



**GILLINGHAM STRATEGIC SITE ALLOCATION,
NORTH DOREST**

**TRANSPORT ASSESSMENT
VOLUME 3: APPENDICES A-I**

Client: South Gillingham Consortium



i-Transport

TRANSPORT ASSESSMENT

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NORTH DORSET**

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APPENDIX A

TRANSPORT ASSESSMENT SCOPING NOTE

SECTION 1 INTRODUCTION

1.1 Background

1.1.1 The North Dorset Local Plan 2011-2031 – Part 1 was adopted by North Dorset District Council's (NDDC) on 15 January 2016. It sets out the strategic planning policies for the district and includes the following strategic development site allocation:

- Policy 21: Gillingham Strategic Site Allocation – sustainable mixed-use development that will comprise about 1,800 homes in total and will expand the built-up area of the town to the south and east.

1.1.2 Policy 21 states a Master Plan Framework (MPF) should be prepared for the whole of the southern extension of Gillingham to ensure that the site will be developed in a comprehensive and coordinated manner and will form the main policy basis for determining any subsequent planning applications on the site.

1.1.3 i-Transport LLP provided transport input as part of the promotion of the site through the Local Plan process and have been retained by The South Gillingham Consortium to advise on highways and transport issues associated with the emerging development proposals at the Gillingham Strategic Site Allocation (SSA).

1.2 Scope

1.2.1 This report sets out the proposed scope and structure of the Transport Assessment (TA) to assess the development set out in the MPF for the site, which will form a technical appendix of the Environmental Statement (ES).

1.2.2 The scope of an Environmental Impact Assessment (EIA) for the extent of the site included within the MPF, including the transport requirements, is set out in NDDC's response to the scoping opinion dated 12 December 2014 (ref: 2/2014/1315/SCOEIA). The excludes the extension to Brickfields Business Park, which forms part of the SSA.

1.2.3 The content of this note is for discussion with DCC as the local highway authority and Highways England (HE), who are responsible for the A303 located approximately 7km-8km to the north of the site, to enable the production of the TA to be undertaken in accordance with agreed parameters.

1.3 **Structure**

1.3.1 The reminder of this transport assessment scoping report is set out in the following sections:

- Section 2 – Proposed Development;
- Section 3 – Policy Context;
- Section 4 – Existing Conditions;
- Section 5 – Gillingham S-Paramics Model – Base Model and Future Year Scenarios;
- Section 6 – Proposed Site Access Arrangements and Parking;
- Section 7 – Sustainable Transport Strategy;
- Section 8 – Development Traffic Generation and Distribution;
- Section 9 – Gillingham S-Paramics Traffic Model – Modelling Parameters; and
- Section 10 – Summary and Conclusions.

SECTION 2 PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 This section of the transport assessment scoping report summarises the development proposals.

2.2 Proposed Development

2.2.1 The transport assessment tests the quantum of development on the site as set out in Table 2.1.

Table 2.1: Development Proposal – Land Uses Tested within Transport Assessment

Land Use	Quantum
Residential:	
Central Parcel (Ham Farm and Newhouse Farm)	960 dwellings^
Park Farm (east of the B3081 Shaftesbury Road)	633 dwellings
Lodden Lakes (south of The Meadows)	207 dwellings*
Total	1,800 dwellings
Education:	
Primary School (Park Farm site)	2-Form Entry
Extension to St Mary the Virgin C of E VA Primary School	1-Form Entry
Local Centre:	
Convenience Store	250 sqm GFA
Health Centre	500 sqm GFA
Community Hall	750 sqm GFA
Pub/Restaurant	750 sqm GFA
2 x Retail Units	250 sqm GFA

Source: Terence O'Rourke

Note: ^ includes 50 elderly accommodation units as part of the overall provision of affordable housing

Note: * 90 of these dwellings benefit from planning permission (reference: 2/2014/0968/OUT)

2.2.2 The illustrative masterplan contained within the MPF is reproduced at Appendix A.

2.3 Indicative Mix

2.3.1 The MPF states the residential element of the proposed development will comprise the following:

“The Southern extension will focus on delivering family housing, about 1,800 dwellings, but will provide a range of housing types, styles and sizes; terraces, semi-detached and detached homes plus a lesser amount of low rise flats/apartments.” (ref: MPF paragraph 6.2)

2.3.2 The precise schedule of development is unknown at this stage. The proportion of affordable housing provided on the site will be determined by the viability analysis that is currently being prepared.

2.3.3 To ensure a robust assessment of the traffic impacts of the residential element of the proposed development, it is assumed that the residential development would be 90% private houses / 10% affordable houses. This is robust because a greater percentage of affordable dwellings is likely to be secured with any planning consent (affordable houses typically exhibit lower trip rates than private housing) and some of the residential dwellings will be apartments (apartments typically exhibit lower trip rates than both private and affordable houses).

2.4 Extension to Brickfields Business Park

2.4.1 It is important to note that although the Gillingham SSA includes an additional 23,333sqm of commercial uses at an extended Brickfields Business Park, this land is not within control of The South Gillingham Consortium and was excluded from the EIA scoping opinion.

2.4.2 On the basis of information previously provided by NDDC, it has been assumed the likely mix of B1/B2/B8 uses will be as follows:

- B1 – 30%: 7,000sqm;
- B2 – 47%: 10,967sqm; and
- B8 – 23%: 5,367sqm.

2.4.3 This element of the Gillingham SSA will only be included within the sensitivity test (see Section 5) and not the main assessment.

SECTION 3 POLICY CONTEXT

3.1 Introduction

3.1.1 To provide context for the transport assessment, this section of the transport assessment scoping report provides an overview of relevant local and national transport planning policy.

3.2 National and Local Policy

3.2.1 The TA will provide an overview of the following national and local policy documents:

- National Planning Policy Framework (NPPF), March 2012;
- National Planning Practice Guidance (NPPG), March 2014;
- North Dorset Local Plan – Part 1; Adopted 15 January 2016; and
- Bournemouth, Poole and Dorset Local Transport Plan 3 (2011-2026).

3.2.2 Analysis of the above documents will provide the context for assessing the transport implications of the development proposals.

SECTION 4 EXISTING CONDITIONS

4.1 Introduction

- 4.1.1 This section of the report sets out existing transport conditions in the local area. This includes a review of the opportunities to use non-car modes, as well as the operation of the existing highway network.

4.2 Site Location

- 4.2.1 The SSA comprises the Park Farm land to the east of the B3081 Shaftesbury Road, the Ham Farm land to the west of the B3081, the Lodden Lakes site to the east of the B3092 New Road and the Newhouse Farm located north east of the B3092 New Road / Cole Street Lane junction.

4.3 Walking and Cycling

- 4.3.1 A review of existing walking and cycling provision in the vicinity of the site will be set out in the TA. This will include consideration of the quality of routes and the journeys to and from the site that they have the potential to accommodate.

4.4 Public Rights of Way

- 4.4.1 The TA will include a review of the network of public rights of way that run through and near the site and will also identify if any improvements are required.

4.5 Public Transport

Bus

- 4.5.1 A review of local bus services will also be set out. This will include consideration of the proximity of bus stops, the frequency and duration of local bus routes as well as the origins/destinations served.

