

Agenda

Environment and Sustainability Scrutiny Committee

Date: **Monday 23 September 2024**

Time: **10.00 am**

Place: **Conference Room 1 - Herefordshire Council, Plough Lane Offices, Hereford, HR4 0LE**

Notes: Please note the time, date and venue of the meeting.

For any further information please contact:

Simon Cann, Democratic Services Officer

Tel: 01432 260667

Email: simon.cann@herefordshire.gov.uk

If you would like help to understand this document, or would like it in another format, please call Simon Cann, Democratic Services Officer on 01432 260667 or e-mail simon.cann@herefordshire.gov.uk in advance of the meeting.

Agenda for the meeting of the Environment and Sustainability Scrutiny Committee

Membership

Chairperson **Councillor Louis Stark**
Vice-chairperson **Councillor Justine Peberdy**

Councillor Dave Davies
Councillor Robert Highfield
Councillor Helen Heathfield
Councillor Rob Owens
Councillor Philip Price
Councillor Richard Thomas

Agenda

		Pages
1.	<p>APOLOGIES FOR ABSENCE</p> <p>To receive apologies for absence.</p>	
2.	<p>NAMED SUBSTITUTES</p> <p>To receive details of members nominated to attend the meeting in place of a member of the committee.</p>	
3.	<p>DECLARATIONS OF INTEREST</p> <p>To receive declarations of interest from members of the committee in respect of items on the agenda.</p>	
4.	<p>MINUTES</p> <p>To receive the minutes of the meeting held on 22 July 2024.</p>	9 - 20
<p>HOW TO SUBMIT QUESTIONS</p> <p>The deadline for the submission of questions for this meeting is 5pm on Tuesday 17 September.</p> <p>Questions must be submitted to councillorservices@herefordshire.gov.uk. Questions sent to any other address may not be accepted.</p> <p>Accepted questions and the responses will be published as a supplement to the agenda papers prior to the meeting. Further information and guidance is available at www.herefordshire.gov.uk/getinvolved</p>		
5.	<p>QUESTIONS FROM MEMBERS OF THE PUBLIC</p> <p>To receive any written questions from members of the public.</p>	
6.	<p>QUESTIONS FROM MEMBERS OF THE COUNCIL</p> <p>To receive any written questions from members of the council.</p>	
7.	<p>ACTIVE TRAVEL MEASURES</p> <p>For the committee to note and make recommendations on the active travel measures report.</p> <p>(Appendix 5 – Hereford Transport Hub papers to follow as supplement)</p>	21 - 380
8.	<p>WORK PROGRAMME</p> <p>To discuss the committee’s work programme.</p>	381 - 414
9.	<p>DATE OF THE NEXT MEETING</p> <p>Monday 18 November 2024, 2pm</p>	

The public's rights to information and attendance at meetings

In view of the continued prevalence of Covid, we have introduced changes to our usual procedures for accessing public meetings. These will help to keep our councillors, staff and members of the public safe.

Please take time to read the latest guidance on the council website by following the link at www.herefordshire.gov.uk/meetings and support us in promoting a safe environment for everyone. If you have any queries please contact the governance support team on 01432 261699 or at governancesupportteam@herefordshire.gov.uk

We will review and update this guidance in line with Government advice and restrictions.

Thank you for your help in keeping Herefordshire Council meetings safe.

You have a right to:

- Attend all council, cabinet, committee and sub-committee meetings unless the business to be transacted would disclose 'confidential' or 'exempt' information.
- Inspect agenda and public reports at least five clear days before the date of the meeting. Agenda and reports (relating to items to be considered in public) are available at www.herefordshire.gov.uk/meetings
- Inspect minutes of the council and all committees and sub-committees and written statements of decisions taken by the cabinet or individual cabinet members for up to six years following a meeting.
- Inspect background papers used in the preparation of public reports for a period of up to four years from the date of the meeting (a list of the background papers to a report is given at the end of each report). A background paper is a document on which the officer has relied in writing the report and which otherwise is not available to the public.
- Access to a public register stating the names, addresses and wards of all councillors with details of the membership of cabinet and of all committees and sub-committees. Information about councillors is available at www.herefordshire.gov.uk/councillors
- Have access to a list specifying those powers on which the council have delegated decision making to their officers identifying the officers concerned by title. The council's constitution is available at www.herefordshire.gov.uk/constitution
- Access to this summary of your rights as members of the public to attend meetings of the council, cabinet, committees and sub-committees and to inspect documents.

Recording of meetings

Please note that filming, photography and recording of this meeting is permitted provided that it does not disrupt the business of the meeting.

Members of the public are advised that if you do not wish to be filmed or photographed you should let the governance services team know before the meeting starts so that anyone who intends filming or photographing the meeting can be made aware.

The reporting of meetings is subject to the law and it is the responsibility of those doing the reporting to ensure that they comply.

The council may make a recording of this public meeting or stream it live to the council's website. Such recordings are made available for members of the public via the council's YouTube channel at www.youtube.com/user/HerefordshireCouncil/videos

Public transport links

The Herefordshire Council office at Plough Lane is located off Whitecross Road in Hereford, approximately 1 kilometre from the City Bus Station.

The location of the office and details of city bus services can be viewed at:
www.herefordshire.gov.uk/downloads/file/1597/hereford-city-bus-map-local-services-

The seven principles of public life

(Nolan Principles)

1. Selflessness

Holders of public office should act solely in terms of the public interest.

2. Integrity

Holders of public office must avoid placing themselves under any obligation to people or organisations that might try inappropriately to influence them in their work. They should not act or take decisions in order to gain financial or other material benefits for themselves, their family, or their friends. They must declare and resolve any interests and relationships.

3. Objectivity

Holders of public office must act and take decisions impartially, fairly and on merit, using the best evidence and without discrimination or bias.

4. Accountability

Holders of public office are accountable to the public for their decisions and actions and must submit themselves to the scrutiny necessary to ensure this.

5. Openness

Holders of public office should act and take decisions in an open and transparent manner. Information should not be withheld from the public unless there are clear and lawful reasons for so doing.

6. Honesty

Holders of public office should be truthful.

7. Leadership

Holders of public office should exhibit these principles in their own behaviour and treat others with respect. They should actively promote and robustly support the principles and challenge poor behaviour wherever it occurs.

**Minutes of the meeting of Environment and Sustainability
Scrutiny Committee held at Conference Room 1 - Herefordshire
Council, Plough Lane Offices, Hereford, HR4 0LE on Monday 22
July 2024 at 10.00 am**

Present: Councillor Louis Stark (chairperson)
Councillor Justine Peberdy (vice-chairperson)

Councillors: David Davies, Robert Highfield, Robert Owens and Richard Thomas

In attendance: Tom Fisher (Worcester, Bromyard, Leominster Greenway CIC), Arthur Lee (Herefordshire Local Access Forum), Councillor Phillip Price (Cabinet Member Transport and Infrastructure).

Officers: Mark Averill (Service Director Environment and Highways), Ed Bradford (Head of Highways and Traffic), Simon Cann (Committee Clerk), Joelle Higgins (Democratic Services Support), Danial Webb (Statutory Scrutiny Officer – Virtual attendee).

82. APOLOGIES FOR ABSENCE

No apologies for absence were received..

83. NAMED SUBSTITUTES

There were no named substitutes.

84. DECLARATIONS OF INTEREST

No declarations of interest were made.

85. MINUTES

Resolved:

That the minutes of the meeting held on 27 March 2024 be confirmed as a correct record and be signed by the Chairperson.

86. QUESTIONS FROM MEMBERS OF THE PUBLIC

A document containing a question received from a member of the public and the response given, plus a supplementary question and the response given, is attached at Appendix 1 to the minutes.

87. QUESTIONS FROM MEMBERS OF THE COUNCIL

No questions were received from councillors.

88. PUBLIC RIGHTS OF WAY AND GREENWAY POLICY

The Chair introduced and gave an overview of the item including the four main areas for discussion as covered off within the report:

- Understanding the size of the public rights of way network in Herefordshire.
- Accounting for the current state of repair of the network.
- Exploring the current and proposed models of management and operational delivery, including the role of the Parish Paths Partnership including the Herefordshire Local Access Forum.
- Exploring opportunities to develop greenways through the county.

The Chair suggested that initially officers should discuss the report and that it would then be opened up for debate with the committee members and attendees.

Size of the network

1. The Chair invited officers present to cover off the size of the PROW (public rights of way) network, the various elements that made up the network and any specific features within the county - such as bridges and topography - which presented officers with challenges.
 - The Head of Highways and Traffic drew the committee's attention to paragraphs 2 and 3 (including Table 1) within the main report, which detailed how Herefordshire's Public Rights of Way network was comprised of Footpaths, Bridleways, restricted byways and byways open to all traffic. To give an understanding of the size of the network, it was highlighted that - at 3014km in length - the footpath network within the county was larger than the road network.
 - The Head of Highways and Traffic pointed out that the size and accessibility of the network, and resources available to manage it presented challenges. In particular the remoteness of certain sections made them difficult to access and maintain.
 - It was pointed out that there were currently 29 bridges within the network that were recorded as being damaged.
 - The Head of Highways and Traffic noted that the complexity around certain legal issues relevant to the network could present issues and challenges for the council.
 - The Service Director Environment and Highways described how the right of way team within the council had reduced in size over recent years.
 - The river running through the county was not necessarily a problem, but maintaining discrete structures bridging remote small streams was a challenge for the team.
 - The rights of way of team was small, and covering over 3,000km of network was a difficult and revenue expenditure-dependent activity.
2. The committee enquired if there were any features specific to Herefordshire, such as topography that made it more challenging to deal with compared to other counties.
 - The Service Director Environment and Highways stated that there was nothing specific to Herefordshire presented unique challenges. The topography and land stability issues within the county were similar to those experienced by other counties.
3. The chair opened up the discussion to other attendees.

