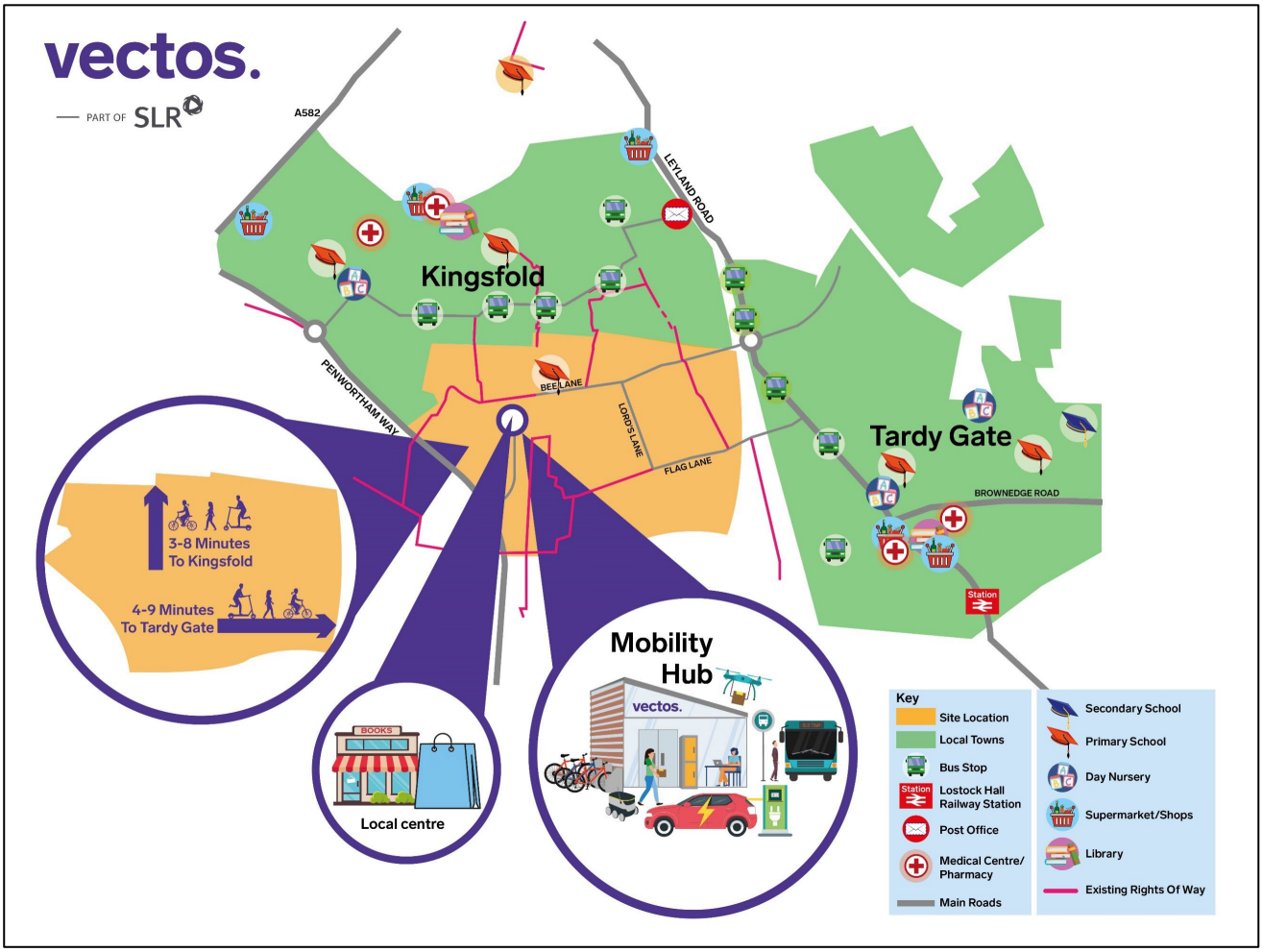

Figure MA5-3: Communities and Facilities in Local Area

Indicative Active Travel Catchments and Local Facilities

5.6 Accessibility, and by which mode, is a function of both distance and quality of route. **Figure MA 5-4** illustrates a 2km catchment by active travel from the access on Moss Lane, **Figure MA5-5** shows this from Bee Lane, and **Figure MA5-6** from Flag Lane. **Figure MA5-7** illustrates a 5km and 10km active travel catchment from the centroid of the allocation area.

5.7 The routes through the site will form part of the masterplan, the principles for which are that active travel corridors are the primary movement network. The active travel routes into and through the neighbouring areas are attractive and of good quality.

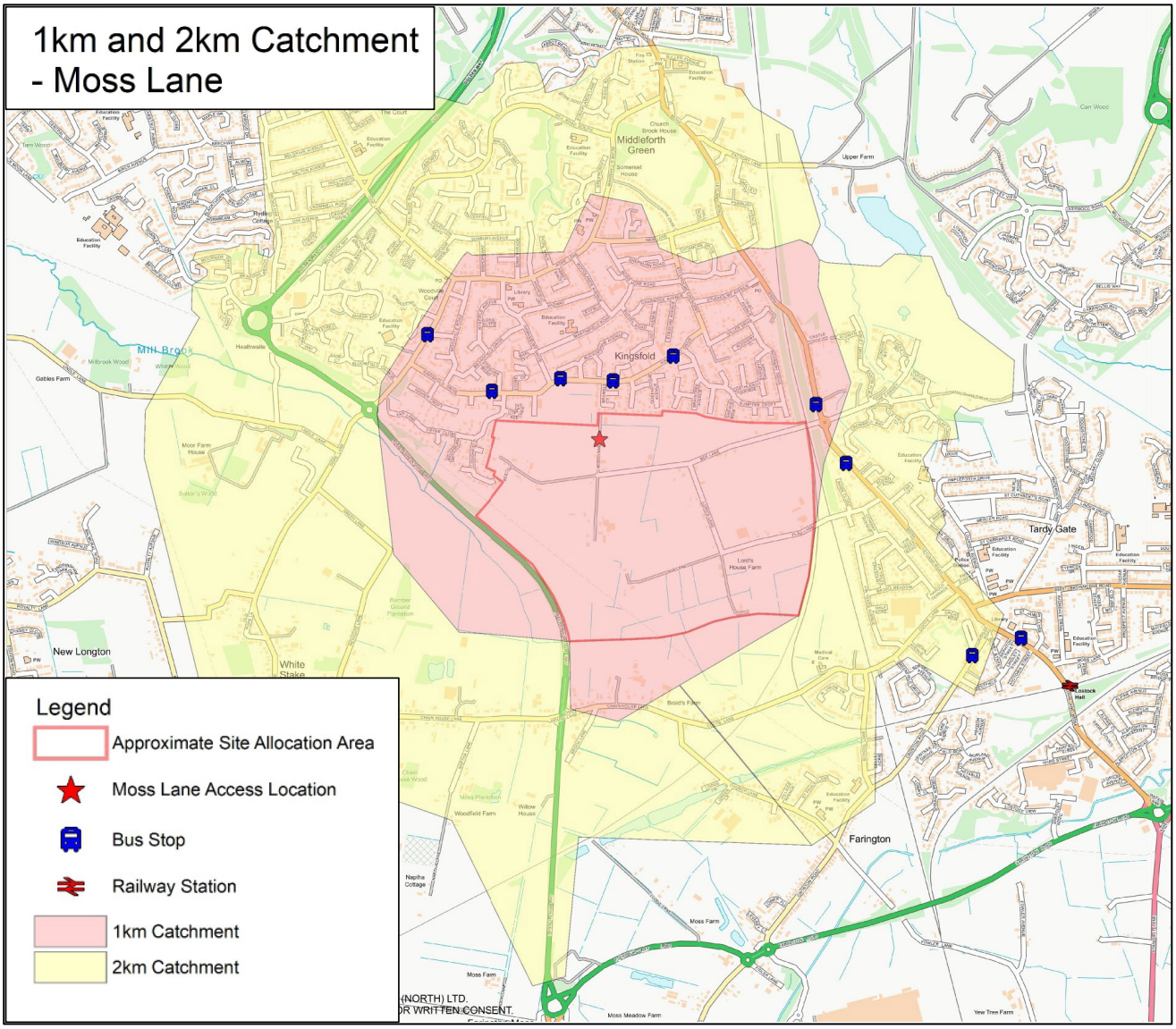

Figure MA5-4: Illustrative Active Travel Catchment – Moss Lane

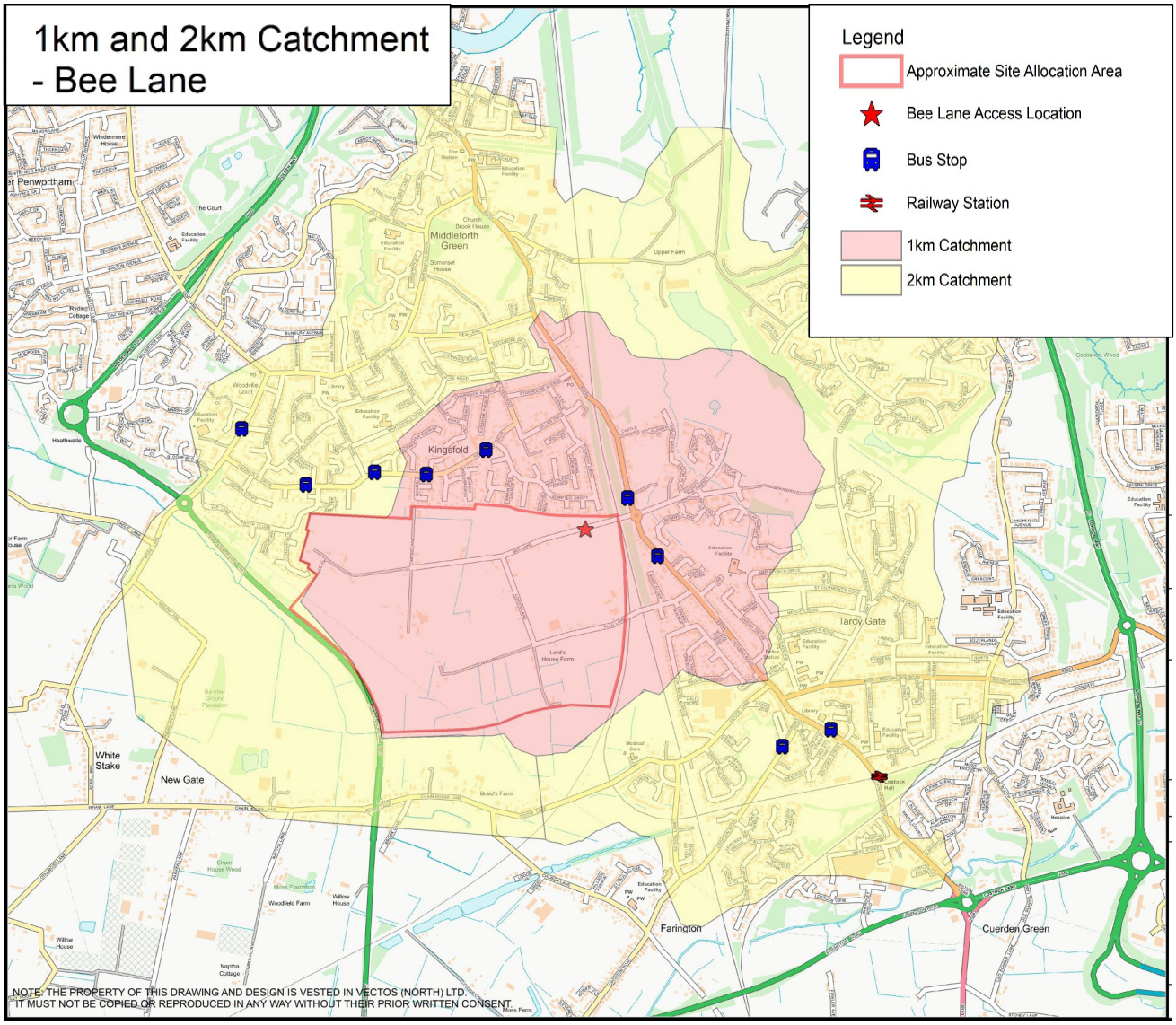

Figure MA5-5: Illustrative Active Travel Catchment – Bee Lane

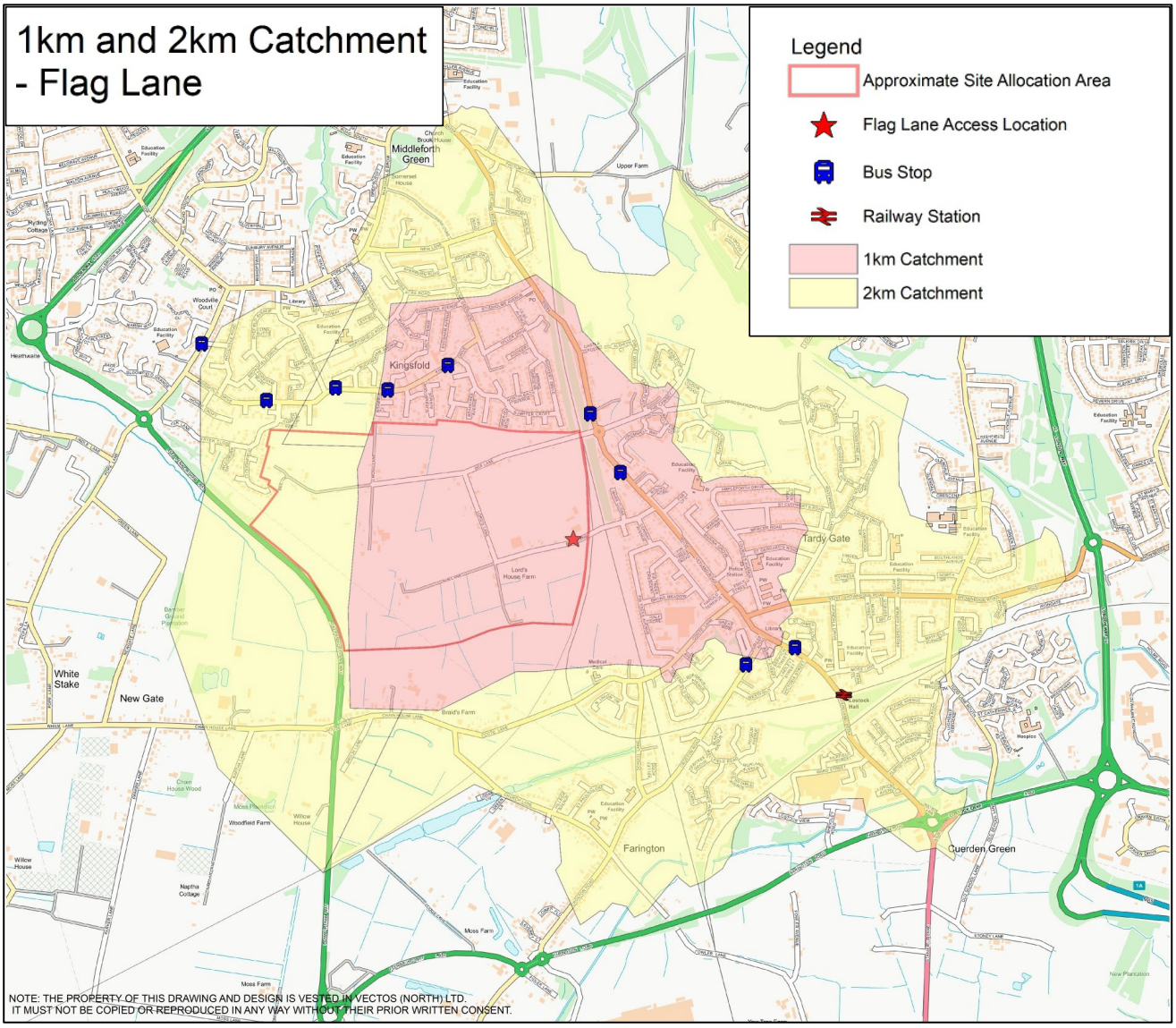

Figure MA5-6: Illustrative Active Travel Catchment – Flag Lane

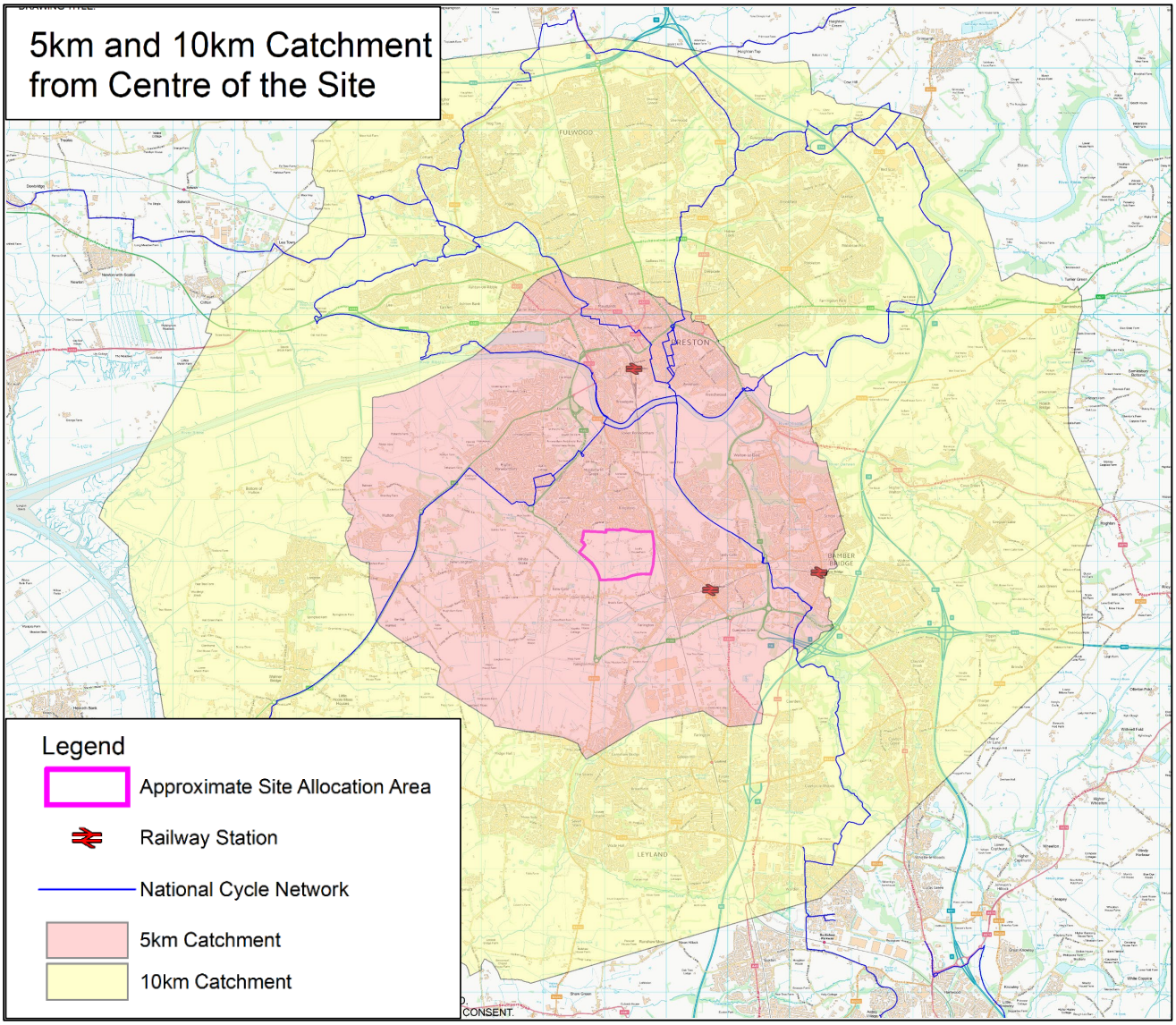

Figure MA5-7: Illustrative Cycle Catchment

5.8 These catchments encompass an area covering the communities of Kingsfold, Penwortham, Tardy Gate and Lostock Hall in the immediate vicinity, but also Preston to the north, Farrington and Leyland to the south, Bamber Bridge to the east and New Longton to the west.

