GRASS ROOTS PLANNING

LAND SOUTH OF BADMINTON ROAD, OLD SODBURY

PROPOSED RESIDENTIAL DEVELOPMENT

TRANSPORT STATEMENT

MARCH 2021

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1. INTRODUCTION

Brief

1.1 Key Transport Consultants Limited (KTC) has been instructed by Grass Roots Planning, to provide professional transport advice in relation to a proposed residential development at a site located in Old Sodbury, South Gloucestershire. This Transport Statement (TS) has been prepared to accompany a planning application for 35 new dwellings including suitable access arrangements, suitable parking, open space, pedestrian connections and other ancillary works.

1.2 This TS assesses the transportation implications associated with the proposals and concludes that the site is not wholly car-dependent, is within a walkable / cyclable distance of some key local facilities, both in the village and nearby Chipping Sodbury. The proposal provides suitable transport infrastructure, including access improvements which may help improve highway safety and lower speeds on Badminton Road. In view of this and given the limited traffic impacts demonstrated, there are no transportation reasons to preclude the development of the site for residential uses.

Site Location and Current Use

1.3 The proposed development site is located to the south of the A432 Badminton Road, on the western outskirts of Old Sodbury village as illustrated in **Figure 1**, directly between Chipping Sodbury and the A46.

1.4 The site is currently used for agricultural purposes, with vehicular access to the A432 provided via an existing agricultural gate located in the north-east corner of the site. An existing Public Right of Way (PROW) also crosses the centre of the site.

Report Structure

1.5 The structure of this TA report is summarised below:

- **Section 2** describes the existing conditions of the local transport network within the vicinity of the development site;
- The proposals for the development site including access, servicing and parking arrangements are outlined in **Section 3**;
- **Section 4** sets out the transport policy context;
- The accessibility of the site to local facilities by alternative modes of travel to the private car are examined in **Section 5**;
- **Section 6** provides an assessment of trip generation and likely traffic impacts;
- A summary and conclusions are provided in **Section 7**.

2. SITE SETTING AND LOCAL TRANSPORT CONTEXT

2.1 This section provides a summary of the characteristics of the development site including location, context, planning history and other relevant transport information relating to the current condition of the transport network including traffic and accident data

Strategic Transport Setting

2.2 As Figure 1 shows, the A432 Badminton Road provides a primary two-way, highway connection between Bristol around 11km to the west via Chipping Sodbury and Yate, and the A46 at Cross Hands, 2.0km to the east of the site, with J18 of the M4 being only short distance to the south

2.3 The A432 enters Chipping Sodbury at a large five-arm roundabout, 1.5km to the west, before continuing through to Yate.

2.4 To the east, the A432 meets the A46 at a four-arm, signal-controlled junction, 1.5km east of the village.

2.5 The A46 connects to the nearby motorway network around 2.7km to the south at a grade-separated, signalised roundabout junction (J18) with the M4. This also provides an onward route to Bath via Cold Ashton, both located to the south of the motorway.

Site Context

2.6 As Figure 2 indicates the site is positioned south of the A432 which runs east-west, just outside of the western edge of the Old Sodbury village settlement boundary, around 400m from its centre.

2.7 Access to the site from Badminton Road is currently provided via a single gated access point in the site's north-east corner. Some separation from Badminton Road is provided along the rest of the site's northern boundary by an existing narrow ribbon of allotments.

2.8 Directly to the south lies the main South Wales to London railway line in a cutting, and beyond that, agricultural land. The main built-up area of Old Sodbury lies to the east, with individual properties to the west, east and on the opposite side of Badminton Road in the north.

Local Highway Infrastructure

2.9 As Figure 2 shows, the village of Old Sodbury is located 400m to the east of the site access. It is centred on a crossroads junction with Cotswold Road and is where a majority of the active frontage is located. There are also a few intermittent T-junctions connecting the A432 with Church Lane and other minor residential access roads further to the east.

2.10 In the vicinity of the site, the A432 is subject to a 30mph within the vicinity of the site frontage with Badminton Road which continues eastwards into the village.

2.11 Around 70m west of the site access, opposite the entrance to a footpath which crosses the site, an existing priority-controlled junction connects Commonmead Lane onto the opposite side of the A432. This provides access to a number of small hamlets/villages further to the north and is unsuitable for HGVs.

2.12 Around 180m west of the existing site access, roughly parallel to the far western edge of the site boundary, the speed limit increases to 40mph. At the speed limit change, the A432 carriageway includes a short length of central hatched white lining to temporarily narrow both traffic lanes and help slow traffic. This reverts to a single broken white line as it passes Commonmead Lane and the site access before re-emerging as central hatching 140m to the east and continuing through the village.

2.13 An assessment of existing facilities for pedestrians, cyclists and public transport users and an analysis for the accessibility these provide to local facilities is detailed in Section 5 of this TS.

Planning History and Consultations

2.14 There is no previous planning history for the site, however the access was used in 2016 as a site access for works on the railway line, including use by large HGVs. Below is a Google Streetview image of the access in operation.

2.15 Other applications are noted at locations bordering the site and on the opposite site of Badminton Road, but it appears that these are all historic, with no extant permissions identified within the vicinity which may generate any sort of significant cumulative traffic impact.

2.16 With regards to this development proposal, a pre-application consultation was undertaken with South Gloucestershire Council (SGC) to inform this scheme. A detailed response was received in March 2019 which is provided in Appendix A, with a summary provided below.

2.17 In general, concern was raised that the development is in a rural location and therefore may be 'wholly car dependent', contrary to Policy PSP11, and potentially be unlikely to permit day-to-day access to necessary facilities by all travel modes.