4. The Herefordshire Local Access Forum representative noted that the foot path network was larger than the road network, and emphasised the importance of encouraging and promoting walking tourism within the county, as it was a valuable means of generating revenue for local businesses
5. The committee asked the attending Cabinet Member for Transport and Infrastructure whether they thought the Public Rights of Way network was given enough priority within the Executive.
 - The Cabinet Member Transport and Infrastructure suggested that perhaps the network wasn't given the priority its size commanded, but suggested that there was perhaps a need to make the network more efficient and that many of the paths within it were potentially irrelevant from a tourism perspective.
 - The Cabinet Member Transport and Infrastructure suggested that streamlining the footpath network, so that focus and resource was directed at paths, walks and routes that actually led to places of interest/businesses, would be more efficient and beneficial for walking tourism than trying to manage and maintain remote/little-used paths that led nowhere.
 - The Cabinet Member Transport and Infrastructure asked the committee to consider whether the network as it stood and was expected to be, was viable and efficient, and whether the council should consider change.
6. The committee invited comments from guest attendees.
 - The representative for Worcester, Bromyard, Leominster Greenway CIC echoed the importance of walking tourism within the county and stressed the need for better coordination between the Walkers are Welcome Network, volunteers and the council in promoting towns and villages within Herefordshire as walking destinations.
 - They also stressed the need to consider how rural greenways could be opened up and used within the county to generate tourism revenue for the local economy.
7. The committee questioned whether certain paths were not used due to disinterest or rather that they were obstructed and inaccessible.
8. The committee noted that consideration needed to be given as to how much council resource should be directed at maintaining remote/blocked paths and how much should be left to volunteer groups and organisations. It acknowledged and agreed with the earlier comments made by the Cabinet Member Transport and Infrastructure about ensuring that the network was efficient.
9. A committee member raised concerns about a potential lack of enforcement in regard to ensuring that landowners met their legal obligations in relation to maintenance of land/property. The committee noted the legal complexity and expense in resolving such matters.
10. The committee raised concerns about publicly owned assets being lost when obstructed/unused public pathways were claimed by private landowners as their property.
11. A committee member pointed out that some people enjoyed walking along paths that didn't necessarily lead anywhere and that every single footpath had a value to someone and was worth maintaining. Maintaining the network with limited resources was a huge challenge, and more work needed to be done in ensuring landowners carried out required maintenance and that the pool of volunteers

willing to assist with maintenance of the network was coordinated and utilised effectively.

12. A committee member welcomed the appointment of a Public Rights of Way Volunteer Development Officer to the council team, but was concerned that some parish councils had reported the officer wasn't getting the support needed to carry out required work.
13. A committee member stressed the need for greater co-operation with parishes and parish path officers who were a good source of information in identifying footpaths that were popular with the public but were unavailable/inaccessible due to obstructions such as broken bridges. It was stated that the quality of repairs being carried out on bridges and other structures needed to be monitored to ensure that repairs made were robust.
14. The committee enquired whether the data contained in paragraph 3, table 1 of the main report was accurate and if the backlog of paths that were going through the registration process were included on the definitive map.
 - The Head of Highways and Traffic explained that the information in table 1 of the report related to recorded paths, but there was a process for going through definitive map orders that the team was currently working on. It was pointed out that the network was constantly changing and could actually be bigger than it was recorded in the document.
15. A committee member suggested that, when deciding where council resources and network maintenance should be directed, complaints/reports from the public should be used as a starting point - as these gave an indication of paths that were being used by the public.
 - The representative from the Herefordshire Local Access Forum commented that every public footpath was important and pointed to the physical and mental health benefits of walking and how this helped many people's wellbeing during the Covid pandemic.
 - They acknowledged the resourcing issues faced by the council in terms of footpath maintenance, but stated that significant repair and maintenance work could be carried out by willing and able volunteers from groups such as: the Rambler Practical Footpath Team, parish councils and various walking groups. It was suggested that if an effective volunteer officer and issue identification system was in place, then this would take pressure off the council in terms of finance.
16. The committee suggested that the whole network could potentially be maintained if: the council used its resources efficiently, enforcement measures were applied properly and volunteers were coordinated effectively.
17. The committee enquired whether it was felt that footpath officers should be council employees or volunteers.
18. The committee asked for assurance that the council was still committed to the Rights of Way Improvement Plan 2018-2028 in terms of user accessibility.
 - The Head of Highways and Traffic stated that in relation to determining which paths were valuable and which were less so, there was a section in Appendix 4 of the Rights Of Way Improvement Plan 2018-2028 that covered off categorisation of paths. Council rights of way officers tended to focus heavily on inspecting category 1 paths and routes, but when members of the public

flagged an issue or made an enquiry, then the officers would follow that up and investigate.

- The Cabinet Member Transport and Infrastructure stressed the need to think about how not just current, but future generations would use and engage with the network.
- The Cabinet Member Transport and Infrastructure asked for clarity in relation to the committee's use of the word accessibility, and whether it meant accessibility for people to reach a path or making paths accessible for all people with disability needs.

19. The committee pointed out that the Improvement Plan 2018-2028 did talk explicitly about accessibility for all users.

20. A committee member suggested that the idea that the entire network would be made accessible to wheelchair users was probably unrealistic, but did highlight schemes in local parishes where wheelchair accessible routes were being created to allow wheelchair users to access woods and fields.

21. Replacing stiles with gates was discussed as a means of improving accessibility for those with disabilities.

- The representative for the Herefordshire Local Access Forum pointed out that the health and wellbeing benefits derived from being able to walk on public rights of way was rarely accounted for in council budget calculations.
- The Service Director Environment and Highways acknowledged the health benefits derived from public rights of way and stated that there needed to be closer cooperation with colleagues from Public Health, such as working with doctors and surgeries to promote prescriptions for better health by advising people to participate in guided walks around the county. There was a need to ensure that money was being invested in the right areas.

The State of the network.

22. The chair invited officers to provide an overview of the state of the network and whether they felt it was better or worse than it had been 20 years ago.

- The Head of Highways and Traffic explained that there wasn't available data to back up how things had changed and that this was partly due to the way in which data had been recorded. Reports from the public made through the website were now fed into the 'Confirm' software system and there was currently work being done on this to ensure that it could measure workload and activity, and identify trends and patterns over time.

23. The committee pointed out that data was key in understanding how the network was being managed and that there didn't appear to be a set of KPIs (key performance indicators) that could demonstrate how interventions were impacting the health of and having a positive effect on the network.

- The Head of Highways and Traffic acknowledged that it had been challenging providing groups such as the Local Access Forum with information on a consistent basis, but that the team was getting closer to being able to provide KPIs for measuring what was going in the network and how the team was performing.
- The Head of Highways and Traffic suggested that it might be useful to formulate a recommendation around working with the Local Access Forum to create some kind of performance framework.

- The Service Director Environment and Highways described the Best Value Performance Indicative Framework or BVPI 178, which had been used in the past and suggested that this could be reintroduced as the structure for it was already in place.
 - The representative from Worcester, Bromyard, Leominster Greenway CIC noted that the best value performance framework was still being used by other organisation such as the Malvern Hills Areas of Outstanding Natural Beauty and the Ramblers, which might allow for benchmarking going forward. The importance of using parish footpath officers in dealing with these reports was also stressed.
24. The committee asked if it might be prudent to improve communications about when maintenance work was timetabled and scheduled in order to pre-empt or allay complaints from the public about overgrown or obstructed pathways and routes.
- The Head of Highways and Traffic acknowledged this point and suggested that it was important that the council could communicate to people that it was aware of an issue to avoid repeat enquiries being made about it. Educating people about when and why work was being undertaken and the best time of year to report issues was also important and was something that could be achieved through campaigns.
25. The committee noted that annually the number of enquiries was around 1,300, but that in the year to date it stood at around 373, the committee enquired if this was because enquiries were seasonal or a sign that the network was much improved.
- The Head of Highways and Traffic confirmed they were the enquiries that had been received to date and that there was a seasonal pattern to the flow of enquiries. As the data system improved it would be easier to identify the trends and patterns and tailor targeted campaigns at landowners and volunteers regarding the best times to engage in maintenance activity.
 - The Head of Highways and Traffic pointed out that batching similar enquiries together when dealing with them would be an effective approach to adopt going forward.
26. The committee enquired whether it would be useful to make a recommendation around ensuring the reporting system for the PROW network was as effective as the one used for highways by Balfour Beatty.
- The Head of Highways and Traffic explained reports received currently came through various channels, but the most efficient of these was the council website, which had been undergoing work recently. The remote location of certain PROW related enquiries made them harder to pinpoint than a typical highways issue, but through the digital front door of the website, 'Granicus' automatically linked into the council's 'Confirm' reporting system so that every report received would feed into 'Confirm' and auto-populate and allocated to one of the rights of way inspectors. In the past the process had been carried out manually, which was time consuming and expensive.
 - The Head of Highways and Traffic explained that the next part of the work being done to the PROW reports system was how the feedback loop would get back to the member of the public who had made the report/enquiry, to let them know the matter had been addressed and the case was closed.
 - The Head of Highways and Traffic pointed out that a lot of the information recorded and received could be displayed on a map where people could see that it has already been reported.