Rail

- 4.5.2 An assessment of the accessibility of the site to Gillingham Rail Station will also be undertaken. This will include a review of the frequency and duration of rail services, as well as the destinations served, to identify the journey purposes that the rail services can accommodate.

4.6 **Public Car Parking**

- 4.6.1 The existing public car parks within Gillingham including the numbers of spaces and existing parking regime, will be summarised within the report.

4.7 **Local Road Network**

- 4.7.1 A narrative describing the local and strategic highway network will be provided, including identification of key local junctions. Any committed highway improvements will also be set out.
- 4.7.2 Traffic flow data has been obtained for the local and strategic highway network in the vicinity of the site from a series of traffic surveys undertaken early December 2016 and February 2017 to establish baseline and forecast traffic conditions.

Personal Injury Accident Data

- 4.7.3 Personal injury accident data has been obtained from DCC for the last available five-year period and will be assessed in the TA. The study area covers the B3081/B3092 corridor through the urban area of Gillingham, extending to the roundabout junction with Bay Road to the north; the B3092 between the junction with the B3081 to the north and the A30/B3092 East Stour Crossroads to the south, B3081 to the south of the site as far as the A30/A350/B3081 'Ivy Cross Roundabout' in Shaftesbury. The study area also comprises the A303/B3081 junction at Leigh Common and A303/B3092 junction in Mere to the north of the site.

SECTION 5 GILLINGHAM S-PARAMICS MODEL – BASE MODEL AND FUTURE YEAR SCENARIOS

5.1 Introduction

5.1.1 This section of the updated Transport Assessment sets out the development of the Gillingham S-Paramics model to establish the base year and future year scenarios for highway network operational assessment, taking into account committed developments and background traffic growth.

5.2 Background

5.2.1 In agreement with NDDC and DCC an S-Paramics micro simulation model of Gillingham was developed to assess the transport impacts and mitigation measures associated with the proposed Gillingham SSA as part of the promotion of the site through the Local Plan process.

5.2.2 The model covers the following areas:

- The B3081/B3092 corridor through the urban area of Gillingham between:
 - The junction with Cole Street Lane to the south; and
 - The B3081 / Queen Street / Bay Road junction to the north.
- The High Street / Queen Street link through the town centre;
- The B3092 New Road (as far south as the junction with Cole Street Lane).

5.2.3 A wide range of surveys have been undertaken in early December 2016 and February 2017, including turning counts, queue lengths, journey time, ATCs, and ANPR surveys to update the previous work undertaken at Local Plan stage (which had a base year of 2011). A new base year of 2016 has been adopted. The modelled periods have been extended to cover the weekday periods 0700 – 1000 and 1600 – 1900.

5.2.4 A Base Model Development Report will be produced to demonstrate the model provides an accurate representation of the existing traffic conditions for the weekday morning and evening peak periods in accordance with the criteria set out in the Design Manual for Roads and Bridges (DMRB) and WebTAG.

5.2.5 The impact of the proposed development at the following junctions outside of the scope of the S-Paramics model will be assessed using TRL program Junctions 9:

- A30 / B3092 Crossroads in East Stour;
- A303 / B3081 junction at Leigh Common;
- A303 / B3092 junction at Mere; and
- A30/A350/B3081 'Ivy Cross Roundabout' in Shaftesbury.

5.2.6 A summary of the operation of the local and strategic highway network for the base conditions will be set out in the TA.

5.3 Committed Developments and Transport Infrastructure

Introduction

5.3.1 The PPG states:

“It is important to give appropriate consideration to the cumulative impacts arising from other committed development (i.e. development that is consented or allocated where there is a reasonable degree of certainty will proceed within the next three years). At the decision-taking stage this may require the developer to carry out an assessment of the impact of those adopted Local Plan allocations which have the potential to impact on the same sections of transport network as well as other relevant local sites benefitting from as yet unimplemented planning approval.”

5.3.2 For the purpose of the TA, the development commitments are those ‘hard’ commitments that benefit from a planning permission but were not built/occupied at the time of the baseline traffic surveys.

5.3.3 Part of the site to the east of Lodden Lakes has planning consent for 90 residential dwellings (NDDC planning application reference 2/2014/0968/OUT. For the purposes of this assessment, this site is considered to form part of the Strategic Site Allocation.

Hard Commitments

5.3.4 For the purpose of this analysis, the committed transport infrastructure improvements are those ‘hard’ commitments that are associated with a consented development (or have secured 100% public funding for its delivery) and had not been constructed at the time of the baseline traffic surveys.

5.3.5 A summary of the committed developments (hard) that will be taken into account in the transport assessment to derive design year traffic flows is presented in Table 5.1.

Table 5.1: Committed Developments

Planning Application Reference	Site	Description
2/2006/0026	Kingsmead Business Park	Commercial garage / dealership with a GFA of 973sqm allowed on appeal reference: APP/N1215/A/06/2010473/NWF
2/2010/0803/PLNG	Kingsmead Business Park	Erection of two-story building (B1/B2/B8) with a GFA of 1,314sqm
2/2006/0026	Kingsmead Business Park	Two no. B1/B2/B8 units with a GFA of 552sqm
2/2016/0149/OUT	Land at Bay	50 new residential dwellings
2/2002/0415 and 2/2002/0880	Land East of Shaftesbury	The construction of 811 dwellings at land adjacent to Greenacres, Salisbury Road – 97 units remaining to be occupied at the time of the traffic surveys (parcels 6 and 7)
2/2015/0598/OUT	Land West of Littledown, Shaftesbury	170 new dwellings, public open space and play areas
2/2104/1350/FUL	Land adjacent to Wincombe Business Park	191 new dwellings and public open space
14/06780/OUT (Wiltshire Council)	Land at the Hill Brush Co Ltd Mere	Demolition of existing factory and dwellings known as Maltot and development of 134 dwellings

Source: WYG / Consultant's Estimates

5.3.6 The traffic generated from each committed development will be assigned to the local highway network in accordance with the agreed analysis in the supporting highways and transport work which has been submitted as part of the planning application for each site and has previously been agreed with DCC. Beyond the coverage of the defined distribution contained within each transport assessment, vehicle movements will be assigned to relevant zones using the base model distributions (see Section 6 and S-Paramics Base Model Validation Report).

5.3.7 No supporting information was submitted with the various committed developments at Kingsmead Business Park. In order to undertake a robust assessment, it is proposed to use the B1 office vehicular trip rates agreed as part of the assessment of the extended Brickfields Business Park in the promotion of the site through the Local Plan.

5.3.8 In order to undertake a robust assessment, it will be assumed all committed development / highway infrastructure will be complete by the development year of opening which has been assumed to be 2021.

5.3.9 DCC are requested to provide a summary of any committed transport infrastructure improvements which will need to be taken into account.

Soft Commitments

5.3.10 In order to undertake an appropriate sensitivity test it is also proposed to include ‘soft commitments’, i.e. sites which do not have a planning consent but which have been identified as suitable for development within the adopted North Dorset Local Plan 2011-2031 and there is a reasonable expectation they will come forward during the proposed assessment period.

5.3.11 A summary of the committed developments (soft) that will be taken into account in the transport assessment to derive design year traffic flows is presented in Table 5.2.

