

South Gloucestershire Core Strategy

Thornbury Transport Review

Client: South Gloucestershire Council

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ATKINS

Plan Design Enable

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1. Introduction

Background

- 1.1. Policy CS32 (Thornbury) of the South Gloucestershire Core Strategy¹ promotes a vision for Thornbury of a thriving and socially cohesive historic market town. These aims are supported by an appropriate level of high quality housing growth that will help strengthen and develop the town centre, local schools and community facilities and activities.
- 1.2. Policy CS33 (Housing Opportunity) identifies the preferred location for a housing opportunity area to the north of Thornbury near to the Castle School, as shown in Figure 1. Housing capacity will need to be determined through further technical assessment relating to flood risk and heritage matters but the potential exists for up to 500 dwellings to be delivered within the Core Strategy plan period to 2026.

Figure 13 – Thornbury
(for illustrative purposes only)

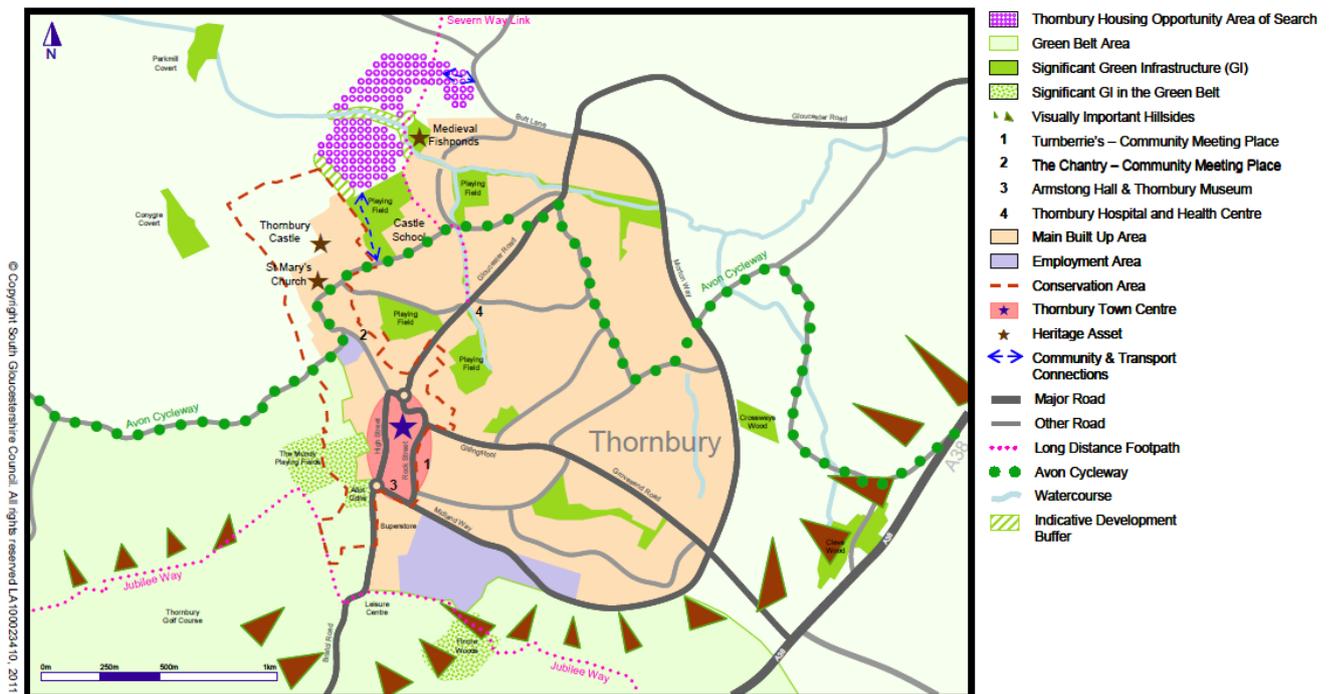


Figure 1 – Location of Housing Opportunity Area in Thornbury

Purpose of this Document

- 1.3. South Gloucestershire Council (SGC) has commissioned Atkins to undertake an independent review of the soundness of the transport case for the housing opportunity area. This document presents the conclusions. The review has considered the following issues:
- Current and future transport problems and issues in Thornbury, including the additional travel demand that will be generated by the development of the housing opportunity area;
 - The transport measures that would be required to mitigate the transport impacts of the development of the housing opportunity area;
 - Whether the Core Strategy's general and area specific policies related to transport are sufficient and appropriate to ensure delivery of the transport measures required; and
 - The mechanisms by which the required transport measures can be funded and delivered.
- 1.4. The review has drawn upon a range of supporting evidence including audits of current transport

¹ South Gloucestershire Core Strategy: December 2011. Core Strategy incorporating Post-Submission Changes.

provision (walking, cycling, public transport and road network) and the Transport Assessment submitted by the Developer promoting the land north of Thornbury near to the Castle School².

- 1.5. A separate document (the **Review of Strategic Transport Case**) discusses the appraisal of alternative locations for development in the Thornbury area and assesses the relative strengths, in transport terms, of development at this location.

Contents of this Document

- 1.6. The remainder of this document sets out the evidence on the soundness of the transport case for development at Thornbury. The document is structured as follows:
- Chapter 2 presents an assessment of the transport issues associated with the delivery of the housing opportunity area in Thornbury;