- The representative for Herefordshire Local Access Forum felt the council's report system was not as user friendly as it could be and would benefit from allowing people who were submitting reports to be able to accurately and easily pinpoint issues on a map and sign them off as completed when appropriate.
 - The Head of Highways and Traffic pointed out that a system similar to this was already active on the council's website, but that they were currently working on how to get job information through to parish footpath officers and other volunteers to keep the process as simple as possible.
27. The committee asked if data could be accessed by ward and parish councillors so that parish footpath officers could monitor the status of local issues.
28. A committee member detailed the enforcement process for landowners not taking action to clearing obstructed routes and paths when instructed to do so and enquired why the council did not appear to be prosecuting individuals who refused to carry out work when ordered to do so.
- The Head of Highways and Traffic explained the team worked closely with colleagues in the legal department in dealing with these matters on a case-by-case basis, and there was a need for action taken to be reasonable, proportionate and in the public interest.
29. The committee raised concerns about landowners not being prosecuted in situations where they continued to wilfully obstruct public rights of way even after repeated engagement from the council. It was suggested that robust enforcement of existing council policy would potentially have a hugely positive impact on ensuring the network was being maintained as it should be.
30. The committee considered if it might be useful for maintaining healthy relationships with landowners if enforcement duties were carried out by officers outside of the PROW team.
- The Service Director Environment and Highways pointed out that relationships with landowners and the team worked because they were open, honest and cordial. Separating enforcement functions from the team would put a strain on already stretched resources and the act of applying enforcement would still lead to potentially damaged relationships between landowners and the council regardless of which officer carried out the enforcement.
 - It was noted that the nature of landownership was changing. A relatively recent development was that large pieces of land were often being carved up and sold off to speculative purchasers. It was explained that having multiple landowners owning various sections of one big piece of land made enforcement of maintenance more difficult than it had been historically.
 - The Service Director Environment and Highways stressed the importance of looking at some problems from a different perspective, and suggested that the council offering a service to landowners to carry out maintenance at a competitive price might motivate individuals to resolve issues around obstructions being reported by the public.
31. A committee member suggested that one clear and well publicised example of enforcement being made against a persistent and deliberate offender - who refused repeated attempts to discharge maintenance responsibilities - would send a clear message out to other offenders that there were consequences for non-compliance with policy.

32. The committee enquired if the council was made aware when land containing a foot path changed hands and if there was a system in place to alert/educate the new owners about their maintenance responsibilities.

- The Service Director Environment and Highways said the council did not automatically receive this information.
- The Head of Highways and Traffic suggested that this information could perhaps be relayed when people made council tax enquiries, but this would have to be given consideration as to whether it was viable.

Models of management and operational delivery.

- The representative for the Herefordshire Local Access Forum suggested all parties needed to be working in partnership in a proactive rather than reactive way. This could be more easily achieved with an accessible system similar to the way highways work with potholes, where people could sign on to get the jobs done and sign off when it was completed - with a photograph to show the work was finished.

33. The committee asked if there was enough engagement about managing the network between the Local Access Forum and the council, and whether there was a need to strengthen the Parish Path Partnership.

- The representative for the Herefordshire Local Access Forum said that historically, when there had been a grant for the number of kilometres of paths/rights of way in a parish area, that the parishes had been more committed to maintaining and taking ownership of them.
- The representative for the Worcester, Bromyard, Leominster Greenway CIC suggested that there was a need for a reliable and up-to-date list of parish footpath officers. There was also a need for closer working between parish footpath officers and council contractors, which could result in improvements in efficiency.

34. The committee enquired about the views of the executive on strengthening partnerships and any resourcing impacts it might have.

- The Cabinet Member Transport and Infrastructure stated that the importance of partnership working had been forgotten for some time and it needed to be re-enabled by building healthy working relationships between the parish and county councils. The forthcoming parish charter (being worked on following a recent parish summit) could offer guidance on how to harness the local volunteer workforce and members of the public in maintaining the network.

35. A committee member stressed the need for clear and effective procedures for gathering together volunteer resources, which wouldn't be wholly dependent on parish footpath officers to organise.

- The Head of Highways and Traffic pointed to the role of the volunteer development coordinator that had recently been recruited to. The new officer had been working to put in place processes and procedures that were needed to coordinate volunteer resources effectively. It was stressed that any system of coordination needed to be structured and disciplined to maximise potential and that different skill sets offered by different volunteers needed to be understood.
- The Service Director Environment and Highways suggested that volunteers and parishes needed to be celebrated for the work they were carrying out and

that this in itself might encourage other people to come forward and get involved.

36. The committee noted a lack of detail about individual officers on some parish websites and suggested it would be helpful if some parishes could provide greater detail and information about their structure, so that it was easier to contact them and offer support.
37. The committee enquired if the £250,000 allocated to the PROW network had been distributed and whether there had been a great deal of demand from parish councils for funds.
 - The Head of Highways and Traffic explained that approximately £100,000 had been received and that his was an ongoing piece of work, but demand had been high and the deadline for applications from parishes had been extended.

Greenways.

38. The committee noted that land ownership had been a significant issue in relation to the progression of greenway activity within the county.
 - The representative for Worcester, Bromyard, Leominster Greenway CIC pointed to and questioned the accuracy of a statement in the agenda report, which suggested that studies had found a number of issues that could not be easily overcome and there has been no further progress with schemes.
 - The representative suggested previous studies in to the feasibility of greenways had produced positive outcomes and pointed to the Worcester, Bromyard, Leominster document which contained data showing an overall cost benefit ratio of 5:1 that the benefits of a greenway would provide over a 30 year life span. The same document stated that the greenway was a feasible project, and should be considered in further detail to prepare funding bids for its delivery. Sensitivity tests had also been undertaken to account for uncertainty around cost benefit and they had demonstrated good value for money.
 - The representative for Worcester, Bromyard, Leominster Greenway CIC acknowledged land ownership was the significant issue and gaining access to required pieces of land required needed to be done through negotiation with relevant landowners and not compulsory purchases. The greenway CIC was looking to move negotiations with landowners along and that was its strategy going forward.
 - The representative for Worcester, Bromyard, Leominster Greenway CIC noted that the Herefordshire Local Plan made substantial reference to the greenway and green infrastructure.
 - The representative stated that the CIC had not had any significant engagement with the council in the last 18 months and felt that it would be helpful to have a meeting to review progress and activity relating to the matter..
 - The Cabinet Member Transport and Infrastructure stated they felt the greenways project had been mis-sold in the context of what it could deliver and that certain local councils had raised serious concerns about the project. It needed to be more clearly defined and presented in terms of where it would and wouldn't run.
 - The representative for Worcester, Bromyard, Leominster Greenway CIC pointed out that greenway policy was formulated in the draft Herefordshire Plan and that it would be useful to have a session where officers could meet with the group to discuss and pick up on feedback around the project.

- The Service Director Environment and Highways confirmed they would be happy to facilitate a meeting.
39. Committee members noted that much of the proposed route was privately owned and many bridges and roads were now missing. However, the long term prospect of opening up 27 miles of flat-level connection between a city and a big town was exciting and full of potential - if it could be completed and the difficulties overcome.
- The Representative Worcester, Bromyard, Leominster Greenway CIC acknowledged that they were ambitious projects and it would take time to make them happen, but stressed it was important to maintain the ambition to make them a reality.
40. The committee stressed there was a need for the executive to set out clear policy on greenways.

At the conclusion of the debate, the committee discussed potential recommendations and the following resolutions were agreed.

Resolved that:

- 1. To assess trends in the overall condition of the PROW network, the Executive should develop or reintroduce one or more key indicators with interested stakeholders (including LAF) that can be used to determine changes in the underlying health of the network over time.**
- 2. Funding for the PROW network should be prioritised over time on replacing/repairing the 40 to 50 bridges vital to providing a joined-up network across the County.**
- 3. The executive should explore expanding the current system for reporting defects to the county's public rights of way network to make them more user-friendly (map-based system of reporting), to enable parishes and volunteers to carry out remedial works themselves, where appropriate.**
- 4. Clear standards for accessibility should be agreed between parish path partnerships and Herefordshire Council.**
- 5. The Executive should strengthen the Parish Path Partnership through more effective organisation, engagement, coordination and communications with Parishes to ensure that they, footpath officers, ramblers and volunteers can play their full part in maintaining the PROW network.**
- 6. In enforcing the current Improvement Plan, the Executive should redress the balance to give priority to the primary purpose of protecting access rights to the network, by ensuring landowners meet their legal responsibilities and where they are not, to prosecute where appropriate.**
- 7. The Executive should set out its policy for expanding the PROW network through the addition of accessible active travel routes (so called greenways and the wider PROW network) as a vital contributor to the Council Plan 2024-28 plus its net zero ambitions for the County.**

89. CHAIR UPDATE

The Committee received and discussed Executive responses to recommendations it had made regarding River Water Pollution and Implementing the Environment Act 2021.