Table 5.2: North Dorset Local Plan – Allocated Sites within Gillingham

Site	Description
Extension to Brickfields Business Park (included within Gillingham SSA)	B1 – 30%: 7,000sqm; B2 – 47%: 10,967sqm; and B8 – 23%: 5,367sqm
Mixed-use regeneration in the Station Road area	4.3 hectares of retail, employment and residential uses
Kingsmead Business Park	Local centre and/or for a range of employment uses
Neal’s Yard Remedies, Peacemarsh	Expansion of site for employment uses

Source: North Dorset Local Plan 2011-2031 – Part 1

5.3.12 NDDC/DCC are requested to provide a summary of the quantum of development and land use classes for each of the soft commitments presented in Table 5.2 above to enable an accurate assessment to be undertaken.

5.3.13 It is proposed the B1/B2/B8 vehicular trip rates agreed as part of the assessment of the extended Brickfields Business Park in the promotion of the site through the Local Plan will be re-used for this site.

5.4 Future Year Scenarios

- 5.4.1 Two over-arching future year scenarios for highway network operational assessment will be assessed, and two further interim years on the basis of the anticipated phasing of the mitigation measures set out in the MPF. This is set out in the following paragraphs.

2021 – Development Year of Opening

- 5.4.2 The first future year is the initial opening year of the development, which is assumed to be the year when the first part of the development is open for occupation. For the purposes of the updated Transport Assessment, the opening year of the development is assumed to be 2021 which is robust because the first occupations on the site are likely to be sooner than this. As such, in the first instance the assessment needs to establish 2021 local highway network conditions (without the proposed development), taking into account appropriate background traffic growth and committed development traffic.
- 5.4.3 Establishing the 2021 opening year local highway network conditions is important because this is then used as the base situation to establish whether the impact of the proposed development on the operation of the local highway network would be severe and if mitigation measures are warranted.

2031 – End of Local Plan Review Period

- 5.4.4 The second future year is the assessment of a future horizon period at the end of the Local Plan review period of 2031. The assessment needs to establish 2031 local highway network conditions (without the proposed development), taking into account appropriate background traffic growth and committed development traffic, as well as allocated sites within the adopted Local Plan, including the extension to Brickfields Business Park. The 2031 analysis is provided to DCC and HE for information purposes only to inform their long-term planning strategies.

2024 – Delivery of On-Line Highway Improvements

- 5.4.5 In addition to the main future years, based on the likely number of completions per annum given a 2021 opening year, 2024 has been identified as the likely year for the delivery of the on-line highway improvements on the B3081/B3092 corridor set out in Policy 21 of the adopted Local Plan. The assessment will seek to demonstrate there is not a severe impact on travel conditions on the local highway network in advance of the highway improvements being delivered.
- 5.4.6 This future year has also been assumed to be the peak period of construction across the site.

2027 – Delivery of Principal Street

- 5.4.7 2027 has been identified as the likely year for the delivery of the Principal Street based on the expected housing trajectory from a 2021 opening year. The assessment will seek to demonstrate there is not a severe impact on travel conditions on the local highway network in advance of delivering the proposed new road link between the B3081 Shaftesbury Road and B3092 New Road. All other proposed highway improvements to deal with the residual traffic impact of the development will be included in the assessment.

5.5 **Background Traffic Growth**

2021 Opening Year

- 5.5.1 Factors to allow for background traffic growth from 2016 (the year the traffic surveys were undertaken) to 2021 have been derived from the National Transport Model (NTM) with adjustments made for local factors derived from the TEMPRO database for the North Dorset 001 MSOA, which includes Gillingham, using the NTM v7.2 dataset.
- 5.5.2 In accordance with the latest transport analysis guidance set out in DfT TAG UNIT M4: Forecasting and Uncertainty, November 2014, the ‘reference case’ planning assumptions (the forecast growth in households and jobs within Gillingham assumed within TEMPRO) have been adjusted to avoid double-counting the traffic generated by committed development and the proposed development.

- 5.5.3 TEMPRO provides the planning assumptions in terms of the number of households and jobs within Gillingham for the base year and the forecast years. The planning assumptions within TEMPRO state that there will be 141 net additional dwellings and 93 new jobs provided within Gillingham from the base year of 2016 to the opening year of 2021.
- 5.5.4 The traffic generated by the committed developments within Gillingham that will be explicitly taken into account as part of the analysis, as set out in Table 5.1, comprises some 642 additional dwellings and, on the basis of current guidance on employment densities, approximately an additional 67 new jobs.
- 5.5.5 The number of additional dwellings and jobs provided by the committed development therefore exceeds the planning assumptions for the North Dorset 001 MSOA within TEMPRO. It is therefore reasonable to assume any further growth in the levels of homes or employment in the study area up to 2021 is unlikely.
- 5.5.6 Appendix B summarises the adjustments that have been made in order to calculate background traffic growth for the 2021 design year.
- 5.5.7 Using this methodology, Table 5.3 below summarises the growth rates which will be applied to the 2016 observed traffic flows to derive the 2021 peak hour traffic flows.

Table 5.3: Traffic Growth Factors: 2016 – 2021

Period	AM Peak	PM Peak
2016 – 2021	1.0328	1.0295

Source: TEMPRO / NTM AF09 Dataset for 'North Dorset 001 MSOA'/'Urban'/'All'

- 5.5.8 The growth rates will be applied to all external-external, internal-internal, internal-external and external-internal traffic movements. This is therefore considered a robust assessment as no adjustment has been applied to take account of the number of trips that are likely to be generated between the various committed development sites (i.e. those trips that are generated between a proposed housing site and a proposed employment site). The assessment will therefore include an element of double counting.

5.5.9 The trips generated by committed employment development will be distributed among the relevant zones within the model using the existing distributions taken from the 2016 base model. As a result, new employment trips have therefore been assumed to originate from existing residential areas in the town (even if there is no increase in the amount of housing within that zone). No account has been taken of the displaced existing commuter trips that are likely to transfer from their existing place of work outside of Gillingham to the new jobs that will be provided within the town (a proportion of the new jobs are likely to be taken by existing Gillingham residents who currently work elsewhere and are therefore currently travelling on the highway network). The assessment is therefore robust as it has been assumed that all vehicle movements generated by committed employment development are new to the network which will result in a significant proportion of double counting between home locations and work.

5.5.10 The application of the traffic growth rates to all trip types is therefore considered robust.

2024 Design Year

5.5.11 The 2024 design year is identified as the year when the on-line highway improvements summarised in Section 9 will be delivered. As set out above, the number of additional dwellings and jobs provided by the committed development exceeds the planning assumptions for Gillingham within TEMPRO and any further growth in the levels of homes or employment in the study are up to 2024 over and above the 'soft commitments' is unlikely. The adjustments made are summarised in Appendix B.

5.5.12 Table 5.4 summarises the growth rates which will be applied to the 2016 observed traffic flows to derive the 2024 peak hour traffic flows.

Table 5.4: Traffic Growth Factors: 2016 – 2024

Period	AM Peak	PM Peak
2016 – 2024	1.0593	1.0557

Source: TEMPRO / NTM AF09 Dataset for 'North Dorset 001 MSOA'/'Urban'/'All'

2027 Design Year

5.5.13 It is expected that in 2027 the Principal Street will be open for all traffic. As identified in the scenarios above, the number of additional dwellings and jobs provided by the committed development will exceed the planning assumptions for Gillingham within TEMPRO and any further growth in the levels of homes or employment in the study are up to 2027. A summary of the adjustments applied to the TEMPRO planning assumptions are included in Appendix B.