2.18 Concern was also raised in relation to the proposed access arrangements, lack of crossing facilities, high vehicle speeds and local accident records within the vicinity of the site

2.19 To address this, this TS provides the information requested by SGC Highways including:

- A full assessment of access to the site by all modes of transport (including pedestrians,

cyclists and public transport), supported by accident records, traffic data and other assessments of existing infrastructure;

- Full details of the proposed site access junction and any off-site works, to include suitable visibility splays, any proposed highway narrowing, and appropriate access junction geometry to ensure safe access from the site without compromising the operation of the A432;

- Details of site layout, on-site parking provisions, vehicle tracking and access for refuge vehicles and access for pedestrians and cyclists;

- Details of projected vehicle forecasts, impact assessments on the highway network and any mitigation proposed;

- Full details of the travel planning and sustainable transport measures adopted to mitigate and minimise vehicular the demand arising from this development;

Traffic Counts

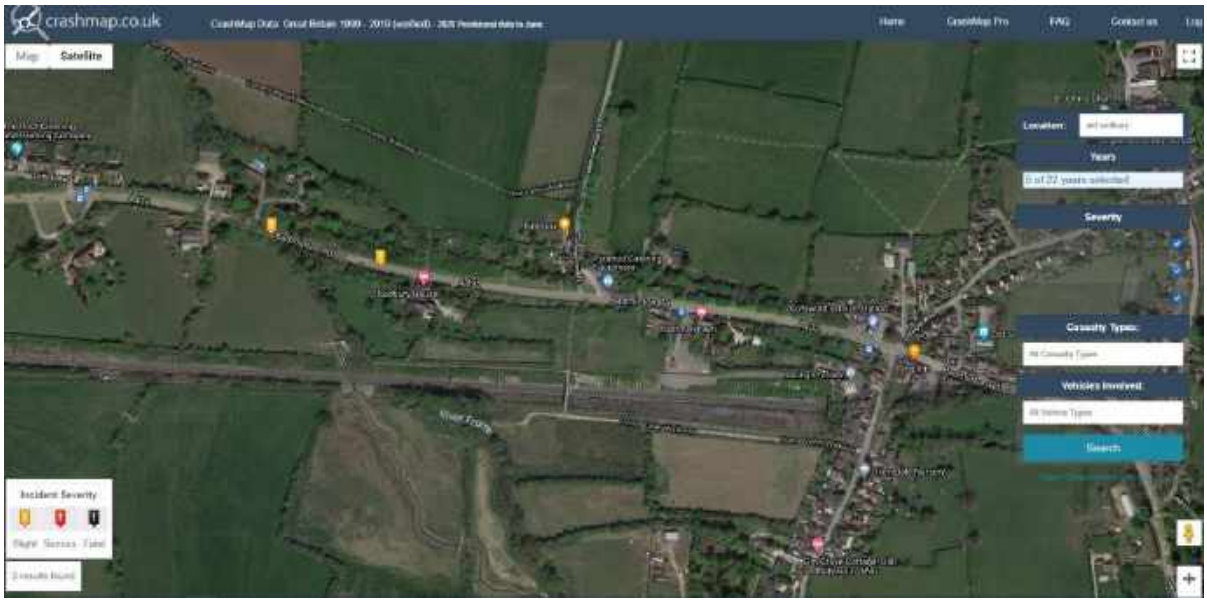
2.20 To provide appropriate background traffic flow and speed data, Seven-Day Automated Traffic Counts (ATC) were commissioned on Badminton Road between the 9th and 15th January 2019. These are provided in Appendix B.

2.21 The ATC identified that there is an average weekday flow of 6,111 westbound and 6,093 eastbound (12,204 two-way), with two-way AM peak (08:00 to 09:00) and two-way PM peak (17:00 to 18:00) flows of 1,183 and 1,065 vehicles, respectively. The ATC also identified that the average 85%ile vehicle speeds were 40mph for westbound movements and 36mph for eastbound.

2.22 It is noted that this is above the 30mph speed limit in the survey location, most likely due to the 40mph limit only being around 400m to the west and the undeveloped nature of the site providing a more rural feel than the more urbanised centre Old Sodbury located to the east.

Personal Injury Accident Records

2.23 As shown on the map below provided by Crashmap, only 3 accidents were recorded on the A432 within 600m of the site access over the course of the previous four years (2016-2020).



2.24 The closest accident was recorded 300to the west of the site access within the 40mph zone, with a further one another 200m west. These are of a slight nature and occurred on the same date, 9th September 2016. A total of five vehicles were involved with four casualties, assuming the records are correct.

2.25 The third accident occurred on Cotswold Way, within the village of Old Sodbury.

2.26 Given this relatively low accident rate, and that both incidents were on a single day, with no recent collisions, there is unlikely to be an existing safety issue in this location currently.

3. DEVELOPMENT PROPOSALS

Proposed Development

3.1 As outlined in Section 1, the proposed development is for up to 35 residential dwellings. These include a variety of housing tenures including a mix of 1-bed and 2-bed apartments and maisonettes and detached and semi-detached houses ranging for 2-bed to 4-bed units. The proposed site layout and housing schedule is provided in Appendix C.

Internal Road Network

3.2 The proposed access road will form a cul-de-sac with no through traffic as shown in the illustrative site layout provided as Appendix C. The primary access road will be designed to adoptable standards to include a 4.8m carriageway width and appropriate forward visibility in line with Manual for Streets guidance on all bends.

3.3 In addition, the site will also include a series of short (maximum length around 35m), unadopted, shared surface links which will provide direct access to small groups of dwellings and their parking spaces, off of the main adopted access road.

3.4 A series of vehicle track plots have been undertaken to demonstrate that the site layout can accommodate the expected vehicle types including a suitable turning head and access to all parking. These are presented in Figure 4.