The Committee was satisfied with the responses received in relation to the Environment Act 2021, but had concerns regarding several of the Executive responses it had received in relation to River Water Pollution. It was unanimously decided it might be useful to

contact and meet with the Cabinet Member Environment to discuss the recommendations that had been partially agreed.

Resolved:

That the Chair of the Committee would write a letter to the Cabinet Member for the Environment, seeking clarity as to whether they would reconsider the responses to recs a), b) and e) in relation to River Water Pollution and enquire whether they could move towards what was the intention of the three recommendations.

90. WORK PROGRAMME

The Committee discussed the work programme for the year ahead and voted unanimously to make the following change:

Resolved:

That the River Lugg water quality item be rescheduled from the Committee's March 2025 agenda to the January 2025 agenda.

91. DATE OF THE NEXT MEETING

Monday 23 September 2024, 2pm

92. APPENDIX 1 - QUESTIONS FROM MEMBERS OF THE PUBLIC.

Questioner:	Mr Peter McKay, Leominster
Scrutiny Meeting:	Environment and Sustainability Scrutiny Committee 22 July 2024
Question:	A question to Connected Communities Scrutiny Committee February 2024 meeting, now transferred to yourselves, seeking assurance that the two specific Highway and Path Record issues be incorporated in its work programme, records that a response to the substance of my question will be given at the next public meeting, now this meeting, and I seek this assurance. Working through various issues in Leominster I ask if you have any guidance for Parishes should they find that situation on the ground differs from that shown on your Highways and PROW Map, making best use of parish powers and most cost effective map correction process, e.g., local plan, list of streets, showing private maintained highways, highways subject of cease to maintain orders, open spaces, etc.?
Response:	This committee will be scrutinising how the council manages public rights of way in Herefordshire. As part of that work, the committee will ask questions about how the definitive map is maintained and amended. A further focus for the committee's questioning will be around how Herefordshire Council works with Parish Path Partnerships, to ensure the maintenance of public rights of way. The council has an established process for modifying the definitive map for public rights of way, which can be found on the council website at https://www.herefordshire.gov.uk/public-rights-way/definitive-map-statement-dms/3 . This includes guidance for submitting anomalies. Parish council have no powers to amend the definitive map and should submit suggested modifications using the same process as that used by members of the public.

Questioner:	Mr Peter McKay, Leominster
Scrutiny Meeting:	Environment and Sustainability Scrutiny Committee 22 July 2024
Supplementary Question:	Have worked through Leominster's List of Anomalies on Town Council webpage, plus those on your own list, and have raised the attached Draft Action Plan, expected to be

on Town Council webpage shortly, aiming to address these in most efficient manner, my finding they mostly if not all fall outside scope of your referenced guidance. Town Council has made representation to the 2021-41 Local Plan Place Shaping Consultation that these need to be corrected. Would you please review this, provide some feedback, would it be included in the Local Plan, and would you discuss with Town Council?

Verbal Response from Cabinet Member Transport and Infrastructure delivered during the meeting: Thank you Mr McKay for your supplementary question. It's quite complex, so we'll strip your question into various bits. Let's start with 'would it be included in the Local Plan? The Local Plan is likely to undergo significant change as a result of the change of government at the recent general election and we're not sure where that's going to take us. However on the substance of the question, that will still remain whatever government is in place, so we'll just get that out of the way to start with. The Local Plan isn't going to arrive any day soon I suspect. I've looked through your list of actions and it's fairly straightforward, however it always has been the case about many of these paths as to whether we are accepting, as Herefordshire Council, the same places as Leominster Town Council. I suspect that our officers will have to take it up with the Town Council as to whether or not some of these individual items are to be extinguished as is the recommendation on some of them, re-recorded or recommitted to. This is going to take quite a bit of time to work through, but I'm sure that our team will review these on the basis of what you've asked for and there will be some feedback in due course, but it will take a little bit of time. Thank you.

The meeting ended at 12:53pm

Chairperson

Title of report: Active Travel Measures

Meeting: Environment and Sustainability Scrutiny Committee

Meeting date: Monday 23 September 2024

Report by:

Classification

Decision type

This is not an executive decision

Wards affected

Purpose

- To consider active travel measures including road safety for all users.
- Explore the county policy on implementing active travel measures where new road build is being proposed.
- Explore where the council is on implementation of active travel measures across the county.
- Explore the benefits and challenges of active travel measures around key buildings such as schools and hospitals and residential roads in Herefordshire.

Recommendation(s)

That:

- a) That the committee notes the reference to active travel across council policies and strategies;
- b) That the committee further notes progress the Council has made in implementing active travel measures across the county; and
- c) That the committee determines any other actions or recommendations it may seek to make.

Alternative options

1. None identified. This report provides an update to the Environment and Sustainability Scrutiny Committee.

Key considerations

2. Evidence for these exploratory activities are from Council Active Travel policies and from appropriate case studies from within the county and other authorities.
3. All active travel policy stems from either the council plan or any statutory duties that are not explicitly captured in the council plan.
4. Active travel describes everyday 'journeys for a purpose' made by walking, wheeling, or cycling¹. (Wheeling is an equivalent alternative to walking – for example, using wheelchairs, mobility scooters, prams or pushchairs). Active travel is a low carbon way to travel. It has a range of other benefits including public health, lowering congestion and pollution, tackling social inequalities, better place making, improved mental health, tackling obesity, improved air quality, amongst others.
5. Department for Transport (DfT) is responsible for active travel policy nationally. The DfT's four objectives for active travel are to: increase the percentage of short journeys in towns and cities that are walked or cycled; increase people's annual walking activity; double rates of cycling; and increase the percentage of children aged 5 to 10 who usually walk to school. However, this is likely to change as a new government sets out its agenda for active travel. The anticipation is that there will be more, rather than less, focus on active travel. For example, the Secretary of State has published five new priorities for transport, one of which is "delivering greener transport".
6. Most active travel schemes are implemented by local government. This includes infrastructure improvements and interventions, maintenance of infrastructure, behaviour change campaigns and innovative scheme design.
7. Activities that support, promote and deliver active travel could include: new cycle lanes, school streets schemes, city bike hire projects, amending existing road space outside schools, providing cycle training, offering walking groups, supporting GPs to offer social prescribing, advising planning teams on cycling and walking inclusion for new developments, junction and crossing redesign to make crossings safer for pedestrians, travel planning for schools and employers, end of ride facilities, anti-theft schemes.
8. The Herefordshire Council Plan 2024-28 sets out how the council will make its contribution to the ongoing success of Herefordshire. With the overarching vision, 'Delivering the best for Herefordshire in everything we do', the plan outlines the council's priorities in four areas:
9. People - We will enable residents to realise their potential, to be healthy and benefit from communities that help people to feel safe and supported
10. Place - We will protect and enhance our environment and ensure that Herefordshire remains a great place to live. We will support the right housing in the right place and do everything we can to improve the health of our rivers. Including the objectives: Expand and maintain the transport infrastructure in a sustainable way and improve connectivity across the county. Work towards reducing county and council carbon emissions, aiming for net zero by 2030/31 and work with partners and communities to make the county more resilient to the effects of climate change.
11. Growth - We will create the conditions to deliver sustainable growth across the county; attracting inward investment, building business confidence, creating jobs, enabling housing development along with providing the right infrastructure

¹ [Active travel in England - Committee of Public Accounts \(parliament.uk\)](https://www.parliament.uk/commissions/public-accounts/active-travel-in-england)