5.5.14 Table 5.5 summarises the growth rates which will be applied to the 2016 observed traffic flows to derive the 2027 peak hour traffic flows.

Table 5.5: Traffic Growth Factors: 2016 – 2027

Period	AM Peak	PM Peak
2016 – 2027	1.0722	1.0685

Source: TEMPRO / NTM AF09 Dataset for 'North Dorset 001 MSOA'/'Urban'/'All'

2031 Design Year

5.5.15 The 2031 Design Year represents the end of the North Dorset District Council Local Plan period. It is proposed to apply the same methodology to growth traffic from the 2016 base year up to the 2031 Design Year, as identified for the scenarios above. The adjusted planning assumptions are summarised in Appendix B.

5.5.16 Table 5.6 summarises the growth rates which will be applied to the 2016 observed traffic flows to derive the 2031 peak hour traffic flows.

Table 5.6: Traffic Growth Factors: 2016 – 2031

Period	AM Peak	PM Peak
2016 – 2031	1.0812	1.0774

Source: TEMPRO / NTM AF09 Dataset for 'North Dorset 001 MSOA'/'Urban'/'All'

SECTION 6 PROPOSED SITE ACCESS ARRANGEMENTS AND PARKING

6.1 Introduction

6.1.1 This section of the transport assessment summarises the proposed site access arrangements from the local highway network, along with servicing and parking provision.

6.2 Proposed Development

6.2.1 This document supports the MPF for a residential led mixed use development on the site including 1,800 dwellings.

6.2.2 An illustrative masterplan is provided as Appendix B. Further details on the indicative mix of development on the site is set out in Section 2 of this document.

6.3 Objectives

6.3.1 The objectives of the overall site access strategy are to achieve:

- Safe and suitable access to the site;
- The take up of the opportunities for sustainable transport modes, to reduce the need for major transport infrastructure; and
- Improvements within the transport network that cost effectively limit the significant impacts of the development.

6.4 Access Strategy Overview

6.4.1 An overview of the site access strategy is summarised below:

Vehicular Access

- Central Parcel (i.e. Ham Farm and Newhouse Farm):
 - Via signalised junction on the B3081 Shaftesbury Road to the south of the existing Park Farm roundabout;
 - Extension of Woodpecker Meadow into the site to serve approximately 100 dwellings; and

- Via Principal Street and realigned B3092 New Road in vicinity of junction with Cole Street Lane.
- Park Farm (east of the B3081 Shaftesbury Road):
 - Extension of the eastern arm of the existing Park Farm roundabout (currently serving Kingsmead Business Park);
 - Eastern end of Cerne Avenue / Cale Way junction (serving a limited number of dwellings); and
 - Eastern end of Trent Square / Fern Brook Lane junction (serving a limited number of dwellings).
- Lodden Lakes:
 - Priority junction to the south of Addison Close (via approved access as part of the consented 90 dwelling scheme); and
 - New access from the B3092 New Road to south of Lodden Lakes (simple priority junction in advance of extension to Brickfields Business Park coming forward).

Pedestrian / Cycle Access

- Pedestrian / cycle access via Pheasant Way via existing Footpath N64/33;
- Pedestrian / cycle access from the central parcel to the informal footpath along Lodden Valley;
- Pedestrian / cycle access from the Lodden Lakes parcel to the informal footpath along Lodden Valley; and
- Series of public footpath links to the south linking to Cole Street Lane.

6.4.2 Independent Stage One Road Safety Audits (RSA) of the proposed access arrangements will be undertaken, including the designer's responses where required, with reference to Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15 Road Safety Audit.

6.5 Proposed Site Access Arrangements

Movement and Access Parameter Plan

- 6.5.1 The movement and access parameter plan is provided at Appendix C.
- 6.5.2 Having regard to the land use and access parameter plan, the proposed access arrangements are for ease of reference shown in the drawings key plan (drawing no. ITB4057-GA-1000) and discussed in more detail below.

Extension of the eastern arm of the existing Park Farm roundabout (Drawing no. ITB4057-GA-076)

- 6.5.3 The existing eastern arm of the Park Farm roundabout is some 7.3m wide with 2.0m wide footways on both sides of the carriageway and currently serves Kingsmead Business Park, as well as Orchard Garden Centre.
- 6.5.4 The eastern end of the route is contiguous with the site boundary, where an existing field gate access is located. It is proposed to extend the road into the site to form the principal access to the Park Farm parcel with a 6.0m wide carriageway and 2.0m wide footways on both sides. This arrangement is shown in i-Transport drawing no. ITB4057-GA-076, a copy of which is provided in the drawings section at the rear of this document.
- 6.5.5 Adequate forward visibility suitable for vehicle speeds of 30mph along the existing carriageway is also achievable in the vertical plane. This has been confirmed through a topographical survey.

Eastern end of Cerne Avenue / Cale Way junction (Drawing no. ITB4057-GA-079)

- 6.5.6 The eastern end of Cerne Avenue currently forms an informal square and is approximately 14.5m wide. It is contiguous with the site boundary, where an existing field gate access is located. There is currently informal perpendicular parking located opposite property no. 17.

- 6.5.7 It is proposed to formalise the parking opposite no. 17, through the provision of three no. parking spaces, similar to the row of parking outside properties 1 – 15, and extend the road into the site (it was allowed for as part of the existing residential development) with the carriageway tapering down to 5.5m, with 2.0m wide footways on both sides. This link will be controlled so that it forms an access to a maximum of approximately 100-125 dwellings.
- 6.5.8 This arrangement is shown in i-Transport drawing no. ITB4057-GA-079, a copy of which is provided in the drawings section at the rear of this document.
- 6.5.9 The Cerne Avenue / Cale Way junction provides visibility splays of 2.4m x 33m to both the left and right which is in accordance with the guidance set out in the DfT's Manual for Streets for roads with vehicle speeds of 25mph. At this stage, it is not envisaged the provision of give-way markings to indicate priority is desirable although this will need to be determined at detailed design stage.

Eastern end of Trent Square / Fern Brook Lane junction (Drawing no. ITB4057-GA-080)

- 6.5.10 A 7.1m wide carriageway is located at the eastern of Trent Square between no's 73 and 75 Fern Brook Lane, and currently provides access to two garages. It forms a vehicular crossover style access onto Fern Brook Lane. There is a 2.0m wide footway on the southern side of the carriageway and a 1.0m wide kerbed margin on the northern side. The eastern end of the route is contiguous with the site boundary, where an existing field gate access is located.
- 6.5.11 It is proposed to extend the road into the site (it was allowed for as part of the existing residential development) with a 6.1m wide carriageway tapering down to 5.5m. The 1.0m wide margin will be widened to form a 2.0m wide footway on the northern side. Adequate visibility will be provided for vehicles emerging from the two existing driveways currently served via this route. This link will be controlled so that it forms an access to a maximum of approximately 50 dwellings.
- 6.5.12 The proposed arrangement is shown in i-Transport drawing no. ITB4057-GA-080, a copy of which is provided in the drawings section at the rear of this document.
- 6.5.13 The site access / Fern Brook Lane junction provides visibility splays of 2.4m x 33m to both the left and right which is in accordance with the guidance set out in the DfT's Manual for Streets for roads with vehicle speeds of 25mph.