Proposed Vehicular Access

3.5 To ensure safe access arrangements suitable to accommodate the development, a new priority-controlled T-junction would be provided directly onto the A432, in the same location as the existing field gate in the north-east corner of the site. As shown in Figure 3., this would include 120m visibility splays in both directions along Badminton Road. Based on the speed survey information, the visibility to the west could be reduced to 56m using the calculation in Manual for Streets, but the more onerous 120m has been shown for consistency and robustness. Splays for 30mph from Manual for Streets are including on Figure 3 for information.

3.6 To aid the formation of adequate visibility splays at the access, and help reduce passing vehicle speeds, it is also proposed to narrow the A543 carriageway to 6.8 around the access junction, through the provision of a minor build out or around 550mm. This will be graded into the existing carriageway shown in Figure 4.

3.7 The proposals reduce the road width to 6.8m. This is more than the 3.25m either side of the pedestrian island elsewhere on Badminton Road, which gives a total width of 6.5m. It is therefore considered that the proposed junction would not limit road capacity, as it already reduced elsewhere on the same stretch. The slight reduction in carriageway width will also reinforce to drivers a change in environment, entering a more urban area and offer some minor speed reduction.

Proposed Pedestrian and Cycle Access

3.8 To provide pedestrian access to the site, 2.0m wide footways would be provided on both sides of the proposed site access junction and up to a point around 20m south of Badminton Road to allow safe crossing movements away from the access but close to the pedestrian desire line, in a position with good intervisibility with the access junction.

3.9 The eastern footway will connect the new access junction and site to the existing footway network along the southern side of the A432 leading into the centre of the village. Within the site, the western footway runs along the full length of the adoptable highway, including around visitor parking bays and the turning head located towards the western end of the site.

3.10 The internal access road cuts through the existing north-south aligned PROW which crosses the centre of the site. Connections to the internal footways are provided with the PROW route retained with improvements made to the surfacing and access arrangements at either end to encourage its use and make it clear this space gives priority to pedestrians, full details will be secured via condition and will form part of the S278/38 packages in due course.

3.11 Cyclists would be required to cycle on-street but given the 'no through' nature of the site and the expected low vehicle speeds, it is considered that this appropriate. The shared nature of the unadopted roads and the rear access they provide to gardens are also likely to make cycling more convenient and accessible.

Parking

3.12 A parking schedule is provided on the site layout provided as Appendix C. It can be seen that there will be 71 parking spaces and 15 garage spaces to serve the 35 dwellings which includes 5 visitor spaces. It is considered that an average provision of 2.6 spaces per dwelling will adequately meet demand from the site and be in compliance with policy PSP 16.

3.13 Garages will comply with the minimum internal dimensions set out in the SPD and be sufficient to accommodate cycle storage. For plots without garages cycles will be stored within secure sheds within the garden areas. Cycle parking will be in line with those outlined in the 2017 Local Plan – Policies, Sites and Places Plan, which require:

Dwellings with garages:

- 1 bed unit - 1 provided in garage or one secure undercover space
- 2+ bed unit – 2 secure undercover space

Dwellings without garages:

- 1 bed unit: 1 secure undercover space
- 2+ bed unit – 2 secure undercover space

Traffic Calming

3.14 During consultation with the parish council, they had concerns with speeding through the village, and lack of safe crossing, especially for parents and elderly people.

3.15 Therefore, as part of the scheme, the developer will contribute towards a signal-controlled crossing in the village. The best location would be close to the junction of Chapel Lane and Cotswold Lane, probably on the eastern side of the junction. This will provide a safe crossing location, but also help in slowing traffic. The crossing will be a simple PUFFIN crossing

3.16 An approximate location for the crossing is shown on Figure 2 and delivery of this will be secured via S106 financial contributions

3.17 For vehicles approaching from the west (Chipping Sodbury), a more prominent village gateway feature is proposed at the existing change from 30/40mph. It would include features each side of the carriageway, and an alterative colour surfacing to highlight the speed limit roundel on the road. An example is shown in the photo below.

3.18 For westbound traffic (from A46) it is proposed to locate a similar feature just east of The Dog pub. Whilst this is within the 30mph speed limit, this location is where the road narrows and residential properties are closer to the road. It therefore gives a better sense of arrival and a change in environment for approaching drivers.

3.19 Local Transport Note LTN 1-07 Traffic Calming suggests significant treatments at gateways achieved a speed reduction of 6-7mph.

4. TRANSPORT POLICY CONTEXT

Introduction

4.1 This section summarises some of the key local and national policies and guidance documents relevant to the proposed residential development in Old Sodbury.

4.2 This section of the TS summarises the various national, sub-regional and local transport-related policies and guidance, which must be considered when developing suitable development proposals for the site.

National Planning Policy Framework

4.3 The National Planning Policy Framework (NPPF) was published by the Ministry for Housing, Communities and Local Government in February 2019. Section 9 of NPPF is titled Promoting Sustainable Transport and comprises ten paragraphs, set out below, that specifically address transport issues for plan making and development.

"Promoting Sustainable Transport

102 Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
a) the potential impacts of development on transport networks can be addressed;
b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
c) opportunities to promote walking, cycling and public transport use are identified and pursued;
d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

103. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

104. Planning policies should:

a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;

b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;

d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);

e) provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements; and

f) recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training and emergency service needs, and the Government's General Aviation Strategy.

105. If setting local parking standards for residential and non-residential development, policies should take into account: a) the accessibility of the development;

b) the type, mix and use of development;

c) the availability of and opportunities for public transport;

d) local car ownership levels; and

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

106. Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.

107. Planning policies and decisions should recognise the importance of providing adequate overnight lorry parking facilities, taking into account any local shortages, to reduce the risk of parking in locations that lack proper facilities or could cause a nuisance. Proposals for new or expanded distribution centres should make provision for sufficient lorry parking to cater for their anticipated use.