5.9 **Figure MA5-8** illustrates the dedicated cycle routes in Preston and South Ribble. In addition, local residential roads are suitable and safe for cycling on.

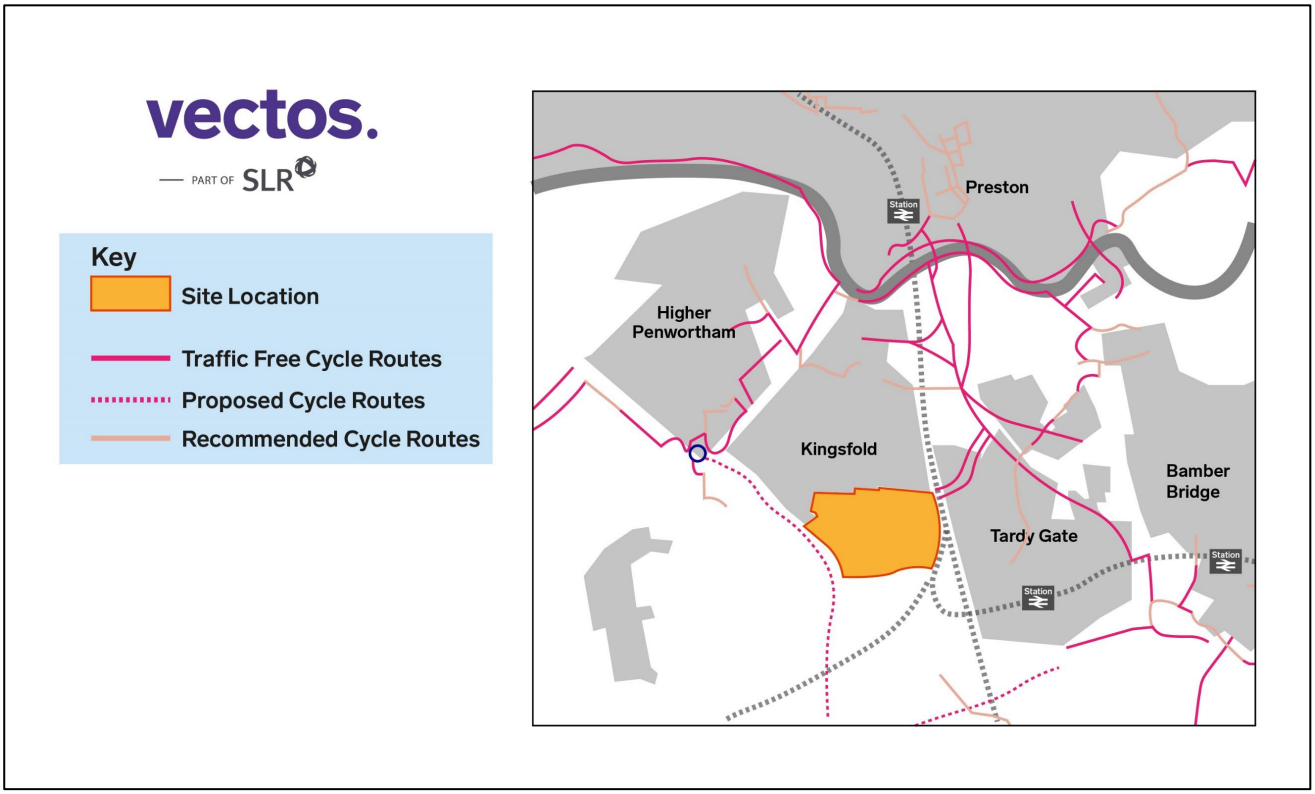

Figure MA5-8: Cycle Route Connections

5.10 **Figure MA5-9** also shows the Neighbourhood Plan safeguarded cycle route which runs along Bee Lane through the Site.

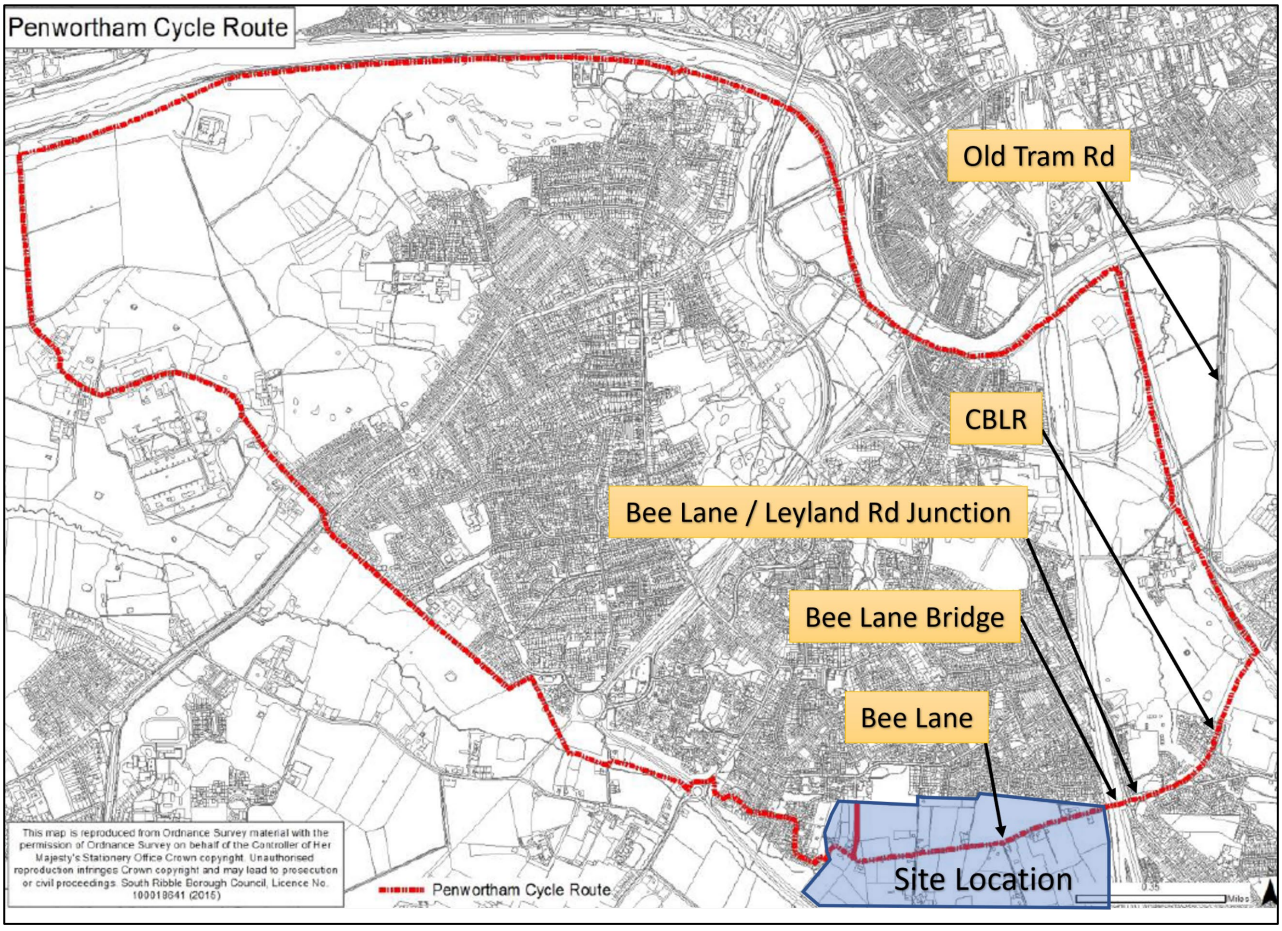

Figure MA5-9: Safeguarded Circular Route for Cyclists and Walkers

5.11 With the developments in place there will be a direct cycle route from the sites to Preston city centre via the sites, the CBLR and the Old Tram Road.

5.12 **Figure MA5-10** shows the location of existing local bus stops and the key bus routes available within the existing local communities. At both Kingsfold Drive and Leyland Road there is a service frequency of 4 to 6 buses per hour during the day on a weekday. These services connect to Preston, Lostock Hall and Moss Side. Higher frequency services are provided within Tardy Gate and Lostock Hall near Lostock Hall Railway Station.

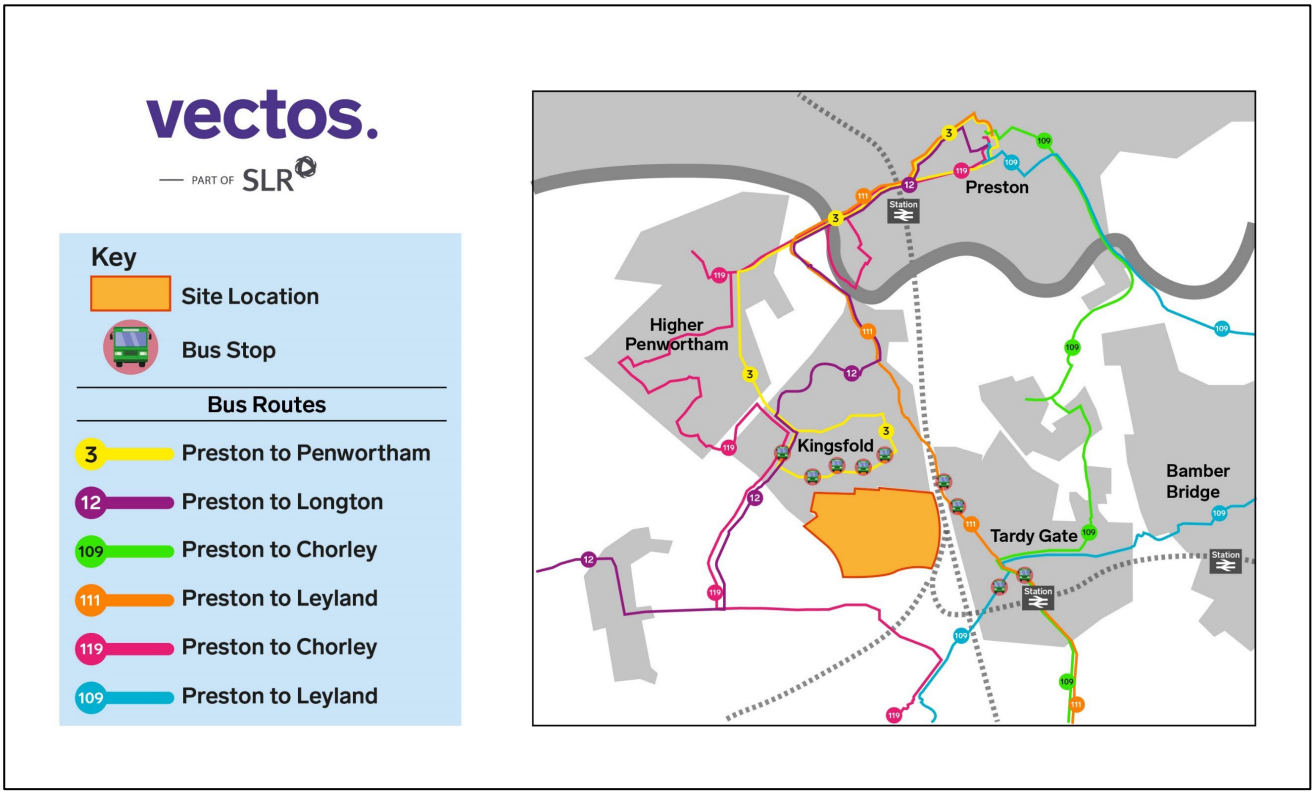

Figure MA5-10: Bus Stops and Routes within the Local Communities

5.13 The closest railway station to the proposed development is Lostock Hall within a 20-30 minutes walk or 6-10 minutes cycle ride and it is accessible via Leyland Road via Bee Lane and Flag Lane. The station is managed by Northern, has two platforms and provides one service per hour to Preston, Blackburn, Burnley, Nelson, and Colne.

5.14 Preston Railway Station is within a 20 minute cycle ride, a 30 minutes bus ride or 20 minute drive, the same time as cycling, and probably longer when parking is taking into account. Preston is on the West Coast Mainline with frequent local, regional, and national services provided to a range of destinations including Blackpool, Lancaster, Manchester, Liverpool, Barrow-in-Furness, London, Edinburgh, and Glasgow.

5.15 Preston Railway Station includes a cycle hub, with cycle fixing facilities and 200 indoor cycle parking spaces (**Figure MA5-11**).

Figure MA5-11: Preston Rail Station Cycle Hub

Local Highway Network

5.16 The local highway network in the vicinity of the site is presented in **Figure MA5-12**.

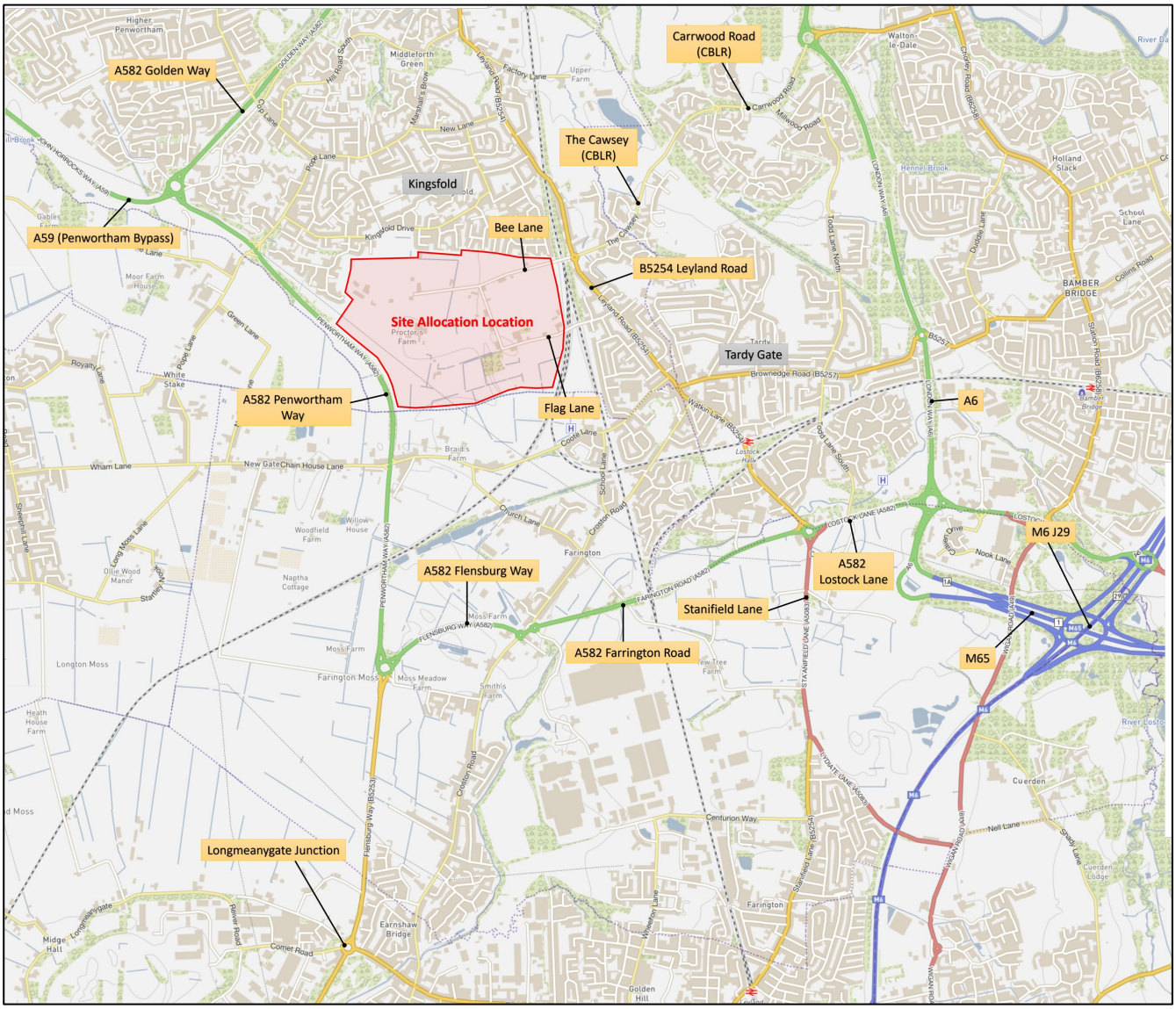

Figure MA5-12: Surrounding Highway Network

Leyland Road

5.17 Leyland Road (B5254) runs along a north to south alignment between the Stanifield Lane/Farrington Road/Lostock Lane/Watkin Lane junction to the A59/Leyland Road roundabout junction. It passes through an urban area with residential access road and residential and retail properties fronting directly onto both sides of the carriageway. Leyland Road provides connections to Tardy Gate, Penwortham Gate and Lower Penwortham.

5.18 In the vicinity of the Bee Lane and Flag Lane junctions, there are footways and street lighting provided along both sides of the carriageway. These footways provide connections to the bus stops located along this road. Both controlled and uncontrolled crossing facilities are provided along the Leyland Road corridor.

Penwortham Way

5.19 Penwortham Way is an 'A' classified road and forms part of the A582 which is a principal distributor road extending for approximately 8km from the M65/A6/A582 junction to the A582/A59 junction. In the vicinity of the proposed development, Penwortham Way is a single-carriageway road.