 - Chapter 3 presents the transport package to mitigate the impacts, together with the potential mechanisms for its delivery; and
 - Chapter 4 sets out the conclusions of the review.

² Land South Of Butt Lane, Thornbury, South Gloucestershire: Transport Assessment 2nd Draft, July 2010.

2. Transport Issues

Current Transport Issues

2.1. Current transport issues related to Thornbury comprise:

- High levels of car use typical of settlements in a rural location within the hinterland of major service and employment centres such as the North Fringe of the Bristol urban area. There are significant levels of commuting from Thornbury to other parts of South Gloucestershire and Bristol, with traffic using the A38 between Thornbury and the North Fringe. However, traffic levels within Thornbury are not at levels that cause significant and persistent congestion at peak times. The available evidence indicates that current traffic levels in Thornbury do not impact negatively on the local economy, environment or quality of life.
- An existing walking network, comprising both footpaths adjacent to the road network and Public Rights of Way. These include the Thornbury Link, a series of way-marked paths that forms part of the Severn Way, passing adjacent to and through the housing opportunity area.
- Cycling infrastructure in the form of the Avon Cycleway which passes through Thornbury, from west to east along Park Road past Castle School. This follows quiet roads and does not generally use dedicated cycle paths. Cycle parking is provided in the town centre on Rock Street and Castle Street.
- Good accessibility to the town centre from most of Thornbury, with most housing within one mile of the town centre, community facilities and the Castle School, making walking and cycling a viable option for many local journeys.
- The town is served by bus routes to and from other parts of South Gloucestershire. The most frequent services are the 309/310 service to Bristol (every 30 minutes), 615 Thornbury town service (hourly), 312 service to Bristol Parkway and Fishponds (hourly) and 622 service to Cribbs Causeway (every 90 minutes). Collectively, these routes serve most of Thornbury, although the most frequent services do not currently access all parts of the north of the town.

Future Transport Issues

2.2. Development of the housing opportunity area will result in additional trips on Thornbury's transport network. A transport assessment for the site estimates that this will result in an additional 595 person trips (all modes) during the morning peak hour and 510 person trips (all modes) during the evening peak hour³. Without appropriate measures to allow for access to/from the site onto the local road network and provide for travel by non-car modes this level of development could give rise to congestion within Thornbury during peak periods. It is therefore appropriate to cater for walking, cycling and public transport to reduce dependency on the car and mitigate the impacts of additional traffic on the local road network.