12. Transformation - We will be an efficient council that embraces best practice, delivers innovation through technology and demonstrates value for money
13. At a strategic level, active travel policy is captured by the Local Transport Plan (LTP). This is a statutory document, by which the council prioritises its transport interventions for a period of time. Herefordshire Council is currently developing a new LTP. The LTP drives the funding proposals and future opportunities for external funding (mainly the Department for Transport). The objectives for the new Local Transport Plan were approved by Cabinet in March 2024. Active travel is specifically referenced in Objective II. All the recommended objectives are set out below:
 - I. Supporting a thriving and prosperous economy – by creating a sustainable, reliable and integrated transport network that includes investing in new infrastructure, improving access to new housing, employment land, facilities and services, education and training.
 - II. Enabling healthy behaviours and improving wellbeing – by providing the right facilities and environment for a wide range of travel modes (including walking, wheeling, cycling, bus, community transport and rail) to increase readily-available transport choices for everyday journeys.
 - III. Tackling climate change and protecting and enhancing the natural and built environment – by creating a transport system offering viable low emission options for most journeys, by influencing the way in which we travel, the way we make decisions and deliver transport options.
 - IV. Improving accessibility and inclusivity – by ensuring that the transport system is accessible and understandable to everyone, and making the most of improved digital connectivity.
 - V. Improving transport safety and security – by reducing the negative impacts of transport on people, ensuring our communities are safe, perceived as safe, and more pleasant places to live.
14. The above objectives will be used as criteria for prioritising transport schemes in the LTP. A long list of schemes has been produced, drawn from a wide range of council documents concerning transport in some form or another, ranging from the EV strategy to Home to School policy. The prioritised list will then be open to public consultation. Following consultation, we expect to publish the LTP in 2025.
15. A key element of the Local Transport Plan is the statutory Local Cycling and Walking Infrastructure Plan (LCWIP). The LCWIP sets out a prioritised list of interventions to improve cycling and walking infrastructure across the county. The priorities are determined by a set of criteria. There is currently (September 2024) an engagement exercise underway with key stakeholders, by which responses can be gathered on an interactive online map, which allows not only responses to proposed routes, but also the sharing of other routes based on 'local knowledge' to be demonstrated. LCWIP tend to consist of a policy framework document, which sets out the links to the council plan, and Local Transport Plan, along with other relevant policy documents followed by an implementation plan, which shows the proposed prioritised list of interventions.
16. The Transportation Team spend a substantial sum of money transporting children and young people to education establishments because a suitable walking or cycling route is not available. A route may be possible, but has been assessed as 'hazardous', hence the council

is obliged to provide transport, even though the distance will be less than three miles for over 8s and two miles for under 8s. Our intention is to, where possible, align the hazardous routes with the LCWIP to see if there are areas where a suitable investment would render the route safe for walking and/or cycling, and thus remove this route from the hazardous list. This would deliver multiple benefits of providing safe routes in particular areas, reducing ongoing costs to the council of providing short-distance transport, increasing public health and lowering congestion and pollution.

17. Substantial work was done on previous iterations of the Hereford bypass planning activity. (see appendices 6 - 9). The key messaging from these studies and investigations is the ability of the bypass to facilitate the conditions by which active travel can flourish. This will be achieved by removing, or dramatically lowering the amount of, traffic from the centre of the city, (including possible actions of detrunking the A49, introducing cycle lanes, and bus lanes, and a range of other measures). The bypass can provide a complementary suite of active travel interventions to support substantial mode shift alongside place making and a reduction of severance. It is clear from the studies that were undertaken between 2014 and 2019, that active travel is a fundamental part of any bypass work. In 2019 it was stated in a Cabinet report that "A number of active travel options have been considered and consulted on in 2014 and 2016. A robust appraisal process outlined in this report has been adopted to determine the schemes which should be included in the scheme business case. If schemes are not progressed the objectives of the South Wye Transport Package will not be met". This puts the delivery of active travel schemes at the heart of the development of a bypass (South Wye Transport Package – a previous iteration of the bypass).
18. Whilst it should be accepted that this work was completed as part of a previous iteration of the bypass/growth corridor, it is to be fully expected that similar work will be undertaken - either by updating, or re-commissioning - for the latest iteration.

Case Studies

19. There are multiple examples of active travel and sustainable transport interventions that have been implemented by or with the council. They are listed below.
20. Herefordshire Council continue to provide support for the city hire bike scheme, run by Beryl Bikes. They are proving to be popular, with year on year increases of usage. Ebikes have also been added to the fleet; extending range and ease of ride. The latest published update on Beryl Bikes is in this news release from June 2024, see Appendix 1
21. The Council continue to organise and operate Nordic Walking Courses. These are a fun way to encourage people to build more walking into their daily lives, in a fun way. The latest courses starting in September 2024 are already fully booked. See Appendix 2
22. The roll out of EV charge points is continuing across the county. We have been working closely with our supplier Wenea to ensure we are installing the most up to date rapid chargers, where possible. We have been mostly aiming for car park charging, but we will see on-street charging coming on line, following the introduction of the government's LEVI scheme. A press release from July 2024 contains the latest update, see Appendix 3:
23. Herefordshire Council was awarded £1.5 million from the Department for Transport Access Fund for the Destination Hereford project from 2017 to 2020. This resulted in the Choose How You Move (CHYM) initiative, which included actions to Improve access to Employment, Improve Access to Education, Getting Hereford Active, see Appendix 4:

24. The area at the front of Hereford Railway Station is being fully redeveloped into the Hereford Transport Hub. The key objectives of the Transport Hub are to support economic growth, improve accessibility and encourage active travel in line with the adopted policies of the council, and Central Government. In particular the project will:
- i) Improve the public realm around the train station and create better walking, cycling and public transport infrastructure which will allow for improved integration of the new development with the historic city core;
 - ii.) Improve access to Hereford railway station and the new interchange infrastructure;
 - iii.) Help address the decline in Hereford's traditional role as a regional economic hub, and meet the national agenda for economic growth;
 - iv.) Encourage the transport mode shift away from car use by facilitating travel by public and active travel;
 - v.) Enable attractive, seamless transfer between different modes of travel; and
 - vi.) To welcome visitors to the city and establish an attractive environment for visitors and commuters.
 - vii.) Merge with other Hereford City Centre Improvement (HCCI) projects as an integrated package of movement and connectivity linking the transport hub with Hereford City Centre. See Appendix 5
25. Appendix 10 provides examples of previous active travel engineering measures that have been delivered around the county.

Community impact

26. There are no direct community impacts as a result of providing an update to the Environment and Sustainability Scrutiny Committee.
27. Increasing physical activity and minimising the time spent sitting down helps to maintain a healthy weight and reduces the risk of cardiovascular disease, type 2 diabetes, cancer and depression. The UK Chief Medical Officers recommend that adults should do at least 150 minutes of moderate activity, or 75 minutes of vigorous activity, each week. The averages for people in England are approximately 84 minutes per week walking and 8 minutes cycling, 92 minutes of exercise in total².
28. The effects resulting from a changing climate will potentially impact every community in the County. Risk and level of impact is increased for specific geographic areas, commercial activities and demographics.
29. Supporting modal shift to active travel helps to improve local air quality and in turn that will benefit all who reside and visit the county. Improvements in this area will positively contribute towards the delivery of The Herefordshire Council Plan 2024-2028, specifically the following success measures:
- a) Support all residents to live healthy lives within their communities (People).
 - b) Work with residents and partners to build connected and resilient communities (People).
 - c) Expand and maintain the transport infrastructure in a sustainable way and improve connectivity across the county (Place).

² [Health benefits of walking and cycling: preventable early deaths - The Health Foundation](#)

Environmental Impact

30. Climate and environmental impact are intrinsically linked. Activities that impact the climate impact biodiversity and local air, water and soil quality. Emissions reduction by switching to active modes have positive associated environmental impacts.
31. Supporting modal shift to active modes supports the Herefordshire Council Plan 2024-2028 ambitions to:
 - d) Value nature and uphold environmental standards to minimise pollution and maximise biodiversity (Place).
 - e) Work towards reducing county and council carbon emissions, aiming for net zero by 2030/31 and work with partners and communities to make the county more resilient to the effects of climate change (Place).
 - f) Seek strong stewardship of the county's natural resources
 - g) protect and enhance the county's biodiversity, value nature and uphold environmental standards
 - h) build understanding and support for sustainable living
 - i) develop environmentally sound infrastructure that attracts investment

Equality duty

32. There are no equality duty implications associated with providing this progress report to the Environment and Sustainability Scrutiny Committee.
33. Environmental inequalities tend to disproportionately impact areas of deprivation and those with lower household income³. The Beryl bike schemes helps to tackle these inequalities by being the cheapest form of public transport available in the city. The busiest bays in residential areas are in areas such as the Oval.
34. Under section 149 of the Equality Act 2010, the 'general duty' on public authorities is set out as follows:

A public authority must, in the exercise of its functions, have due regard to the need to –

 - a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
 - b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

³ <https://www.gov.uk/government/publications/state-of-the-environment/the-state-of-the-environment-the-urban-environment>

Resource implications

35. There are no resource implications associated with providing this progress report to the Environment and Sustainability Scrutiny Committee.
36. Any recommendations arising from the Scrutiny Committee will require separate governance.

Legal implications

37. The role of the scrutiny committee is to help develop policy, to carry out reviews of council and other local services, and to hold decision makers to account for their actions and decisions.

Risk management

38. There are no risks associated with providing this progress report to the Environment and Sustainability Scrutiny Committee.
39. Any new projects arising as a result of recommendations from the Scrutiny Committee will require separate governance.

Consultees

40. None.

Appendices

Appendix 1: Beryl Bikes update, available through this weblink:

<https://www.herefordshire.gov.uk/news/article/1769/major-million-milestone-for-hereford-bikeshare->

Appendix 2: Nordic walking update, available through this weblink:

<https://www.herefordshire.gov.uk/news/article/1802/free-nordic-walking-courses-in-hereford-this-september>

Appendix 3: EV charge point roll-out. available through this weblink:

<https://www.herefordshire.gov.uk/news/article/1796/new-electric-vehicle-charge-points-for-leominster>

Appendix 4: Choose How You Move (CHYM). Herefordshire Council

Appendix 5: Hereford Transport hub [Paper to follow as supplement]

Appendix 6: South Wye Transport Package - Option Refinement Report

Appendix 7: South Wye Transport Package - Active Travel Measures

Appendix 8: Hereford Transport package

Appendix 9: Hereford Transport package - Active Travel Measures at Option Development Stage

Appendix 10: Examples of Active Travel Engineering Measures

Background papers

None identified

Report Reviewers Used for appraising this report:

Please note this section must be completed before the report can be published		
Governance	Click or tap here to enter text.	Date Click or tap to enter a date.
Finance	Click or tap here to enter text.	Date Click or tap to enter a date.
Legal	Click or tap here to enter text.	Date Click or tap to enter a date.
Communications	Click or tap here to enter text.	Date Click or tap to enter a date.
Equality Duty	Click or tap here to enter text.	Date Click or tap to enter a date.
Procurement	Click or tap here to enter text.	Date Click or tap to enter a date.
Risk	Click or tap here to enter text.	Date Click or tap to enter a date.

