

Gloucester City Council

Committee	: PLANNING COMMITTEE
Date	: 1st July 2014
Subject	: ELMBRIDGE PARK AND RIDE
Decision Type	: CONSULTATION RESPONSE
Ward	: NONE
Report By	: Meyrick Brentnall/Vincent Maher
No. Of Appendices	: 2: Environmental Statement. Previous report.
Reference No.	: Elmbridge Court Consultation

1.0 Purpose of Report

1.1 For the Committee to respond to a planning application by Gloucestershire County Council on the Elmbridge Transport Scheme.

2.0 Recommendations

2.1 That the Committee support the principle of the transport scheme and that the comments set out in Section 4 of this report be forwarded to Gloucestershire County Council.

3.0 Background

3. The Elmbridge Transport Scheme is being implemented by Gloucestershire County Council and aims to tackle congestion on the road network and improve public transport between Gloucester and Cheltenham. There are three elements to the scheme:

- Improvements to the Park and Ride Service
- Junction improvements at Elmbridge Court at Gloucester
- Bus priority measures at Arle Cour roundabout near Cheltenham

3.2 Of particular relevance to Gloucester City is the Elmbridge Park and Ride Service and the junction improvements to the Elmbridge Court Roundabout. While most of the proposals sit in Tewkesbury Borough administrative area the roundabout improvements are within the City

3.4 The Park and Ride proposals include a 1,000 space park and ride interchange on the land next to Elmbridge Court Business Park. This will be accessed via a new junction on the A40 Golden Valley Bypass and will serve both Gloucester and Cheltenham. The junction improvements at Elmbridge Roundabout include a reconfiguration of the junction to reduce the congestion that is already experienced at this point on the highway network

3.5 When the County consulted last year the expectation was that the application would be determined by the Planning Inspectorate, this is now not the case, as such the County Council will be the determining authority. The City Council is a consultee on the proposal.

- 3.6 In 2013 the County Council informally consulted on the scheme, and the city councils comments area attached at appendix 1. Little has changed since the earlier consultation, the main difference being the inclusion of a dedicated left turn slip road from the A40 to the A417 Barnwood link to facilitate increased capacity through the junction. In terms of wildlife mitigation and the impact on Pirton Break further clarification has been included in terms of light spill and the timing of illumination.

4.0 Proposed Response

- 4.1 The following section of this report sets out a series of points that the City Council should make the County Council as part of our formal response to the planning application.

Park and Ride comments

1. The proposed Park and Ride at Elmbridge Court should help to improve accessibility to the City by reducing the number of vehicular movements on the highway network within the City. The Park and Ride facility could be used by commuters and visitors approaching from the north from the M5 and along the Golden Valley. Any easing of congestion at peak times would be welcomed by residents and business alike.
2. The facility has the possibility not only to relieve the highway network of vehicles travelling toward Gloucester but also vehicles travelling to Cheltenham.
3. If buses from Elmbridge provide access to both Cheltenham and Gloucester via high speed bus priority routes the possibility exists to reduce congestion in both urban areas and potentially reduces journey times for City residents who currently commute to Cheltenham.
4. The proposed route for the park and ride bus will be pivotal in the success of the service, as journey time and drop off points will be key factors in determining whether members of the public will choose to make a transfer of transport as part of their commute or leisure journey – as yet no details are available of this proposed route and it is recommended that it be devised in conjunction with the City Council in order to develop an optimum solution to encourage the success of the proposed service.

Development plan policy considerations

5. The site is currently located within the Green Belt. Paragraph 90 of the National Planning Policy Framework states that transport projects which can demonstrate a requirement for a Green Belt location are not inappropriate forms of development. The County has demonstrated in the documentation supporting its application that this site is the most suitable for such a use. However, the proposed park and ride site is located within the pre-submission draft of the emerging Joint Core Strategy (the JCS) inside the proposed South Churchdown urban extension. The JCS anticipates that this site will be primarily used for housing and employment but that it will also accommodate a park and ride facility too. The County's proposal is therefore notionally compatible with emerging development plan policy and the principle of the use has been endorsed by the three JCS authorities of Gloucester, Cheltenham and Tewkesbury.

Elmbridge Court Roundabout Junction Improvements

1. Improvements to the highway network that improve accessibility to the City and help to relieve traffic flow on arterial route ways into the City at peak times are to be welcomed.
2. If major highway works are to be undertaken it would be wise and prudent to future proof this key junction in the County during the proposed phase of construction in order to minimise disruption to the highway network rather than undertake additional disruptive works in the future.

Environmental Considerations

1. More detailed proposals for the landscape scheme with regard the roundabout and A40 approach to the Park and Ride should take into account the importance of the site as a gateway to Gloucester, and the need to make it attractive to visitors approaching the City from the east.
2. Long distance views should be mitigated by use of grasscrete or similar for the overflow car park.
3. It would be a significant improvement to cycling if the Pirton Lane in Churchdown could be connected to the development. This would be a very useful addition to the Sustrans route 41 linking Cheltenham to Gloucester.

5.0 Conclusions

- 5.1 Gloucester City Council has been consulted by Gloucestershire County Council on the Elmbridge Transport Scheme as part of a planning application by the Highways Authority. While generally supporting the scheme there are a number points raised in section 4 that it is recommended be submitted to the County Council as the City Council's formal response to the planning application.

6.0 Financial Implications

- 6.1 There are no financial implications associated with this report.

7.0 Legal Implications

- 7.1 Gloucester City is being consulted Gloucestershire County Council and therefore there are no legal implications to this report.

8.0 Risk Management Implications *(Authors to complete) Identify all key risks (scoring 8 and above) for the recommendation including the impact and likelihood of the risk occurring and what measures will be taken to mitigate the risk.*

- 8.1 There are no risks associated with this report.

9.0 People Impact Assessment (PIA):

Please ensure you complete this section even if a PIA is not required.

Is a PIA required?	Yes	No	Explanation: This is a consultation response
		x	

Has an initial PIA screening been completed?	Yes	No	Explanation: This is a consultation response
	x		
Has a full PIA been completed?	Yes	No	Explanation: This is a consultation response
		x	
Is the PIA available?	Yes	No	Explanation: This is a consultation response
		x	
Has the PIA identified any negative impacts on any protected characteristic or community cohesion?	Yes*	No	*Please ensure PIA is available
		x	

Any Further Relevant Information:

None

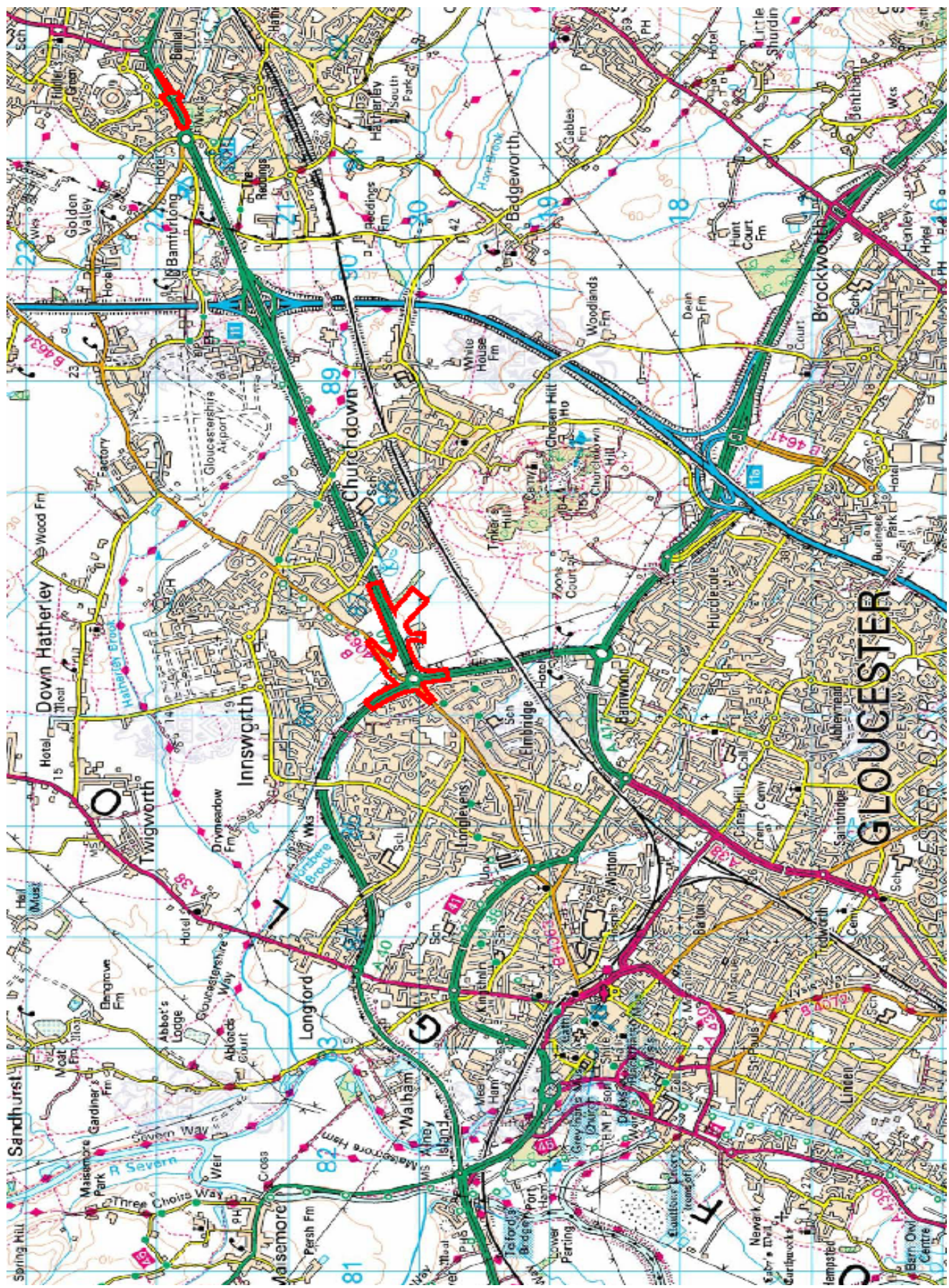
10.0 Other Corporate Implications (this may include Community Safety, Environmental, Staffing, Trade Union)

There are no other implications associated with this report.

Background Papers : None

Published Papers : None

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Elmbridge Transport Scheme



VOLUME 1: ENVIRONMENTAL STATEMENT NON-TECHNICAL SUMMARY

Date: FEBRUARY 2014

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VOLUME 1
Environmental Statement
Non Technical Summary

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1. INTRODUCTION

- 1.1.1 This Non-Technical Summary has been prepared on behalf of Gloucestershire County Council (GCC). It forms part of the Environmental Statement (ES), which accompanies an application for planning permission to construct the elements comprising the Elmbridge Transport Scheme (ETS) submitted to GCC as local planning authority.
- 1.1.2 The Elmbridge Transport Scheme would deliver a high frequency park and ride service from Elmbridge Court to Gloucester City Centre, linking in with Cheltenham Town Centre and the Arle Court P&R site. It comprises three elements; A 1,000-space Park and Ride (P&R) site with access off the A40 Golden Valley Bypass via a new signalised junction, a complementary scheme of improvements to the Elmbridge Court Roundabout and construction of a new bus gate and bus lane on the A40 west-bound carriageway as it approaches the Arle Court Roundabout at the Cheltenham end of the Golden Valley road.
- 1.1.3 It is anticipated that the P+R site would primarily be used by commuters, university students, visitors to the hospital and shoppers. However the site might be used by football and/or rugby supporters and for transferring employees to employment sites in the vicinity.

1.2 NEED FOR THE SCHEME

- 1.2.1 Current traffic levels in the Gloucester and Cheltenham area are at the point where congestion is becoming a significant problem. Forecast levels of housing and employment growth up to the year 2026 mean that without new transport infrastructure, levels of congestion could become significantly worse in the future.
- 1.2.2 Elmbridge Court Roundabout is one of the busiest in Gloucestershire and, as traffic levels increase, congestion and unreliable journey times will become more of an issue for people travelling to/from Cheltenham and Gloucester, as well as further afield. Congestion at this roundabout creates traffic queues on all approaches, particularly at peak times.
- 1.2.3 In response to the problem described above Gloucestershire County Council is proposing to develop the Elmbridge Transport Scheme. The scheme would deliver a high frequency park and ride service from Elmbridge Court to Gloucester City Centre, linking in with Cheltenham Town Centre and the Arle Court P&R site, with improved bus priority measures along the route and enhanced capacity at the Elmbridge Court roundabout.
- 1.2.4 The proposals would reduce the distance that people travel by car by facilitating the use of public transport for part of their journey. The scheme would also

promote the use of other sustainable modes by providing a 'transport hub' which enables interchange between several transport modes including walking and cycling.

1.3 SCHEME HISTORY

Alternative sites

- 1.3.1 A number of studies have been undertaken over the last 20 years to identify and appraise potential sites for Park and Ride facilities in Gloucester and Cheltenham. Some sites have been discounted because they would not address the identified need in the Gloucester to Cheltenham corridor. Some sites have been discounted because they are not available for Park and Ride development. Other sites have been disregarded because they do not meet the essential characteristics required to make a Park and Ride site successful. The preferred site to the east of Elmbridge Business Park is available and has the prerequisite site characteristics to promote sustainable transport and sustainable patterns of development in the Gloucester Cheltenham corridor.

Alternative design solutions

- 1.3.2 Within the last ten years a wide range of bus priority measures to improve bus service reliability in Cheltenham and Gloucester has been assessed. Some of the measures have already been constructed. As part of a sifting exercise bus priority options were discounted for a variety of reasons including landtake, disruption to the travelling public during the construction period, landscape impact and ecological impact.
- 1.3.3 The design of the embankment widening to facilitate the bus lane at Arle Court has evolved to minimise the felling of existing trees.
- 1.3.4 At one stage a railway station formed part of the scheme but was ruled out for not being cost effective.
- 1.3.5 A new Churchdown Link Road was removed from the scheme to make the scheme more cost effective, to minimise noise impacts to residential areas on the western edge of Churchdown and to minimise traffic delays during and post-construction.
- 1.3.6 A number of changes to the Elmbridge Court Roundabout design have been made. These include removal of bus lanes on the roundabout and on the approach to the roundabout on safety and traffic grounds; inclusion of emergency vehicle access to the hamburger 'through lane'; the inclusion of a dedicated left turn slip from the A40 Golden Valley bypass to the A40 / A417 Barnwood Link

Road to significantly improve traffic capacity at the junction. Road widening proposals were adjusted to minimise vegetation loss.

- 1.3.7 Alternative means of access to Elmbridge Court Business Park and Elmbridge Court Farm were considered but discounted for a number of reasons including: disruption to road users and to services, conflict with pedestrians/cyclists, substantial land take, substantial visual impact and site security considerations.
- 1.3.8 The design of the Park and Ride site has been amended to improve safety for users, to improve access and to minimise visual impact.

2. THE SCHEME

2.1 SERVICE OVERVIEW

2.1.1 Whilst the contract to provide the bus service is still under discussion with potential operators, and would not be finalised until closer to the time of opening, the envisaged service is for a 10-12 minute express bus service between Elmbridge Court P&R and Gloucester City Centre/Gloucester Royal Hospital, linking in with Arle Court P&R and Cheltenham town centre. The Elmbridge and Arle Court P&R sites would both serve Gloucester and Cheltenham. The P&R site is likely to operate, as a minimum, from 7am to 7pm six days a week.

2.2 THE PROPOSED SCHEME

2.2.1 The Elmbridge Transport Scheme comprises three elements:

- Element One: A 1,000-space Park and Ride (P&R) site, on an area of approximately 7ha of agricultural land adjacent to the Elmbridge Court Business Park, with access off the A40 Golden Valley Bypass via a new signalised junction;
- Element Two: A complementary scheme of improvements to the Elmbridge Court Roundabout, which would reduce overall levels of congestion, and would therefore also improve bus reliability through the junction; and
- Element Three: Construction of a new bus gate and bus lane on the A40 west-bound carriageway as it approaches the Arle Court Roundabout at the Cheltenham end of the Golden Valley road. This would improve bus journeys from Cheltenham to the Arle Court Park and Ride and then on to the Elmbridge elements of the scheme.