³ Land South Of Butt Lane, Thornbury, South Gloucestershire: Transport Assessment 2nd Draft, July 2010.

3. Transport Measures

Overview

- 3.1. A set of transport measures has been identified that will be required to mitigate the impact of additional travel associated with the development of the housing opportunity area. The measures – described as a package – will both encourage sustainable travel to/from the new development and also benefit the wider Thornbury area. Improvements to key junctions on the local highway network will ensure that the impacts of additional traffic are adequately mitigated.
- 3.2. The transport package has been developed to meet the following objectives:
- Objective A: Improve connectivity and accessibility by sustainable modes in Thornbury;
 - Objective B: Provide high quality links and wayfinding for walking and cycling;
 - Objective C: Provide high quality, direct bus services to key destinations; and
 - Objective D: Mitigate the wider impacts of traffic on key routes within and from Thornbury.

Elements of the Transport Package

Walking and Cycling Links

- 3.3. The housing opportunity area will be designed with a layout to facilitate direct, safe and comfortable movement by pedestrians and cyclists. Direct links will be provided to the road network as follows:
- Pedestrian and cycle access through a new link via Park Road. This link will be for the exclusive use of pedestrians, cyclists and buses, and will not be accessible to general traffic;
 - Improved footpath provision to the countryside to the north; and
 - Pedestrian / cyclist access to the site via the main site accesses from Butt Lane.

Bus Services

- 3.4. The housing opportunity area will be served by good quality buses that provide direct access to the town centre, other parts of Thornbury, the North Fringe and Bristol. It will be possible to extend the routings of existing services to access the site via the main site access from Butt Lane and a new dedicated public transport link via Park Road. This will enable buses to route efficiently through the site to maximise potential patronage and minimise operating costs.

Highway Improvements

- 3.5. The housing opportunity area will be served by two site accesses on Butt Lane to enable effective balancing of traffic flows and which will comply with current design standards. As noted above, pedestrians, cyclists and buses will also be able to enter the site via a new link.
- 3.6. It will be necessary to mitigate the impacts of traffic to/ from the new housing opportunity area, which will include the following measures:
- Extension of 30mph speed limit along Butt Lane to reflect the change in character of the road;
 - Oldbury Lane / Morton Street: improvements to junction to address potential safety issues;
 - Butt Lane / Gloucester Road / Morton Way: widening of the Butt Lane approach to junction to accommodate additional traffic flows; and
 - Grovesend Road / A38 / Tytherington Road traffic signals: widening of approaches and improvements to signal timings to accommodate additional traffic flows.
- 3.7. It will also be desirable to make improvements to the A38 corridor to take account of the increased volume of travel between Thornbury and the North Fringe. This will be primarily focused on improving provision for buses, which are currently delayed by general congestion.
- 3.8. This will help encourage increased bus use for travel to Bristol and the North Fringe from Thornbury, with the primary objective being to tackle congestion caused by the current high level

of car use on the corridor. Bus stops will be upgraded and opportunities for bus priority investigated, as part of a programme of comprehensive improvements to the A38 corridor.

Impact of the Transport Package

- 3.9. The evidence from the transport assessment, including consideration of the impact of greater use of sustainable modes, indicates that the development of the housing opportunity area will result in additional vehicle trips on the local road network (447 two-way trips during the morning peak and 383 two-way trips during the evening peak). This review concurs with these estimates. There is, however, an opportunity for the new development to support increased levels of walking, cycling and public transport use for local journeys and for journeys to and/from key destinations in the North Fringe and Bristol city centre.