5.20 The Penwortham Bypass was opened in December 2019. The effect of this road was to make it easier and quicker to travel in the east west plane along the A59. I expect the new road to result in an increase in traffic movement, releasing suppressed demand for travel by car and inducing movement due to improved convenience.

5.21 LCC has aspirations to dual the A582 from Golden Way to the Longmeanygate junction and the Stanifield Lane junction, reflected in a planning application data 2020 for which there are a number of supporting documents which I consider later on.

Highway Safety

5.22 The TA at Section 2 analyses accident records. It does not identify any out of the ordinary safety issues.

5.23 In addition, safety audits and a safety risk assessment have also been undertaken. They are included in **Appendix MA-6.**

5.24 The audit and risk assessment are consistent with a judgement that there is no unreasonable transport safety consequence either within the site, or on the highway networks.

6 Assessment of the Effects of Development

Context

6.1 The assessment of the effects of the development has focused upon the Lower Penwortham and Lostock Hall area, to the south of Preston as this is where changes in traffic flows on the highway network as a result of the proposed development will be most likely.

6.2 The highway network extent captures the A59, A582, A6, B5254 Leyland Road, maintained by the Local Highway Authority LCC, and the M6 Junction 29 which is the responsibility of National Highways. In addition to this, any local arterial routes identified within the study area have also been included (i.e. Chain House Lane, Coote Lane, Cop Lane and Pope Lane).

Movement

6.3 The starting point for the assessments of movement are judgements about why, how and by what means people are likely to get accessibility assuming a typical world and no external influences (unfettered demand), followed by the likely effect of out of the ordinary design, external influences and trend evolution.

6.4 **Accessibility** means access to facilities, including friends, shops, leisure, exercise, work and more.

6.5 **Out of the ordinary design** includes, for instance, the effects of Mobility Hubs and the Community Concierge team, and also more attractive access to facilities by active travel compared with car travel.

6.6 **External influences** means measures, or circumstances, that make access either more attractive or less attractive, with the obvious external influences being congestion on the road network, or a more convenient road network.

6.7 **Trend evolution** means the future effects of trends, including for instance the effect that Covid will have on working practices.

6.8 The purpose of assessment is to understand the characteristics of the transport networks, make judgements about how those are likely to change with proposed development and other interventions, and based on this make iterative judgements about whether mitigations are appropriate and achievable within the planning context.

6.9 The TA took the following approach to the unfettered forecast of movement:

i) An estimate of person trip demand for movement by time of day based on the industry standard TRICS database.

ii) An assumption about journey purpose proportion by time of day based on the industry standard NTS (National Travel Survey) database. Over a working day, the substantial reasons for person travel across the day pre Covid were 62% for leisure, 17% for education, 18% for commuting and 4% for business

iii) Based around the data in the NTS database, and census data for travel to work, assumptions about the destinations of people by journey purpose. Using the same data, assumptions about mode of travel by journey purpose and destination. For instance, a substantial proportion of travel to schools remains local and is by active travel. Commuter trips further afield are mainly by single occupancy car.

iv) In addition, an estimate of the number of 'virtual trips' being undertaken for the purpose of work by people staying at home (i.e. home working).

v) Pre Covid, about 15% of people nationally were working from home at any single point in time in the working week. The expectation is that, nationally, this will settle down to about 25% post Covid.

vi) There is a tool that enables judgements to be made about the proportion of people working from home by UK area, based on the demographics and type of jobs. Running this for the South Ribble area suggests that 24% of people will be working from home or a Third Place in the near future, up from 15% pre Covid, a difference of 9%.

vii) For the purpose of assessment in the TA we applied a change of 5% to the pre Covid unfettered travel to work forecast to represent the change in home working. We did not apply any adjustment for the extensive sustainability measures and investments.

viii) A Predict & Provide approach would be to assume that the overall forecast of trip movements is inflexible. A Vision & Validate approach would allow for flexibility in the face of changing conditions and is normal.

ix) A consequence of the assumptions that we have made is that 58% of trips are contained within 5km of the site. As a sense check, in comparison, the National Travel Survey (NTS) reports that nationally 71% of trips are contained with 8km. The two statistics are not inconsistent.

x) A consequence of the assumptions that we have made is that 37% of trips are by sustainable modes (not single car occupancy). The TCPA Garden City Standards target that 60% of trips are made by non car means. In this respect we are a little light in our assumptions, the effect being a higher forecast for car trips than is both likely and desirable.

6.10 From this approach, we derived a vehicle demand flow across the day external to the local community. The TA used this to make further judgements.

The Road Network

6.11 In my view, the road network in the immediate area is relatively high capacity, and convenient. This is demonstrated by a look at journey times across the day. **Figure MA6-1a** and **Figure MA6-1b** shows journey routes and journey times across the day for those routes, pre Covid, and then in April 2021, the time of our surveys based on TomTom data. **Appendix MA-7** shows Google's interpretation of 'typical conditions' on the network by time of day.

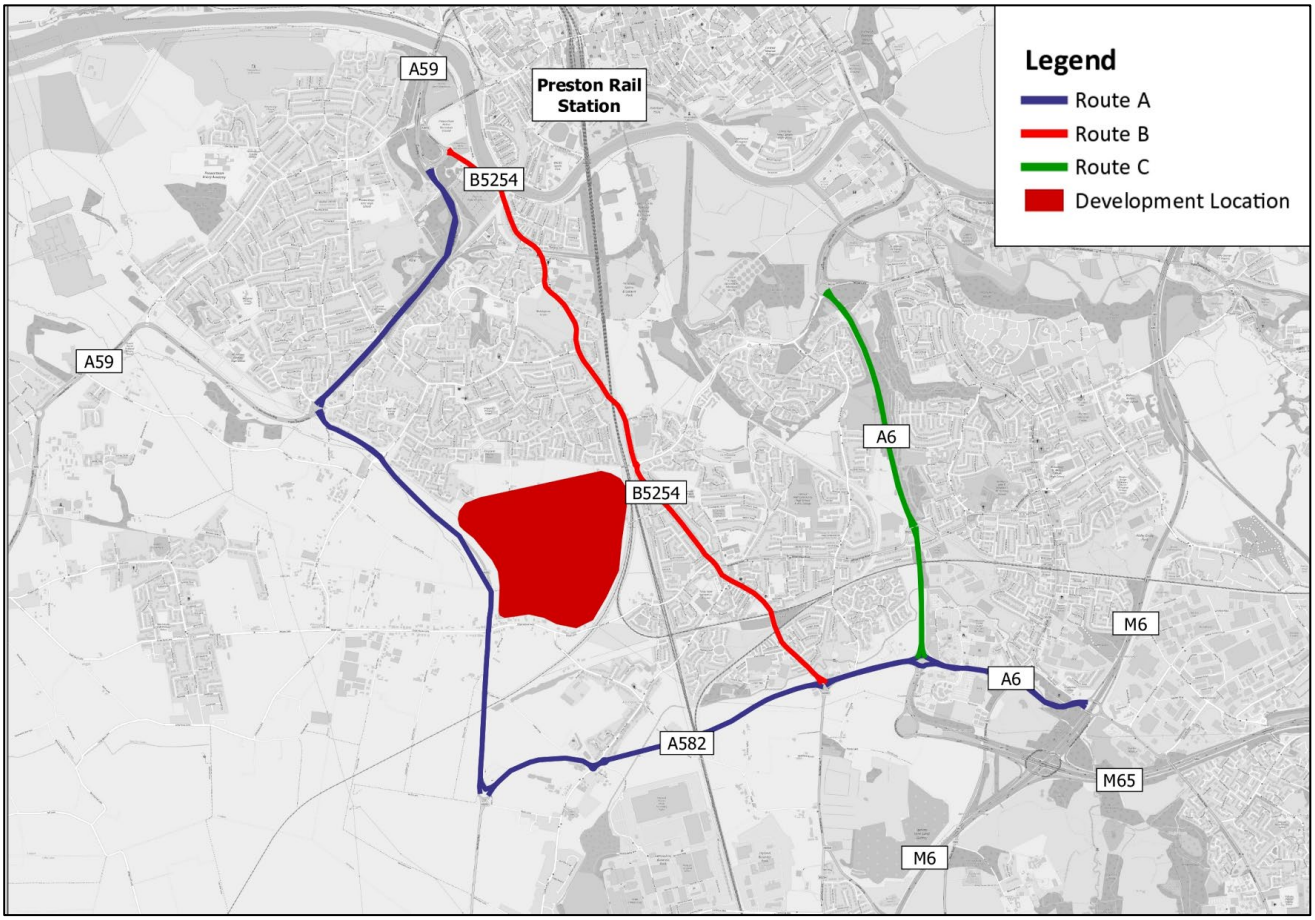

Figure MA6-1a: Journey Time Comparison April 2019 and April 2021

Figure MA6-1b: Journey Time Comparison April 2019 and April 2021

6.12 There is a relatively flat profile across the day in all circumstances, with short peaks in some cases.

6.13 The Penwortham Bypass was opened in December 2019, and so divides the dates of these surveys. The effect of the bypass on journey times across the A59 south west to north east and vice versa is journey time savings in the order of 3-5 minutes.

6.14 My view is that, with that much convenience in the system, this high capacity road network will continue to induce traffic, and that traffic volumes will increase as a result. That is not to say that this induced traffic should have a priority call on the network to the extent that appropriate local development, such as this development which is the largest housing allocation in the Local Plan, should be resisted or curtailed.

The Reference Case

6.15 The TA took a point in time, April 2021, to measure background traffic for the purpose of assessing the effects of the development. In addition, to get to a reference case (i.e. a forecast of the situation should the development not proceed) we added an unfettered estimate of traffic demand for committed development.

6.16 This is not necessarily a true reflection of the situation should the development not proceed, as if this allocated development does not proceed, then there will be demand for housing growth on a more ad hoc basis to fill the gap. However, for the purpose of assessment, this is the approach that we took, making judgements cognisant of that.

6.17 On the basis of V&V it is not necessary to either accurately forecast what background flows might be, or to save the convenience of the highway network in order to accommodate those 'maybe future demands' at the expense of appropriate local and sustainable development, except, as always, in exceptional circumstance. The purpose is to make judgements about the character of the network, whether that is an acceptable character, and how that might change with development and other interventions.

6.18 This is particularly so with the case here where the highway network is high capacity and convenient, with short and shallow journey time peaks.

6.19 The current position in 2022, or the April 2021 position, on traffic flows across the UK may or may not be the norm moving forward. Whether or not it is does not obviate the ability to make judgements regarding the characteristics of the network.

6.20 Since the onset of the pandemic, background traffic flows have been subject to fluctuation. Evidence from the DfT[24] indicates that daily private car traffic demands have generally reduced compared with before the pandemic (at about 94% of pre pandemic levels as of June 2022), and that delivery vehicle flows have increased (at 111% of pre pandemic levels for light commercial vehicles, and 105% for heavy goods vehicles). This is illustrated in **Figure MA6-2**.

6.21 April 2021 average traffic flows for all motor vehicles were at 89% of pre-pandemic flows, and 91% of June 2022 flows.

[24] DfT Transport use during the coronavirus (COVID-19) pandemic (June 2022)

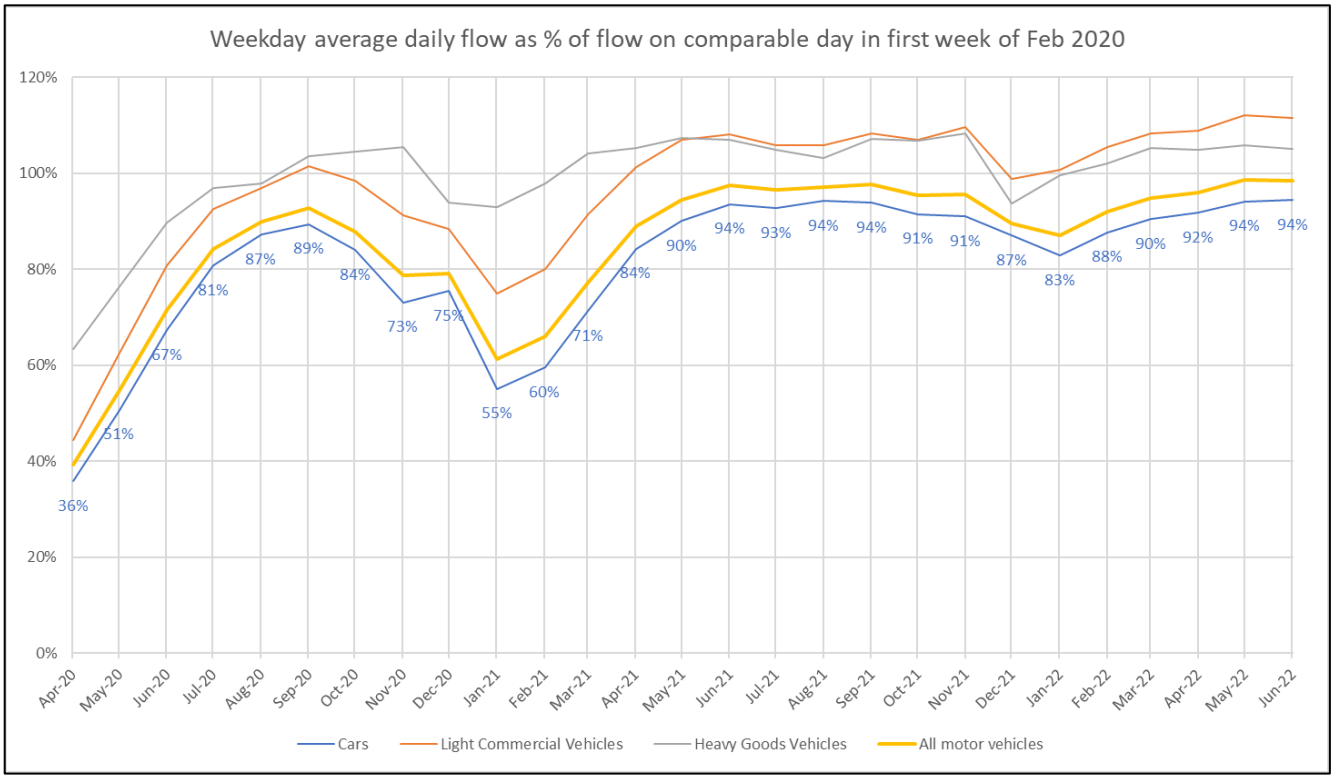

Figure MA6-2: DfT Post-Covid Vehicle Travel Trends Summary

6.22 The emphasis in transport planning is what one wants to achieve, as opposed to trying to forecast something and designing so that it must be accommodated (P&P). Therefore, fluctuations in flows (which by definition will be on relatively uncongested networks), or uncertainties about the future, are not constraints to good design.

Traffic Modelling

6.23 We employed a micro-simulation model, a Paramics model, to help inform our judgements. This works in a similar way to the strategic model, Saturn, used by LCC to support its A582 dualling planning application. It assesses convenience on the network and assigns traffic along the most convenient routes. This is an element of a Vision & Validate approach.

6.24 The differences are that a strategic model (Saturn) is cruder than a micro-simulation model (Paramics). Saturn does not contain a detailed understanding of junction performances. Paramics looks at the network, including junction performances, in far greater detail.

6.25 The benefit of Saturn is that it requires less data, and can therefore be used over wide areas. The benefit of Paramics is that it can be used to understand how junctions interact across a network and forecast characteristics at a much finer grain with greater confidence.

6.26 The difference between models is explained in **Appendix MA-8**.

6.27 The caveat with any model, including these, is that in no circumstance can a mathematical traffic model provide an accurate forecast of future reality. This is because the future is subject to multiple variables and uncertainties.

6.28 There is no empirical pass/fail trigger in traffic modelling. They aid in making judgements about characteristics, and cannot be an arbiter in their own right on the planning acceptability of development. I note the Create Streets recommendation in this respect to give traffic model results the same weight as an expert opinion from your design team rather than treat it as an exact science.

6.29 A model can give an approximation of transport network performance in a scenario defined by assumptions. The assumptions themselves are defined by a human as we have done in this exercise. When it comes to assumptions about the future, they are subject to uncertainties.

6.30 A model is a useful tool to aid professionals in making judgements about likely effects of interventions. To do this, the professionals have cognisance of the assumptions and the limitations. Even then, disagreement between modellers on the mathematical robustness of individual models is common.

6.31 A 'black box' mentality to modelling, assuming that the answers are the source of ultimate truth, is an inappropriate way to use a model. It would not accord with the policy requirement to consider 'likely' impacts (NPPF Paragraph 113).

6.32 Models in themselves do not account well for human behaviour, or the reaction of drivers to changing conditions. They will load traffic into the model in the way the assumptions specify. As a result, a model used as a black box has the ability to forecast greater problems than in reality will occur.

6.33 Micro-simulation models do make some allowance for this. They allow for route choice changes in either the face of increasing congestion or change in distance. They allow for interaction between different parts of the road network, and they are more practical in the results, providing journey time estimates through the network, compared with the older stand alone models, which can't do this.

6.34 We have used a micro-simulation model of the area shown in **Figure MA6-3**, cognisant of the assumptions and limitations, to make judgements about the future characteristics of the networks, and the way in which that may be affected as a result of the developments.