These three elements are described in more detail as follows:

The Park and Ride Development

2.2.2 The Park and Ride development will provide approximately 700 parking spaces plus 300 spaces in an overflow section to accommodate peak demand periods, such as in the lead up to Christmas and future growth demand. 26 disabled parking spaces and 22 parent and toddler spaces would be located close to the bus stops. The layout allows the site and the number of spaces to be expanded if and when the need arises in the future.

2.2.3 It will be accessed via a new signal controlled junction on the A40 and a new roundabout junction to the south. This new roundabout will provide access to and from the P&R site, Elmbridge Court Business Park and Elmbridge Court Farm. A reduced speed limit of 50mph will apply to the A40 Golden Valley Bypass westbound carriageway on the approach to the new signalised junction.

Site Layout

- 2.2.4 Buses and cars access the site via separate access points from the new roundabout, thereby keeping buses segregated from vehicular and pedestrian traffic. A further, separate access point is also provided off the Park and Ride junction for Elmbridge Court Business Park and Elmbridge Court Farm. The bus access road is wide enough to allow buses to pass and a turning head at the end of the bus access road prevents the need for any reversing or manoeuvring. All four bus stops are located in one area to allow easy transfer between bus services, with each stop provided with a shelter, seating and real time passenger information.

Safety and Security

- 2.2.5 The security strategy for the Elmbridge Park and Ride site is developed around the concept of a destination that provides a safe and secure environment for staff and site users to support efficient travel and transit and that will deter opportunist theft and vandalism. To achieve these aims it is intended to provide a highly visible CCTV presence at appropriate points, a full lighting scheme and good natural surveillance to maintain a high deterrent effect against criminal activity. The parking areas, footpaths and the shared use path would all be lit during opening hours and the layout and landscape proposals have been designed to avoid dark corners and maximise the affective area of the CCTV system.
- 2.2.6 The layout has been designed to minimise conflicts between buses and pedestrians. Pedestrian routes are to be well defined and distinguished from roads through the use of a different coloured surfacing. The layout ensures that there is no need for pedestrians to cross the bus routes to access the bus stop area. Traffic calming measures are proposed where pedestrian routes cross vehicular (car) routes.

Provision for pedestrians and cyclists

- 2.2.7 A shared use footway/cycle way is proposed that links the park and ride site with the existing pedestrian and cycle routes around the Elmbridge Court roundabout. This route is located outside the fence line of the P&R site to allow use when the P&R site is locked. The footway/cycleway has been designed so that it could be linked to footways forming part of any potential development to the south of the site in the future.
- 2.2.8 A cycle shelter with stands and four cycle lockers provides secure cycle storage facilities in the vicinity of the bus stops.

Landscape Proposals

2.2.9 The landscape proposals comprise the following:

- New mixed native hedgerow planting with scattered hedgerow trees along the northern and southern verges of the A40 Golden Valley Bypass to replace planting lost due to the widening works.
- Sculptural ground modelling along the site frontage to represent the ridge and field furrow system in evidence at the site along with the planting of large tree species and lengths of native hedge.
- Species rich grassland areas at the site frontage and on the fringes of the site with amenity grassland verges elsewhere.
- Frequent linear rows of trees within the car park area to break up the visual appearance of the tarmac areas and parked cars. Columnar tree species are to be used alongside pedestrian routes within the car park to prevent interference with the lighting and CCTV system whilst broad-crowned tree species will be used between parking areas to maximise their screening affect.
- Mixed ornamental shrub and herbaceous planting within and around the parking areas. This is to be restricted to low groundcover planting within the parking areas to maintain good visibility for safety and security purposes.
- Mixed native woodland planting along the southern boundary, which will be under-sown with a woodland wildflower and grassland mix. This woodland will be planted on an organically shaped earth bund to maximise day one screening.

2.2.10 The majority of existing trees within the site will be retained, including the mature oak tree that is within the existing arable field. Dead or dying trees will be removed for safety reasons and, subject to landowner consents, existing mature pollarded willows along the western boundary will be re-pollarded.

Drainage

2.2.11 The discharge from the parking area and bus access lanes would be drained into the existing agricultural drainage ditch (Innsworth Drain).

2.2.12 The car parking area has been designed with a permeable tarmac surface so that rainwater will quickly filter through the surface into the sub-base. Here it is filtered and flow rates are attenuated before being discharged into grassed swales, which further attenuate the flow so that the eventual discharge rates into the ditch are equivalent to greenfield run-off rates.

Appearance and Materials

- 2.2.13 The design of the proposals has been influenced by the need for them to be functional, durable and to reflect the good quality landscape and Green Belt setting. Hard surfacing materials are proposed as follows:
- Parking areas – permeable ‘tarmacdry’ system.
 - Overflow car park - Reinforced gravel surface delineated with timber knee rails.
 - Standing area for buses – concrete. (Selected because this is much more resistant to diesel and oil spills).
 - Access roads and compensatory parking spaces at the business park - conventional bitumen surfacing.
 - Pedestrian/cycleway through the site - Permeable resin bound gravel.
- 2.2.14 All security fences, cycle racks, seating, lighting columns and bus shelter structural elements would be finished in a natural, dark green colour. The quantity of such elements has been minimised to prevent site clutter.
- 2.2.15 Lighting columns vary in height between eight and five metres. The lanterns have been selected to minimise light spill from the site, with zero upward light above the horizontal. Lanterns bordering on to Pirton Brake would be fitted with shields to further limit any light spill. Lights would only be turned on when the site is operational.

Elmbridge Court Roundabout

- 2.2.16 The proposed changes to Elmbridge Court Roundabout are all designed to enhance its capacity and thereby reduce congestion.
- 2.2.17 The changes are as follows:
- Creation of a left hand turn lane for traffic from the A40 Golden Valley Bypass to the A417 Barnwood Link Road;
 - Construction of a lane through the roundabout between the A40 Golden Valley Bypass and the A40 Gloucester Northern Bypass;
 - Closure of the direct access off the roundabout to Elmbridge Court Business Park and Elmbridge Court Farm to be replaced by a new access to the proposed signalised junction on the A40;
 - Creation of a new combined access road/pedestrian and cycle link from the park and ride site to Elmbridge Court Roundabout;
 - Carriageway widening on all approaches to Elmbridge Court Roundabout; and

- The introduction of 24 hour signals on all approaches to the roundabout (apart from Cheltenham Road East) and greater coordination with the traffic signals at the Nine Elms/Cheltenham Road signal junction.

Soft Landscaping/Environmental Mitigation

- 2.2.18 Landscape proposals seek to replace planting lost as a result of the carriageway widening and new hamburger 'through lane'. The construction of the latter will result in the removal of a number of semi mature trees from the central roundabout area; these are to be replaced with an avenue of alder trees. Other areas of semi mature trees and scrub are to be removed to achieve the required forward visibility at the widened approaches. This planting will be compensated for by a new area of mixed native trees and shrubs across the area previously occupied by the access to the business park.

Highway Infrastructure elements

- 2.2.19 The scheme includes new lighting columns, traffic signals, signage and safety barriers. All such elements would be designed to highway Agency standards. In addition, gabion basket retaining walls, 1.5-2.5m high (including embedded depth), are required in the eastern verge of the A40 Northern Bypass and the northern verge of the A40 Golden Valley Bypass where embankments would otherwise encroach onto private land. These will be topped with timber post and rail fences.

Arle Court Bus Priority measures

- 2.2.20 This part of the scheme involves the creation of a new westbound bus lane along the A40 between Whittington Road and Arle Court roundabout in order to improve the reliability of bus and taxi journeys along this part of the A40. A buried bus detection loop would give priority to buses at the signal controlled Whittington Road/A40 junction.
- 2.2.21 The bus lane will be 3.5 metres wide and will be constructed wholly within the existing highway boundary. In order to accommodate the new lane the existing grassed verge between the carriageway and the adjacent shared use footpath/cycleway is to be steepened, with a short section incorporating a length of gabion walling, where gradients would otherwise become too steep to maintain.
- 2.2.22 The scheme includes new signals, signage, fences, barriers and lighting, all designed to Highways Agency standards.

Soft Landscaping/Environmental Mitigation

- 2.2.23 Although the proposed carriageway widening does not extend as far as any of the trunks of the existing mature trees in the area, disturbance to roots and the changes of ground levels under the canopy of these trees means it is necessary to remove a number of them. In addition, some trees are to be removed because their condition is such that they do not have a viable long term future. New trees are to be planted in the verge and these trees will be planted as semi-mature specimens for immediate impact.

3. ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

3.1 INTRODUCTION

3.1.1 The EIA Directive (Council Directive 85/337/EEC as amended) sets out procedures that must be followed for such projects before they can be given planning permission. The Directive is legally transposed via statutory instruments known as Regulations. The Regulations that are applicable to the SBL Scheme are the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. The Elmbridge Transport Scheme is classified as EIA development as it is development of an infrastructure project with an area over 1 hectare within Schedule 2 of the Regulations and therefore it requires and Environmental Impact Assessment (EIA).

3.1.2 Environmental Impact Assessment (EIA) is a tool for systematically examining and assessing the impacts and effects of a development on the environment. It is an iterative process and is used to inform design. It also involves consultation with various bodies and the public to be undertaken to inform the design process. A scoping opinion was obtained from Gloucestershire County Council (and subsequently from the Planning Inspectorate as a result of the scheme being considered as a Development Control Order scheme for a period of time). This scoping opinion sets out the matters which should be covered in the EIA process. The Environmental Statement (ES) is the formal reporting of the EIA process and contains:

- A description of the development, including any alternatives considered.
- A description of the existing environment at the site and surrounding areas.
- A prediction of the potential impacts on the existing human, physical and natural environment at the site and assessment of subsequent effects.
- A description of mitigation measures to avoid or reduce such effects.
- A Non-Technical Summary.

3.1.3 The objectives of the ES are to ensure that environmental factors are considered throughout the project, and the decision-making process, and potential adverse and beneficial environmental impacts are identified and assessed. As a result of this assessment process, potential measures to avoid or minimise any likely significant impacts can be identified and where necessary subsequently implemented.

3.1.4 An Environmental Impact Assessment (EIA) of the effects of the development has been conducted in accordance with relevant guidance, industry good practice and methodologies. The EIA is reported in the Environmental Statement (ES) comprising Volume 1; this Non Technical Summary, Volume 2 (the main ES) and Volume 3 (technical appendices and figures).

3.1.5 This Non-Technical Summary (NTS) provides a summary of the findings presented within the ES. A summary of the environment of the scheme is

provided below. This is followed by key findings of the assessment, topic by topic, covering impacts during construction and operation of the Scheme. Consideration is also given to the impact of the Scheme when taken together with other projects either nearby or affecting traffic levels in the vicinity.

3.2 SITE AND SURROUNDINGS

The Park and Ride Site and Elmbridge Court Roundabout

- 3.2.1 The proposed P&R site is located to the south of the A40 between the settlements of Cheltenham and Gloucester. The A40 is the main radial route into/out of Cheltenham from the west, and connects with Gloucester and the M5 junction 11 (located approximately 2 miles west of Arle Court roundabout) via the A40 'Golden Valley Bypass' dual two-lane carriageway.
- 3.2.2 Elmbridge Court Roundabout is at the intersection of five roads: A40 Golden Valley Bypass, A40/A417 Barnwood Link Road, A40 Gloucester Northern Bypass, B4063 Cheltenham Road East and B4063 Cheltenham Road.
- 3.2.3 Elmbridge Court Roundabout is in the administrative area of Gloucester City Council whilst the proposed P&R site lies within the administrative area of Tewkesbury Borough Council. The P&R site is located in the Green Belt that separates Gloucester from Cheltenham.
- 3.2.4 The P&R site and Elmbridge Court Roundabout lie close to the urban settlements of Elmbridge, Longlevens, Innsworth and Churchdown. These settlements are primarily residential. However, at the southern end of Elmbridge the predominant uses changes to commercial and light industrial.
- 3.2.5 The proposed P&R site is a generally flat piece of land made up of two fields; the larger of the two in arable use and the smaller field adjacent to the A40 laid to pasture. This smaller field is bounded by hedgerows. The second, larger field has hedgerows on its northern and western boundaries, a row of trees along part of the southern boundary and deciduous woodland known as Pirton Brake along the eastern boundary. The rest of the application site is operational highway land consisting of carriageways and highway verges.
- 3.2.6 There is no existing vehicular access to the site proposed for the P&R facility other than farm access tracks and most of the site is not publicly accessible. The definitive public rights of way maps show one public footpath running through the northern part of the site (path ECN/9/1), although there is no evidence of this footpath on the ground and no visible access to the path at either end.
- 3.2.7 Elmbridge Court Roundabout caters for vehicular and non-vehicular movements including access to Elmbridge Court Business Park and Elmbridge Court Farm.
- 3.2.8 The surrounding area is semi-rural in character. Although a significant proportion is in agricultural use, with numerous hedgerows and trees, there is much built development. The most significant existing built development nearest the site,

other than the transport infrastructure, is the Elmbridge Court Business Park, which lies immediately to the west of the proposed P&R site. Other buildings within the area include scattered residential buildings along the B4063, the modern Gloucester North Community Fire Station building at the south western end of the B4063 Cheltenham Road East, Elmbridge Court Farm and Pirton Court, the latter being a grade II listed building. There are also a number of large electricity pylons that cross the area. A traditional orchard lies to the east of Elmbridge Court Farm. The Bristol to Birmingham main line railway lies to the south of the application site. To the south of the P&R site lies the higher ground of Tinkers and Churchdown Hills (Together known as Chosen Hill). This area is designated as a Special Landscape Area in the Tewkesbury Local Plan due to its status as an area of high quality landscape of local significance.

- 3.2.9 A more detailed description of the P&R site, Elmbridge Court Roundabout and the surrounding environment are included in the relevant environmental topic chapters of the Environmental Statement.

Arle Court Bus Priority Scheme

- 3.2.10 The site proposed for the bus priority measures is located on the westbound stretch of the A40 Gloucester Road between the Whittington Road junction and Arle Court Roundabout in Cheltenham. The road is an urban dual two-lane carriageway. The A40 provides access for vehicular and non-vehicular traffic. The A40 / Telstar Road / Whittington Road traffic signal junction provides access to the Government Communications Headquarters [GCHQ] Cheltenham site immediately to the north and to the Benhall residential area to the south.
- 3.2.11 The Arle Court Bus Priority Scheme is located within the administrative area of Cheltenham Borough Council.
- 3.2.12 The area around the proposed scheme is an urban area with a mix of residential and commercial developments. Despite its urban status however, there is a significant proportion of green, well wooded space, particularly at the western end. The A40 in this area runs along the southern edge of a broad open grassed corridor with frequent mature trees which separates the road from the residential properties in the suburb of Fiddlers Green.
- 3.2.13 The vehicular carriageway and the shared use pedestrian/cycle path are separated by a verge planted with mature trees. The verge slopes away from the road to the shared use path. Woodland exists along the southern boundary of the shared use path.
- 3.2.14 More detailed descriptions of the site identified for the bus priority scheme and the surrounding environment are included in the relevant environmental topic chapters of the Environmental Statement.

3.3 KEY IMPACTS

Transport and Movement

- 3.3.1 The proposed Elmbridge P&R facility, modifications to the Elmbridge Court roundabout to improve capacity, and bus lane and priority measures on the A40 corridor in proximity to Arle Court would have an impact on existing travel patterns both during construction and operation.
- 3.3.2 Current traffic levels on the roads around Elmbridge Court roundabout, and within the wider Gloucester and Cheltenham area, are at the point where congestion is becoming an increasing problem. With the forecast housing and employment development planned within the Gloucester / Cheltenham areas, traffic is predicted to increase by up to 20% over the 15 year period from 2011 to 2026. Therefore, without new transport infrastructure, existing capacity issues will intensify significantly in the future.
- 3.3.3 Gloucestershire's current Local Transport Plan sets out the transport strategy for the County from 2011 to 2026. In terms of Park and Ride, this document reiterated the County's long term strategy to create a ring of 1,000 space P&R sites around Cheltenham and Gloucester, with the Elmbridge Court site identified as a priority site to serve Gloucester.
- 3.3.4 The P&R scheme, modifications to Elmbridge Court roundabout and the Arle Court Bus Priority measures are proposed to reduce road congestion in the Gloucester / Cheltenham area and to improve journey time reliability for all vehicles, including buses. This is expected to have a significant positive impact on accessibility. Traffic modelling work carried out in support of the overall scheme proposals both at a strategic and more detailed local level have demonstrated that the proposed changes to the highway network – specifically to the configuration of Elmbridge Court roundabout and the associated new A40 / P&R site / Elmbridge Court Business Park traffic signal junction, would significantly improve capacity in terms of operational performance for all junction movements at year of opening (2016) as well as for a 2026 future forecast year.
- 3.3.5 During scheme construction, it is likely that there will be some disruption to traffic flow on the A40 (particularly on the A40 Golden Valley bypass) and through Elmbridge Court roundabout. However a package of measures has been identified which will be adopted by the appointed contractor in a Construction Traffic Management Plan in order to mitigate these impacts.
- 3.3.6 Potential pedestrian / cycleway routes to the P&R site will enable effective access to the facility by non motorised users. This would have a positive impact on accessibility to the P&R facility.
- 3.3.7 In terms of road safety, analysis of road accident data over the most recent five year period confirmed that, prior to the recent implementation of local safety improvements (Spring 2011), Elmbridge Court roundabout (including adjacent