Consistency with Core Strategy Transport Policies

- 3.10. The transport package described above is fully consistent with the Core Strategy objectives for tackling congestion and improving accessibility, as it includes measures to encourage walking, cycling and bus use and it mitigates the impacts of additional traffic. It is also consistent with the 3rd Joint Local Transport Plan (JLTP3).
- 3.11. **Policy CS7 (Strategic Transport Infrastructure)** describes the proposals for strategic transport infrastructure that will reduce congestion and improve accessibility by means other than the private car. It includes proposals for a Rural Package, which will include extension of the A38 Showcase Bus Corridor and A38 Cycling Route to Thornbury and provision of Real Time Information at strategic bus stops throughout the rural area.
- 3.12. As noted above, the extension of the A38 Showcase Bus Route to Thornbury will encourage mode shift for travel between Thornbury and the North Fringe. This will help address existing congestion problems on the approach to M5 Junction 16. Although the implementation of these measures will be desirable, they are not a pre-requisite for the delivery of the housing opportunity area at Thornbury.
- 3.13. The transport package described above will be delivered as part of the comprehensive masterplanning of the housing opportunity area and through planning obligations. The housing opportunity area will not be contingent on the delivery of the measures defined in Policy CS7. However, the delivery of measures identified within Policy CS7 will make a positive contribution to further mitigating the impacts of additional traffic generated by the housing opportunity area and in supporting sustainable travel from Thornbury.

Delivery of the Transport Package

- 3.14. Funding for the package of measures would come from developer contributions (through the use of Section 106 planning obligations and/or a Community Infrastructure Levy) and other financial resources available to South Gloucestershire Council.
- 3.15. In addition to the costs of on-site infrastructure and infrastructure to connect the site to Butt Lane, the Developer will be expected to make financial contributions to smarter choices measures, improvements to walking and cycling infrastructure, provision of the link via Park Road and measures to mitigate the impacts of additional traffic on the highway network. Contributions will also be sought towards the A38 Showcase Bus Corridor.
- 3.16. The level of contribution expected from the Developer is considered affordable when benchmarked against developer contributions secured in relation to other sites in South Gloucestershire. The projected level of contribution would not therefore impact on the viability of development at the housing opportunity area.
- 3.17. The transport package described above is proportionate, realistic and affordable. Highway improvements can be delivered within the existing highway boundary or within the boundary of the housing opportunity site, and the public transport link via Park Road would make use of Council-owned land.

4. Conclusions

- 4.1. The review has concluded that the location of the preferred housing opportunity area in relation to the Thornbury built-up area and its transport network make it conducive to maximising opportunities for walking, cycling and public transport.
- 4.2. The additional travel demand generated by the development of the housing opportunity area can reasonably be accommodated by Thornbury's transport network without adversely impacting on the local economy, environment, road safety and quality of life, subject to the following:
- the development is planned and designed in accordance with Policy CS1 (High Quality Design) with density and overall layout that is well integrated with existing adjacent development and connected to the wider network of foot, cycle and public transport links;
 - a sustainable transport package is implemented comprising measures to encourage and maximise opportunities for walking, cycling and public transport use to, from and within the housing opportunity area; and
 - highway infrastructure improvements are provided, comprising access onto Butt Lane and improvements to junction capacity at key locations on the local highway network to mitigate impacts of additional traffic associated with the development.
- 4.3. The transport measures necessary to enable the development of the housing opportunity area will also serve to improve sustainable travel choices throughout Thornbury because of improved walking and cycling connectivity and the availability of improved bus services.
- 4.4. The development is not contingent on the delivery of measures defined in Policy CS7 (Strategic Transport Infrastructure). However these measures will make a positive contribution to further mitigating the impacts of additional traffic associated with the development and in supporting sustainable travel from the housing opportunity area. The Rural Package (including extension of the A38 Showcase bus corridor, A38 Cycling City route and real time information at bus stops) will make the most significant contribution.
- 4.5. The review has concluded that the sustainable transport measures required to support development of the housing opportunity site can be delivered within the timescale of the Core Strategy plan period through existing delivery and funding mechanisms. These include contributions from developers via Section 106 planning obligations and/or a Community Infrastructure Levy. The review has also concluded that the likely costs of the Package measures are realistic and affordable within the scale of contribution that could reasonably be realised through Section 106 obligations.

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