Approved by	Mark Averill	Date 13/09/2024
-------------	--------------	-----------------



Access Fund Project summary 2017-2020

Herefordshire Council was awarded £1.5 million from the Department for Transport Access Fund for the Destination Hereford project from 2017 to 2020.

Here are some highlights from the Choose how you move campaign.



Strong recognition of campaign and brand

46% aware logo

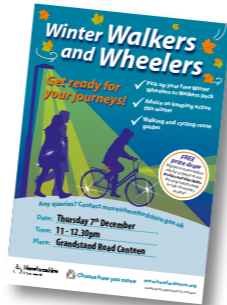
49% aware brand

87% aware Beryl Bikes



Improving access to employment

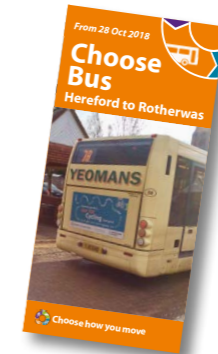
Workplace events



Choose Day events at Hereford Enterprise Zone (HEZ) enabled us to reach many employees from local businesses and give them travel advice and free bike checks.



Supporting Hereford Enterprise Zone (HEZ)



A sustainability event at HEZ saw the launch of the Straight Mile cycle path and a new Park & Choose site at Skylon Park to assist commuters to and from the Enterprise Zone.



Business travel grants



The cycle stands are on their way to us! If only everything was so simple and quick.
Wendy



The Ebike has been a fantastic addition for our company. It allows me to travel on a bike when normally I would drive.
Invizio employee

The ebike has offered us as a small business, a means of transport both better for the environment as well as a fitness tool for our employees.
Swift Tech Services



Into work



It is a great scheme and has really benefitted many of our young people, thank you for your understanding, flexibility and accessibility.
Steph

It's a fabulous scheme that makes all the difference to people...who could not afford to buy a month of bus tickets before being paid. So this scheme really helps to get young people into work.
Employability & skills Coach

Safe urban driving courses



As a fairly new driver, I still feel quite nervous on the road so the course was a great eye opener and very helpful to help build more respect for Bicycle users and Car Drivers. I will be advocating for more people to take part.
2 Wheels Aware course attendee



- 30 1,030 employees reached during 27 business events (18 at HEZ)
- 51 Travel Fund grants approved
- 212 cycle stands installed at 64 different workplaces
- 874 Walking/Cycling packs given to support employees travelling to work
- 109 new businesses joined the Travel for Work Network covering 1996 additional employees. Network up to 134 businesses covering 10,000 employees)
- 81 young people helped to access work or training. 46 bikes loaned to job seekers and 32 sets of bus tickets given out to support 16+ travel to work

Improving access to education

Providing training and building confidence



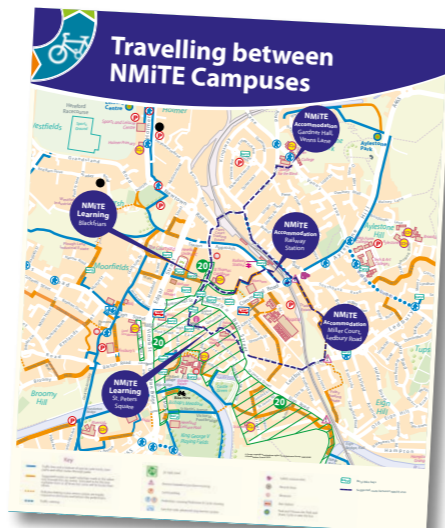
Just got back from a fantastic Level 2 bikeability day... What excellent instructors... The children gained so much from the day in terms of self confidence, bike skills, road awareness and riding ability. They were buzzing all the way home!

Vicky

31

Supporting NMiTE

Working with New Model Institute for Technology and Engineering (NMiTE) on their travel plan.



WOW Walk to school project

775 pupils in 2 primary schools engaged with the 6 month pilot of a 'WOW' Walk to School project between Sept 2019 and March 2020.

54% of trips were walked



98 residents have received 1:1 adult cycle training lessons

583 active travel activities have been delivered across schools in Hereford City

26,010 children have engaged in Hereford's active schools programme

143 commercial drivers attended HGV driver awareness courses

52 new/learner drivers have attended 8 cyclist awareness courses

25 Play on Pedals sessions

Getting Hereford active

Motivating and supporting residents and commuters

Get Walking Los Angeles

See how far your feet can take you...

Boost your every day walking on our virtual tour!

...until 25 March 2020

WIN fabulous prizes

Every step you take here in Herefordshire takes you further along the free virtual walk route

- Walk to work
- Walk into town
- Hop off the bus a stop early - every step counts!

FREE sign up any time at www.herefordwalk.org

I love logging my walks via my fitbit on the site and looking at the virtual walks and information as I complete the distances.

Michelle

I have been taking part since its inception and think it's a great motivator.

Peter

520 participants signed up to the new Get Walking website and apps.

816 residents participated in Nordic Walking events and led walks.

24 new Walk Leaders trained

520 Walking and cycling champions recruited

Free Learn a new skill! make new friends

Nordic Walking

Six-week beginners courses will start in Hereford on:

- Saturdays from 9 March at 9.45am
- Tuesdays from 2 April at 6pm
- Thursdays from 4 April at 11am
- Monday from 3 June at 6pm
- Thursday from 6 June at 11am
- Saturday from 7 September at 9.45am

Book your place now! 07858 264315 info@ignite-cic.co.uk

Good way to exercise with others and discover new parts of Hereford suitable for walking

Nordic Walker

Seen parts of Hereford I have never seen... using the car less

Zoe



Promoting healthy lifestyles - joint working with Public Health



Broad range of training and qualifications achieved...

160 people achieved Level 2 Healthy Living Network (HLN)

9 people achieved a Royal Society for the protection of Health Level 2 Understanding Health Improvement course.

13 people achieved a City & Guilds Level 3 Health Trainer with a further 6 people working towards the qualification.

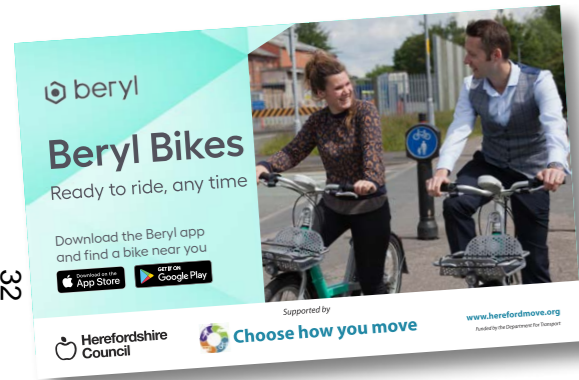
Getting Hereford Active

Beryl Bike hire in Hereford



It's a great scheme and lovely to see both young and old taking use of the bikes. Both my parents and brother use bikes by way of commuting around Hereford.
Katherine

186 Beryl Bikes
5,554 unique users
39,303 total trips
89,098 distance (Km)



32

Encouraging and supporting women riders

250 New riders recruited as well as significant numbers of returning riders joining our led rides for women.

122 Bikes loaned to support new women riders.

I just wanted to say thank you for the lesson this afternoon. I was really nervous but it was so useful and I ended up really enjoying it!
Anna

It was really enjoyable ride on Friday, on top of that, meeting new people added more joy.
Adult cycle lesson client who progressed onto led rides



Park and Cycle



I've been using the park and ride regularly over the summer months 3-5 week days and find it a great experience – no slower and less stressful than driving and great exercise
Park & Choose user

Improving the network



Great job yesterday to your guys maintaining the cycle way by Aldi in the rain... it looks great. Thank you. It does make a difference when cycling around Hereford that the pathways are well maintained.
Laura

Traffic-free cycle network kept clear of vegetation and litter

Routes to...

New signed routes to improve awareness of traffic-free paths to the Enterprise Zone and the city centre.

Five further linking routes scoped and ready to be installed



88 new Park & Choose members signed up

109 active Park & Choose users

Other highlights of the project

Get Active event showcasing walking and cycling



A variety of walking and cycling activities were available to try on the day including a wide range of accessible bicycles.

Bike exchange

Three successful bike exchanges were held.

People donated old unused bikes, which were safety checked and refurbished.

People could swap an old bike for one of the donated bikes.



Hereford River Carnival



The Community Bike Ambassador team organised led rides to Hereford River Carnival.