entry arms) was ranked second on GCC's accident hotspot list and fourth in the Highways Agency's accident 'black spots' on the Area 2 network. Since the improvements were implemented, the evidence suggests that there has been a minor reduction in accidents. An appraisal of the scheme benefits compared to a 'do nothing' situation showed that there would be a further reduction in the number and severity of accidents on the road network resulting from the scheme proposals, confirming that the scheme will improve road user safety. These predicted accident savings are in large part due to the introduction of the P&R facility as a key part of the scheme proposal, which will result in a transfer of trips from the private car to public transport, giving a reduction in vehicle trips on the road network. A qualitative review of accident benefits has also been undertaken which provides support that the proposals are expected to lead to a further reduction in accidents.

Socioeconomic

- 3.3.8 An assessment has been made of the socioeconomic impact of the scheme on local areas that are likely to be affected by the implementation of the Elmbridge Transport Scheme. Areas with the potential to be affected, referred to as the Local Impact Area (LIA), include the wards that cover the proposed route and those that are adjacent to the scheme. The socioeconomic effects of the proposed scheme are assessed during both the construction and operational phases. The assessment covers the impacts on factors such as jobs (considering the net additional number of jobs created or lost), accessibility to employment/ education opportunities, image and perception and disruption.
- 3.3.9 The proposed Scheme is expected to have an overall positive socioeconomic impact. The scheme will improve the connectivity between Cheltenham and Gloucester and is expected to provide high quality public transport connectivity between Cheltenham and Gloucester that will prove attractive and accessible to all sectors of the local communities. The scheme will also reduce congestion and improve safety at one Gloucestershire's busiest junctions, thereby improving reliability for all transport users including strategic traffic by-passing Gloucester.
- 3.3.10 After the short-term disruption caused during the construction phase, the scheme will result in employment, education, training, retail and leisure opportunities becoming available/ more accessible to people living across the proposed Scheme's catchment area. In addition, the implementation of the scheme is anticipated to support economic regeneration of Gloucester and Cheltenham through the provision of enhanced bus services connecting the two centres, and through the provision of alternative car parking at the edge of Gloucester, thereby reducing the need for traffic entering the city centre. The scheme will also support future strategic development sites as proposed in the emerging Joint Core Strategy.

Air Quality

- 3.3.11 An assessment has been made of the potential effects of the Elmbridge Transport Scheme on local air quality in Gloucester and Cheltenham, and greenhouse gas emissions in the wider area. The assessment has considered both the potential effects on existing receptors in the study area during construction and once the scheme is open fully. The study area for air quality consists of the area within 200 metres of the proposed scheme and also any affected road meeting certain industry defined changes in traffic movements.
- 3.3.12 Mapped background concentrations and measurements at monitoring locations in the vicinity of the ARN suggest that it is very unlikely that there are currently exceedances of AQS objectives in the immediate vicinity of the ARN. Results from the project specific air quality monitoring survey show that the concentrations at properties in the immediate vicinity of the Scheme are not currently exceeding the air quality objectives.
- 3.3.13 Negligible residual effects are expected to occur as a consequence of the Scheme construction assuming that appropriate mitigation measures to prevent and control dust emissions are maintained by the construction contractor. These mitigation measures will be set out in a Construction Environmental Management Plan (CEMP). This will detail the procedures and working methods to be followed during the construction phase to minimise pollution, such as the use of covered vehicles to transport loose materials, the use of dust suppression techniques for cutting and grinding tasks, the covering of stock piles and the control of site run-off of water and mud.
- 3.3.14 No significant adverse residual effects are expected to occur as a consequence of the Scheme after opening. Of the 45 receptors modelled, only 8 locations are predicted to experience a small increase in terms of annual mean Nitrogen Dioxide (NO₂). The majority of these are located adjacent to the B4063 and B4634. All other changes in annual mean NO₂ concentrations are considered to be imperceptible.
- 3.3.15 The calculation of emissions showed that with the Scheme, pollutant emissions would rise in line with vehicle kilometres travelled in both 2016 and 2026, compared to the future situation without the Scheme. However, emissions would generally decrease in future years compared to the existing situation as a result of more stringent emissions control legislation, with the exception of CO₂ which showed an increase in emissions.
- 3.3.16 Provided any other independent construction works in the area ensure appropriate emissions prevention and control measures, the cumulative effect should not be significant. Cumulative effects on air quality will arise as a result of additional changes in traffic from other developments in the area. However, this assessment has included predicted emissions from all other developments with planning approval in the local area as a part of the assessment process and the

cumulative effect on air quality therefore remains the same as the effect arising from the proposed development, i.e. negligible.

Noise and Vibration

- 3.3.17 Analysis of noise impacts has been carried out to assess the effects of the Scheme on traffic noise and vibration levels in Elmbridge, Gloucester. It has considered both the direct effects of traffic using the Scheme and the effects of redistributed traffic on the existing road network. Noise levels have been predicted both with and without the scheme, for the opening year of the scheme (2016) and for the Scheme design year; 10 years after opening (2026). Noise levels have been predicted at residential and non-residential noise sensitive receptors within the study area, including Schools and Colleges, Hotels, Hospitals and public open spaces and footpaths.
- 3.3.18 The noise environment at properties potentially affected by the Scheme is currently controlled by traffic on the A40. Noise measurements were taken at a number of the noise sensitive properties closest to the Scheme in 2013.
- 3.3.19 On opening of the scheme the majority of properties would experience a negligible increase, no change or decrease in façade noise level. The 101 properties that would experience a minor daytime increase in façade noise level are located along Cheltenham Road East, Dancey Road, Gemini Close, Heathden Road and Parklands. Two properties on Gemini Close are predicted to experience a moderate increase in façade noise level. A noticeable decrease in noise is predicted generally at properties on or near Bibury Road, Robert Burns Avenue, Colesbourne Road and Willersy Road (Cheltenham) and Blackwater Way (Gloucester). Analysis of the wider road network shows that there would be a minor increase in noise along Great Western Road in Gloucester. Online mapping indicates that there are approximately 50 residential properties that would potentially be affected.
- 3.3.20 No properties within 600m of the proposed scheme would experience anything greater than a negligible change in façade noise level over the design period if the scheme was not built, after having allowed for 'natural' changes in traffic levels. When considering the wider road network in Cheltenham and Gloucester, without the scheme there is predicted to be approximately 167 minor increases and 14 minor decreases for receptors. There are also four potentially impacted residential properties on the A38 between Quedgley Trading Estate and Quedgley Trading Estate West where there is a moderate decrease in predicted noise level, which is a significant benefit.
- 3.3.21 Should the scheme go ahead the majority of receptors would experience a negligible change in noise by the design year of 2026, although there are two properties located on Gemini Close, near the Arle Court part of the scheme that would experience a minor increase in noise. These increases are not considered to be significant and mitigation is not proposed. All night time changes in noise

are negligible. Analysis of the wider network shows a larger proportion of Valliant Way would experience minor noise increases; however there are still no residential properties within 50m. The roads affected when comparing 2016 and 2026 with the scheme are the same as those affected between these time periods without the scheme, with four properties with significant noise benefits.