Considering development proposals

108. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

109. 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.

110. Within this context, applications for development should:
a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

111. All developments that will generate significant amounts of movement should be required

to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

4.4 The transport aspects of the Plot 3 development proposal are considered to meet all the requirements of NPPF for the promotion of sustainable transport.

Planning Practice Guidance

4.5 National Planning Practice Guidance has been updated and released online. The online resource makes reference to Transport Assessments where it is stated:

'The scope and level of detail in a Transport Assessment or Statement will vary from site to site but the following should be considered when settling the scope of the proposed assessment:

- *information about the proposed development, site layout, (particularly proposed transport access and layout across all modes of transport)*
- *information about neighbouring uses, amenity and character, existing functional classification of the nearby road network;*
- *data about existing public transport provision, including provision/ frequency of services and proposed public transport changes;*
- *a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;*
- *an assessment of trips from all directly relevant committed development in the area (i.e. development that there is a reasonable degree of certainty will proceed within the next three years);*
- *data about current traffic flows on links and at junctions (including by different modes of transport and the volume and type of vehicles) within the study area and identification of critical links and junctions on the highways network;*
- *an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area;*
- *an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);*
- *measures to improve the accessibility of the location (such as provision/ enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;*
- *a description of parking facilities in the area and the parking strategy of the development;*
- *ways of encouraging environmental sustainability by reducing the need to travel; and*

- *measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads.*

In general, assessments should be based on normal traffic flow and usage conditions (e.g. non-school holiday periods, typical weather conditions) but it may be necessary to consider the implications for any regular peak traffic and usage periods (such as rush hours). Projections should use local traffic forecasts such as TEMPRO drawing where necessary on National Road Traffic Forecasts for traffic data.

The timeframe that the assessment covers should be agreed with the local planning authority in consultation with the relevant transport network operators and service providers. However, in circumstances where there will be an impact on a national transport network, this period will be set out in the relevant Government policy.'

Local Policy

Joint Local Transport Plan 2011 - 2026

4.6 The third Joint Local Transport Plan (JLTP3) is prepared jointly for the four West of England unitary authorities and is in three parts:

- Strategy – the long term policy view to 2026;
- Supplementary Documents – covering transport topics;
- Delivery Plan – three year programme of schemes.

4.7 The JLTP3 vision is for "an affordable, low carbon, accessible, integrated, efficient and reliable transport network to achieve a more competitive economy and better connected, more active and healthy communities."

South Gloucestershire Council Core Strategy - December 2013 (2006-2027)

4.8 The adopted Core Strategy emphasises the need for sustainable communities. '*i.e. communities that will stand the test of time, where people want to live, and which will enable people to meet their aspirations and potential*'.

4.9 Policy CS8 is applicable to the proposed development and addresses Improving Accessibility. Within the policy it is noted that the principle of provision and promotion of sustainable travel options will be applied, as follows:

'Provision and Promotion of sustainable travel options. All new development proposals of a sufficient scale will be encouraged to reduce greenhouse gas emissions, travel demand and support travel by means other than the private car, particularly to significant destinations such as educational establishments, hospitals, rail stations, bus interchanges and employment areas. This will be achieved through:

- *the provision of, and integration of walking, cycling and public transport infrastructure into the local network;*
- *providing mixed use developments in appropriate locations;*
- *the active promotion of a Green Travel Plan approved by the Council;*
- *the provision of shower and changing facilities for use by staff in commercial and business premises;*
- *contributions to bus services, and other initiatives such as commuter and car clubs and community transport projects, as appropriate; and*
- *access to high speed broadband and installation of electrical sockets, storage and sufficient space in dwellings such that allows homeworking.*
- *Provision of facilities for charging plug-in or other ultra-low emissions vehicles.'*

4.10 Policy CS8 also requires *'parking and vehicular site access should be well integrated and situated so it supports the street scene and does not compromise walking, cycling or public transport infrastructure and highway safety'* and ensure that safe and secure cycle parking is provided in line with standards.

4.11 PolicyCS4A includes a presumption in favour of sustainable development, taking a pro-active and *'positive approach'*. Where policies are potentially outdated, the council will grant permission, unless material considerations indicate otherwise, taking into account whether *'granting permission would significantly and demonstrably outweigh the benefits when assessed against…'* the NPPF, Local Plan, other planning documents and any emerging policy which may be relevant.

4.12 Policy CS17 on Housing Diversity notes that housing developments must contribute to the provision of homes suitable for '*older people, persons with disabilities and those with other special needs, in a way that integrates these people with the wider community*'.

4.13 Although Policy CS16 requires housing developments to provide densities that are informed by the character of the local area, it notes the importance of making an efficient use of land '*particularly in and around town centres… where there is good pedestrian access to frequent public transport services'*.

4.14 Policy CS18 commits to improving affordable housing provision to meet housing needs including purpose-built accommodation suitable for older, (possibly vulnerable) persons which provide safe local walk and cycle routes and access to good quality public transport.

South Gloucestershire Policies, Sites and Places – November 2017

4.15 The SGC Polices, Sites and Places Plan (PSP), was adopted on 8th November 2017. It replaced remaining "saved" policies of the 2006 Local Plan.