Signalised junction on the B3081 Shaftesbury Road to the south of the existing Park Farm roundabout (Drawing no. ITB4057-GA-073)

- 6.5.14 It is proposed to provide a 3-arm signalised junction on the B3081 Shaftesbury Road at the eastern end of the Principal Street, approximately 150m to the south of the existing Park Farm roundabout. This arrangement is shown in i-Transport drawing no. ITB4057-GA-073. The Principal Street will have dedicated left and right-turn lanes and there will be a right-turn lane on the northern arm to accommodate vehicles turning right into the site. The junction can safely accommodate large articulated HGVs turning into and out of Principal Street.
- 6.5.15 There will be a minimum forward visibility of 120m on all approaches to junction within highway limits, in accordance with the worst case visibility provision guidance on the basis of the existing 40mph speed limit, as set out in the Design Manual for Roads and Bridges (DMRB) TD 42/95 'Geometric Design of Major/Minor Priority Junctions' (i.e. the statutory guidance for trunk roads).
- 6.5.16 An advanced stop line (ASL) arrangement with a cycle feeder lane will be provided on the Principal Street arm to enable cyclists to safely join the carriageway from the proposed shared-use footway cycleway provided within the site.
- 6.5.17 There will be dedicated pedestrian crossing facilities on each arm of the junction to enable safe pedestrian movement across the B3081 Shaftesbury Road, i.e. between the central parcel and Park Farm parcel.
- 6.5.18 The existing bus lay-by located to the north of the proposed junction on the eastern side of the carriageway will be removed and replaced with an on-line bus stop cage broadly in the same location.

Extension of Woodpecker Meadow (Drawing no. ITB4057-GA-077)

- 6.5.19 Woodpecker Meadow is situated within the residential development located immediately to the north of the SSA central parcel. It currently provides access to 14 residential properties and is accessed via a priority junction to the south of Kingfisher Avenue. It is typically some 5.5m wide with 2.0m wide footways on both sides.

6.5.20 The southern end of the route is contiguous with the site boundary and it is proposed to extend Woodpecker Meadow into the site with a 5.5m wide carriageway and 2.0m wide footways on both sides. This link will be controlled so that it forms an access to a maximum of approximately 100 dwellings.

6.5.21 This arrangement is shown in i-Transport drawing no. ITB4057-GA-077, a copy of which is provided in the drawings section at the rear of this document.

6.5.22 The Kingfisher Avenue / Woodpecker Meadow junction provides visibility splays of 2.4m x 43m to the right which is in accordance with the guidance set out in the DfT's Manual for Streets for roads with vehicle speeds of 30mph, and as far as the roundabout junction with Chaffinch Chase and Otter Springs to the left (2.4m x 21m).

Priority junction to the south of Addison Close (Drawing no. ITB4057-GA-081)

6.5.23 Means of access was determined for the consented 90 residential dwellings as part of the Lodden Lakes parcel (NDDC planning application reference 2/2014/0968/OUT).

6.5.24 The agreed access comprises a simple priority junction on the southern side of Addison Close, located approximately 50m east of the junction with the B3092 New Road. The site access comprises a 6.0m wide carriageway with 2.0m wide footways on both sides and achieves sight lines of 2.4m x 43m in both directions.

6.5.25 This access was agreed with DCC as local highway authority as part of the planning permission and the agreed arrangement is presented in i-Transport drawing no. ITB4057-GA-081.

New access from the B3092 New Road to south of Lodden Lakes (Drawing no. ITB4057-GA-082)

6.5.26 In addition to the agreed access via Addison Close to the Lodden Lakes parcel, it is proposed to provide an additional priority junction on the B3092 New Road at the southern end of the parcel, located approximately 75m to the south of existing access serving the Lodden Lakes car park.

6.5.27 The site access will be 6.0m wide with 2.0m wide footways on both sides of the carriageway. Visibility splays of 2.4m x 120m are achievable in accordance with vehicle speeds of 40mph using the guidance set out DMR) TD 42/95 'Geometric Design of Major/Minor Priority Junctions'.

- 6.5.28 This arrangement is shown in i-Transport drawing no. ITB4057-GA-077, a copy of which is provided in the drawings section at the rear of this document.
- 6.5.29 it is acknowledged that an extension of the existing 30mph speed limit on the B3092 New to include the proposed site access and Principal Street is desirable (not essential) in order to better integrate the site with the existing urban area. The applicant is willing to make a financial contribution to fund all reasonable costs related to the traffic regulation order (TRO) necessary to implement such a speed limit change.
- 6.5.30 This junction is capable of being upgraded to a roundabout (within the same footprint – land will be safeguarded as part of the proposed masterplan) at some time in the future when the extension to Brickfields Business Park comes forward. However, a simple priority junction is adequate to serve the Lodden Lakes site in isolation in the event it should forward first – the roundabout is only required to serve the employment uses.

6.6 Pedestrian and Cycle Access and Connections

- 6.6.1 In addition to the pedestrian and cycle provision at the site access junctions, the following pedestrian and cycle connections will be provided to make permeable connections between the proposed development and existing facilities and destinations, including the town centre.

Pedestrian / cycle access via Pheasant Way via Existing Footpath N64/33 (Drawing no. ITB4057-GA-078)

- 6.6.2 A minimum 3m wide footpath / cyclepath is proposed between the site and Pheasant Way along the existing Public Right of Way N64/33. Drainage and surface improvements will be provided to enable all weather access. At this stage, a macadam surface is envisaged although the detail of the surfacing will be determined at detailed design stage. The route will be lit within the site as far as Pheasant Way.
- 6.6.3 This will tie in with the existing network of footways/lightly trafficked low speed residential roads within the residential development immediately to the north of the Ham Farm and will form an attractive traffic-free pedestrian / cycle link from the central part of the site to the Ham residential area and the town centre beyond. No vehicular access is proposed via Pheasant Way.

- 6.6.4 It is proposed to convert the section of the existing footpath within the site to a shared-use footpath under the Cycle Tracks Act 1984.

Other Existing Public Rights of Way / Footpath Links

- 6.6.5 There are three existing footpath links to Cole Street Lane to the south of the central parcel which will continue to be available as Public Rights of Way accessing the countryside towards East Stour to the south.
- 6.6.6 There will also be pedestrian / cycle access from the central and Lodden Lakes parcels to the existing informal footpath provision along Lodden Valley.

6.7 Principal Street and Movement Hierarchy Within the Site

- 6.7.1 In accordance with Policy 21, a road link between the B3081 Shaftesbury Road and the B3092 New Road – known as the ‘Principal Street’ – will be provided through the central parcel.
- 6.7.2 The Principal Street will provide the main means of vehicular access to the central parcel, will be designed to enable a bus service to route through the site, and will be at the top of the street hierarchy within the development.
- 6.7.3 The proposed alignment avoids the flood plain of the River Lodden and includes the realignment of the existing double bends on the B3092, and a replacement single span bridge over the River Lodden. The centre line radius on the bends will be a minimum of 75m.
- 6.7.4 The B3092 New Road will be extended to form the minor arm of a priority junction with the Principal Street. Cole Street Lane would form a revised priority junction with the extended New Road. Access to the Newhouse Cottages will be via a new private driveway with the existing B3092 further to the north to be Stopped Up or to form a highway verge.
- 6.7.5 The proposed alignment of the Principal Street is shown in i-Transport drawing no. ITB4057-GA-070, a copy of which is provided in the drawings section at the rear of this document.