- 3.3.22 If the scheme were not built there would be a small increase in noise nuisance at the majority of properties due to natural traffic growth by the design year. With the scheme in place there would be fewer properties overall which receive an increase in nuisance than if the scheme were not built. However, the severity of the nuisance at the affected properties would increase slightly.
- 3.3.23 If the scheme were not built the majority of properties would experience no change in airborne vibration nuisance. If the scheme were built, there would be 169 fewer properties that would receive a small increase in airborne vibration nuisance and 168 more properties that would receive a small decrease in airborne vibration nuisance.
- 3.3.24 Construction impacts can only be estimated as the construction methods are not fully determined at this time. Significant construction noise impacts may arise at business units on Elmbridge Court throughout the Park and Ride and Elmbridge Court Roundabout works. Piling activities are likely to cause significant impacts at properties on and around Blackwater Way.
- 3.3.25 In conclusion, The Elmbridge Transport Scheme would increase noise levels at particular receptors because it alters existing noise sources in the local environment. This is in the form of road alignment and traffic composition. Decreases in noise are also expected at other locations as a result of traffic using the new Park & Ride and therefore reducing the volume of traffic on the A40. The largest adverse changes in noise expected are 'moderate' in magnitude in the opening year and 'minor' in magnitude in the design year 2026. The worst affected area is Gemini Close, near the Arle Court scheme, where two properties receive more significant increases of noise in both the opening and design years with the scheme in place due to an increase in the percentage of HGVs using the adjacent road. Moderate decreases in noise are expected at a limited number of properties. The change in noise at all other NSRs by the design year would be negligible. Assessment shows that no properties are likely to qualify for an offer of noise insulation under The Noise Insulation Regulations 1975 (as amended 1988).

Ecological Impacts

- 3.3.26 The ecological assessment has considered the effect of the scheme on designated areas, habitats and species within the sites and the surrounding areas.

- 3.3.27 Four areas covered by statutory European nature conservation designations were identified as having the potential to be affected by the proposals; Walmore Common SPA (Special Protection Area) and Ramsar site, The Severn Estuary SAC (Special Area of Conservation), SPA and Ramsar sites, the Wye Valley and Forest of Dean SAC and the Wye Valley Woodlands SAC. However, due to the distance of these areas from the scheme and a lack of habitat connectivity it is concluded that there are no likely significant effects on European sites.
- 3.3.28 Two sites covered by statutory national nature conservation designations were identified within 2 km from the scheme; Innsworth Meadow Site of Special Scientific Interest (SSSI) and Badgeworth SSSI are approximately 2 km to the north and southwest of the Scheme respectively.
- 3.3.29 Four locally designated nature conservation sites were identified within 2 km of the scheme. Griffiths Avenue Local Nature Reserve (LNR), Churchdown Hill Meadows Key Wildlife Site (KWS), Chosen Hill KWS and Chosen Hill Gloucestershire Wildlife Trust Nature Reserve. These sites are designated for the habitats present within each site and their importance for wildlife. All of these sites are too far from the proposed scheme to be directly affected. There is the potential for indirect impacts due to air pollution but at more than 200 metres from the proposed scheme current guidance is that air quality impacts will be negligible and are therefore not considered significant.
- 3.3.30 Habitats within and around the scheme comprise woodland, individual and hedgerow trees, scrub and hedgerows, semi-improved grassland and open water, all of which will be directly affected by the proposals. Areas of all of these habitat types except for woodland and open water would be permanently removed as a result of the scheme, whilst other areas may be adversely affected by noise and dust pollution. Mitigation measures include the replanting of hedges and trees, the creation of a new area of native woodland and creation of species rich grasslands. Pollution effects will be controlled by the inclusion of buffer strips between the scheme and the existing woodland and watercourses and the creation of attenuation swales as part of the surface water drainage system. Environmental and habitat management and monitoring plans will also be produced to ensure ecological mitigation and its ongoing management is undertaken in accordance with the agreed scheme and best practice. After assessing the loss of habitats in the context of the immediate environs of the site and taking into account the proposed mitigation measures the impacts on habitats are not considered significant.
- 3.3.31 The habitats identified above provide food and nesting opportunities for a number of birds, mammals, reptiles and invertebrates. The loss of these habitats and/or their degradation by noise and dust pollution will have an impact on the species that live there although the mitigation described in the paragraph above will reduce the effects of these impacts. Additional mitigation specifically to address impacts on species comprises the design of the lighting scheme to reduce

disturbance to bats (especially the inclusion of shields to prevent backward light spill into Pirton Brake woodland), the provision of bird and bat boxes, the provision of log piles for invertebrates and reptiles, the timing of vegetation clearance and on-site checks to avoid disturbance to nesting birds and additional reptile surveys and translocation of reptiles if found. After assessing the affect of birds, mammals, reptiles and invertebrates in the context of the immediate environs of the site and taking into account the proposed mitigation measures the impacts on these species are not considered significant.

- 3.3.32 Various other proposed schemes in the vicinity of the proposals have been considered in order to assess the cumulative impacts on ecology. Many of these comprise mixed use development on Greenfield land. The full detail of the majority of these schemes is not known at this time so it is not possible to assess in detail their impacts. Ecological impacts from these schemes are likely to arise from loss of habitats of value to wildlife such as scrub and mature trees. Given the requirement for ecological assessments, protection of the most valuable habitats and provision of mitigation measures, it is not considered that cumulative impacts will be significant.

Landscape and Visual Impacts

- 3.3.33 The landscape and visual impact assessment has considered the effect of the proposed scheme on the landscape resource of the study area. The landscape resource comprises the individual landscape elements of the area such as grasslands, trees and woodlands, hedgerows and buildings as well as the overarching character of the area. In addition, the assessment considers the visual affect of the scheme on the various receptors that experience the landscape. Receptors include residents, workers, users of footpaths and other recreation facilities, and motorists, cyclists and pedestrians passing through the area.
- 3.3.34 The scheme would involve land take of approximately seven hectares, largely of agricultural land comprising semi improved pasture and arable land. In addition the scheme affects a number of highway verges.

Impacts due to Park & Ride Site and Elmbridge Court Roundabout Scheme

- 3.3.35 The main impacts on landscape elements include the loss of semi improved pasture land and native hedgerows and hedgerow trees as well as grassland, trees and scrub adjacent to the Elmbridge Court Roundabout. These impacts will be mitigated by the planting of new hedgerows and hedgerow trees alongside the widened A40, a new area of native woodland along the southern edge of the park and ride site and the sowing of species rich grasslands around the perimeter of the site. New native tree and shrub planting is proposed as part of the roundabout scheme. In addition, the internal areas of the park and ride site will include belts of ornamental tree and shrub planting.

- 3.3.36 It is not considered that the character of the area, which is assessed to be semi-rural with numerous detracting built elements, will change significantly as a result of the works. The park and ride scheme introduces a new urban element into the landscape but once the associated landscape has matured this will integrate the scheme into the wider, mixed urban and rural landscape.
- 3.3.37 The proposals would result in negative visual impacts for nearby residents and workers along with users of roads and footpaths in the area. However, in the long term, the proposed landscaping will reduce and in many cases remove these impacts. The scheme will have some long term negative affects for a limited number of nearby residents and users of footpaths in the area, especially those on the mid slopes of Tinkers Hill. The view available to these receptors would permanently change and they would be able to see additional urban elements and vehicles in areas previously open and undeveloped. However, the views from affected properties would largely be from upper stories only and would be filtered by vegetation. Views from affected footpaths would be for relatively short stretches of footpath only and again would be filtered by existing and the proposed vegetation. These impacts are therefore not considered to be significant.
- 3.3.38 The lighting scheme for the park and ride site will only be turned on during the opening hours of the site and the scheme has been designed to minimise light pollution by the use of lower columns and LED lanterns with deflectors to direct light downward. There are also large areas of existing, lit urban development near to the site. It is not considered therefore that the lighting scheme will have a significant impact on the character of the landscape or the visual amenity of the receptors around the site.
- 3.3.39 When assessing cumulative impacts, it is considered that the urban extension areas included in the draft Joint Core Strategy, along with the proposed mixed use developments at Longford and Brockworth would, when combined with the proposed scheme at Elmbridge, have a long term negative impact on the landscape and visual amenity of the area. This needs to be balanced however with the fact that the urban extension areas are in a development plan that is at draft stage and the detail of these schemes is unknown. If these schemes were to go ahead this would change the character of the area and the proposed scheme would lie within an urban edge, rather than a semi-rural landscape.