4.16 Traffic Impact is set out in PSP 11 which states:

"Development proposals which generate a demand for travel, will be acceptable where:

1. *appropriate, safe, accessible, convenient, and attractive access is provided for all mode trips arising to and from the proposal; and*

2. *any new or improved bus stops meet the Council's adopted standards and the appropriate national guidance; and*

3. *residential development proposal(s) are located on:*

    i. safe, useable walking and, or cycling routes, that are an appropriate distance to key services and facilities and then

    ii. where some key services and facilities are not accessible by walking and cycling, are located on safe, useable walking routes, that are an appropriate distance to a suitable bus stop facility, served by an appropriate public transport service(s), which connects to destination(s) containing the remaining key services and facilities; and

4. *commercial development is located on safe, useable walking routes, that are an appropriate distance to a suitable bus stop facility, served by appropriate public transport services, linking to major settlement areas; and*

5. *appropriate on-site loading, unloading and waiting facilities are provided for commercial developments; and*

6. *it would not generate traffic that would:*

    i. create or contribute to severe congestion;

    ii. severely impact on the amenities of communities surrounding access routes (local network to strategic road network);

    iii. have an unacceptable effect on highway and road safety;

    iv. harm environmentally sensitive areas; and

7. *any new transport related infrastructure provided in relation to the proposal would not create or exacerbate traffic congestion or have an unacceptable effect on highway and road safety; and*

8. *unobstructed emergency vehicle access is provided; and*

9. *potentially significant transportation impacts are accompanied by an appropriate Transport Assessment and where necessary a Travel Plan.*

PSP Parking Standards

4.17 Parking requirements are set out in PSP16 (2017) and in SGC's Residential Parking Standards 2013 Supplementary Panning Document (SPD), and define the following minimum residential car parking standards as **Table 4.1** shows.

Table 4.1 Car Parking Standards	
Type	**Spaces**
1 Bed Dwelling	1
2 Bed Dwelling	1.5**
3 Bed Dwelling	2
4 Bed Dwelling	2
5+ Bed Dwelling	3
Visitor Spaces (per dwelling)	0.2

**Requirement rounded down to the nearest whole number. Where 2 bed flats are proposed the Council will encourage the provision of 1 parking space per flat, with the remainder of the requirement provided as unallocated visitor spaces in close proximity of the units they serve.

4.18 The standards outline that only garages that meet the following internal space standards will count towards the parking requirement:

1. *Single garage: 6m x 3m*
2. *Double garage: 6m x 5.6m*
3. *Where a garage is provided to the minimum size standards it will be accepted as providing the 'secure undercover [cycle] spaces' as required in policy T7 of the South Gloucestershire Local Plan. Where garages are provided below the minimum size requirements only 50% of them will count towards the parking standards. Garages will not be acceptable as the sole parking spaces(s) serving a dwelling."*

4.19 Cycle parking is set out in Policy T7/Schedule A, which, for houses and flats is summarised as:

- 1 bedspace/bedroom unit: Minimum of 1 space (provided garage design accommodates both car and cycle storage). Otherwise, 1 secure, undercover space.
- 2 or more bedrooms: Minimum of 2 secure, undercover spaces.

4.20 Para 5.67 requires developers to '*address parking provision in the comprehensive Transport Assessment or Statement where it is submitted with the planning application (see Policy PSP11)*"

4.21 Paragraph 5.68 states *"South Gloucestershire Council has adopted minimum parking standards for residential uses to accommodate car ownership rates. The absence of adopted standards would result in parking congestion upon local residential streets. Parking provision that does not accord with the standards set out in Policy PSP16 and the cycle schedule, may be acceptable. In such cases, conclusive factual statements confirming why deviation from the standards is necessary, must be included in the Transport Assessment. Where such departures from standard are agreed with the Highway Authority, a Travel Plan or other measures may be required to mitigate any intensified transport impact."*

Residential Parking Standards 2013 SPD

4.22 As para 5.68 of the PSP states, minimum car parking standards are set to accommodate car ownership rates, but in some cases, a relaxation may be acceptable when *'conclusive factual statements confirming why the deviation is necessary'* (Para 5.68) are provided.

4.23 The SPD document reiterates this and notes that there may be *'exceptions where anticipated levels of car ownership may well be less than the proposed standards'* and therefore variations to the standards may be appropriate, when justified as part of a detailed TS.

4.24 In terms of communal visitor parking, Para 3.1 suggests one additional visitor space for every five homes is generally acceptable unless the scheme provides half of its parking as unallocated spaces. If a significant proportion of parking is communal (unallocated) it allows greater flexibility as a common resource for both visitors and residents.

4.25 Para 3.2 identifies that a mix of both allocated and unallocated parking is usually the best solution, with the latter required to provide for average car ownership levels, to suit residents needs and allow for changes in car ownership over time. It indicates that when opportunities to maximise the levels of communal parking are provided, a reduction in the number of allocated spaces may be appropriate.

4.26 Section 6 of the SPD requires Electric Vehicle Charging Points (EVCPs) should be provided in the external walls or garages of suitable houses to serve private parking spaces. This may also include a charging point in a communal/unallocated visitor parking space.

4.27 Site design should also meet the parking needs of people with disabilities.

Emerging Local Plan

4.28 Although not yet adopted, the Emerging Local Plan (ELP) for South Gloucestershire (2020) outlines key *'issues, opportunities and choices'* for future development within the area including responding to the declared *'Climate Emergency'* positively and proactively by locating housing

appropriately to enhance connectivity, meet identified housing needs to reflect the changing population, and encourage healthy and active lifestyles.

4.29 Section 6 of the ELP outlines a new *'Urban Lifestyles'* approach to urban development which encourages optimised densities in sustainable locations, which while maintaining the area's prevailing character and setting, would provide higher densities in the right locations with sustainable travel options to help make public transport services more viable.

4.30 The ELP specifically identifies Bradley Stoke as potentially suitable location for Urban Lifestyles developments whereby densities can be optimised. Sites within 800m to 1km (a 10-minute walk) of local shops and facilities would be considered.

4.31 Optimising development requires the diversifying the choice dwellings available to provide more flats and apartments which benefit downsizers, younger buyers/renters, and wider range of potential users. Although this may include larger buildings or a different arrangement of building types to the surrounding built-up area, a key component would be a reduced level of car parking which is integrated into the design with increased cycle/motorcycle parking.

