

TITLE	Arborfield Cross Relief Road
FOR CONSIDERATION BY	The Executive on 26 March 2015
WARD	Arborfield
DIRECTOR	Heather Thwaites, Director of Environment
LEAD MEMBER	John Kaiser, Executive Member for Planning and Highways

OUTCOME / BENEFITS TO THE COMMUNITY

Significant traffic relief for local residents and improved traffic capacity on a key route in the Borough.

Ensures appropriate mitigation of traffic impacts from the development of Arborfield Garrison Strategic Development Location.

Allows the Strategic Development Location to be developed as envisaged by the Core Strategy.

RECOMMENDATION

That the Executive agrees:

- 1) the Option B alignment modifications for the Road and to progress it through detailed design to a full planning application.
- 2) the Council will continue liaison and discussions with Councillors, landowners, affected residents and other stakeholders.

SUMMARY OF REPORT

WBC has completed the refinement of Option B to provide the Arborfield Cross Relief Road. Option B was supported by 70% of responses to a public consultation completed in 2013.

All directly affected land owners have expressed a willingness to engage in negotiations relating to acquisition of their land for building the road.

The total scheme package is as follows:

- A 50mph single carriageway road with a provision for pedestrians and cyclists separated from the road by a swale.
- A roundabout junction would be provided with the A327 at Reading Road and Eversley Road.
- A staggered crossroads would be provided at Eversley Road to make it easier for farm vehicles and through traffic on Swallowfield Road to cross the relief road.
- Footpath crossings of the relief road would be provided with pedestrian refuges. Consideration will be given to signal controlled crossings as an alternative.
- A cutting is required for the relief road between Swallowfield Road and Eversley Road. This will affect Footpath AR17.

- Extensive earth bunds will be included along much of the route to reduce noise and visual impacts to nearby residents.

The next stage of the project to prepare a planning application will take approximately 12 months.

Background

Policies CP18 and CP19 of the Council's Core Strategy, identified a requirement to enhance the A327 in order to effectively mitigate the traffic growth impacts that will be generated by the development of the Arborfield Garrison and South of M4 SDLs, as envisaged by the adopted Core Strategy.

The Council had indicated that a relief road to Arborfield Cross would provide the most effective form of mitigation against the impacts arising from the development of the SDLs.

In 2013 WSP was appointed by the Council to undertake a study to identify the most appropriate mitigation scheme. The study identified four alignment options based on traffic impacts, environment and property impacts, land requirements, engineering design, cost and deliverability.

Public consultation was completed during September and October 2013. Around 1,300 questionnaires were returned to the Council with approximately 65 additional emails, letters and other correspondence. Of those that responded, 70% of the stated public preference was for Option B.

In 2014 Executive agreed to progress with the refinement of the Arborfield Cross Relief Road Option B to gain greater confidence in scheme delivery.

In the Medium Term Financial Plan 2015/2016 the scheme is contained in the 10 year capital vision at an estimated £23million for construction.

Liaison since March 2014

The Council has undertaken a number of liaison meetings, including Arborfield & Newland and Barkham Parish Councils, landowners whose land is required for the road and with residents living close to the road alignment but whose land or property is not required for its delivery.

To date all directly affected land owners have expressed a willingness to engage in negotiations relating to acquisition of their land for building the road.

A face-to-face meeting has been held with the residents of four properties most affected by the road. Although correspondence has been exchanged, a meeting has still to be held with the owners of a fifth property. Generally residents are not happy to have the road passing close to their properties. The Council will mitigate the impacts of the scheme on their property and livelihood in line with current legal requirements, guidance and best practice.

Option B Alignment

The Option B alignment has been considered in detail and has been determined as feasible and appropriate to mitigate the impacts of SDL development.

The starting point was the consultation alignment presented in summer 2013. Following discussions with landowners, the consultation alignment has been modified to minimise

land requirements and to maximise retained and workable field areas, taking account of the need for noise, visual and landscaping mitigation, especially to properties close to the road where impacts are greatest.

Excepting the need to mitigate noise and visual impacts on residential properties, there are few constraints along the route alignment, although the need to cross the ridgeline between Swallowfield Road and Eversley Road will require a cutting and embankments on the approach from Eversley Road.

Route Description

The proposed route is shown in Annex A. The full technical appraisal of the route is available on request.

From north to south, the relief road would form a new roundabout junction with A327 Reading Road, west of Bridge Farm.

Consideration was given to indicate the main movement for through traffic between Reading Road and the relief road with a priority controlled junction. This would have then changed the perception of the route to and from Arborfield Cross via Reading Road east of Bridge Farm. However the traffic effect of this junction, although negligible, did indicate a delay to westbound traffic from Arborfield Cross that would result in some traffic choosing to use Swallowfield Road as an alternative route. On balance, a roundabout was considered to be the most appropriate form of junction at Reading Road.