6.7.6 It is currently envisaged the Principal Street will provide direct frontage access to development. This is likely to primarily comprise large properties with on-site turning facilities. Direct frontage access will enable an efficient layout in land-use terms which maximises natural surveillance and the amount of developable land.

6.7.7 The Gillingham SSA will also bring forward the following on-site walking and cycling provision:

- A high quality network of permeable and legible pedestrian and cycle routes will be provided within the site. The development layout will be developed further during the lead up to any planning application, but ‘walkable neighbourhoods’ would be provided. This will provide a permeable network with direct pedestrian routes to match desire lines as closely as possible to minimise walking distances;
- The provision of the Principal Street will provide the ability for a new footway / cycleway connection alongside the new street. Suitable pedestrian and cycling crossing facilities will be provided along the principal street;
- Low key upgrade to existing public footpath N64/34 within the site linking the Lodden Lakes parcel with the south-west of the site across the River Lodden;
- Convenient, safe and secure, cycle parking will be provided at the local centre for employees and visitors; and
- Convenient, safe and secure, cycle parking will be provided for visitors to residential uses.

6.8 **Parking Arrangements**

6.8.1 On-site parking provision will be secured with subsequent reserved matters applications following the grant of any outline planning permission.

6.8.2 A statement of intent with regards to car parking is set out in the Masterplan Framework is summarised as follows:

- i) To be provided having regard to local car parking standards at the time for all land uses on the site;

- ii) Any residential non-curtilage allocated car parking ideally to be located within 25m of individual dwellings;
- iii) Within discrete residential parking courts, a proportion of parking should be unallocated to provide for efficient use; and
- iv) On-street parking to be accommodated on the Principal Street in appropriate parking bays, particularly in the vicinity of the local centre, as well as on residential streets (so as not to obstruct refuse vehicle access).

6.8.3 Future reserved matters applications would also provide details of cycle parking provision having regard to local standards at the time.

SECTION 7 SUSTAINABLE TRANSPORT STRATEGY

7.1 Introduction

7.2 In accordance with Policy 21: Gillingham Strategic Site Allocation of the adopted North Dorset Local Plan 2011-2031: Part 1, and the general requirements of the National Planning Policy Framework, the main objectives of the sustainable transport strategy are to provide:

- The opportunity for journeys to be contained within the Gillingham Southern Extension and Gillingham as a whole;
- Development layouts which maximise the potential for ‘walkable’ neighbourhoods where walking and cycling are the first choice as a mode of transport;
- Integration between the development areas and the remainder of Gillingham through improved linkages and connectivity to enable future residents, employees and visitors to the site to travel to everyday destinations by a choice of travel modes, as follows:
 - Walking and cycling improvements on the links into Gillingham town centre and other key local destinations;
 - Bus service improvements to serve the site, Gillingham, and key off-site destinations; and
 - Improved connections to Gillingham rail station (pedestrian, cycle and bus).
- Demand management measures that will encourage future residents, employees and visitors to the site to travel to everyday destinations by modes other than single occupancy car use; and
- Minimise external traffic generation and traffic impacts on the existing local highway network and identify improvements that can be undertaken within the transport network that cost effectively limit the significant impacts of the development.

7.2.1 The following sections set out how these objectives will be achieved.

7.3 Walking and Cycling Improvements

7.4 The Gillingham SSA will assist in completing the gaps in the existing pedestrian and cycle route provision between the site and Gillingham town centre and other local facilities, as follows:

- Provision of new footway on eastern side of B3092 New Road linking potential new access to Lodden Lakes and the extended employment area with the existing footway provision to the north of the existing junction serving Brickfields Business Park (subject to extent of highway maintainable at the public expense and land ownership constraints);
- The development will assist in bringing forward, through delivery and / or financial contribution, improvements to pedestrian / cycle access between the site and Gillingham town centre and other local facilities; including:
- The core pedestrian/cycle routes within the highway between the development site and key local destinations (as shown in Figure 7.1); and
- Any other routes that are developed by Dorset County Council at planning application stage into deliverable and costed improvements, which may include:
 - Improvements to pedestrian access to Gillingham rail station via the off-road route on Brickyard Lane to the south of the railway line;
 - Footway / cycleway between Kings Court Road / Kings Court Palace and King John Road; and
 - Improvements to the footpath links along the Lodden Valley between the site boundary and Shaftesbury Road, at the Lodden Bridge.

7.5 Public Transport Improvements

7.6 The Gillingham SSA will assist in enhancing the existing public transport provision in Gillingham through the following measures:

Bus

- The existing bus stops on Shaftesbury Road and New Road along the site frontage, as well as additional key bus stops within Gillingham town centre and at the rail station will be upgraded – the improvements will be in accordance with Dorset County Council strategy at the time;
- Phased increases in bus service frequency (in conjunction with development completions) on the Gillingham – Shaftesbury corridor to a service level of approximately one every 20 minutes between 07:00 – 19:00 Monday – Saturday and potentially a Sunday service (subject to demand and viability) with a good level of service to Brickfields Business Park;
- A ‘community transport hub’ in the vicinity of the local centre / community uses; and
- Financial contribution towards the enhancements of the community transport schemes and community led transport initiatives within Gillingham.

Rail

- A financial contribution towards provision of additional cycle parking at Gillingham rail station.

7.7 Travel Plan

7.7.1 A Travel Plan (TP) will be prepared as a standalone document and will be summarised in the TA.

7.7.2 The TP will focus on promoting sustainable lifestyles amongst new residents, through reducing the need for travel by private car; providing non-car mode travel options for local journeys; and influencing modal choice. The TP will also provide an initial framework for implementation, management, and review of the Travel Plan.

7.7.3 To achieve the overarching aim of encouraging and facilitating journeys by future residents by non-car modes of transport, it is proposed to issue all new residents with a 'Travel Pack', which will include details of journey planning websites, walking and cycle maps, local cycle shops and bus timetable information. Consideration will also be given to providing free or discounted use of public transport to future residents for a limited time. It will also include the following measures:

- Smarter choices measures covering targeted marketing initiatives;
- Consideration of provision for electric charging points across the site;
- Provision of car club (to tie in with existing car club operators in Dorset); and
- Commitment to update the existing Gillingham and Shaftesbury Walking and Cycling map.

7.7.4 In addition to the site-specific measures, it will also set out town-wide Personal Travel Planning (PTP) for Gillingham for existing residents, as well as those residing within the Gillingham SSA.

7.8 **Summary**

7.8.1 Confirmation is requested that the sustainable transport strategy set out above is acceptable to serve the Gillingham SSA.

SECTION 8 DEVELOPMENT TRAFFIC GENERATION AND DISTRIBUTION

8.1 Introduction

8.1.1 This section sets out the proposed vehicular trip rates and traffic generation for the various land uses included within the Gillingham SSA.

8.1.2 It is important to note the vehicular trip rates and subsequent traffic generation set out within this chapter are before the effects of the sustainable transport strategy measures are taken into account.

8.2 Garden Gate Traffic Generation

8.2.1 The garden gate traffic generation is in effect the traffic generation of each land use before the effects of any internalisation of journeys (or pass-by, linked trips, etc) between land uses on site has been taken into account. The external traffic generation after the effects of the internalisation of journeys between land uses on site is set out in sub section 8.3 (i.e. that traffic which impacts on the existing highway network).