Riders joined the carnival parade through the City to promote 'led rides for women'.



Herefordshire Council

SOUTH WYE TRANSPORT PACKAGE

Option Refinement Report



Herefordshire Council

SOUTH WYE TRANSPORT PACKAGE

Option Refinement Report

PUBLIC

PROJECT NO. 70089880

OUR REF. NO. -

DATE: FEBRUARY 2019

Herefordshire Council

SOUTH WYE TRANSPORT PACKAGE

Option Refinement Report

WSP

Kings Orchard
1 Queen Street
Bristol
BS2 0HQ

Phone: +44 117 930 6200

WSP.com



QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3	Revision 4	Revision 5	Revision 6
Remarks	Initial draft for officer comment	Revised draft in line with client comments	Revised draft in line with client comments	Revised draft in line with client and DfT comments	Revised draft in line with client comments	Revised draft in line with client comments	Revised draft in line with client comments
Date	October 2017	February 2018	February 2018	April 2018	May 2018	November 2018	February 2019
Prepared by	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Signature							[Redacted]
Checked by	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Signature							[Redacted]
Authorised by	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Signature							[Redacted]
BBLP Authoriser						[Redacted]	[Redacted]
Signature							[Redacted]
Date						November 2018	February 2019
Signature							
Project number	70029880-530	70029880-530	70029880-530	70029880-530	70029880-530	70029880-530	70029880-530
Report number	1						
File reference	\\uk.wspgroup.com\Central Data\Projects\700202xx\70020236 - SWTP ATM Business Case\02 WIP\TP Transport planning\03 Document\ORR						

CONTENTS

1.	INTRODUCTION	1
1.1.	BACKGROUND	1
1.2.	OPTION ASSESSMENT REPORT	1
1.3.	SWTP OBJECTIVES	4
1.4.	PURPOSE OF OPTION REFINEMENT REPORT	5
2.	SOUTHERN LINK ROAD – ROUTE DEVELOPMENT	6
2.1.	INTRODUCTION	6
2.2.	DESIGN REQUIREMENTS AND FUNCTION	6
2.3.	ROUTES	7
3.	SOUTHERN LINK ROAD PREFERRED ROUTE SELECTION	11
3.1.	INTRODUCTION	11
3.2.	DESIGN ASSESSMENT	11
3.3.	OTHER FACTORS	20
3.4.	TECHNICAL ASSESSMENT OF ROUTES	21
3.5.	PUBLIC CONSULTATION	41
3.6.	IDENTIFICATION OF PREFERRED ROUTE	43
4.	SOUTHERN LINK ROAD – REFINEMENT OF PREFERRED ROUTE	45
4.1.	INTRODUCTION	45
4.2.	CHANGES AT PLANNING APPLICATION STAGE	45
4.3.	CHANGES AFTER GRANT OF PLANNING PERMISSION	49
5.	ACTIVE TRAVEL MEASURES – SCHEME DEVELOPMENT	51
5.1.	INTRODUCTION	51
5.2.	SCHEME GENERATION AND INITIAL SIFTING	52

5.3.	GROUPING FOR CONSULTATION AND TECHNICAL ASSESSMENT	53
5.4.	TECHNICAL ASSESSMENT OF ACTIVE TRAVEL SCHEMES	59
5.5.	PUBLIC CONSULTATION	91
5.6.	IDENTIFICATION OF PREFERRED PACKAGE	94
6.	CONCLUSION	104
<hr/>		
6.1.	BACKGROUND	104
6.2.	SLR ROUTES	104
6.3.	SLR PREFERRED ROUTE AND ALIGNMENT	104
6.4.	ACTIVE TRAVEL SCHEMES	105
6.5.	ACTIVE TRAVEL PACKAGE	105
6.6.	WIDER SWTP PICTURE	107
6.7.	RECOMMENDATIONS	107
<hr/>		

APPENDICES

Appendix A – Key Environmental Designations

Appendix B – SLR Routes

Appendix C – SLR Traffic Flow Diagrams for 2017 and 2032 Weekday Peak Periods

Appendix D – Plan of Cultural Heritage Features

Appendix E – Appraisal Summary Tables of SLR Routes

Appendix F – Schedule of active travel measures and outcome of initial sift

Appendix G – Groups of Possible Active Travel Measures and their Subsequent Refinement

Appendix H – September 2016 public consultation exhibition boards of possible active travel improvements

Appendix I – Feasibility drawings of active travel measures

Appendix J – Comparative Study

Appendix K – Appraisal Summary Tables of Active Travel Measures

GLOSSARY

Term	Description
Active travel	Transport modes which promote physical activity, principally walking and cycling, rather than motorised forms of travel such as the private car.
BBLP	Balfour Beatty Living Places, the contractor providing highways services to Herefordshire Council, and the client for this project.
Clehonger Link	A new road link from the A465 to the B4349 Clehonger Road, passing east of the property known as Pykeways.
Departures from Standard	Any variation or waiving of a requirement contained within a DMRB, except where the standards permit specific relaxations.
DfT	Department for Transport, the UK ministerial department which inter alia provides policy, guidance and funding to English local authorities for major transport schemes and issues guidance on the conduct of transport studies.
DMRB	Design Manual for Roads & Bridges, a suite of documents which set out current standards and advice on the design, assessment and operation of trunk roads, including motorways. DMRB may also be applicable to other roads with similar characteristics.
Highways England	Government company which operates, maintains and improves England's motorways and trunk roads.
HEZ	Hereford Enterprise Zone, a 72 hectare site designated by central government at Rotherwas in which companies benefit from 100% business rate discounts and simplified planning application arrangements.
NCN	National Cycle Network, the UK-wide network of signposted routes for cycling, initially created by the charity Sustrans, mostly composed of quieter on-road routes and traffic-free links.
OAR	Option Assessment Report, which documents the Stage 1 transport appraisal processes (option development).
Openreach	A subsidiary of telecommunications company BT Group that owns the wires and telephone cables connecting subscribers to the national broadband and telephone network.
PRoW	Public Rights of Way, the network of footpaths, bridleways, restricted byways and byways open to all traffic on which the public have various rights to travel.
SLR	Southern Link Road, a proposed new road link connecting the A465 to the A49(T).
SWTP	South Wye Transport Package
(T)	Trunk road
TAG	Transport Analysis Guidance, a suite of documents produced by the Department for Transport giving advice on undertaking transport studies and conducting appraisals which meets department standards.

EXECUTIVE SUMMARY

This Option Refinement Report (ORR) has been prepared to document the refinement of the preferred option, as recommended by the Option Assessment Report (OAR). It forms part of the technical work carried out to support the transport business case submission for funding approval, constituting the first element of *Option Development - Stage 2* of the Transport Appraisal Process, as set out in Department for Transport guidance. The use of an ORR to document this process was specifically agreed with the Department for Transport. The preferred option is a package combining a Southern Link Road (SLR) with active travel measures.

Seven route alignments were considered for the SLR, four of which were presented at public consultation in 2014. Three additional routes were generated as suggestions by third parties at the consultation. An assessment was made to understand how a suitable design could be achieved for each route, which concluded that SC2 performed best against key design criteria.

A technical assessment was then carried out to assess the anticipated impacts of each route on the economy, society and environment, based on the assessment areas set out in the Option Assessment Framework. Account was taken of the public consultation outcome and stakeholder views. The technical assessment demonstrated that SC2 was the best performing route. This route passes over the Hereford to Newport railway and under Haywood Lane, passes through the northern part of Grafton Wood but avoids Hayleasow Coppice. It includes a short section of road connecting the A465 to the B4349 (the Clehonger Link).

This route also received the highest level of support as a proportion of the feedback received, of the initial four routes taken to public consultation. This led to route SC2 being identified as the preferred route for the SLR. A range of refinements were subsequently made to the preferred route at the planning application and post-planning permission stage, such as changes to the design of structures along the route.

Possible active travel measures were identified from the analysis of problems in the OAR, a site visit, from those already in policies and plans, and through discussion with authority officers. In line with Step 6 of the Option Development process, an initial sift was undertaken to exclude measures which did not meet the guidance criteria. This meant that *inter alia* only active travel schemes which could be funded by capital expenditure were taken forward. Remaining active travel schemes were grouped for the purposes of assessment, with nine improvement groups taken forward for technical assessment. A further three variants were assessed to ensure that improvements could combine to create a coherent preferred package. In similarity to the SLR routes, this covered all the assessment areas in the Option Assessment Framework. The outcome of the 2016 public consultation on active travel schemes also formed part of the assessment.

Every improvement group obtained a positive score in the technical assessment and more support than opposition in the public consultation. A methodology was devised to enable the improvements to be prioritised, using three assessment criteria – alignment with South Wye area objectives, value for money and an assessment of the issues which may arise in delivering the scheme. A double weighting was accorded to the objectives score in view of the importance of implementing schemes which strongly achieve the objectives.

Applying this methodology identified that the active travel improvement groups which received the joint highest overall scores were groups 3 and 3A (two variants of Belmont Road walking and cycling improvements), groups 6 and 6A (two variants of Better walking and cycling routes to Hereford Enterprise Zone) and groups 8 and 8A (two variants of Holme Lacy Road further walking and cycling improvements). These are the schemes which would have the highest priority.