4.32 In terms of issues and opportunities, the ELP specifically refers to existing high levels of car use (Issue 7) which puts pressure on the transport network and drives higher levels of car parking which in turn takes up valuable development land. In the future, we may see the decline of private car use which requires the use of more flexible policy options.

4.33 Theme 6 of the ELP highlights that new parking policies will be required to replace PSP16 to allow lower levels of parking where *'Urban Lifestyles… development sites… [are] close to existing high streets, town centres, rail stations, major destinations and facilities on significant public transport routes, and the strategic cycle network in the North and East Fringes'*. This allows the focus to shift towards the provision of secure and covered cycle and motorbike parking, and the use of *'car clubs'* or other shared private vehicles.

4.34 The ELP emphasises the need to improve the design of the public realm, include design elements such as private amenity space, and is currently undertaking a new approach to parking.

5. SITE ACCESSIBILITY

5.1 This section considers accessibility from the development site to key local services and facilities using sustainable travel modes such as walking, cycling and public transport, and considers whether they offer a viable alternative to car-based travel for some trips.

5.2 The National Travel Survey (NTS): 2019, published in August 2020, provides details of all trips per person per year, and is shown in **Table 5.1** below. This provides clear evidence of the relationship between distance and probability of use of different modes of transport. The analysis shows that walking is the dominant mode for trips under 1.6km (79.81%).

5.3 For distances over 1.6km but less than 3.2km, use of a car is the most popular mode of travel (58.9% for car driver and passenger), while walking is the second most popular mode, chosen by almost a third (31.03%).

Table 5.1: Proportion of Total Trips by Mode and Distance

Modal Split by Distance

Distance	Car Driver	Car Passenger	Bus	Train	Walk	Cycle	Other
0 - 1.6km	11.26%	6.58%	0.70%	0.00%	79.81%	1.06%	0.58%
1.6 - 3.2km	36.98%	21.94%	5.03%	0.07%	31.03%	2.85%	2.10%
3.2 – 8km	51.59%	27.22%	9.88%	0.63%	4.04%	2.40%	4.24%
All Journeys	39.89%	21.01%	5.28%	2.23%	26.23%	1.70%	3.66%

5.4 The NTS is consistent with guidance in the IHT document Providing for Journeys on Foot (2000). This identifies that the preferred maximum walking distance is around 2km. DfT guidance contained within Local Transport Note 1/04 – Policy, Planning and Design for Walking and Cycling shows that the mean average length for a cycle journey is around 4km although journeys of up to three times this distance are not uncommon for regular commuters. The recent development of electric cycles is such that average journey lengths are likely to increase.

Pedestrian Facilities

5.5 Facilities for pedestrian access to the site include a continuous footway connection along the northern side of Badminton Road, linking Chipping Sodbury and Old Sodbury, and passing the site. As shown below, a generous width footway is provided directly opposite and to the west the site access, up to the nearby junction with Commonmead Lane. To the west of the site, it narrows behind a grass verge and continues onto Chipping Sodbury, around 1.5km to the west

5.6 An existing Public Right of Way (PROW) footpath crosses the centre of the site and the allotments from north to south, with access from the A432 provided via the bridge shown below. This forms part of the longer *Frome Valley Walkway*, crossing Badminton Road from Commonmead Lane and connecting to Cotswold Way/Chapel Lane south-east of the site.

5.7 To the east of the site access, as shown below, continuous footway links leading into Old Sodbury are set within grass verges and provided on both sides of Badminton Road. An electronic speed sign warns drivers of the 30mph limit just to the east of the site access as shown below.

5.8 There is an existing uncontrolled pedestrian crossing point on the A432 around 200m to the east of the site access. This includes a central refuge island with raised kerbs and keep left signage, set within the central hatched white lining, and at-grade crossing made possible by the provision of dropped kerbs either side as shown below. The carriageway width between kerbs was measured at 3.25m on site.

5.9 Badminton Road is lit within the built-up area of the village, and at the site access.

Cycle Facilities

5.10 Cycle facilities within the vicinity of Old Sodbury are limited. As illustrated an extract of the better by bike map provided in Appendix D, there are no formal cycle routes on Badminton road however there are cycle lanes and traffic free routes within Chipping Sodbury itself. The nearest route is The Avon Cycleway (National Cycle Route 410) which provides a large circuit around Bristol, taking in several towns and villages including nearby Wickwar.

5.11 A majority of NCR410 operates with traffic on country roads, with only a few off-road sections predominantly located to the east of Bristol near Emersons Green and on the Avonmouth Bridge to the west of Bristol.

5.12 NCR410 also provides a useful link to NCR4 (Bristol to Bath Railway Path) with access available at both Warmley and Saltford to the east of Bristol. This provides onward cycle routes to Bath, Reading and London to the east; and Bristol, Newport, Swansea, Carmarthen, Tenby and Haverford West to the west.

Public Transport

Bus

5.13 The closest bus stops to the site are located near the site entrance with the eastbound stop being just metres from the site access. It is positioned within the very wide section of the northern footway and is marked by a bus stop flag with timetable information. The westbound stop is some 50m from the site access in an area of hardstanding, also marked with bus stop flag with timetable information.

5.14 These stops are served by the 41, 85/85 and 620 services. The 41 links Yate to Malmesbury with four services a day and the 620 between Bath and Old Sodbury via Yate and Westerleigh with six services a day. 84 and 85 are school services. The buses currently serving the area are summarised in Table 5.1 with the local area routes and timetables shown in Appendix E.