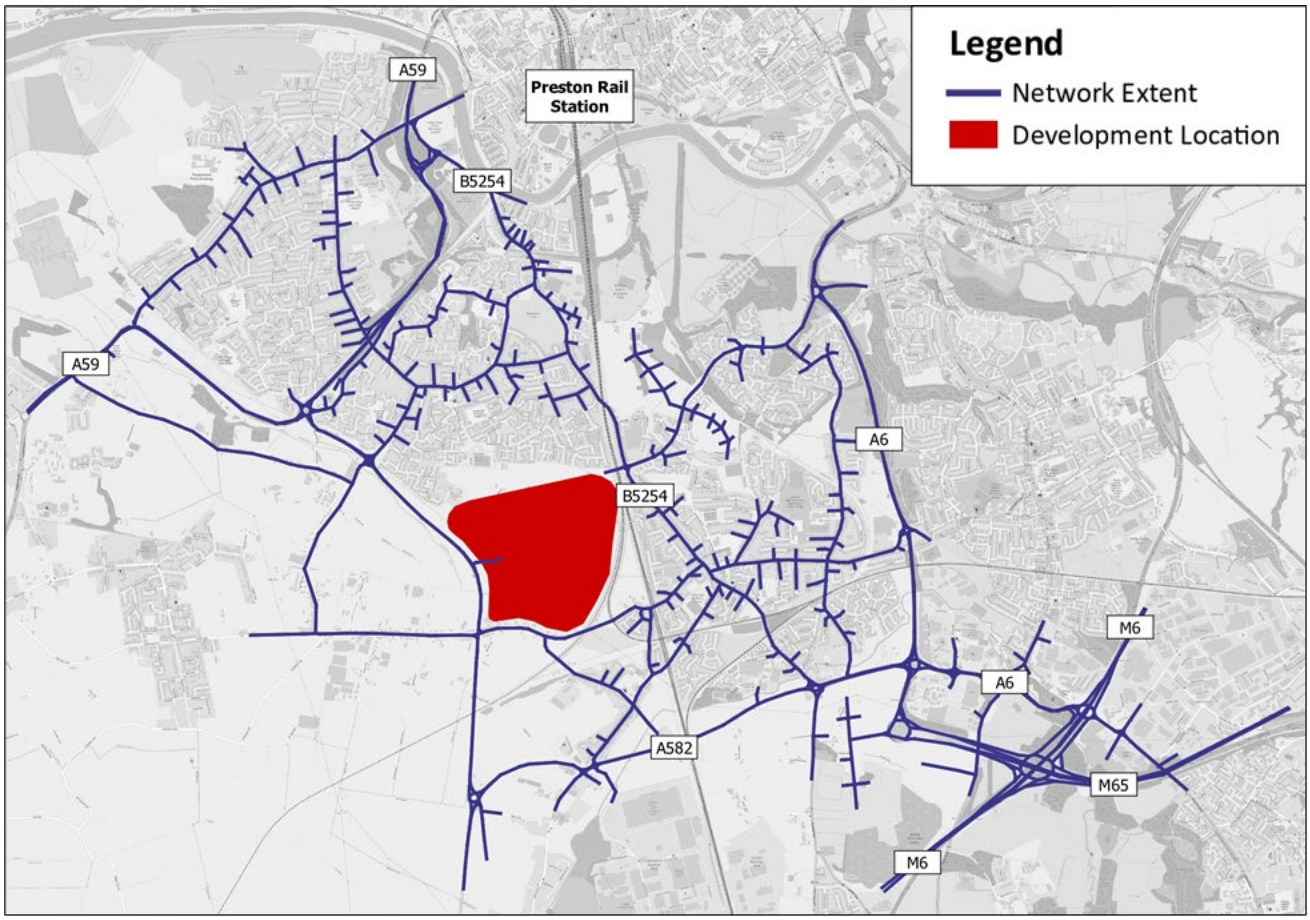

Figure MA6-3: Plan Showing Paramics Model Extent

6.35 The model was used to assign the forecast development traffic demand. The inputs to the model are where the trip starts from, and where it will end. The model assigns the trip to a route based on distance and time.

6.36 The development trip demand on the modelled network is shown in **Figure MA6-4** for an hour in the morning commuter peak, and an hour in the evening commuter peak.

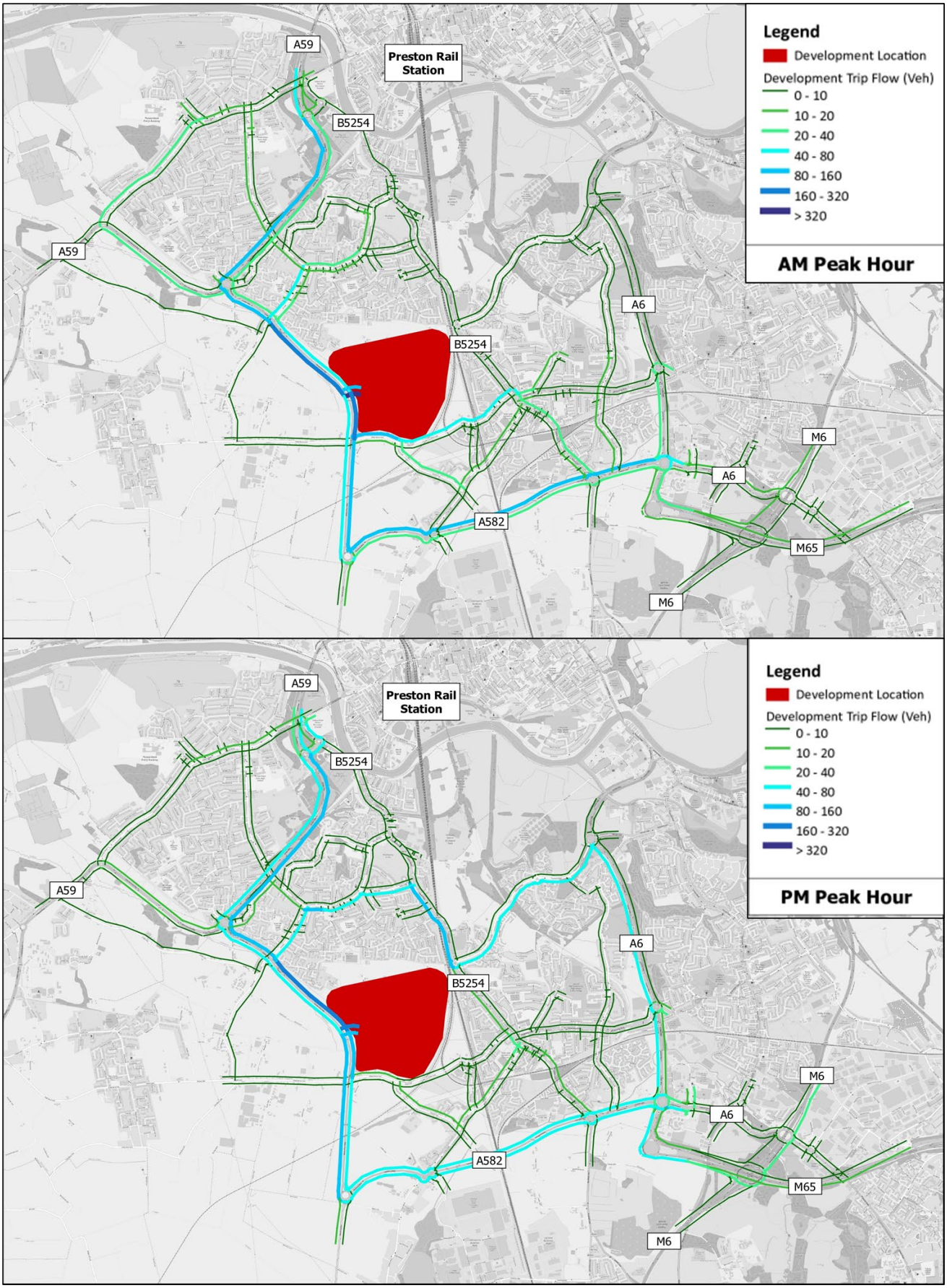

Figure MA6-4: Proposed Development Trip Peak Hour Assignment

6.37 As it is not the aim of planning policy to protect the convenience of the car commuter, I looked instead at the potential effects on a local route most likely to be affected by the developments, and which might be one of the more important when it comes to providing for business travel. This is the A59 and A582 route from the A59 in the north west to the M6/M65 motorway in the south east (**Figure MA6-5**).

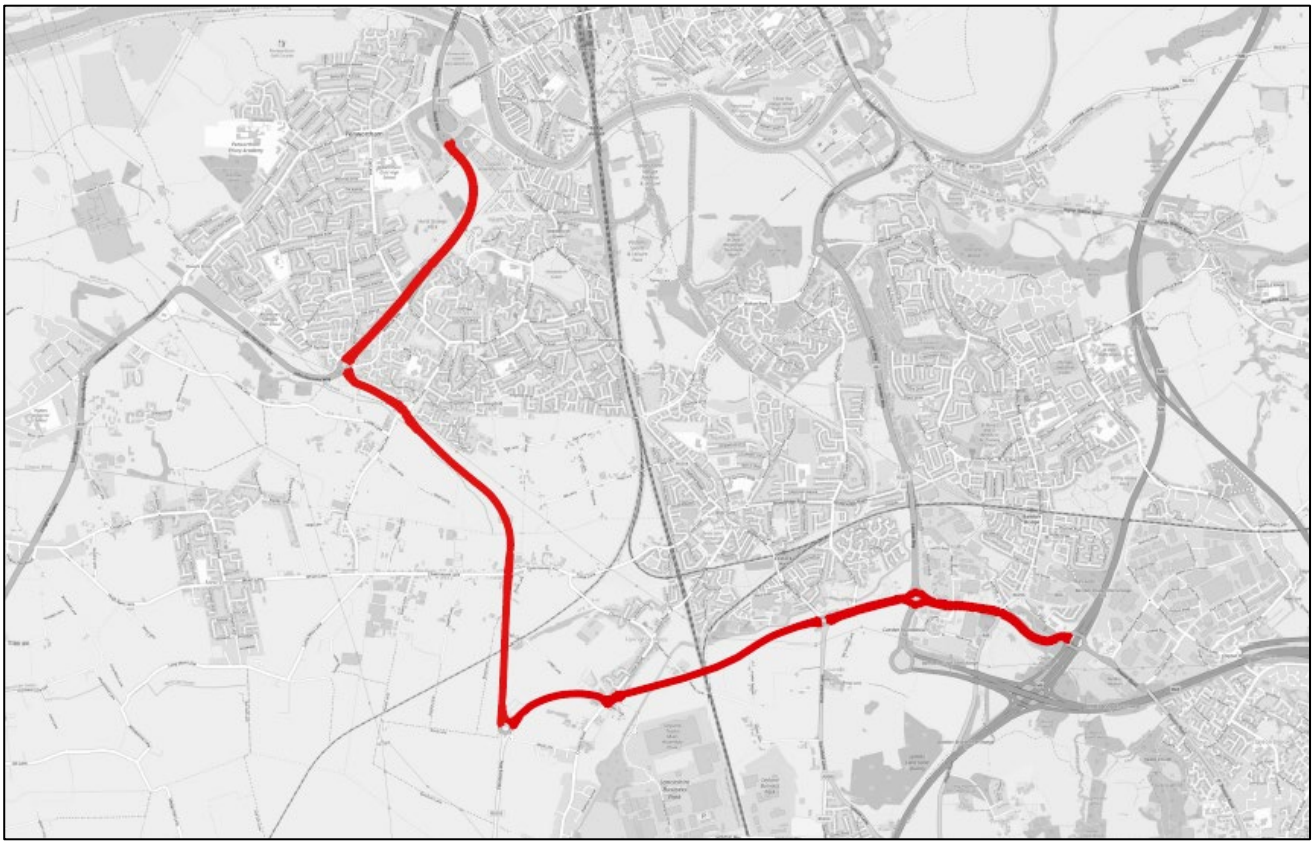

Figure MA6-5: A582 Journey Time Route

6.38 Travel convenience along this route will be affected in two ways. There will be inconvenience as a result of new infrastructure. The proposal includes a new signalled junction on Penwortham Way. This will stop and slow some traffic, where without the development traffic will be free flowing.

6.39 There will also be an effect on the network from traffic going to and from the developments.

6.40 The results from the model, which were also presented to the Councils in documents dated November 2021 (**Appendix MA-9**), are shown in **Figure MA6-6**.

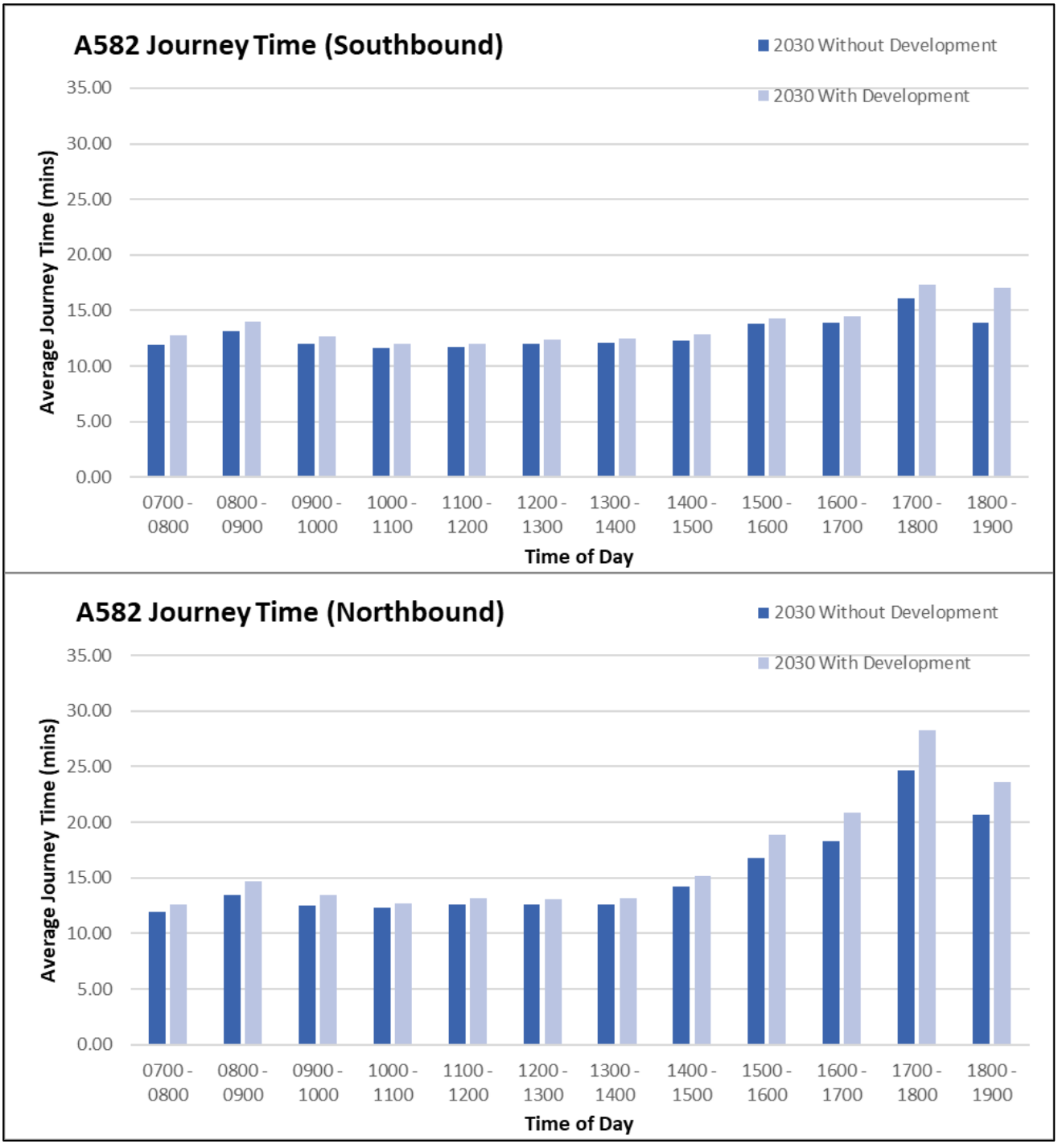

Figure MA6-6: A582 Journey Time Results Summary - Reference Case and Development Case

6.41 It is difficult to see a meaningful difference in the context of planning policy.

6.42 The southbound average journey time results show that the effect of the proposed development traffic is to increase journey times by less than 1 minute across 10 of the 12 hours. The maximum increase in southbound average journey time is 3 minutes 12 seconds on a typical journey time of 15 minutes which occurs at 18:00-19:00.

6.43 Northbound, the average journey time results show that the effect of the proposed development traffic is to increase journey times by less than 1 minute across 6 of the 12 hours, and the maximum increase in average journey time is 3 minutes 34 seconds on a typical journey time of 25 minutes which occurs at 17:00-18:00.

6.44 The scale of these increases is not significant when viewed in the context of a route that is around 5 miles in length and accounts for the inclusion of an additional signal junction on the A582 at the proposed site access, which would be expected to introduce some inherent additional delay to the journeys along the route.

6.45 In addition, I have run this model with a notional 10% uplift in the flows measured in April 2021 in order to make judgements about sensitivity. This is a very crude approach. In practice any general uplift in flow will not be uniform across the network and by time. In more congested locations and times, the uplift will be relatively lower than in less congested locations and times. However, cognisant of this, the journey time results for the same strategic route are in **Figure MA6-7**.

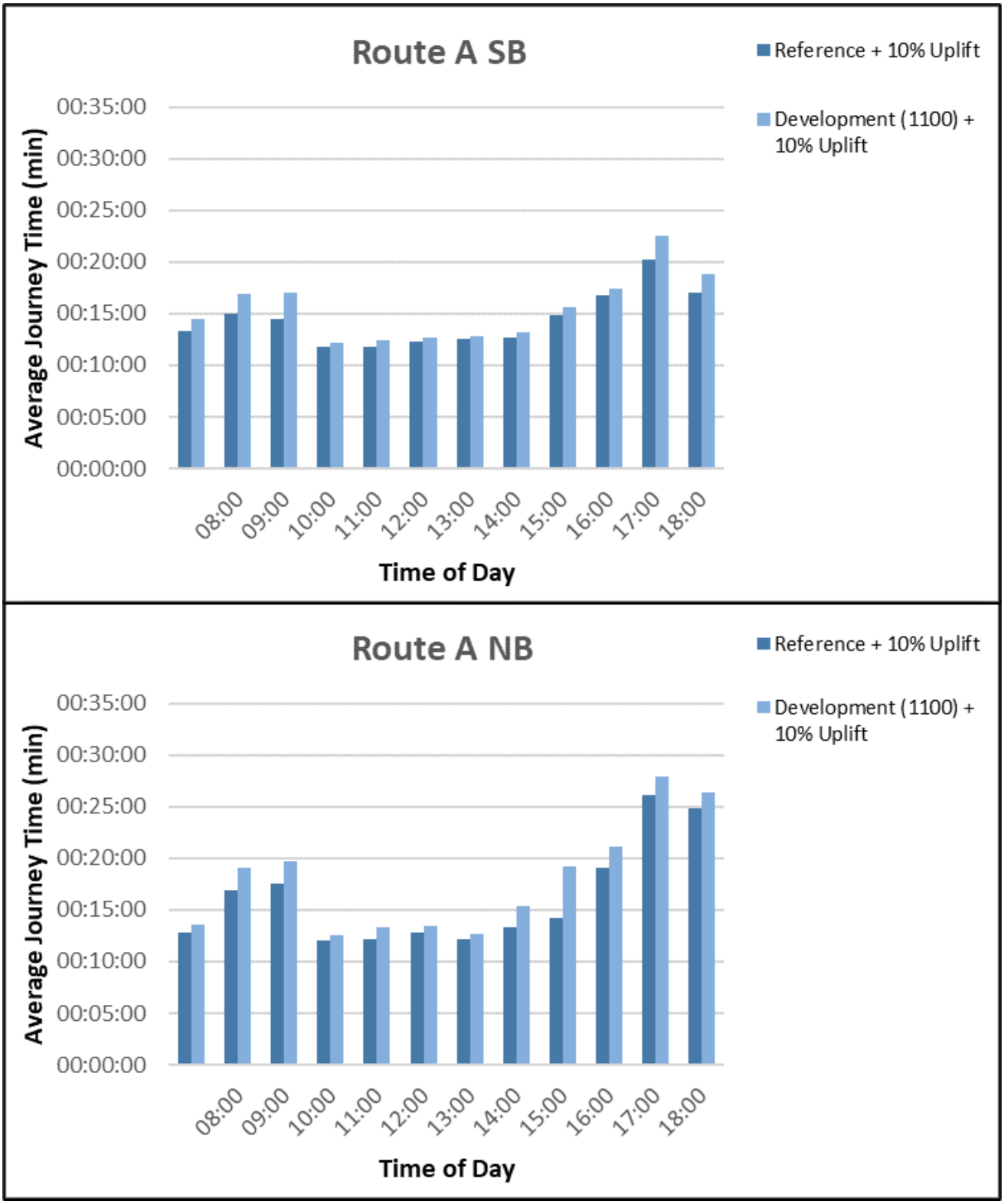

Figure MA6-7: A582 Journey Time Results Summary - Reference Case and Development Case with 10% Background Uplift Scenarios

6.46 My judgements are not changed by this assessment. For example the southbound average journey time results show that the effect of the proposed development traffic in this 10% uplift scenario is to increase journey times by less than 1 minute across 7 of the 12 hours. The maximum increase in southbound average journey time is 2 minutes 21 seconds on a typical journey time of 25 minutes which occurs at 17:00-18:00. This is lower than the maximum increase shown in the no uplift scenario.