The relief road runs south towards Swallowfield Road as a single carriageway with a 50mph design speed.

A 40mph speed limit was considered for this section. However discussions with Thames Valley Police and advice from engineers indicated that the characteristics of the road in a generally rural environment would make a 40mph difficult to enforce without the additional provision of enforcement measures. A 50mph limit would complement the proposed speed limit on the southern part of the Shinfield Eastern Relief Road (SERR) and support a change in the speed limit on the A327 between the SERR and ACRR to 50mph.

The relief road would have a shallow drainage ditch or swale adjacent to and east of the carriageway separating the road from a 3m wide shared use path for pedestrians and cyclists.

Consideration was given to a segregated path, but it is anticipated pedestrian use will be relatively low indicating a shared use path would be appropriate.

A pedestrian refuge crossing would be provided at the junction with Tanners Lane and where the existing Footpath AR22 crosses the relief road a little further to the south.

The road is currently planned to have no street lighting to maintain the rural night time character of the area. The intention is not to provide lighting at the junction with Swallowfield Road although a final decision on this will be made during detailed design. There will be a need for sensitive street lighting at the junctions with A327 Reading Road and Eversley Road.

A staggered priority controlled crossroads would be provided at Swallowfield Road. The design of the junction is such that vehicles travelling between Arborfield Cross and Swallowfield would make a left turn onto the relief road and then a right turn to Swallowfield Road, waiting in the central reserve if necessary. It is considered this is an easier manoeuvre for this traffic, in particular for farm vehicles.

A right-left stagger or a simple crossroads would mean through traffic on Swallowfield Road would need to cross two streams of traffic to complete the manoeuvre. A roundabout was also considered at this location and discounted as a staggered crossroads would have a smaller footprint and less of an engineering and visual impact on adjacent properties at The Lodge and New Cottage.

A pedestrian refuge crossing of the ACRR is currently proposed at Swallowfield Road. However further consultation may result in a traffic signal controlled pedestrian and cyclist crossing. Consideration will also be given to making special provisions for equestrians at this location.

The road continues south of Swallowfield Road across land rising up to a ridgeline traversed by Footpath AR17. To satisfy highway design standards, a cutting is required that would be approximately 5m deep at its greatest extent. This will require either a footbridge to maintain the line of Footpath AR17, or a local diversion of the footpath to cross the relief road at a pedestrian refuge. These decisions will be resolved at detailed design.

The shared use path will be continued on the eastern side of the ACRR between Swallowfield Road and A327 Eversley Road. Pedestrian and cyclist paths would be extended at Eversley Road to provide connections into Arborfield Cross, Baird Road and to Arborfield Garrison.

The single carriageway would require a slight embankment for part of the ACRR between the ridgeline cutting and Eversley Road.

A roundabout would be provided at A327 Eversley Road. This junction is further south than the consultation route and would form a three-arm roundabout (the consultation route would have required a fifth arm to the Langley Common Road roundabout).

Consideration was given to replacing the Langley Common Road roundabout with a priority junction, but traffic modelling indicated significant peak period delays to southbound traffic from Arborfield Cross. It is therefore recommended that the existing roundabout is retained.

Visual Impact and Noise Mitigation to affected Residents

The full environmental report is available on request.

The visual impacts of the relief road will be reduced in part by the road alignment itself. This would include constructing the road level as close to and below the existing ground level where this is achievable. Elsewhere extensive tree and shrub planting will be provided, and at the more sensitive noise and visual receptors (notably The Lodge and New Cottage) landscaped earth bunds will be provided. Indeed the extent of earth bunding will be significant, shown in Annex A (Drawing Number 60001180-SK-130-B).

The landscape design and land requirements to achieve this will be detailed for the planning application.

Air Quality

During consultation with affected residents, those living at Arborfield Court expressed concern over the potential for air pollution. The sources of 'damage' to listed buildings from air pollution include:

- Dust/particulate deposition arising from road traffic and/or construction activities (affecting the look/setting of the listed building); and
- Erosion/weathering of the Listed Building due to 'acid rain'.

Before undertaking detailed investigations for impacts on buildings that are required for the planning application and for the construction phase, it is difficult to comment at this stage on dust and particulate deposition to nearby properties. However, in accordance with the Institute of Air Quality Management (IAQM) Guidance on the Assessment of Construction Phase Effects, with appropriate mitigation measures in place, the effect of dust and particulate emissions arising from the ACRR is anticipated to be negligible.