8.2.2 As set out in Section 2, the emerging illustrative masterplan includes local service provision to include a convenience store and two other small retail units, a health centre, a community hall, and a pub/restaurant. For the purposes of this transport assessment, a 500sqm GFA doctors' surgery and a 750sqm GFA pub/restaurant have been tested as these are the only potential uses that are considered likely to generate a material number of external trips.

8.2.3 It is considered that the scale of any convenience store (maximum size of 250sqm) is ancillary to the proposed residential uses and other retail uses that will be provided as part of the development proposal are only likely to attract and serve residents living within the site.

8.2.4 The provision of a convenience store or other retail uses on site will also reduce the need for future residents to travel off-site for everyday shopping needs and therefore will have a beneficial impact in terms of reducing the external traffic generation of the site. This would particularly apply to town centre journeys.

- 8.2.5 Against this background, the provision of any other uses as part of the local centre other than a doctors' surgery and a pub/restaurant are unlikely to generate a material number of trips by visitors/customers and/or staff journeys during the peak hour periods and is therefore likely to be neutral in traffic terms. On this basis, these uses have not been explicitly accounted for as external trips in the analysis.
- 8.2.6 It is important to note the S-Paramics model will assess the operation of the local highway network for the weekday morning peak period (0700-1000) and the evening peak period (1600-1900). For the purpose of this note however, only the 0800-0900 and 1700-1800 peak hour periods are set out.
- 8.2.7 The traffic generation of the proposed development has been estimated using a combination of comparable survey data contained within the TRICS trip generation database and a robust first principles assessment. The data in Appendix D will also be used create the expansion factors and flow profiles to establish the traffic generation for the weekday peak periods (i.e. 07:00 – 10:00 and 16:00 – 19:00) periods either side of the peak hours and used in S-Paramics traffic modelling exercise.
- 8.2.8 The full TRICS and survey data is provided in Appendix D and a summary of the garden gate weekday peak hour trip rates by land use is set out in Table 8.1.

Table 8.1: Proposed Development: Garden Gate Vehicular Trip Rates – Weekday Peak Hours

Land Use	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Residential – Trip Rate Per Dwelling						
Privately Owned Houses	0.128	0.376	0.504	0.315	0.204	0.519
Affordable Houses	0.131	0.245	0.376	0.248	0.184	0.432
Elderly Accommodation	0.084	0.080	0.164	0.040	0.084	0.124
Other Land Uses						
Primary School	First Principles Assessment – See Appendix E					
Local Convenience / Retail	n/a					
Health Centre	4.697	2.647	7.344	1.856	2.808	4.664
Community Hall	n/a					
Pub/Restaurant	-	-	-	2.763	1.900	4.663

Source: TRICS / Consultant's Estimates

Note: the term "garden gate" trip rate refers to the trip rate immediately on leaving the demise of the dwelling or employment use etc. and does not allow for internalisation within the development site itself and is thus different from the external trip rates and traffic generation (i.e. the development traffic that uses the existing external highway network)

8.3 Development Traffic Generation

- 8.3.1 An analysis of the external traffic generation for each land use (i.e. that traffic which impacts on the existing highway network) taking into account the internalisation of journeys (as well as pass-by, and linked trips) between the various land uses on site is set out in detail in Appendix E.
- 8.3.2 A summary of the external traffic generation of the proposed development (allowing for internalisation of journeys), before the effects of the package of sustainable transport improvements have been taken into account, are set out in Tables 8.2 and 8.3.

Table 8.2: External Traffic Generation Proposed Development – AM Peak Hour (08:00 – 09:00)

Land Use	All Vehicles		
	Arrivals	Departures	Total
Residential (1,800 dwellings)	212	621	833
Primary School (3 FE) – Staff	25	-	25
Primary School (3 FE) – Escort Education	112	84	196
Local Convenience / Retail	-	-	-
Health Centre	9	5	15
Community Hall	-	-	-
Pub/Restaurant	-	-	-
Total	358	710	1,068

Source: Consultant's Estimates

Table 8.3: External Traffic Generation Proposed Development – PM Peak Hour (17:00 – 18:00)

Land Use	All Vehicles		
	Arrivals	Departures	Total
Residential (1,800 dwellings)	542	357	898
Primary School (3 FE) – Staff	-	12	12
Primary School (3 FE) – Escort Education	-	-	-
Local Convenience / Retail	-	-	-
Health Centre	4	6	9
Community Hall	-	-	-
Pub/Restaurant	13	9	23
Total	559	384	943

Source: Consultant's Estimates

- 8.3.3 The analysis indicates that the proposed development is likely to generate some 1,068 two-way external vehicle trips in the weekday morning peak hour and 943 two-way vehicle movements in the evening peak.

8.4 Development Traffic Distribution

- 8.4.1 The proposed distribution of the development generated traffic for each land use is summarised in the following paragraphs.

Residential

Journey Purpose

- 8.4.2 The likely journey purpose for the generated car driver peak hour trips has been determined using data derived from the National Travel Survey (NTS) 2015 (DfT) and the proportion of peak hour trips by journey purpose by car is presented in Table 8.4.

Table 8.4: Proportion of Peak Hour Trips by Journey Purpose (Car Driver Only)

Trip Purpose	AM Peak (0800-0900)	PM Peak (1700-1800)
Commuting/Business	40%	46%
All Other Journey Purposes	60%	54%
Total	100%	100%

Source: Car driver trip start time by trip purpose (Monday to Friday only): National Travel Survey, DfT, 2015

- 8.4.3 For the purpose of this assessment, the analysis has been undertaken on the basis that 46% of the total vehicular trips generated by the residential development will be for employment journeys and the remaining 54% of the vehicle trips will be all other purposes for both the morning and evening peak hour periods (this is a worst case as employment journeys on average, are longer, and therefore will have a greater impact on the wider highway network).

Distribution

- 8.4.4 To provide an accurate assessment of the likely distribution of traffic from the site, separate methodologies have been applied to consider the destinations of commuting / business trips and other trip purposes.
- 8.4.5 In summary, the traffic generation has been assigned to the local and strategic highway network using a distribution derived as follows:

- For the proportion of peak hour trips that are work journeys), the 2011 Census Journey to Work data for the North Dorset middle layer super output area (MSOA) ref: 001 (E02004255) has been used. This area encompasses the vast majority of the Gillingham built-up area and has been used derive the likely workplace destinations for future residents of the site and so identify existing commuting patterns; and
- For trips for other journey purposes, a P/T^2 gravity model has been undertaken using the population of key urban areas (from the 2011 census) within a 30-45-minute drive from the site (estimated from Google Maps Directions facility).

8.4.6 The two sets of data will then be combined to generate a single set of distribution parameters to inform the development trip assignment for the residential element of the Gillingham SSA.

Other Land Uses

8.4.7 All generated trips associated with the other land uses (i.e. primary school, health centre, pub / restaurant) external to the site will be distributed using the results of the Gravity Model only.

8.4.8 Having regard to the above distribution, the external generated trips will be assigned in accordance with the relevant zones within the Gillingham S-Paramics model. With regards to the assignment of internal trips within Gillingham, trips associated with the site forecast to travel to/from Gillingham (i.e. internal to the model study area) will be distributed among the relevant zones within the town using distributions taken from the Base model.