5.15 As shown, the most frequent service passing the site is the 620 which is operated by Stagecoach. The service offers a link to Old Sodbury with a journey time of 4 minutes and to Bath with a journey time of 69 minutes. Commonmead Lane bus stop is the fourth bus stop from the beginning of the outbound 620 route to Bath.

5.16 The earliest bus arriving at the Commonmead Lane bus stop westbound is the 620 which arrives at 06:18 after departing from the Cross Hands at 06:15. This service arrives at Yate Shopping Centre at 06:30 and at Pucklechurch Village Hall at 06:47; before arriving at Bath Bus Station at 07:22.

5.17 The earliest bus arriving at the Commonmead Lane bus stop eastbound is the 85 which arrives at 07:15 after departing from Chipping Sodbury at 07:11. This service arrives at Wotton-under-Edge War Memorial at 07:50 and at Katharine Lady Berkley's School in Kingswood at 08:00 before arriving back in Chipping Sodbury at 08:35.

5.18 The latest bus service arriving at the Commonmead Lane bus stop westbound is the 41 at 17:02. For travel to Bath, the latest bus departs Commonmead Lane at 15:18. From here, arrival at Yate shopping Centre is at 15:35; at Pucklechurch by 15:52 and at Bath Bus Station by 16:27.

5.19 The latest bus service arriving at the Commonmead Lane bus stop eastbound is the 620 at 19:48. This is the inbound service which departs from Bath Bus Station at 18:45 and terminates at the Cross Hands at 19:52.

Table 5.1 Existing Bus Services in Local Area – Frequency in Each Direction						
Service	5.20 **Route**	**Mon-Fri**		**Sat**		**Sun**
		Day	**Eve**	**Day**	**Eve**	**Day**
41	Yate – Chipping Sodbury – Acton Turnville – Easton Grey – Malmesbury	120 minutes	No Service	120 minutes	No Service	No Service
84	Yate – Wooton under Edge –Chipping Sodbury - Yate	1 per day (school service)	No Service	No Service	No Service	No Service
85	Yate – Chipping Sodbury – Wooton Under Edge – Chipping Sodbury - Yate	1 per day (school service)	No Service	No Service	No Service	No Service
620	Chipping Sudbury – Yate – Wooton Under Edge	Between 180 and 60 minutes	No Service	Between 180 and 60 minutes	No Service	No Service

5.21 Although the above often provides a travel time slightly over one-hour, certain off-peak services appear to provide travel times around one hour to and from Bristol, probably due to lower traffic volumes on the local road network and fewer passengers.

Train

5.22 Yate railway station is located around 5.2km from the site and is on the Bristol to Birmingham main rail line, positioned between Bristol Parkway station to the south, and Cam and Dursley railway station to the north. This distance would take around 20 minutes to cycle with a car journey taking around 10 minutes.

5.23 Yate Station has a ticket office and staff members on site, with step-free disabled access available to both platforms and provides a removable ramp to access the train services. Although both platforms are accessible for disabled persons, users wanting to access the northbound platform would be required to travel along and cross Station Road to access the long ramps which lead down to the platforms.

5.24 Yate railway station includes 120 car parking spaces within its boundary with parking charges ranging from £2.60 per day to £325 for an annual season ticket. In addition, there are also 30 formal cycle parking spaces available at the station. These are not sheltered from the elements or covered by CCTV and are located within the main car park.

5.25 Great Western operate services between Westbury and Great Malvern stopping at stations including Trowbridge, Bath Spa, Bristol Temple Meads and Cheltenham Spa. Services also operate between Gloucester and Bristol Temple Meads, calling at Cam and Dursley, Bristol Parkway, Filton Abbey Wood amongst other local stations. Services generally run hourly in both directions.

5.26 Journey times to local stations are summarised below:

- Bristol Parkway 9 minutes;
- Filton Abbey Wood 12 minutes;
- Cam and Dursley 13 minutes;
- Gloucester 33 minutes; and,
- Bristol Temple Meads 25 minutes.

Access to Local Facilities

5.27 Given the location of the site, on the edge of a small village but relatively close to a major town, facilities within the immediate locality of the site are slightly limited but do provide a few useful amenities within the village itself that provide for everyday needs.

5.28 As shown on Figure 2, the centre of Old Sodbury includes the nearest Convenience Store (Gulf Petrol Service Station and shop) and Public House (The Dog Inn). Both are located on Badminton Road, at the crossroads in the village centre, approximately 300m from the site. A further 75m to the east on the A432 is Old Sodbury Village Hall which is also accessible from both Cotswold Way and Church Lane.

5.29 For education, Old Sodbury Church of England Primary School is located around 650m to the north-east of the site. For younger children (3-months to 5-years), Overndale Nursery is conveniently located on Chapel Lane approximately 300m to the south-west of the site.

5.30 To access each of these facilities, continuous footway links and an existing crossing facility on the A432 provide a relatively easy, walkable and direct route from the site to the crossroads in the centre of the village, and along both Cotswold Way to the north and Chapel Lane to the south. Walk distances are around 800m to the school and 550m to the Nursery via the existing adopted network.

5.31 Alternative, traffic-free, PROW pedestrian routes to both of these local education sites is also available in reasonable weather using the Frome Valley Walkway: eastwards from Commonmead Lane across fields with a walk distance of around 900m; and from the site's southern boundary, over the existing bridge and east to Chapel Lane which potentially cuts the walk distance to 400m.

5.32 For alternative educational establishments, St Johns Mead Primary School and Nursery, plus the First Steps Day Nursery are all located on Hounds Road, Chipping Sodbury, approximately a 2.5km west from the site access via the A432. Secondary and further education opportunities are also available at Chipping Sodbury School, located on Bowling Road also approximately 2.5km from the proposed site access.

5.33 Other than at junctions and road crossings, there are continuous footpath links between the site and each of these educational facilities. As such, it is considered that some children could potentially be able to walk or cycle these distances.