Noise

The overall impact of noise on existing residents will be considered in detail as part of the planning application. However overall it is likely that the impact can be mitigated to acceptable levels of increase. The use of bunds, noise barriers and surfacing that produces less noise will all be considered as part of the design.

Water Quality

The relief road will be constructed over clay ground for much of its length between Reading Road and Eversley Road. The intention is that all water runoff from the relief road will be intercepted and taken away from the immediate area to drainage ponds located close to Reading Road and Eversley Road. The clay ground would not allow the swales to act as an infiltration area for runoff and instead they will transport the runoff to the ponds.

There is a water source for Arborfield Court located close to the relief road replenished by runoff from adjacent fields, especially from land east of Swallowfield Road. There are also ponds at Bartletts Farm. Without proper consideration, the road could form a dam to field runoff towards Arborfield Court, the road running as it does between the field and the water collection point. This damming effect will be reduced using French drains under the road to maintain the flow of water to the water source.

Traffic Effects

The ACRR will provide traffic relief to Arborfield Cross from new development at the Arborfield Garrison SDL. The relief road will also be used in both directions by A327 traffic between Shinfield and Eversley, and between Shinfield and Wokingham. The route of the road is such that traffic between Winnersh and Eversley will continue to travel through the village.

Junctions at each end of the ACRR and at Swallowfield Road have been sized

appropriate to the forecast traffic volumes in 2026 to minimise traffic delays whilst being sensitive to land requirements and consequential environmental and visual impacts.

In 2026, the ACRR is forecast to be used by around 2,000 vehicles in the AM and PM peak hours respectively. These vehicles would otherwise have travelled through Arborfield Cross.

Residual peak hour traffic flows through Arborfield Cross (The Bull) with the proposed ACRR are forecast to be as follows:

Two-way flows, pcus/hr	AM Peak Hour		PM Peak Hour	
	2010	2026	2010	2026
To/from Arborfield Cross	1,500	700	1,600	690
Reading Road	290	220	230	210
Swallowfield Road	1,560	960	1,440	1,040
Eversley Road	570	640	630	620
School Road	830	1,170	660	1,220

Traffic modelling shows that provision of the relief road would lead to a significant reduction below current traffic levels on Reading Road and Eversley Road, a consequence of the diversion of through traffic on the A327 away from the village centre. The ACRR maintains traffic flows on Swallowfield Road and School Road at current traffic levels. However traffic flows on Sindlesham Road will be greater as no relief to the village is proposed for traffic to/from Winnersh.

Overall, as a consequence of the relief road and with the addition of traffic arising from the SDL development to the south, there will be reduction of around 500 vehicles in each peak hour passing through the village by 2026 when compared to current (2010) traffic levels.

Next Steps

If the route is approved then the next key milestone is to develop a planning application and seek approval for this. The planning application will require detailed design and a full environmental impact assessment. In parallel, work will be done on the business case that is required to secure the funding that has been identified by the Department for Transport for the scheme. The earliest an application could be brought to planning committee would be summer 2016. Procurement would follow approval and construction could possibly start in 2017.

FINANCIAL IMPLICATIONS OF THE RECOMMENDATION

The Council faces severe financial challenges over the coming years as a result of the austerity measures implemented by the Government and subsequent reductions to public sector funding. It is estimated that Wokingham Borough Council will be required to make budget reductions in excess of £20m over the next three years and all Executive decisions should be made in this context.

Funding has already been allocated through the Medium Term Financial Plan 2015/2016 to progress the scheme.

	How much will it Cost/ (Save)	Is there sufficient funding – if not quantify the Shortfall	Revenue or Capital?
Current Financial Year (Year 1)	0	n/a	n/a
Next Financial Year (Year 2)	£250,000	Yes	Capital
Following Financial Year (Year 3)	£1,000,000	Yes	Capital

Other financial information relevant to the Recommendation/Decision

See Cross-Council Implications below.

Cross-Council Implications

The Council's intention is that the scheme will be partially developer-funded, and will depend on the Council obtaining the full build cost of the scheme through relevant S106 agreements and (once operational) CIL and that enough developments come forward (or come forward early enough) to fund the scheme. There is therefore the risk that the Council will be required to fund (or forward fund) a proportion of the scheme. There will also be financial and timescale implications for the Council should a CPO inquiry be ordered by the Secretary of State. Accordingly, unless the Council is able to acquire funding through some alternative streams, there is a possibility that the Council will need to redirect funding for other infrastructure into this scheme, should the need arise.

List of Background Papers

Arborfield Cross Relief Road: Refinement Report

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Arborfield Cross Relief Road. Drawing No. 60001180/SK/130, Rev. B January 2015.
This drawing can be provided at a better resolution on request.