SECTION 9 GILLINGHAM S-PARAMICS TRAFFIC MODEL – MODELLING PARAMETERS

9.1 Introduction

9.1.1 This section of the Transport Assessment Scoping Report sets out the proposed modelling parameters to assess the traffic generated by the proposed development on the operation of the highway network.

9.1.2 These modelling parameters were previously agreed with DCC as part of the assessment undertaken at Local Plan promotion stage.

9.2 Implementation of Smarter Choices Initiatives

9.2.1 As set out in Section 8, the proposed development will deliver a comprehensive package of sustainable transport improvements. The framework travel plan commits the development to the effective promotion and delivery of sustainable transport initiatives e.g. walking, cycling, public transport and tele-commuting, in connection with both the proposed and existing developments in Gillingham and through this to thereby reduce the demand for travel by less sustainable modes. Further, the development will assist DCC in implementing Town Wide Smarter Choices measures, through Personalised Travel Planning across Gillingham, which will assist in achieving a modal shift for existing journeys made within the town.

9.2.2 By the inclusion of existing development within the provisions of a travel plan associated with new development, it may be possible to free up additional capacity within the road network within the road network to offset some of the demand generated by the proposed development. This is an approach was endorsed by DCC and HE at Local Plan promotion stage. As such, additional future year modelling runs will be undertaken with the following percentage reductions being applied to design year baseline vehicle movements (for both 2021, 2031 and all interim years) and development generated vehicle trips to represent this modal shift:

- 10% reduction to development generated traffic to reflect the implementation of the Travel Plan; and
- 7.5% reduction to the design year baseline traffic flows (for traffic originating from dwellings within the town, i.e. excluding through movements) to estimate the likely modal shift of existing journeys as a result of the comprehensive transport strategy delivered by the development.

9.3 Peak Spreading

- 9.3.1 Peak spreading relates to the re-timing of trips out of congested peak hours to adjacent periods.
- 9.3.2 It was agreed with DCC at Local Plan promotion stage that an analysis of the likely effect of peak spreading on the network is appropriate in order to present a more realistic picture of the future traffic conditions that could be expected on the network. The effect of peak spreading will be allowed for in both the 2021 and 2031 reference case and ‘with development’ models, as well as the interim year models.
- 9.3.3 It is accepted that not all trips are likely to consider retiming their journeys across the morning peak hour. Peak spreading will only be applied to a proportion of all traffic within the network and will exclude the trips that are to/from the schools within the study area.
- 9.3.4 A full analysis of the peak spreading methodology applied to the Gillingham S-Paramics model will be set out in detail in the Do Minimum and Do Something model validation reports.

SECTION 10 SUMMARY AND CONCLUSIONS

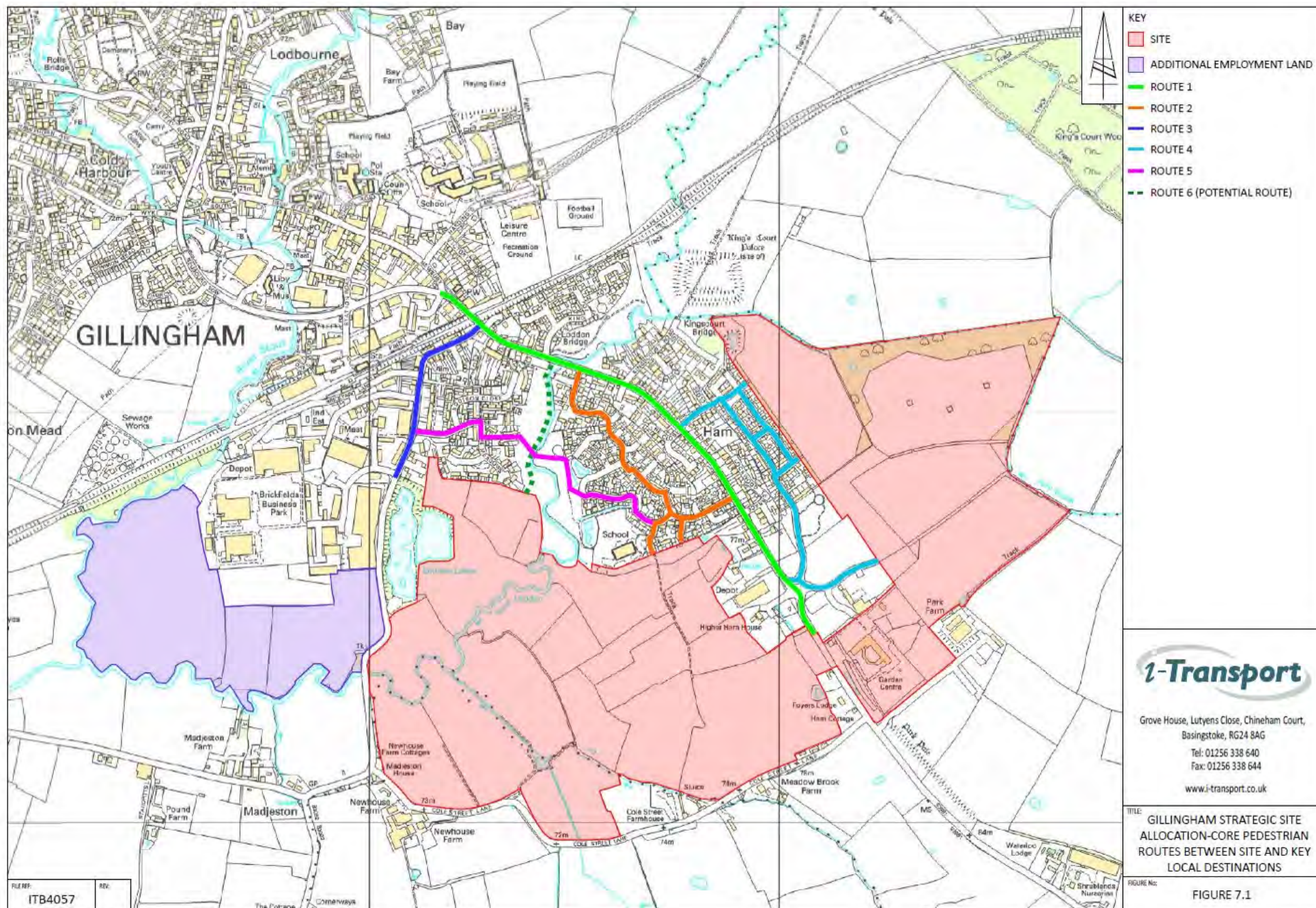
10.1 Introduction

10.2 This Transport Assessment Scoping Report sets out the proposed methodology and parameters for a Transport Assessment to assess the transport and highways implications of the Gillingham Strategic Site Allocation, a sustainable mixed-use development comprising about 1,800 homes.

10.3 The Transport Assessment will form a technical appendix of the Environmental Statement (ES), which is being prepared to assess the development set out in the Master Plan Framework for the site.

10.4 Agreement is sought from the Local Highway Authority, Dorset County Council, and Highways England, that the proposed access arrangements, sustainable transport strategy, development traffic generation, and suggested modelling parameters identified in this report are acceptable to enable the production of the TA on an agreed basis.

FIGURES



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DRAWINGS