6.47 Northbound, the average journey time results show that the effect of the proposed development traffic is to increase journey times by less than 1 minute across 4 of the 12 hours, and the maximum increase in average journey time is 4 minutes 59 seconds on a typical journey time of 15 minutes which occurs at 15:00-16:00 and is not significantly different to the scale of the change in the no uplift scenario.

6.48 Using the V&V approach, it is reasonable to expect displacement of traffic demand (whether development related or background traffic) to minimise inconvenience in the round where inconvenience is growing to such levels that people start to think about alternatives, whether routing, time, mode or something else.

6.49 The model already makes a judgements about routing. This is embedded in the results. It is incapable of making judgements about time, mode or something else.

6.50 I expect, looking this far into the future, that there will be some temporal shift, mode shift, or lifestyle shift effects in some of these busier periods with or without the development, as the development itself makes little difference in practice. However, in my judgement the journey times are not so substantial that these will be significant, and may be as much to do with changing attitudes and changing lifestyles as a reaction to congestion. I have not reassessed journey times to take this into account.

6.51 It is for the Highway Authorities to decide what it wants this wider road network to achieve. If it chooses to build bigger to attract traffic and to maximise convenience for through traffic, that is a strategic decision that is beyond the scope of these Applications. I understand that this may be LCC's intention given its as yet undetermined planning application for dualling of Penwortham Way between Golden Way to the north, Longmeanygate to the south and Leyland Road to the east.

6.52 Critically, whether or not that strategic increase in road capacity is deemed appropriate, and this is something that we won't know until the dualling application is determined, it is reasonable based on the evidence here, to judge that these developments do not prejudice that aspiration.

6.53 I have also interrogated the situation at the motorway junction. The likely additional development demand at the M6 Junction 29 and M65 Interchange is less than 1% at either junction. In absolute terms there is no reason to suppose that there will be blocking back onto the motorway as a result of the scheme. Being further away from the site than the local junctions, these forecast percentage changes in demand are consistent with the marginal increase in homes (0.8%) that these developments contribute to the Preston built up area, as I discuss further in Section 7.

6.54 Given the Vision & Validate approach to transport, the elasticity of demand in the face of changing congestion, the priority afforded to car commuter convenience compared with sustainable transport options and the Local Plan status of the proposal, my view is that traffic impact alone would have to be quite extreme for there to be a 'severe adverse impact on the local highway network'. To prevent this development from being delivered on traffic impact grounds would, in my view, require a change in the character of the network across the day that is impossible to reasonably envisage from any of the submitted evidence, either mine or in LCC's A582 dualling application.

6.55 Therefore, I judge that the traffic impact of the developments will be within reasonable bounds, and that the absolute performance of the road network will be within reasonable bounds. There is no reason to protect or 'save' ultimate convenience of the road network for notional future traffic demands at the expense of this appropriate local development, that contributes positively to local living, climate, health and community.

6.56 In the course of this work I have noticed that if one were to prioritise funding to road capacity, that the most noticeable constraint to convenient traffic flow on the network in a commuter peak is the Croston Road and Stanifield Lane junctions on the A582 (see previous **Figure MA5-12** for location) west of the motorway.

6.57 Highways improvements at these junctions are included in LCC's Dualling Application. I have run the Paramics model with the inclusion of the Croston Road capacity improvement. The modelled effect is that the journey time in the peak periods for Route A in the Development Case now match the journey times in the Reference Case (**Figure MA6-8**).

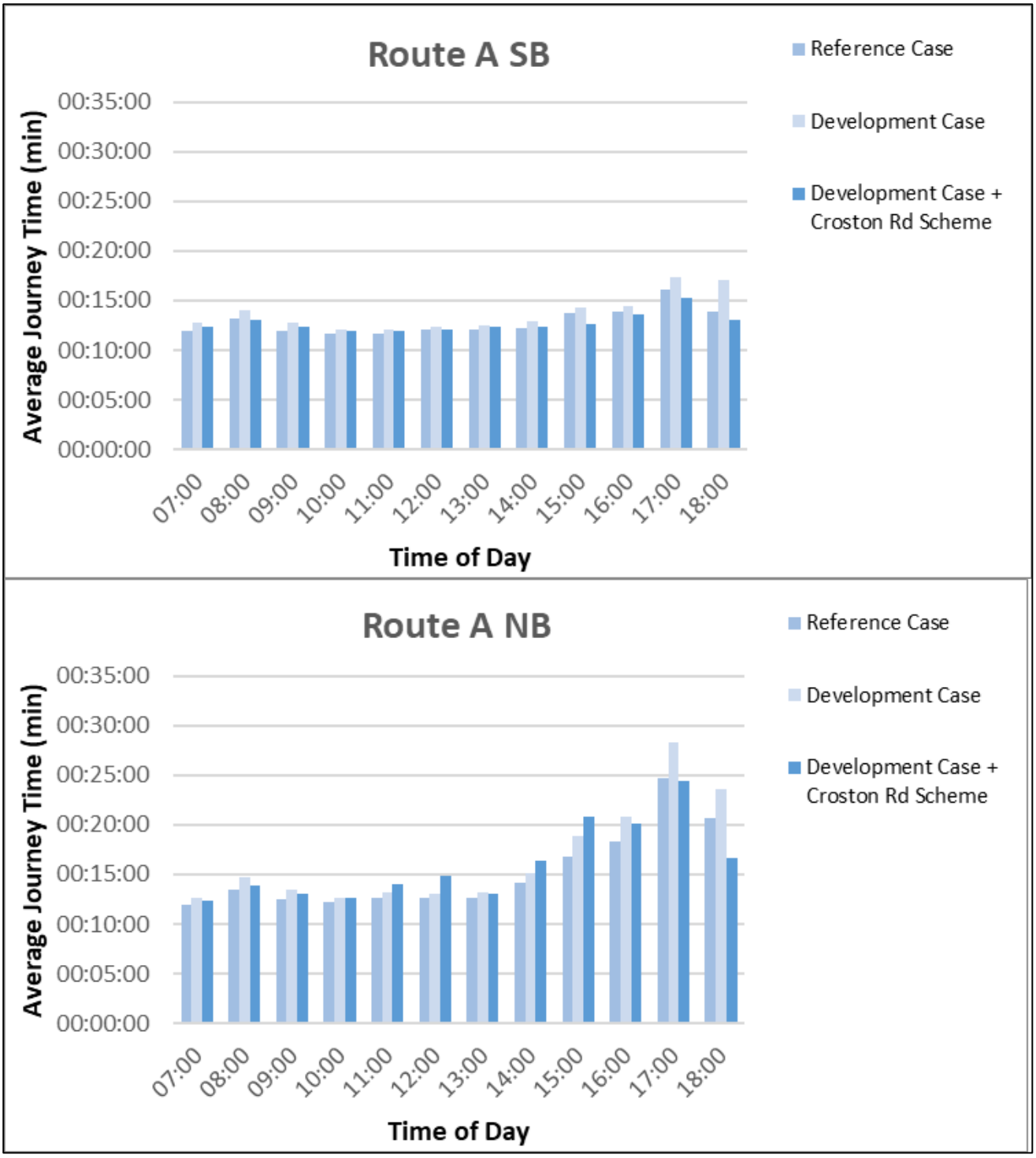

Figure MA6-8: A582 Journey Time Results Summary – Croston Road Scheme Effects

6.58 Mr Alsbury explains that this proposal makes an appropriate CIL payment. The Local Plan relates the CIL payment to the provision of 'further transport infrastructure' which includes "proposals to upgrade links and junctions on the A582"[25]. The upgrade of this junction is included in the Dualling Application.

6.59 LCC's Dualling Application does not publicly specify the expected cost of delivering these junctions. However, Mr Alsbury explains the value of the CIL contribution from this proposal. A substantial contribution to the cost of upgrading these junctions can be made from the CIL contributions if the Councils were minded to allocate it in this way.

6.60 I do not consider the upgrade of these junctions necessary in order to make this development acceptable, or as necessary mitigation in order to avoid a severe adverse impact on the local highway network. However, if for other reasons the Councils consider this upgrade desirable and a high priority then the Council can spend some of the CIL contribution on it, and in this respect the proposal facilitates the delivery of it.

[25] Local Plan para 6.12

7 Overview of Case

Predict & Provide vs Vision & Validate

7.1 Guidance from professional organisations I have identified in Section 3, including the DfT, is that Predict & Provide (P&P) should no longer be used for assessing the UK's local traffic networks, and an approach called Vision & Validate (V&V) is used instead.

7.2 A Predict & Provide approach to traffic network assessments is where a forecast is made of the number of people that might like to travel by car in peak periods in the future, and the road network is then designed to accommodate that conveniently. A P&P assessment often assumes that traffic volumes, both measured and forecast, are fixed (i.e. that they are inflexible and that they will remain the same 'come what may'). This approach then assumes that the predicted traffic demand must be accommodated conveniently.

7.3 The proxy for assessing 'accommodating conveniently' had sometimes been whether the percentage figure for 'demand vs capacity' was under 100%, and derived over a single hour from a standalone traffic model run for a commuter peak period.

7.4 A standalone traffic model is a model of an individual junction, such as use of a LinSIG or Arcady model, which, by its nature as a standalone junction model, cannot account for real life interaction between junctions and other facets of the road network. Unlike in real life, as all drivers do in reality, the models cannot flex traffic demand in light of changes in congestion. This approach prioritises commuting car drivers.

7.5 Most UK towns and cities have junctions that operate at or beyond this historical threshold. Therefore, if this approach were to be taken in most towns and cities, there would have to be a widespread moratorium in housing growth, or widespread local road building (including network and junction upgrades), neither of which are consistent with current planning policy.

7.6 A Vision & Validate (V&V) approach to design and assessment of the transport networks is the appropriate interpretation of planning policy according to the guidance I have previously identified.

7.7 Taking a V&V approach means starting with the vision of what one wants to see in terms of local living and transport choices and designing to achieve it. This method should concentrate on 'accessibility', (i.e. access to day-to-day facilities by a variety of means). It considers accessibility by all modes, and across the entirety of the day, not just the peak commuter periods.

7.8 A V&V approach includes taking consideration of vehicular traffic, including in the peak periods, but it does not necessarily afford this ultimate priority. It expects traffic demands to be influenced in many ways, including by travelling conditions (for instance pedestrians crossing, buses stopping) and varying levels of congestion, in a way which a P&P approach does not.

7.9 Given the hierarchy for local movement in policy, where active travel and public transport occupy the highest priorities, the relevant policies do not generally afford the convenience of travelling by car in the local area the highest priority.

7.10 With a V&V approach there is no mathematical traffic-based pass/fail trigger for acceptability of development.

Traffic Modelling and the Vision & Validate Approach

7.11 Traffic models can be used to inform a V&V approach. They are often used as a tool to assist in making judgements as opposed to being the determining factor. Strategic traffic models, such as Saturn, which has been used by LCC for its own planning application for dualling of the A582, which I explain later, follow a general V&V approach. They assign traffic iteratively to those parts of the road network that enable fastest journey times. In this respect these strategic traffic models assume that drivers react to road conditions.

7.12 Micro-simulation models, such as Paramics, which we have used, is a finer grain version of a strategic model. It also adopts a V&V style approach. It assigns traffic to the most convenient routes. The 'in principle' difference between a strategic model and a micro-simulation model is that the micro-simulation model includes far more detail about the road network, the nature of the roads (i.e. buses stopping, pedestrians crossing etc) and interaction between different parts of the road network using a car-following theory (just as drivers do in reality).

7.13 Neither of these model types relies on an empirical pass/fail result, including on a 'percentage of demand vs capacity' basis as standalone models do. There is no reason to do so. They provide results in terms of journey times. By and large, the consequence of demand being greater than capacity over a period is that a queue forms in that period. These models apply that to journey time, which is a more tangible real world phenomenon.

7.14 Standalone models can still be used as part of a V&V approach. As with all models, the results need to be interpreted cognisant of the inputs and limitations, but this is more so with standalone models. There needs to be a human brain interface (i.e. manual user intervention) to enable iterative testing in a situation where junctions are operating at their maximum capacity, which in most towns and cities occurs for at least some of the time. Without this safeguard, and because these models can never adequately reflect actual human behaviour, these models, more so than any of the others, have a tendency to forecast chaos where none in reality will occur.

7.15 I have not yet seen the traffic impact work that I understand LCC is undertaking. However, I believe it to be solely carried out on a P&P basis with standalone models. My assessment is, for the reasons set out above, based on a V&V basis.

7.16 I understand that one of the Inspector's main issues is whether or not the proposed development would have a severe adverse impact on the local highway network. The interpretation of what a 'severe adverse impact on the local highway network' is and means in the context of the NPPF depends on the approach, whether P&P or V&V. Therefore, I expect there to be a difference between us on what 'severe adverse impact' means, and there may be a difference in whether there is one or not. I will not know this until I have seen LCC's work.

The Approach

7.17 I believe that the appropriate interpretation of planning policy and guidance is to provide a well designed movement network in the round to complement location and masterplanning, and that to do so requires a Vision & Validate approach.

7.18 I have approached transport, traffic and accessibility in the context of the most important matters of the day, climate and health, and on the basis that it is appropriate to consider this across sectors (i.e. transport is not a subject in its own right).

7.19 Many say that the biggest issue facing the planet, and everything in it, today is Climate Change. Protecting the environment, and moving to a low carbon economy is of global and local importance.

7.20 South Ribble Borough Council (SRBC) agrees. In 2019, SRBC declared a Climate Emergency, making a pledge to work towards making the Borough carbon neutral by 2030. In 2020 SRBC approved a Climate Emergency Strategy, summarising the global, national and local needs for such action. In July 2021, SRBC published a Climate Emergency Action Plan.

7.21 On my understanding of current trends, and drawing on evidence from my research colleagues, the 2030 target is highly ambitious and requires an effort, boldness in approach and ability to make brave judgements, rarely seen before. SRBC recognises the need for ambition, and says that this is necessary in order to provide a healthy and sustainable borough for generations to come[26].

7.22 The evidence is that containing the global rise in temperature to 1.5C from 1990 levels may avoid the most severe consequences[27]. We are not currently on a trajectory to achieve this.

7.23 This matters to these Applications, firstly because it matters to everything that we do, and secondly because transport represents about 25% of Europe's greenhouse gas emissions.

7.24 In the context of Climate, the EU has specifically addressed transport. It has set a target of a 90% reduction (in comparison to 1990) in transport related greenhouse emissions by 2050[28]. However, that is not sufficient in its own right as if one doesn't take major action now, the 1.5C limit will be breached well before then. Therefore, it has also introduced a 'Fit for 55' target, which is a target to cut greenhouse emissions by at least 55% by 2030. This is not as ambitious as SRBC's pledge.

[26] CD10.51 SRBC Climate Emergency Action Plan 2021

[27] CD10.52 IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels

[28] CD10.53 The European Green Deal 2019

7.25 Maintaining a P&P approach to local traffic, as I understand LCC to be doing, is inconsistent with this because it attracts, rather than dissuades, movement by private car. It is inconsistent with the SRBC climate pledge. It is inconsistent with the guidance and advice from the industry's main professional bodies.

7.26 V&V as the necessary approach, and which has replaced the typically abandoned P&P, is expressed, amongst others, by TCPA (Town and Country Planning Association) in the Garden City Standards, the RTPI (Royal Town Planning Institute), the CIHT (Chartered Institution of Highways and Transportation), and most recently by the DfT (Department for Transport) in its 2021 Decarbonising Transport report.

7.27 In traffic terms, V&V employs what is often called the 'first law of transport' which is that on a busy network, the volume of traffic is increasingly a function of the available road space. If you want more vehicles then build more capacity, if you want less vehicles then reduce road space. It is based on the premise that people act to minimise their inconvenience, and that the convenience for movement by single occupancy car is not typically afforded the highest priority in the local context.

7.28 Building in more local road capacity, and thereby increasing local traffic flow, which I understand the LCC approach may be, is the antithesis of what is required to achieve the climate targets.

7.29 From a health perspective, the aim is to maximise physical activity (physical health) and maximise interaction between people (mental health).

7.30 In the transport context this is best achieved by creating an environment which maximises activity at a local level and an 'active travel' or public transport scale. Active travel is mobility by foot, cycle or micro-mobility. Micro-mobility is use of a lightweight vehicle, either human powered or electric, such as scooters or electric bikes.

7.31 From a transport perspective, and according to the RTPI and the EU which I have previously explained, the aim is to; ***avoid*** trips where possible; ***shift*** *modes* where that can be done, and lastly ***improve*** *the efficiency* of the vehicle, including by switching fuel to sustainable electric generation.

7.32 This is not a new approach. In a Secretary of State decision to approve two housing developments in Hartford, Cheshire, in 2013, the Inspector concluded in his judgement that it is not the aim of planning policy to protect the convenience of commuting car drivers [29].