Impacts due to Arle Court Scheme

- 3.3.40 This scheme is considered to have only minor impacts on the landscape elements of the study area. Although a quantity of mature trees are to be removed to accommodate the wider carriageway many of these were assessed to be of poor quality with a limited safe life expectancy. The scheme includes the replanting of new, large tree species to replace those lost and these are to be planted as semi-mature specimens for immediate impact.

- 3.3.41 The character of the area, which is urban and dominated by the existing road, will not change as a result of the works.
- 3.3.42 The scheme is considered to have only minor visual impacts and this would largely be due to the removal of the existing mature trees. Until such time as the replacement trees achieve full and broad crowns the users of the combined cycle path and footway to the south of the A40 will be more exposed to the traffic on the A40. The visual amenity for other receptors in the area such as motorists, residents and workers is not considered to be adversely affected long term due to the limited nature of the scheme and the existing tree cover in the area.
- 3.3.43 There are other traffic improvement schemes proposed in the Arle Court area which also involve widening the A40 carriageway to create new bus lanes. If these were also to go ahead the negative impacts on existing landscape elements in the area and the visual amenity for residents closest to the A40 corridor may increase.

Historic Environment

- 3.3.44 This assessment has considered the effects of the proposed Elmbridge Transport Scheme on the historic environment. This encompasses designated and non-designated heritage assets including Scheduled Monuments, Listed Buildings (statutorily listed and locally listed), Conservation Areas, World Heritage Sites, Registered Parks and Gardens, Registered Historic Battlefields, historic buildings (unlisted), known archaeological sites and areas of archaeological potential.
- 3.3.45 There is one conservation area (Poets conservation area in St Marks, Cheltenham) and several listed buildings within the study area, but no scheduled monuments or registered parks and gardens. Key views from within the conservation area were checked and it is concluded that the scheme has no direct impact on this area. There are two listed buildings with the potential for their settings to be adversely affected by the park and ride development; Pirton Court and Pirton Court Barn. Due to the shielding effect of the Pirton Brake tree belt, the distance from the development and the proximity of other existing sources of noise and light, the proposed development will produce no appreciable changes to the setting of the Listed Buildings at Pirton Court, and therefore the impact of the development is not significant. Arle Court Lodge listed building lies in the vicinity of the Arle Court works. However, It is located adjacent to the existing A40 carriageway just east of the Arle Court Roundabout and this setting will not change significantly as a result of the scheme.
- 3.3.46 An area of extant ridge and furrow, which lies to the south of the A40, will be removed as a result of the park and ride proposal. This is a non designated heritage asset which is rated to have a low heritage value. The affect on this asset is therefore concluded to be moderately significant. There is also an area of ridge and furrow north of the A40 on which the scheme would have a

moderate/slight effect due to temporary works compounds. These are also un-designated and considered to be of low heritage value. There are various other non-designated heritage assets in the study area but the impact on these is not considered significant due to their low heritage value and/or the extent of disturbance.

- 3.3.47 Site investigations have indicated that the potential for finding any significant remains from the prehistoric and Roman periods within the site areas is negligible. A watching brief is proposed for areas outside of the site such as compounds and access roads in order to monitor and record any archaeological remains exposed. There would be no residual effects on any buried archaeological remains following mitigation as these would be fully recorded before their destruction.
- 3.3.48 Other proposed developments in the area, including the urban extension areas identified in the draft Joint Core Strategy for the region, do have the potential to have a significant adverse affect on the setting of the listed buildings at Pirton Court. When considered alongside the scheme they would change the character of the surrounding area and therefore the setting of the listed buildings. Further areas of ridge and furrow may also be lost, adding to the significance of the impact on this historic feature in the area along with removal and damage to various other non-designated heritage assets.

Flood Risk

- 3.3.49 An assessment to NPPF of the baseline flood risks to the existing site and that of the proposed development has been made with the objective of ensuring that the proposed development will have an acceptable level of flood risk and does not exacerbate flooding elsewhere. The resulting Flood Risk Assessment will be submitted to the Environment Agency.
- 3.3.50 The Flood Risk assessment has shown that the proposed development site lies within Environment Agency Flood Zone 1. NPPF guidance categorises the development proposals as 'less vulnerable' and appropriate within Flood Zone 1. However detailed hydraulic modelling suggests part of the site is located in the 20 year floodplain.
- 3.3.51 The assessment therefore makes the following recommendations for the development:; A flow gauge should be installed along the Innsworth Drain, A flood warning strategy and emergency plans should be development. ;A parking strategy should be implemented to avoid parking vehicles in areas most susceptible to lower return period event flooding; and, Users of the park and ride should also be educated on emergency evacuation procedures.
- 3.3.52 The parking areas within the park and ride site are to be designed as a permeable drainage system. The surface water will percolate through the tarmac surface into an open graded aggregate base layer before discharging into

attenuation swales and ultimately the existing agricultural drainage ditches and watercourses. This system slows down the flow of surface water to match greenfield run off rates and avoid overloading of the existing system. All other areas of the scheme will drain into existing highway drainage systems.

- 3.3.53 Clearance and ongoing maintenance of the existing ditches around the site will improve their capacity and reduce the possible extents and depths of flooding on the site.

Water Environment

- 3.3.54 An assessment has been made to determine the potential impact of the proposed Elmbridge Transport Scheme on the quality and quantity of water within nearby surface and groundwater environments.
- 3.3.55 The construction phase of the development could generate an increase in the concentrations of some pollutants in the water environment. In particular, suspended soils from the mobilisation of silts and sediments during earthworks and hydrocarbons and heavy metals from vehicles and equipment emissions could find their way into groundwater and nearby watercourses. A Construction Environmental Management Plan (CEMP) has been drafted and will be expanded on prior to the works commencing. The CEMP would detail both generic and specific instructions and operating procedures to enable construction work to be undertaken with minimal impact on the water environment and ensure appropriate consents are obtained prior to works commencing. The CEMP will also be used to ensure appropriate storage of fuels, lubricants and other construction chemicals in the Contractor's compounds thereby preventing pollution of surface and groundwater through leaks and spills. Through the use of the CEMP, the Contractor will ensure compliance with best practice.
- 3.3.56 The permeable drainage system for the parking areas as described in the flood risk section above provides treatment of pollutants from surface water run-off before it enters any watercourses. Also, as the system attenuates (slows down) the discharge of surface water, outfalls into the drainage ditch will be at Greenfield rates which will minimise erosion. The drainage scheme for all other areas using the existing highway drainage system will include petrol interceptors. These measures will avoid any deterioration in water quality in existing ditches and watercourses.
- 3.3.57 Baseline investigations of the ground conditions indicate there will be negligible risk to the groundwater quality from the proposed scheme.
- 3.3.58 A Water Framework Directive (WFD) compliance assessment has also been undertaken to consider deterioration to the water environment and ensure that appropriate mitigation is included within the scheme to lessen impacts specifically to the water quality, hydromorphology and aquatic ecology. The WFD initial assessment concluded that the A40 culvert extension is likely to cause

adverse localised impacts to one water body and that these impacts will need to be further assessed at the detailed design phase, and appropriate mitigation or enhancement put in place. Consultation with the Environment Agency is advised at this stage. All other scheme elements (assuming recommended mitigation is put in place), upstream and downstream impacts and in-scheme cumulative impacts have been deemed compliant with WFD objectives.

- 3.3.59 Other developments considered within the cumulative impact section may impact on the water environment. However, assuming that all developments are to current best practice standards it is not considered that here will be additional cumulative impacts, when considered with the Scheme, on the water environment.

Contamination

- 3.3.60 An assessment has been made of the likelihood of potential sources of contamination within the site boundary, or within 500m of the site, to present significant environmental effects with regards to land contamination, either during construction or operation and maintenance of the Scheme. A desk based study was initially undertaken and, as a result, no potential sources of contamination were identified.
- 3.3.61 Ground investigations, which included the chemical analysis of soil samples, have been undertaken on both the park and ride and Arle Court bus lane areas of the scheme. The assessments concluded that, from the soils analysed, there is not considered to be an unacceptable level of risk to groundwater or surface waters from the re-use of material but that the potential risks to human health would need to be managed through a Materials Management Plan (MMP). The re-use of any contaminated material within the Scheme will be considered within a MMP and may involve placement away from human receptors, (i.e. under the tarmacadam of the park and ride) or removal from site. Preliminary assessments have indicated that none of the soil samples analysed would be categorised as hazardous if they are required to be removed to landfill.