5.34 A wider range of other facilities are found in Chipping Sodbury (which lies approximately 2.3km from the site) including takeaways, banking, and sports facilities. It is also home to a Waitrose supermarket on Wickwar Road approximately 3km or a 5-minute drive from the site. Alternative superstores are available within Yate.

5.35 In terms of healthcare facilities, the nearest NHS Doctor's Surgery is located on Kennedy Way in Yate, approximately a 4km cycle from the site. There is a Dental Practice located on Hounds Road in Chipping Sodbury, approximately a 2.5m cycle from the site access.

5.36 Within the maximum recommended 2,000m walking distance as specified by the CIHT guidance 'Providing for Journeys by Foot' (2000), it is apparent that although part of Chipping Sodbury is just within a reasonable walkable distance at 1.5km from the site, Yate is just outside of the maximum recommended distance.

5.37 Within the generally accepted reasonable maximum cycle distance of 8km, various other urban settlements can be reached including Iron Acton, Nibley, Dodington village, Little Sodbury and Acton Turville. This also encompasses the Beeches Industrial Estate, Westerleigh Business Park and the Badminton Road Trading Estate, each located on the western side of Yate.

5.38 A series of isochrones are provided in Appendix F to illustrate the travel times from the site for all sustainable travel modes.

Summary

5.39 Despite its location, there is a range of basic facilities and services located within a suitable walking or cycling distance from the site, whilst a frequent bus service can be accessed from directly opposite or 40m to the east of the site which provides good access to the surrounding areas.

5.40 Although bus services provide a travel time slightly over one-hour, certain off-peak services appear to provide travel times around one hour to and from Bristol, probably due to lower traffic volumes on the local road network and fewer passengers.

5.41 In addition to being served by appropriate public transport services the site also meets the walking/cycling criteria for convenience store, primary school, secondary school and public houses. It is also within 800m of a church, Old Sodbury Village Hall and a service station.

6. TRAFFIC IMPACT

6.1 This section considers the likely impact of traffic associated with the proposed development on the local road network using the TRICS database to estimate averages trip rates of suitable residential comparison sites.

Trip Generation

6.2 Surveys have been selected from the TRICS 7.4.1 category 03/A Houses Privately Owned for the proposed use, using weekday surveys of development in suburban areas and edge of town sites. To ensure an accurate representation of the likely traffic generated, some sites were omitted from the assessment, such as sites in London and Ireland.

6.3 To retain a sufficient number of sites, the range of was set to between 18 and 72 units (i.e., half and double the proposal) and population within one mile is limited to 10,000 with no other filers applied. This identified 19 comparison sites which is considered adequate to provide a robust average trip rate. The TRICS output is provided as **Appendix G**.

Table 6.1: TRICS Weekday Trip Rates – per Dwelling

Time Period	Arrivals	Departures	Two Way
08:00 – 09:00	0.130	0.339	0.469
17:00 – 18:00	0.313	0.133	0.446
Daily	2.266	2.308	4.574

6.4 **Table 6.1** sets out the morning and evening peak hour trip rates for the proposed residential use. On the basis of these trip rates the proposed development of 35 dwellings would generate the morning and evening peak hour trips shown in **Table 6.2**.

Table 6.2: TRICS Weekday Trips – 35 Houses

Time Period	Arrivals	Departures	Two Way
08:00 – 09:00	5	12	16
17:00 – 18:00	11	5	16
Daily	79	81	160

Traffic Split

6.5 In order to determine the split of traffic leaving the site, Census Data (WU03EW – Location of usual residence and place of work by method of travel to work) was used for the Old Sodbury

area (E02003113). for car and van drivers. Then using Google Maps direction from Old Sodbury, the east/west split was calculated.

6.6 The results are that 70% of traffic heads east towards the A46 and the M4, with the remainder heading east towards Yate. For most destinations in Bristol, and some in South Glos, the quickest route is via the M4.

Conclusions

6.7 It can be seen from **Table 6.2** above that the proposed development would generate a maximum 17 two-way movements in the peak hours. This is equivalent to around one additional vehicle every three minutes during the peak hours, which is likely to be barely perceptible when distributed onto the local highway network.

6.8 Given the very low flows generated by the proposed layout, junction capacity assessments at the access were considered not necessary.

7. SUMMARY AND CONCLUSIONS

Summary

7.1 This Transport Statement demonstrates that the proposed development is designed in line with policy requirements and would not cause any significant impact on the operation of the local highway network.

7.2 The site is located 400m from the centre of Old Sodbury village, with existing continuous footpath connections providing access to the local facilities, including education, within the village, and to Chipping Sodbury further to the west. Bus stops are positioned close to the site and provide a regular service which may be suitable for work trips in Bath, Chipping Sodbury, Yate and Bristol.

7.3 The proposed site access junction provides improvements to the junction visibility and A432 carriageway to manage traffic speeds. These are suitable to serve the proposed development and no road safety issues are anticipated.

7.4 A review of the PIA (Accident) data does not indicate any particular highway safety issues within the vicinity of the site and therefore it is not considered that the proposals would have any significant negative impact on highway safety. In fact, the provision of a new junction in this location may help to lower vehicle speeds entering the village.

7.5 Traffic generation from the proposed 34 homes would be barely perceptible once distributed across the wider highway network.

7.6 Parking for all relevant vehicle modes will be provided in line with local standards as will carriageway widths and kerb radii which are suitable for the vehicle types expected to visit the site.

Conclusions

7.7 In view of the above, it is considered that the development proposals would not lead to a severe residual cumulative impact on the highway network, is accessible by a range of sustainable travel modes and provides appropriate measures to encourage reduced traffic speeds. Therefore, there are no transport reasons why the planning application should not be approved.