7.33 I refer to the abovementioned decision, explaining how this is an earlier example of an Inspector and the Secretary of State adopting a V&V approach, which resulted in approving appropriate development in a more heavily congested road network than exists here, with no reason, or attempt, to increase road capacity to accommodate either an existing or a forecasted traffic demand.

[29] SoS Decision, Inspector's Report para 14.45 Hartford (Cheshire) Inquiry 2012 – Extract at CD10.44

The Characteristics

7.34 The overarching objective on Climate, and the local targets, will be best served by developments that do better than past developments. Doing more of the same will result in the same. The climate targets are extremely ambitious, transport is the biggest opportunity, and this development is a best opportunity for SRBC to both minimise carbon emissions per unit of housing growth, and create a catalyst for necessary change within the Borough.

7.35 These developments will add about 1,100 homes to the Preston built up area which is an approximate increase of 0.8%[30].

7.36 The developments are designed to maximise the benefits of the sustainable location[31], to link to, and form part of, the existing communities. The approach taken has started with designing a community as accessibility is a fundamental subset of building a community. In doing so, I have drawn on my experience as a Design Council Expert (DCE) and New London Architecture (NLA) mobility expert.

[30] Based on Census 2011 Data for Population and Households in the Preston Urban Area

[31] Main SoCG para 2.3

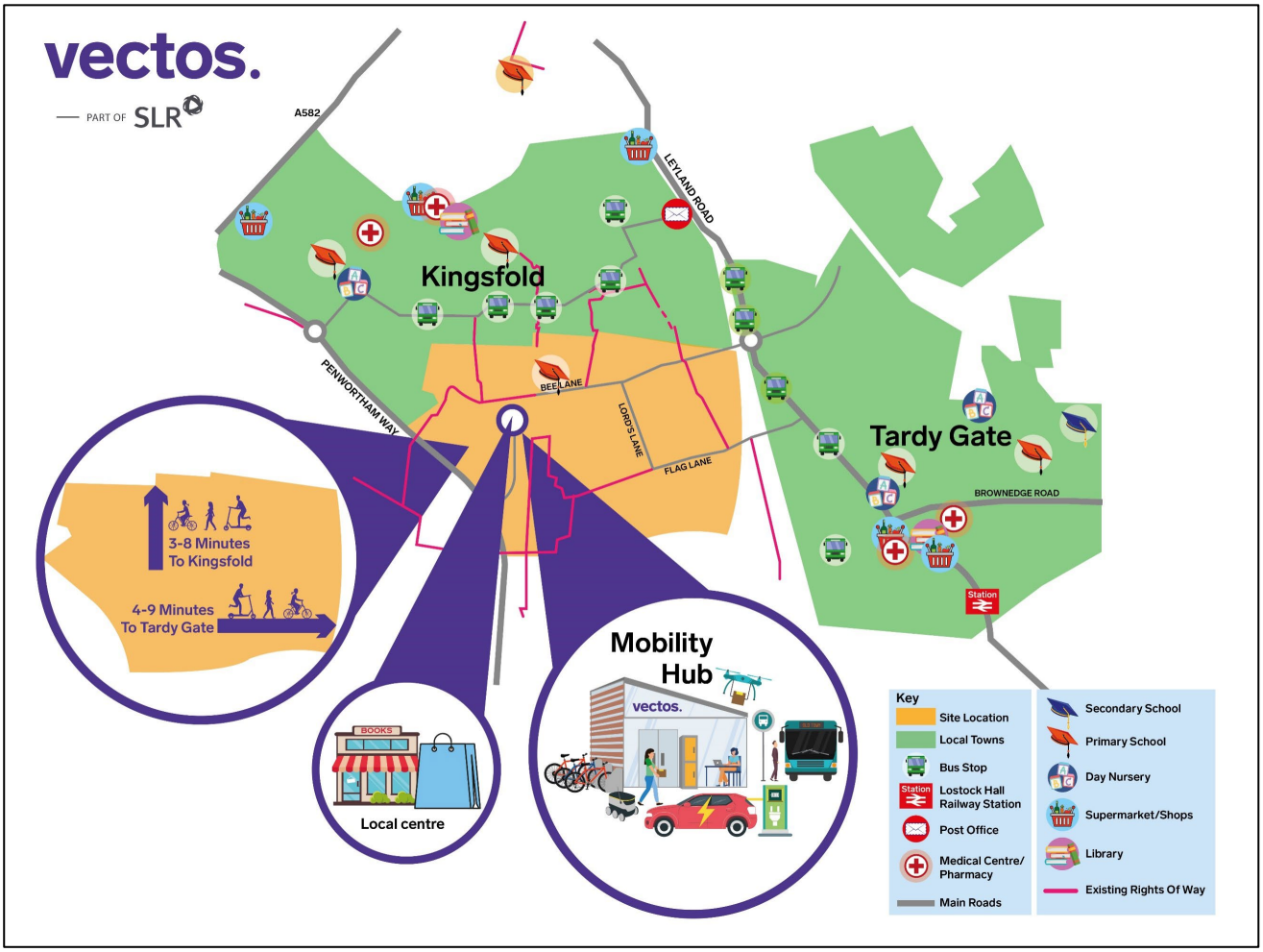

Figure MA7-1: Communities and Facilities in Local Area

7.37 The aim is to maximise accessibility to desirable facilities by a choice of means. It is to maximise the relative convenience of the most sustainable forms of mobility.

7.38 The context for localisation is journey purpose. Typically, pre Covid across the whole day, 62% of activity was related to leisure (including dog walking, visiting friends and buying staple food products), 17% was for education, 18% for commuting and 4% for business[32]. Post Covid, I have previously noted that the expectation is that working from home at any point in time will have increased to 25% from 15% pre Covid[33] and so the commuting and business travel elements will have reduced.

[32] Table NTS0502 August 2020

[33] Vectos Working from Home Calculator

7.39 The hierarchy of movement, with highest priority first is digital accessibility (virtual travel), active travel, and then shared travel, which includes buses, rail, and shared vehicles, followed by single car occupancy.

7.40 The general switch to electric vehicles won't come soon enough to meet the climate targets, and on its own to maintain global temperatures below 1.5C[34]. However, the task for the development is to maximise the use of electricity as a fuel where vehicles are used, in preference to petrol or diesel.

7.41 The development's location and planned facilities influence the characteristics for travel, including in the following ways:

i) Providing day to day facilities, including basic shopping, access to people and leisure space, and access to local education in order to establish long lasting habits;

ii) Providing a network of Primary and Secondary Mobility Hubs, with temporary Hubs from the outset of development, moving to a permanent Primary Mobility Hub in the Local Centre, and Secondary hubs as development proceeds;

iii) Providing the Primary Hub with 'fix your own' bike space, hire bikes, scooters and other micro-mobility as it emerges, car share, and a car pooling platform;

iv) Providing a Community Concierge (CC) presence from the outset. The CC team manages the Mobility Hubs, administers the Hub café, is the face and heart of the community, liaises with schools and businesses, creates the micro-consolidation centre for parcel delivery and fulfils other community functions;

v) Creating permeability through multiple access points including with neighbouring communities;

vi) Upgrading the Bee Lane and Leyland Road junction to better provide for active travel, connecting the site with the cycleways leading to Preston city centre.

vii) Committing to a design for the internal layout that prioritises community integration through active travel corridors, and delivers public realm at the 'pedestrian scale.'

viii) In addition to the shared travel facilities at the Mobility Hubs, underwriting the delivery of buses connecting the development with Preston city centre, to run in addition to, and to complement, the very good services that already run through the neighbouring and accessible communities.

[34] CD10.46 DfT Decarbonising Transport (p6)

ix) Providing an active travel and shared travel connection that provides a cross borough link in these respects, achieving an east west link across the urban area, and connecting with the north south Old Tram Road network to Preston city centre and railway station.

x) Providing a Monitor and Manage mechanism, administered by a Steering Group that includes SRBC and Lancashire County Council (LCC), and with a Flexible Transport Fund of £1m. The aim of the mechanism being to continually monitor accessibility, and the effectiveness of sustainable movement measures, in light of changing conditions and technologies, and maximise their effectiveness

xi) Providing access options by many means of transport, including digitally, by active travel, shared travel and single occupancy use of the private car.

xii) Providing car charging facilities at every property that accommodates cars, and fast charging elsewhere within the site.

A582 Dualling

7.42 LCC has aspirations to dual the A582 from Golden Way to the Longmeanygate junction and the Stanifield Junction (**Figure MA7-2**). This aspiration is reflected in a live planning application dated 2020, for which there are a number of supporting documents.

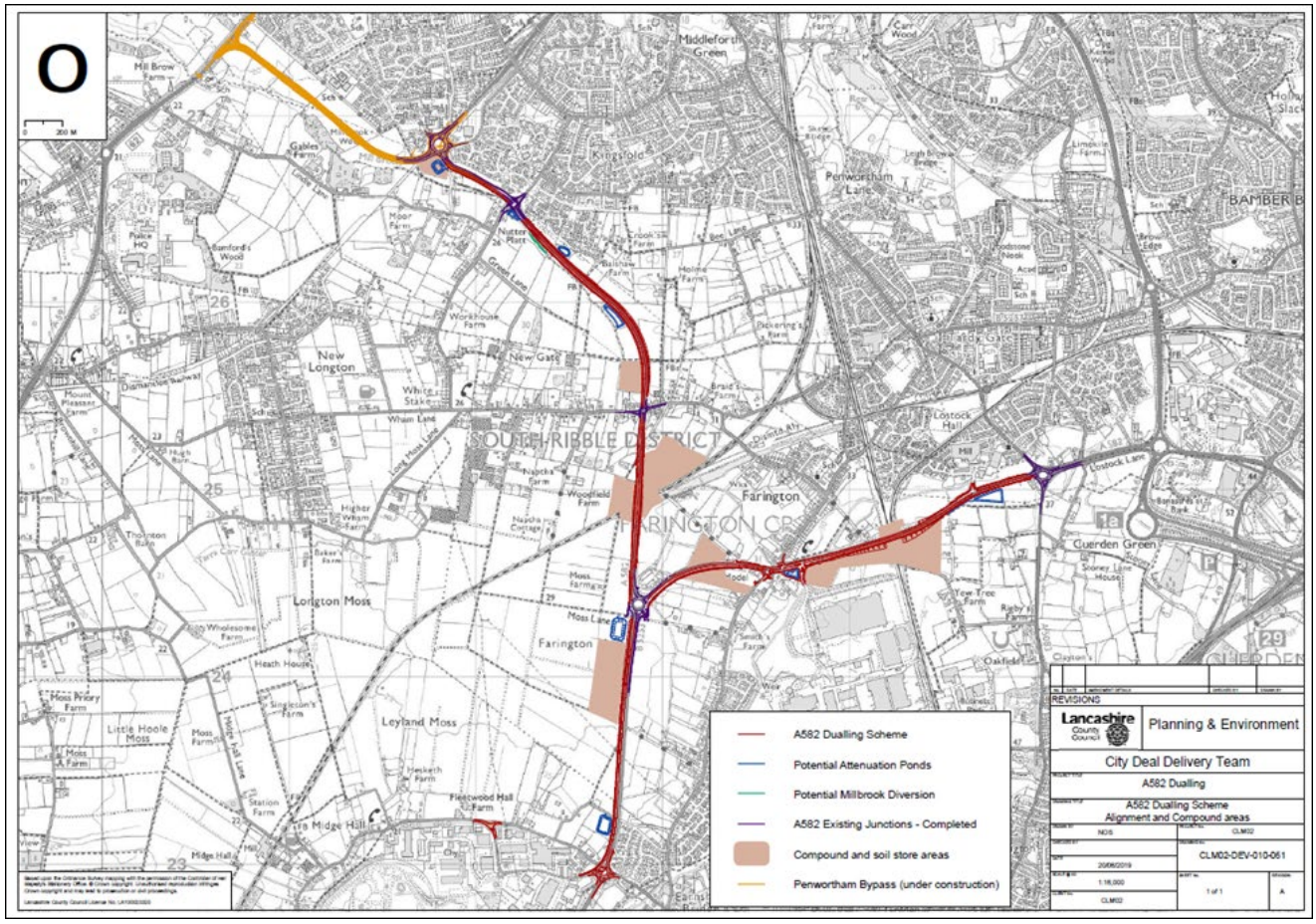

Figure MA7-2: LCC Dualling Scheme Plan

7.43 The supporting documents include forecasts for the performance of the local highway network in 2022 and 2037, with and without the dualling scheme. The assessment carried out by LCC includes five scenarios, as follows:

- Scenario 1: A forecast for traffic in 2022 without the dualling scheme in place
- Scenario 2: A forecast for traffic in 2022 with the dualling scheme in place
- Scenario 3: A forecast for traffic in 2037, including committed development and additional other traffic growth (which I explain later does not specifically include Pickering's Farm, but which includes a general uplift in homes that encompasses the number of homes provided by the Pickering's Farm allocation), without the dualling scheme.
- Scenario 4: Scenario 3 but with the dualling scheme in place and also with the full CBLR in place across the site
- Scenario 5: Scenario 4, but without the CBLR in place across the site

7.44 The assessment reports local journey times with and without the A582 dualling scheme in the commuter peak hours as follows:

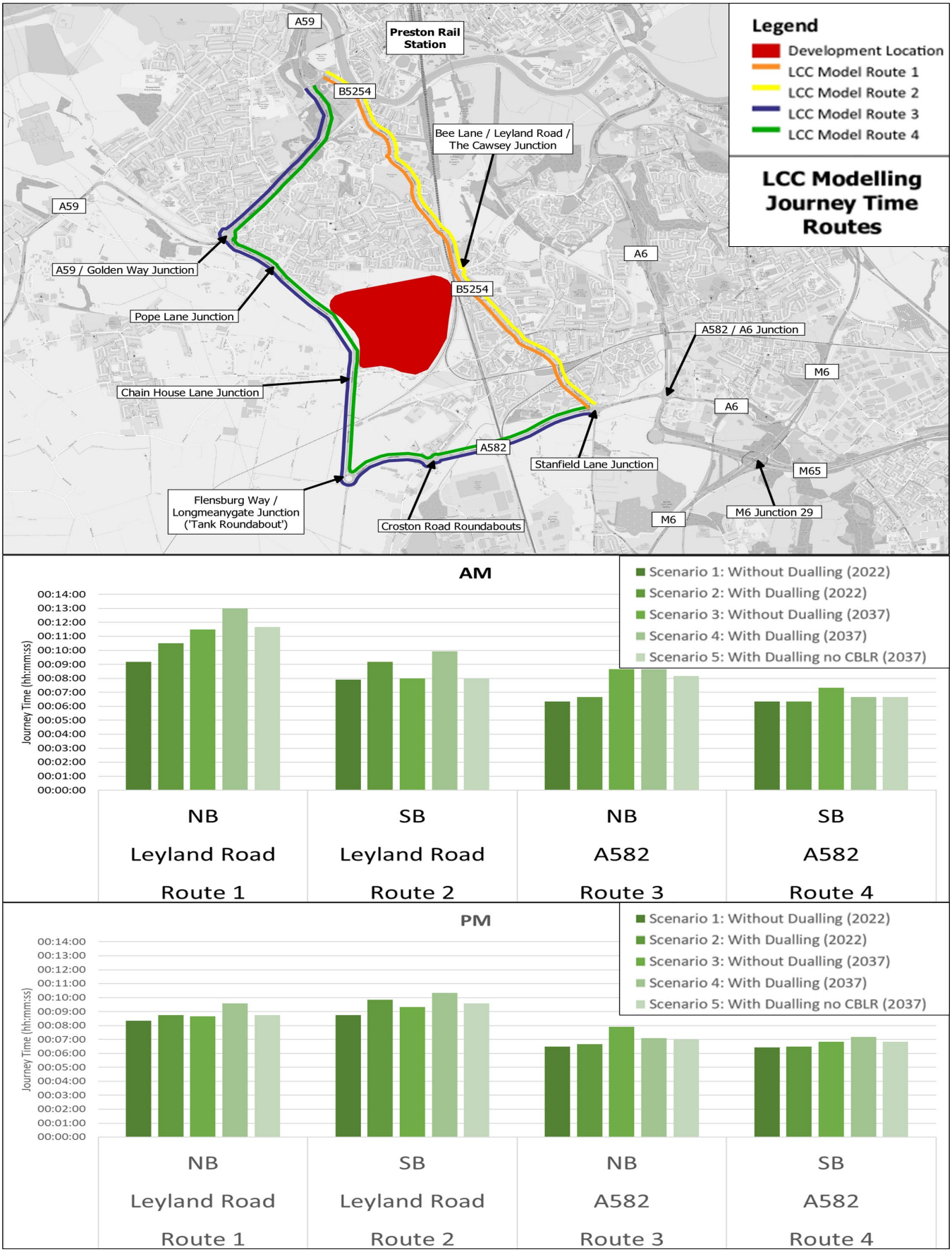

Figure MA7-3: Reported Journey Times from LCC Dualling Scheme Application

7.45 There is an apparent inconsistency between the Local Plan and the A582 Dualling Business Case. LCC's Business Case for the dualling scheme makes a statement that the dualling scheme is necessary for the delivery of both the Pickering's Farm allocation (Policy C1 in the Local Plan) and Cuerden Strategic Site (Policy C4 in the Local Plan)[35]. I have been unable to find evidence or reasoning to support that statement in the submitted documents. It is a statement made by LCC to the consultants undertaking the work[36].

7.46 I do not agree that the dualling scheme is necessary infrastructure for delivery of the Pickering's Farm allocation. I note that the journey times reported by LCC, explained in **Figure MA7-3**, show no substantial difference in travel times, from a policy perspective and bearing in mind these are the peak times, on the local network when comparing LCC's traffic forecasts for 2022, 2037 and with or without the dualling scheme.

7.47 The Dualling Application assessment makes assumptions for the number of homes and jobs coming forward in South Ribble up to 2037. It identifies specific developments which add up to 5,425 homes excluding Pickering's Farm. It assumes that a further 2,831 homes will be developed in as yet unknown locations by 2037 excluding Pickering's Farm. This flows from a comparison that LCC undertook between a method of forecasting growth using a tool called Tempro, and the specific developments, excluding Pickering's Farm, that LCC identified.

7.48 In my view it is inappropriate and unreasonable in the assessment to prioritise background growth in as yet unknown locations or ways, over the Pickering's Farm allocation, a key housing allocation in the Local Plan.

7.49 The allowance in the assessment for additional homes over and above the specific developments identified encompasses the number of homes that can be delivered by the Pickering's Farm allocation. Therefore, the LCC assessment can be used to assist with judgements about the traffic effect of the Pickering's Farm allocation cumulatively with other developments in the area.