Soils and Land Use

- 3.3.62 The park & ride site is currently agricultural land over heavy clay soils. The fields are under typical Vale of Gloucestershire heavy land rotations based around winter wheat and improved grass. Due to the heavy, wet soils and the local climate the land is not classified as best quality agricultural land. The loss of seven hectares of such poorer quality land is not significant in terms of national policy guidelines for the protection of agricultural land.
- 3.3.63 Topsoil is a valuable resource and would be stripped from the areas of hard standing for reuse, either locally for landscaping or for other projects. The quality and quantity of reusable soil would be maintained by implementing appropriate standard best practice techniques for stripping, storing and re-use.

- 3.3.64 With the application of appropriate soil remedial works such as alleviation of compaction, the installation of a field drainage system and a period of time under pioneer crops, it would be possible to return the site to agricultural use in the future if required.
- 3.3.65 It has been concluded that the Elmbridge Transport Scheme will not have any significant impacts on soils and land use.

4. CONCLUSION

- 4.1.1 The Environmental Statement reports the findings of the Environmental Impact Assessment for the Elmbridge Transport Scheme. It provides a comprehensive description of all aspects of the proposed development and the receiving environment. The ES identifies and assesses the direct, physical impacts of the development on the surrounding environment as well as the indirect impacts such as changes in traffic flow across the local network and impacts on the economy and quality of life experience. Where appropriate the ES identified mitigation measures to avoid or reduce adverse environmental effects.
- 4.1.2 The ES outlines the alternatives considered and describes the contribution that environmental effects made in discounting those alternatives in favour of the preferred scheme.
- 4.1.3 As with most development projects there will be a number of adverse impacts. Many of these occur during the construction phase and they may be exacerbated if they occur in tandem with other construction projects in the area. However, such impacts are temporary and can be reduced through the adoption of best practice working methods.

Gloucester City Council

Committee	: PLANNING COMMITTEE
Date	: 5 MARCH 2013
Subject	: ELMBRIDGE PARK AND RIDE
Decision Type	: CONSULTATION RESPONSE
Ward	: NONE
Report By	: TIM WATTON: PLANNING POLICY MANAGER
No. Of Appendices	: 1: CONSULTATION DOCUMENT
Reference No.	: Elmbridge Court Consultation

1.0 Purpose of Report

1.1 For Members to respond a consultation by Gloucestershire County Council on the Elmbridge Transport Scheme.

2.0 Recommendations

2.1 That Members support the principal of the transport scheme and that the comments set out in Section 4 of this report be forwarded to Gloucestershire County Council.

3.0 Background

3. The Elmbridge Transport Scheme is being implemented by Gloucestershire County Council and aims to tackle congestion on the road network and improve public transport between Gloucester and Cheltenham. There are three elements to the scheme:

- Improvements to the Park and Ride Service
- Junction improvements at Elmbridge Court at Gloucester
- Bus priority measures at Arle Cour roundabout near Cheltenham

3.2 Of particular relevance to Gloucester City is the Elmbridge Park and Ride Service and the junction improvements to the Elmbridge Court Roundabout.

3.4 The park and ride proposals includes a 1,000 space park and ride interchange on the land next to Elmbridge Court Business Park. This will be accessed via a new junction on the A40 Golden Valley Bypass and will serve both Gloucester and Cheltenham. The junction improvements at Elmbridge Roundabout include a reconfiguration of the junction to reduce the congestion that is already experienced at this point on the highway network

3.5 The scheme has been categorised as a nationally significant project and as such will be considered by the Planning Inspectorate directly. As part of this process there will be an examination into the proposals and the City Council will be invited to respond formally to the Inspectorate on the proposals. The consultation being undertaken by the County Council at this stage is part of the pre-application process, however, it is important to respond despite a fuller response being sought by the Planning Inspectorate during examination

4.0 Proposed Response

- 4.1 The following section of this report sets out the a series of points that the City Council should make the County Council aware of in advance of the formal application being submitted to the Planning Inspectorate.

Park and Ride comments

1. The proposed Park and Ride at Elmbridge Court should help to improve accessibility to the City by reducing the number of vehicular movements on the highway network within the City. The Park and Ride facility could be used by commuters and visitors approaching from the north from the M5 and along the Golden Valley. Any easing of congestion at peak times would be welcomed by residents and business alike.
2. The facility has the possibility not only to relieve the highway network of vehicles travelling toward Gloucester but also vehicles travelling to Cheltenham.
3. If buses from Elmbridge provide access to both Cheltenham and Gloucester via high speed bus priority routes the possibility exists to reduce congestion in both urban areas and potentially reduces journey times for City residents who currently commute to Cheltenham.
4. The proposed route for the park and ride bus will be pivotal in the success of the service, as journey time and drop off points will be key factors in determining whether members of the public will choose to make a transfer of transport as part of their commute or leisure journey – as yet no details are available of this proposed route and it is recommended that it be devised in conjunction with the City Council in order to develop an optimum solution to encourage the success of the proposed service.
5. It is not certain whether the new facility has been designed taking into account proposed new housing and employment development that may take place in the immediate area or at other locations to the north of Gloucester. Any new residential or employment development to the south of Churchdown may make additional demands on the proposed service and scope to expand the parking area should be planned at the outset.

Elmbridge Court Roundabout Junction Improvements

1. Improvements to the highway network that improve accessibility to the City and help to relieve traffic flow on arterial route ways into the City at peak times are to be welcomed.
2. It is not certain whether the new facility has been designed taking into account proposed new housing and employment development that may take place in the immediate area or at other locations to the north of Gloucester over the next 20 years.
3. Proposed levels of new development to the north of the City will be included in the JCS Preferred Options document consultation in Summer 2013. This should

be considered as part of the final scheme so that it does not prejudice sustainable development proposals.

4. If major highway works are to be undertaken it would be wise and prudent to future proof this key junction in the County during the proposed phase of construction in order to minimise disruption to the highway network rather than undertake additional disruptive works in the future.

Environmental Considerations

1. There is a need to look at impact of lighting on bats nesting birds etc and mitigate accordingly as although the woodland will not be physically impacted, light pollution may be an issue.
2. Attenuation ponds surrounded by roads is not the most sensitive way to attract wildlife to such environments/habitats
3. Long distance views should be mitigated by use of grasscrete or similar for the overflow car park
4. There is no mention of night-time impacts of lighting or mitigation
5. It would be a significant improvement to cycling if the Pirton Lane in Churchdown could be connected to the development. This would be a very useful addition to the Sustrans route 41 linking Cheltenham to Gloucester.

5.0 Conclusions

- 5.1 Gloucester City Council has been consulted by Gloucestershire County Council on the Elmbridge Transport Scheme in advance of a formal submission of the proposal to the Planning Inspectorate for examination. The Council has at that stage a requirement to produce a Local Impact Report which will provide a fuller response to the scheme. However, at this stage it is important that the information above is provided to the County Council as part of the pre-application consultation process.

6.0 Financial Implications

- 6.1 There are no financial implications associated with this report.

7.0 Legal Implications

- 7.1 Gloucester City is being consulted Gloucestershire County Council and therefore there are no legal implications to this report.

8.0 Risk Management Implications *(Authors to complete) Identify all key risks (scoring 8 and above) for the recommendation including the impact and likelihood of the risk occurring and what measures will be taken to mitigate the risk.*

- 8.1 There are no risks associated with this report.

9.0 People Impact Assessment (PIA):

Please ensure you complete this section even if a PIA is not required.

Is a PIA required?	Yes	No	Explanation: This is a consultation response
		x	
Has an initial PIA screening	Yes	No	Explanation: This is a consultation

been completed?	x		response
Has a full PIA been completed?	Yes	No	Explanation: This is a consultation response
		x	
Is the PIA available?	Yes	No	Explanation: This is a consultation response
		x	
Has the PIA identified any negative impacts on any protected characteristic or community cohesion?	Yes*	No	*Please ensure PIA is available
		x	

Any Further Relevant Information:

None

10.0 Other Corporate Implications (this may include Community Safety, Environmental, Staffing, Trade Union)

There are no other implications associated with this report.

Background Papers : None

Published Papers : None

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