7.50 The LCC assessment makes use of a strategic traffic model, Saturn. As such, similarly with our assessment of traffic, the LCC assessment introduces an element of V&V. The model takes into account variable demand choice in light of changes in congestion. The assessment notes as a caveat that it does not take into account 'mode choice', 'time of day choice' and 'peak spreading'. These are other elements of V&V that a model of this nature cannot account for.

7.51 This is not the P&P approach that we understand LCC prefers for the assessment of our Applications. It is closer to the approach that we have taken.

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[35] CD10.54 A582 South Ribble Western Distributor Strategic Outline Business Case July 2019 p2, p36, p38, p40

[36] CD10.55 A582 South Ribble Western Distributor Traffic Forecasting Report para 4.4.5

7.52 As shown in **Figure MA7-3**, I note that LCC accept that the journey times on the local network set out in its Dualling Application in the '2037 with dualling' scenario (Scenario 4) are acceptable on the network. I note that the 'without dualling' 2037 scenario journey times, incorporating such growth as would be expected to occur with the delivery of the Pickering's Farm allocation, are similar (Scenario 3).

7.53 My judgement, based on LCC's assessment of its Dualling Application, is that the cumulative consequences of development growth in this local area including an allowance for more homes than the Pickering's Farm allocation will provide, are not substantial or important changes in journey times at the busiest times of the day. Following on from that I judge that the consequences at other times of the day are also not substantial or important.

7.54 Therefore, I believe that by LCC's own measure it is showing that the Pickering's Farm allocation is deliverable with or without the addition of the Dualling Scheme with no 'severe adverse impact'.

7.55 Whether the Dualling Scheme is appropriate is not a matter that I am instructed to address. I do though note that on the basis of LCC's own evidence it is not a necessary piece of infrastructure for delivery of the Pickering's Farm allocation.

Cross Borough Link Road (CBLR)

7.56 LCC and SRBC have an aspiration to provide a road connecting Carwood Road to The Cawsey, and then a road through the site ultimately connecting the A582 to the west with the A6 to the east. This is expressed by Policy A2 in the SRBC Local Plan.

7.57 Whether the proposal makes adequate provision for highways improvement, with particular regard to the CBLR, is one of the main issues identified by the Inspector.

7.58 This route has now been completed (August 2020) between Carwood Road and The Cawsey, east of the sites. To extend this route to the A582 would involve crossing the West Coast Mainline railway line, and passing through the Pickering's Farm allocated site. This is indicated in **Figure MA7-4**.

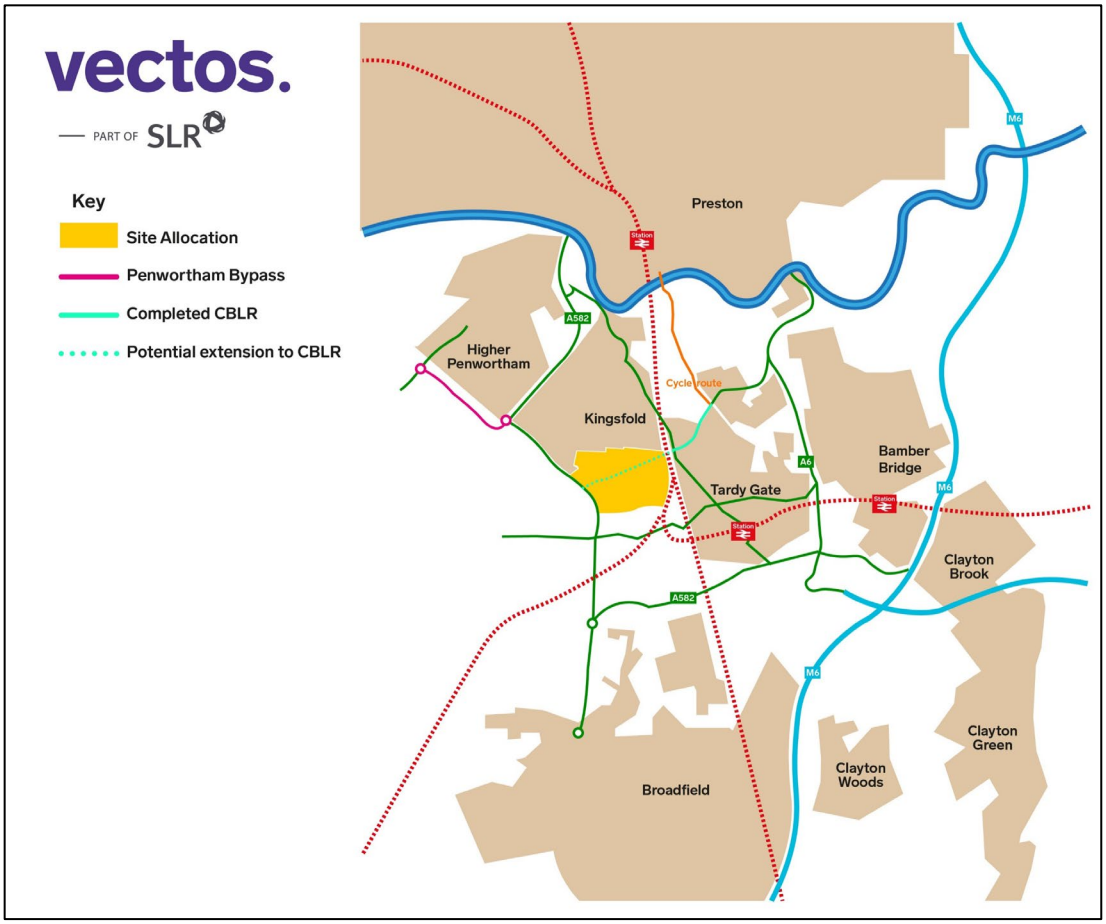

Figure MA7-4: CBLR and Penwortham Bypass Overview Plan

7.59 There is no up to date publicly available analysis or judgement about the effect that this is likely to have on traffic movement in the area. However, the work undertaken by LCC in the Dualling Application, indicates the effect that LCC expects the 'Pickering's Farm Link Road' to have, this being the CBLR connection from Leyland Road to the A582 across the sites.

7.60 The relevant comparison is between the journey times in Scenario 4 and Scenario 5, summarised in **Figure MA7-3**. Scenario 4 is LCC's forecast for network performance in 2037 assuming inclusion of the dualling, and inclusion of the Pickering's Farm Link Road'. Scenario 5 is the same, except for the exclusion of the Pickering's Farm Link Road. Within the tolerances of the modelling there is no difference in road network performance.

7.61 The report[37] concludes that removing it from the A582 dualling assessment (this is the way it was looked at in the assessment) results in "*no material difference in journey times along the A582 (southbound)*" and "*reduced journey times on approach to Bee Lane (southbound) along the B5242 Watkin Lane/ Leyland Road*".

7.62 In the opposite direction, northbound, the assessment reports that there is "*little difference in journey time along the A582* (between the with and without link road scenario) *in the morning peak period and no difference in the evening peak period*" and that "*journey times on the B5242 Watkin Lane/Leyland Road are quicker without Pickering's Farm Link Road*".

7.63 The reduction in journey times as a result of removing the Pickering's Farm Link road from the model is likely because of the additional journey times caused by introducing signalled junctions on the network to accommodate the Link Road. In my judgement, the changes in journey time either way are not substantial in the planning context.

7.64 Mr Alsbury explains that the requirement on the Pickering's Farm allocation, and therefore the Application sites, is to safeguard land to enable the extension of the CBLR through the sites. This safeguarding is included within the S106 legal document associated with the Applications.

7.65 The consequence of developing the Application sites is to deliver this connection for active travel and shared travel (buses). The Applications provide for active travel connectivity and bus (shared travel) connectivity between the A582, the sites, and Tardy Gate via Bee Lane Bridge, including connectivity with the route now provided by the as built section of the CBLR. Public transport (including bus) connectivity through the site will be provided via a bus gate, affording connectivity by public transport where none exists for private car use.

7.66 Overall, where the CBLR, or Pickering's Farm Link Road, passes through the Application sites it will perform the dual role of both place and movement. The movement element is in respect of designing a road capable of accommodating through movement by cars and cycles, but at a scale so that vehicles do not dominate the environment or intimidate active travel users. The place element is this pedestrian scale ambience necessary for this part of the site to fulfil its community function.

7.67 This is capable of being provided through careful masterplanning. The detail will be subject to post determination design. In the meantime, the legal agreement will commit to the principles that provide for both the movement function that LCC wishes to achieve and the place function that enables it to form an active part of the local community.

[37] CD10.56 A582 Dualling EIA Chapter 12 para 12.7.15

Assessments of Effect

7.68 The Framework requires that assessments are based on what is 'likely'[38]. I have based our assessment on a level of localisation on what historically has been achieved in the UK and demonstrated through industry standard evidence. I expect this to be at the lower end of 'likely' as we expect to do better with the design and initiatives proposed, and would miss an opportunity if we did not.

7.69 This has led to an initial and unfettered demand for traffic movement external to the site prior to any effects of congestion or other external factors.

7.70 The difference between this approach and that which I understand LCC to prefer is the extent of local living assumed in the assessment. Whereas we have started with a TRICS assessment of demand for movement by person, I understand LCC to prefer to use TRICs to get a demand for movement by car. TRICS is an industry standard database of surveys.

7.71 TRICS does not have a good database of sites similar to this one, or what this is designed to be like. Starting with demand for movement per person enables us to investigate movement from a first principles basis. We go through a series of steps that ends up with demand for movement by car bespoke to this proposal.

7.72 Most of the surveys uploaded to TRICS are smaller stand alone sites, where the integration of homes with schools, shops and other places aren't picked up by an interrogation of cars alone. Simply applying a car trip rate direct from these TRICS sites is crude, and for sites like this one where local living is not just likely, but expected and encouraged, will provide an overestimate of car demand. Overestimating car demand is unhelpful, particularly where there is a risk that doing so will result in bigger highway infrastructure to the disbenefit of the higher priority forms of transport, and climate.

7.73 The approach that we have taken is more involved. It still uses industry standard data, but rather than relying on this development having similar characteristics to the sites uploaded to TRICS, it takes the first principle demand for people movement, which can be derived from the sites in TRICS, and applies it to reasons for travel and mode of travel for those reasons.

7.74 If this proposal were to exhibit the same characteristics as the TRICS sites, then the car trip rate would turn out to be the same. That it doesn't is a reflection of the purpose of allocating a large urban extension, that is capable of providing facilities and sustainable designs, in the Local Plan.

[38] NPPF Paragraph 113

7.75 The assessment results in the characteristic of about 58% of movement being contained locally (within 5km – the measure that we have adopted) and that about 37% of movement being by sustainable means. This compares with the National Travel Survey (NTS) data which reports that nationally 71% of movement is contained within 8km (the measure that NTS has adopted), and the Garden City Standards target of 60% of movement being by non-single occupancy car means. It means that the assessment probably overestimates external traffic demand.

7.76 To understand the potential consequences of this on the road networks we have built our own micro-simulation model. As I have previously explained, traffic models are not accurate forecasts of future reality as they cannot, themselves, allow for all of human behaviour and other uncertainties. However, with a human brain interface, they are a useful tool from which to make judgements.

7.77 The model used is an industry standard model called Paramics, and built in an industry standard way. It had been independently audited prior to its submission. This is a similar but more sophisticated model than the model used in LCC's A582 Dualling Application (a strategic model) as it more accurately represents junction performances.

7.78 The model has been constructed over a twelve-hour period to help with judgements about accessibility and connectivity across the day, including, but not being limited to, the traditional commuter peak period which was once the focus under a commuter peak P&P approach.

7.79 The developments affect the traffic networks in two ways. One way is the physical intervention of new or changed infrastructure. In this case, it is the new junction on Penwortham Way, and the modified junction on Leyland Road at Bee Lane. Both of these add constraint and delay to the network. The other way is the effect of traffic using the development on other traffic on the network.

7.80 The micro-simulation model is not the source of ultimate truth, but it is the best tool available to help with judgements about how the interventions and the traffic is likely to affect the character of the network. These judgements feed into the planning balance of benefits and disbenefits.

7.81 The reason for it being the best tool available is that it is capable of assessing the interaction between junctions and traffic flows across the network, and describing the characteristics of a network in the tangible real world metric of journey times (as does the LCC model, but using cruder algorithms encompassing a larger tolerance making the effects of individual developments much harder to discern).

7.82 The model routes traffic on the basis of the most convenient (its assumption of most convenient) route, in a similar manner to the LCC model in the A582 dualling application. In doing so it expresses one element of the V&V approach, as it assumes that traffic demand is affected by convenience.

7.83 In expressing effects in terms of journey time changes, it enables those making judgements to do so in the context of the practical effects on road users, which can then be related to planning policy and what is and isn't important in the round.

7.84 There is no expression of policy that establishes traffic models as a pass/fail arbiter of development.

7.85 This model is based on traffic flows and journey times measured in April 2021, an assumed additional demand from developments that are committed but not built, and the unfettered forecast of demand from the sites.

7.86 In terms of what may matter most, I have previously drawn out modelled journey times from our assessment along a route that is likely to be most important for business travel, the route between the A59 to the north west of the site providing access over the river and the strategic road network at the M6 and M65. This is similar, although not exactly the same, to Routes 3 and 4 in the LCC A582 dualling model.

7.87 It is difficult to see a meaningful difference in the context of planning policy. The degree of difference is consistent with a comparison between the 2022 and 2037 assessments undertaken by LCC in the A582 Dualling Application.

7.88 I have identified the total development demand flows across the local network forecast to be generated by the proposed development, for the morning peak hour and evening peak hour prior to any effects due to highway conditions.

7.89 I have also interrogated the situation at the motorway junction. Being further away from the site than the local junctions, the forecast percentage changes in demand of less than 1% are consistent with the marginal increase in homes that these developments contribute to the Preston built up area (0.8%).

7.90 To understand the sensitivity of the modelled network to changes in assumption I had rerun this with a blanket uplift 10% in background flow across the whole day. My judgements are not changed by this assessment.

7.91 Given the Vision & Validate approach to transport, the elasticity of demand in the face of changing congestion, the priority afforded to car commuter convenience compared with sustainable transport options and the Local Plan status of the proposal, my view is that traffic impact alone would have to be demonstrable and substantial for there to be a 'severe adverse impact on the local highway network'.

7.92 To prevent this development from being delivered on traffic impact grounds would, in my view, require a change in the character of the network across the day that is impossible to reasonably envisage from any of the submitted evidence, either mine or LCC's.

Highway Safety

7.93 One of the Inspector's main issues is the effect of the proposed improvements to the Bee Lane bridge on the safety of pedestrians and cyclists.

7.94 Safety audits and a safety risk assessment have been undertaken. These are consistent with the view that there is no unreasonable transport safety consequence either within the site, or on the highway networks.

7.95 Network Rail commented on the Application, raising a concern that additional active travel and vehicular movement over the Bee Lane bridge may increase the risk of vehicles swerving to avoid pedestrians and colliding with the bridge parapet, although they recognise that the risk level is low.

7.96 As a result, we commissioned the safety risk assessor to quantify this risk should the carriageway remain a shared surface, as it is at the moment. The assessor rated this as 'low risk', which carries the safety risk assessment label 'acceptable'.

7.97 In addition, we looked at options for mitigation. There is no reason to assume that there is only a unique solution. We developed one option that segregated the carriageway from the parapets and pedestrians, similar in character to the existing situation at the nearby Coote Lane bridge. The safety risk assessor also rated this option 'low risk' with the safety risk assessment label 'acceptable'.

Section Summary

7.98 This development is in a sustainable location. The commitments that come with this development make the most of that sustainable location.

7.99 Transport is not a subject in its own right, and getting appropriate accessibility is a cross sector task. Focussing on designing for localisation and community, as opposed to simply mitigating impacts, is critical to doing better in terms of minimising carbon emissions. Doing better than in the past is necessary, particularly so in the context of the highly ambitious carbon target set by SRBC. I can't see any other initiative that would be better in this respect than making the most of this opportunity in the Borough, in the timeframes that SRBC and National Government have set.

7.100 There is a high-capacity road network on the doorstep, and this will attract movement by car as its use is relatively convenient.

7.101 The old approach of designing local road networks on a Predict & Provide basis, where the convenience of the commuting car driver was protected as a high priority, is not consistent with current national aims and policies. I believe that this is the approach that LCC favours. Instead the label given to the policy compliant approach is Vision & Validate, and this features in up to date guidance from professional bodies, and the DfT.

7.102 In the Vision & Validate world the priorities are to prioritise local growth in a way which considers accessibility across the day, instead of just the peak commuter period, to prioritise walking, cycling and public transport on the basis that by doing this the impacts of car use are limited, and designing so that there need not be a general reliance on the private car for day to day activities.

7.103 Vision & Validate understands that traffic demands are flexible, and react to changing conditions. It also understands that local traffic inconvenience is not the ultimate determinant or highest priority when it comes to a well designed movement network. It starts with the Vision and designs to achieve it, as opposed to Predict and Provide which starts with a forecast and designs to accommodate it.

7.104 In this context, to get to a judgement that there is a 'severe adverse impact', one of the Inspector's main issues, requires, in my view, an assessment of the network that demonstrates that there is a substantial unpalatable change in character across the day taking into account all of the Vision & Validate arguments. No such assessment exists.

7.105 LCC has effectively undertaken an assessment of the cumulative effects of development in its A582 Dualling Application, and that includes making an allowance for a volume of homes that the Pickering's Farm allocation can deliver. It reports results in terms of journey times. My view is that using journey times as a general measure of character is reasonable and sensible.

7.106 The results do not indicate substantial journey time effects of cumulative growth in the area, and similar journey times with and without the dualling, which is the subject of the Application. On this basis, and LCC's own measure, the volume of homes that can be delivered by the Pickering's Farm allocation along with other growth in the area does not have a severe adverse impact on the highway network.

7.107 The work that I have undertaken, and also reported in terms of journey times, is consistent with this judgement.

7.108 I have addressed another of the Inspector's main issues, the effect of the proposed improvements to the Bee Lane bridge on the safety of pedestrians and cyclists, by referring to the judgement of a safety risk assessor. I asked the assessor to consider two options, the first the retention of the current arrangement, a shared surface, and the second a scheme that segregates pedestrians from vehicles, cyclists and equestrians. I noted that these are not unique solutions, and that there could be variations at detailed design stage.

7.109 In both of these scenarios the assessor considered the situation 'low risk' which carries with it a label of 'acceptable' in safety risk terms.

7.110 The Inspector's third transport related main issue is whether or not the proposal makes adequate provision for highways improvements with particular regards to the CBLR and the Bee Lane bridge.

7.111 With regards to the CBLR, the proposal delivers the cross borough permeability for active travel and public transport. Where the CBLR crosses the sites the commitment is to safeguard a route, plan for it and construct it so that it performs the dual roles of movement and place. The proposal facilitates and does not prejudice the delivery of the CBLR.

7.112 The Bee Lane bridge improvements options demonstrate that a safe and appropriate design is achievable, and the commitment is to deliver a scheme that will be worked up in greater detail with LCC at detailed design stage.

7.113 There are other highways improvements planned by LCC in the local area. The reasons for these upgrades include for strategic reasons and it is for the Councils to judge the merits or not of the schemes for these reasons. The proposals have only a marginal effect on those parts of the network. However, the provision that the proposal makes to these strategic initiatives is through the CIL payment associated with the proposal. It is then for the Councils to determine the most appropriate way of spending that payment, which at their discretion can be on these highway improvements.

8 Response to Reasons for Refusal

8.1 The Reasons for Refusal are set out in each of the Decision Notices which were issued following the Planning Committee on the 29th of November 2021.

8.2 The Reasons for Refusal may be based on comments from LCC and National Highways submitted to SRBC in September and October 2021. A response to those comments was provided by Vectos in November 2021, prior to determination (see **Appendix MA-9**).

Reason 1 – Modelling Methodology

8.3 The Reason for Refusal is:

It has not been demonstrated that the modelling methodology applied within the submitted Transport Assessment is acceptable. As such it has not been demonstrated that the proposed development would not have a severe adverse impact on the local highway network. The proposal is therefore contrary to the requirements of para. 111 of the NPPF, Policy 17 of the Core Strategy and PolicyG17 of the South Ribble Local Plan

8.4 The Authority has not been convinced by the work submitted with the Applications that the transport consequences are not so substantial that they negate the planning benefits of delivering the schemes. The Authority has not, through this reason for refusal, identified any transport problems with the scheme. In addition, the Authority has not to date advanced a positive case that the scheme will have a severe adverse impact on the local highway network.

8.5 The Appellant has demonstrated that the scheme will not have a severe adverse impact on the local highway network. The reasons that I reach this conclusion are set out below.

8.6 The bar set by the 'severe adverse traffic impact' test is high. The context is that local traffic impact and traffic convenience in the commuter peak periods, the periods that I understand the Authority is most interested in, is not the most important aspect of mobility, accessibility and transport, and not the main determinant of acceptability (see my Section 3). I say that acceptability is a function of accessibility, and in this context in order; climate, health, social integration, connectivity and then traffic impact.

8.7 The Hartford Inspector drew his conclusions in the context of the Framework, that it is not the aim of policy to protect the convenience of commuting car drivers. The SoS agreed with his conclusions (see Section 3).

8.8 Almost every major professional body involved in planning in the development industry, including the TCPA, CIHT, RTPI and the DfT interpret the correct transport planning approach to be a Vision & Validate (V&V) approach (Section 3). A key theme of V&V is that it's not Predict & Provide (P&P). In traffic terms V&V is that traffic demands are elastic and flex with changing conditions, what some call the 'first law of transport' as people act to minimise their inconvenience. Reducing road capacity is a tool used to lower car volumes where that is desirable in this context.

8.9 The Framework prioritises sustainable travel over car travel in the local context (NPPF Chapter 9).

8.10 The EU, the UK and SRBC have declared climate emergencies. SRBC has a bold target to reduce carbon emissions (Section 3). Traffic is the biggest contributor to carbon emissions. SRBC must restrict and dissuade car use if it is to achieve its targets. There is no other way in the time available, except to accept that it will not achieve its targets.

8.11 Placing commuter period traffic convenience on the wider local network as a major factor in the determination of an otherwise appropriate and desirable allocation is inconsistent with its stated aims on climate. For this reason the bar for 'severe' has to be high because otherwise the embodied carbon in road building, the higher speeds, and the induced traffic, all works in the opposite carbon direction to that which SRBC needs to achieve (Section 3).

8.12 The reason for refusal relates a judgement about modelling construction to the lack of demonstration of effect. Even if there is not an agreement between modellers, and that is a common situation in the industry, it does not mean that the Authority doesn't have enough to make a judgement on impact.

8.13 There are two ways of looking at this. I explain why our assessment enables a judgement to be made on traffic impact, and why that judgement is that there is no severe adverse impact (Section 6).

8.14 If that is not accepted, or in addition as it is consistent, I also explain why LCC's own work in connection with its A582 planning application enables a judgement to be made and leads to the same judgement that there is no severe adverse impact (Section 7).

8.15 In brief, LCC accept that the journey times on the local network set out in its Dualling Application in the '2037 with dualling' scenario (Scenario 4) are acceptable on the network. The 'without dualling' 2037 scenario journey times, incorporating such growth as would be expected to occur with the delivery of the Pickering's Farm allocation, are similar (Scenario 3).

8.16 My judgement, based on LCC's assessment of its Dualling Application, is that the cumulative consequences of development growth in this local area including an allowance for more homes than the Pickering's Farm allocation will provide, are not substantial or important changes in journey times at the busiest times of the day. Following on from that, I judge that the consequences at other times of the day are also not substantial or important.

8.17 Therefore, I believe that by LCC's own measure it is showing that the Pickering's Farm allocation is deliverable with or without the addition of the Dualling Scheme with no 'severe adverse impact'.

8.18 There are strong comments from Create Streets including dispensing with Predict & Provide traffic modelling, and rather than treating traffic models as a black box of exact science, giving them for instance the same weight as an expert opinion. Models are limited. They can only help with judgements, not make them.

8.19 The only detailed modelling comments that we have received are from National Highways. We have responded, addressing every point that is made, concluding that even where there is disagreement, the consequence of that disagreement is no change to the conclusion and hence the judgements (**Appendix MA-4**). Matters currently rest with National Highways in this respect.

8.20 A more detailed modelling response addressing the 'suitability' of our approach to this reason is in **Appendix MA-10**.

8.21 I say that there is a rich vein of information from which judgements about effect can reasonably be made. This vein includes not just our model, but analysis of existing conditions, knowledge of what the proposal entails and delivers, and the current work submitted by LCC for its Dualling Application, which shares the local network with this scheme and the southern part of the Preston built up area.

8.22 Cognisant of all information and assessments, their limitations and their benefits, it is possible to draw the conclusion that there will be some traffic impact, and that this traffic impact is not substantial and well within reasonable bounds. I get to that position from the work that I have undertaken, and the work that LCC has undertaken as part of its live application for changes to the A582.

8.23 As a result of that, and the high bar set for 'severe' it is possible and reasonable to conclude from the evidence that exists that the proposed development would not have a severe adverse impact on the local highway network.

Reason 2 – Scoping and Technical Evidence

8.24 The Reason for Refusal is:

It has not been demonstrated that the scoping and composition of technical supporting evidence of the submitted Transport Assessment is acceptable. As such it has not been demonstrated that the proposed development would not have a severe adverse impact on the local highway network. The proposal is therefore contrary to the requirements of para. 111 of the NPPF, Policy 17 of the Core Strategy and Policy G17 of the South Ribble Local Plan.

8.25 The active phrase in this reason for refusal, that 'it has not been demonstrated that the proposed development would not have a severe adverse impact' is identical to that in the first reason for refusal. My comments above apply equally to this reason as that reason.

8.26 The preamble relates to scoping and composition of evidence.

8.27 We knew from an early stage that we were unable to reach agreement with the Authority on scoping or composition of evidence. There are differences between us, particularly on whether this is a traffic focussed commuter peak P&P approach, or an accessibility based climate, health and connectivity approach, and these are highlighted in the evidence. We have been aware that LCC does not agree with our approach to transport assessment. We do consider traffic, and indeed have built the most detailed traffic model that exists for this area, but not as a peak period primary determinant, also focussing on accessibility across the day, and considering transport in the V&V context.

8.28 The Authority has concluded that this lack of agreement means that effect has not been demonstrated. I do not agree, and for the reasons set out in my response to the first reason for refusal I firmly believe that it has. Furthermore, in doing so I judge that it is only reasonable to conclude that the impact is not 'severe adverse'.

Reason 3 – Bee Lane

8.29 The Reason for Refusal is:

The proposed improvements to the Bee Lane bridge are not considered to be sufficient for the additional traffic, as well as increased number of pedestrians and cyclists, resulting from the development prejudicing highway safety and pedestrian safety. The proposal is therefore contrary to the requirements of para. 111 of the NPPF, Policy 17 of the Core Strategy and Policy G17 of the South Ribble Local Plan.

8.30 This reason for refusal relates the character of Bee Lane Bridge, the volume of vehicles and the volume of pedestrians and cyclists to a conclusion about highway and pedestrian safety. There is no evidence that supports that conclusion.

8.31 The evidence that exists is that there have been no recorded accidents on Bee Lane Bridge in the past five years. Therefore, it is reasonable to judge that the existing character of Bee Lane Bridge is suitably safe.

8.32 Bee Lane Bridge is a shared space, where vehicles, pedestrians, cyclists and equestrians exist together. The space typically accommodates in the order of 30 vehicles, 10 pedestrians and up to 5 cyclists per hour.

8.33 The consequence of the development will be to intensify the use of that space. We expect movement to increase as a result of the proposal by in the order of 15 vehicles, 15 pedestrians and 10 cyclists per hour. We will be encouraging active travel use across the bridge and so we would like the active travel flow to be higher.

8.34 There is no reason to suppose that this will change the already observed effect of a suitably safe environment.

8.35 To provide further comfort I have looked at a road shared by vehicles and active travel users elsewhere. I have also reported the judgements of a qualified safety risk assessor.

8.36 I have picked the shared road that accesses Edale in Derbyshire, as it is a place that I know. **Appendix MA-11** shows the character of that place. The road is a cul-de-sac for vehicles, and the access to the Pennine Way and the hills for active travel users. It connects the main road, various large car parks, the railway station and a café, with the village of Edale, which includes homes, shops, a camping and caravan site, a pub, and the hills. My judgement is that on a pleasant weekend there can be well over one thousand active travel users, and several hundred vehicles, a situation in excess of that likely at Bee Lane Bridge.

8.37 There are no recorded accidents over the past five years and so this character of the place is suitably safe.

8.38 The safety risk assessor made an expert judgement, which was that the safety risks associated with the Bee Lane Bridge remaining as it is at the moment were ‘low risk’ and therefore ‘acceptable’.

8.39 Network Rail responded to the Applications with a concern that vehicles would swerve to avoid pedestrians and collide with the parapet. There is no evidence that this has happened to date.

8.40 However, to react to this, in addition to assessing the existing layout of the bridge we identified that there are options for changes to the character of the layout. This was included in a response to LCC in Technical Note 04 'Bee Lane Access Review' in November 2021 (**Appendix MA-9**).

8.41 We presented an option, not dissimilar to that which already exists at a nearby bridge on Coote Lane, that segregated pedestrians from vehicles, cyclists and equestrians, so that there is a buffer strip between vehicles, cyclists and equestrians, and the bridge parapets (Section 4).

8.42 The safety risk assessor also assessed this layout and judged the character of the bridge to be 'low risk' and therefore 'acceptable'.

Reason 7 – CBLR

8.43 The Reason for Refusal is:

Policy A2 of the South Ribble Local Plan seeks to ensure delivery of the Cross Borough Link Road through the major development site at Pickering's Farm. The two applications together with the Masterplan do not provide a firm commitment for the delivery of this key piece of infrastructure necessary to support the scale of development proposed. The scheme is therefore contrary to Policy A2.

8.44 The proposal will make adequate provision for highways improvements through conditions and the S106 document. With particular regard to the CBLR, it facilitates it by safeguarding a route, and where the scheme is to construct sections of this route, committing to a design criteria that will satisfy its function (**Appendix MA-1**).

8.45 The proposal includes measures that deliver the CBLR function for active travel and public transport (shared travel). The scheme provides the cross borough connection for these users. For private vehicles it facilitates and does not prejudice the delivery of this piece of infrastructure.

9 Third Party Representations

Keep Bee Lane Rural

9.1 KBLR undertook its own mathematical forecast of car trip demand and made the assumption that this forecast will apply on a strict P&P basis to the road network.

9.2 It paints the picture of a doomsday scenario in the Preston built up area if this development were allowed to proceed. The doomsday is in respect of the inconvenience to drivers on the road network in the peak periods, the consequent effect on economy (on the basis that economy is proportional to peak period driver convenience) and carbon emissions (on the basis that inconvenienced peak period traffic emits more carbon).

9.3 KBLR does not agree with LCC on the effect of the A582 Dualling. It makes the judgement that widening the A582 will not provide a solution. I note that the LCC business case for the dualling includes unlocking sites for development, including this one. KBLR considers that providing a new junction on the A582 to this site weakens the case for A582 dualling. This is a traffic priority and traffic convenience focussed approach to transport planning, and one which I say is not expressed by planning policy.

9.4 It concludes that journey time increase on a number of routes will be ‘catastrophic’ for the region.

9.5 I do not agree with the method of assessment, the specifics of the assessment, the judgements flowing from the results of the assessment or the conclusions. Standing back from the minutiae of the numbers, the claims about catastrophic impact do not pass the common sense test. The claim that growth, and growth of this nature that has also been tested through the Local Plan process, can cause such widespread chaos is inconsistent with this scheme making up less than 1% of the Preston built up area. Preston, or anywhere else in the UK, is not so sensitive to this level of change.

10 Conclusions

10.1 The Inspector has identified three 'main issues' relating to transport.

Whether or not the proposed development would have a severe adverse impact on the local highway network

10.2 The bar for this test is necessarily high. It is not enough to conclude there will be inconvenience, but whether there is such an obvious and adverse change in character, as Create Streets says taking into account the longer view of movement, that substantial harm is caused to matters of importance. Matters of importance in current guidance includes effects on safety, climate and health.

10.3 As a result, whether the impact is 'severe adverse' is a matter of judgement. It cannot be determined empirically by a traffic model.

10.4 In the Vision & Validate world applied to traffic, there is an understanding that traffic volumes are a function of the convenience that drivers are prepared to bear. Congestion is both common and acceptable in the busier periods, and its existence does not constitute 'severe adverse'. As congestion becomes unpalatable to some, then people make small changes if possible and larger changes if necessary compared with what they would have done.

10.5 A factor to bear in mind when considering whether a convenience constraint on the road network matters, is whether this constraint changes the position on accessibility and inclusivity (the TCPA's Garden City Standards). In this case, the Preston built up area has good accessibility internally by a choice of means, and a fluctuation in the convenience of travel by car in peak periods is not as important as it would be in a less well connected and served place.

10.6 The development itself is located and designed to maximise the convenience of accessibility without high car dependency. It is a sustainable location with a wide range of day to day facilities and services available. It delivers active travel and public transport travel priority compared with car use, which it also provides for.

10.7 The local road network is high capacity, and I expect it to attract traffic. It is congested for short periods in the day, and it is reasonable to expect this. This proposal will have an impact, the consequence of which is that journey times will go up. They will go up because of the physical interventions, the new junctions interrupting the flow of traffic, and the effects of additional traffic demand.

10.8 However, the changes are unlikely to be substantial, and in the order of matters of minutes for short periods of the day at the most. Commuter period car travel inconvenience measured in minutes, in an environment where non car accessibility is good, where there are many choices for many people, in a world where car driver convenience is not the priority, and where the test for 'severe adverse' is set high, means that the proposed development would not have a severe adverse impact on the local highway network.

The effect of the proposed improvements to the Bee Lane bridge on the safety of pedestrians and cyclists

10.9 The observed effect is that that Bee Lane bridge at the moment is safe. This is borne from an investigation of the accident statistics and the judgement of a qualified safety risk assessor. The character of the bridge is one of a shared space accommodating cars, agricultural vehicles, pedestrians, cyclists and equestrians. It is part of a leisure route.

10.10 Penwortham Town considers this bridge suitable for its proposed Penwortham Cycle Route.

10.11 The proposal will intensify the use of the bridge by cars, but not by much. The change is likely to be in the order of 10-20 cars per hour on average. It will intensify the use by pedestrians and cyclists, and we aim to maximise that intensification as people interact within the community. This could be in the order of 15 pedestrians and 10 cyclists per hour. There is no reason to suppose that an intensification changes the character of the bridge.

10.12 To provide further comfort in this respect I have referred to a situation in Derbyshire where the incidence of pedestrians, cyclists and vehicles sharing the same road is more intense, and the observed effect is that it is not a problem.

10.13 However, Network Rail raised a concern about vehicles swerving to avoid pedestrians and striking the parapets. As a result we offered to make changes to the bridge layout to minimise this likelihood. These changes are relatively straightforward and similar to those that exist on a neighbouring bridge. They segregate pedestrians from vehicles, and prevent vehicles from getting close to the parapets. There is more than one option in this respect, and the eventual solution can be determined at detailed design stage. However, we proposed an option and asked the safety risk assessor to consider it.

10.14 He judged the situation to be ‘low risk’ and therefore ‘acceptable.

10.15 Therefore, I judge there to be no effect on the safety of pedestrians and cyclists at Bee Lane bridge.

Whether or not the proposal makes adequate provision for highways improvements, with particular regard to the Cross Borough Link Road and the Bee Lane bridge

10.16 The proposal either makes, or commits to funding that provides for, active travel highway improvements into neighbouring communities, in order that it becomes part of the local community. This is delivered through the S106 document.

10.17 It makes highway improvements that deliver a cross borough link through the site for active travel and public transport (shared travel). Pedestrians, cyclists and public transport will make use of the Lanes to do this. Buses will connect the infrastructure within the site with the Lanes via a bus gate, allowing them priority of movement compared with car travel.

10.18 It makes direct provision for a vehicular site access to the A582 to connect with either the existing A582, or the dualled A582. The dualling is the subject of a current live planning application. It also makes provision for a highway upgrade to the Bee Lane/Leyland Road junction. This upgrade benefits active travel users at the expense of car driver convenience at some times of the day.

10.19 The Cross Borough Link Road is provided for in the scheme. A safeguarded area, and a design criteria, is a commitment in the legal documents.

10.20 The change to Bee Lane bridge in accord with the proposal set out above will be provided directly by the proposal.

10.21 We say that no further highway changes are necessary in order to make this development acceptable. However, LCC has strategic aspirations to increase the capacity of the A582, and it has a live application for that scheme at the moment. This is not necessary in order for the development to proceed, but the development will contribute to demand on this route, probably more so if it is made more attractive for strategic reasons.

10.22 If it deems it an appropriate use of funds, contributions to this strategic scheme can be made by the planning authority using the CIL payment that this development provides. This use of CIL monies is referenced in the Local Plan.

10.23 Therefore, I judge that adequate provision for highways improvements is made by the proposal.

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