As the groups listed above contain variants of the same improvements, only three of the six listed groups were taken forward (groups 3A, 6A and 8). They were chosen on the basis of being the better performing variant and the ability to form a coherent package.

The planning application for the Southern Link Road (reference P/151314) was considered by Herefordshire Council's Planning and Regulatory Committee in June 2016. The committee resolved that the application be granted, subject to a series of conditions. One of the conditions stated that: *'Prior to the first operation of the road hereby approved, a weight restriction on Belmont Road shall be implemented and effective unless an alternative timescale is submitted to and approved in writing by the Local Planning Authority'*. On that basis, and although not forming one of the better performing active travel measures defined by the prioritisation process, Group 4: *Belmont Road weight restriction* was also included in the SWTP preferred package.

The preferred package of active travel improvements is summarised below:

- Group 3A (Belmont Road walking and cycling improvements, including Toucan crossing near Walnut Tree Avenue and associated works) would transform the look, feel and use of a substantial section of Belmont Road, which has a key role in enabling more journeys to be made by active travel modes to access the HEZ, the city centre and local facilities. This would provide connections to the key existing quality off-road route (Great Western Way) and extend the availability of quality off-road active travel infrastructure. The improved or new crossings along the length of the road would make it easier to cross and connect communities on either side of the road;
- Group 4 (Belmont Road weight restriction) would divert heavy goods vehicles away from the road except those with legitimate access requirements. This would improve the environment for the walking and cycling;
- Group 6A (Better walking and cycling routes to Hereford Enterprise Zone, without a shared use footway/cycleway under the railway bridge) would create a signed and waymarked 'quietway' cycle route from Newton Farm to the HEZ mainly using side roads. This would provide an alternative route to access employment areas, local facilities and schools; and
- Group 8 (Holme Lacy Road – further walking and cycling improvements, with a shared use footway/cycleway under the railway bridge) would make east-west walking and cycling links easier, quieter and safer, linking homes to the employment areas at the HEZ.

The total cost of the three groups of improvements was estimated to be £7.05m. It should be noted that this figure was a preliminary cost estimate reflective of the relative maturity of the scheme designs at the time of the prioritisation process. The costs for the preferred package of measures will be refined as the detailed design for each scheme comprising the preferred package is developed and subjected to value engineering.

In conclusion, the SWTP preferred package is a combination of route SC2 for the SLR (as subsequently refined through the planning application and post-planning permission stages) and Groups 3A, 4, 6A and 8 of the proposed active travel improvements. The business case will demonstrate that these elements are the package to be progressed.

1. INTRODUCTION

1.1. BACKGROUND

- 1.1.1. WSP was commissioned by Balfour Beatty Living Places on behalf of Herefordshire Council to develop an Option Refinement Report (ORR) in support of the South Wye Transport Package (SWTP) major transport scheme business case. The aim of the SWTP is to promote the economic growth agenda of Herefordshire Council and the Marches Local Enterprise Partnership (LEP), by addressing the specific transportation problems within the South Wye area of Hereford (geographic area shown in Figure 1 overleaf).
- 1.1.2. The ORR details the processes behind the selection of a preferred route for a Southern Link Road (SLR) connecting the A49 to the A465, along with a series of improvements to sustainable transport in the area, mainly for walking and cycling (referred to as active travel). The use of an ORR to document this process was specifically agreed with the Department for Transport. It forms the first element of the *Stage 2 – Further Appraisal* in the Transport Appraisal Process set out in the Department for Transport’s Transport Appraisal Guidance (TAG). Figure 2 outlines the steps in this stage from TAG.
- 1.1.3. The ORR follows on from the Option Assessment Report (OAR), which documents the *Stage 1 – Option Development* element of the Transport Appraisal Process in accordance with TAG. The OAR recommended that a preferred option (a package combining a SLR with active travel measures) be developed further to identify the preferred route for the SLR and the type and location of active travel measures to be taken forward.

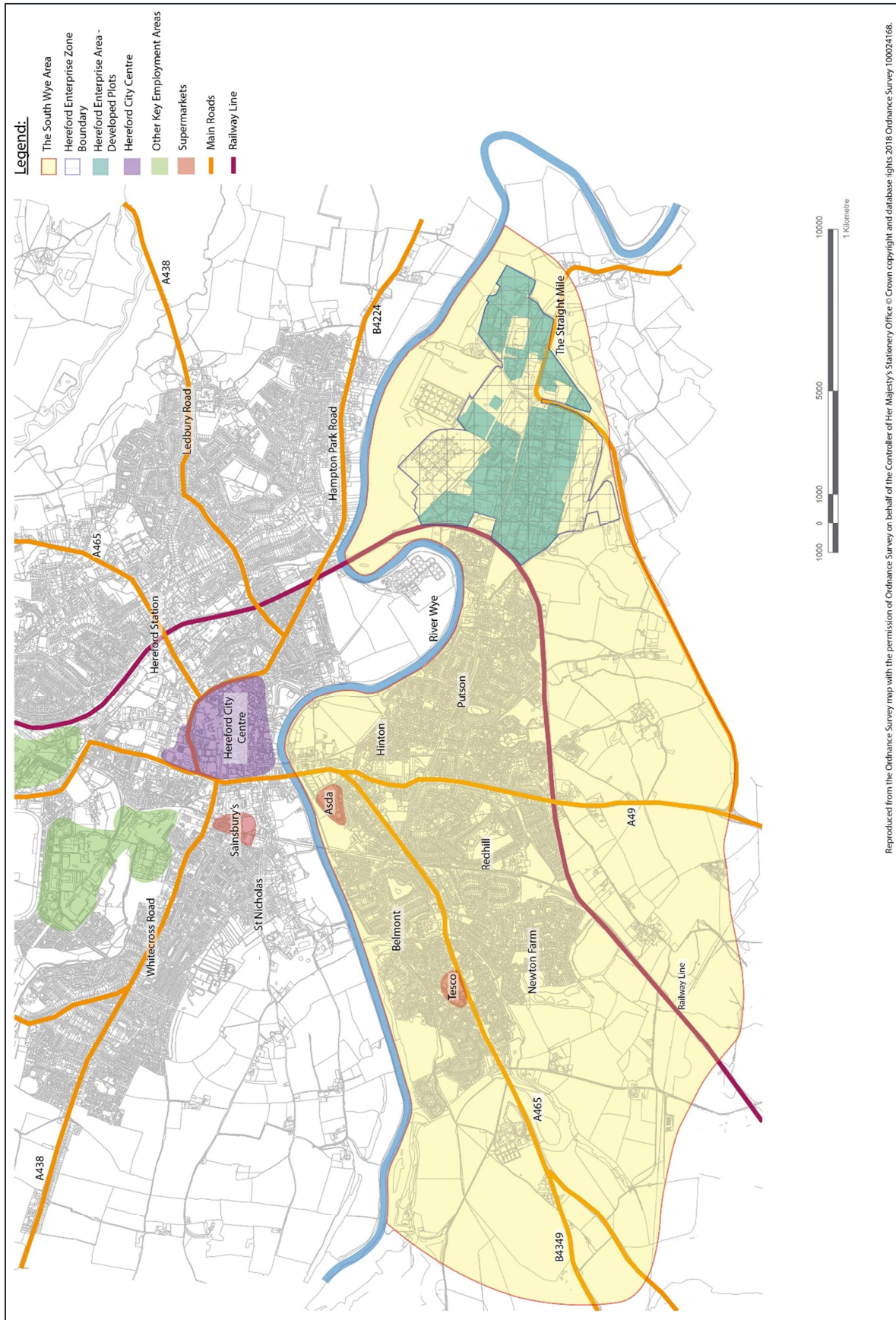
1.2. OPTION ASSESSMENT REPORT

- 1.2.1. The ORR was preceded by the Option Assessment Report (OAR), which was also prepared as part of work to seek funding for the SWTP. It covered the following key processes:
- A review of national, regional and local policy and strategy documents, which identified six common policy objectives – (1) enable economic growth; (2) ensure access to services, including those living in rural areas; (3) make journeys safer; (4) promote healthy lifestyles; (5) protect the environment and tackle climate change; and (6) provide a good quality transport network for all users;
 - A review of technical studies which had been undertaken to inform policy and strategy, which tended to conclude that a combination of highway links on the periphery of the town should go hand-in-hand with investment in active travel modes of walking, cycling and public transport, with supporting funding of non-infrastructure measures such as behaviour change or demand management;
 - Analysis of current and future conditions, and the causes of problems experienced in the study area;
 - Objective development based on the insights gained from the above processes;
 - Option identification, covering a range of modes, approaches and scales of intervention as potential means to address the issues identified, shaped by inputs from public consultation;
 - Option sifting using the Department for Transport Early Assessment and Sifting Tool and then packaging options together;

- Option development and assessment using the Option Assessment Framework in TAG. This assessment process found that two of the four option packages (highway widening and highway junction improvements) did not perform well against the assessment areas. Two options – Southern Link Road and active travel measures – were both considered to contribute to the delivery of the study objectives, with each performing better against different assessment areas. As a consequence, the two better performing options were combined to deliver an option which performed well across a majority of the assessment areas.

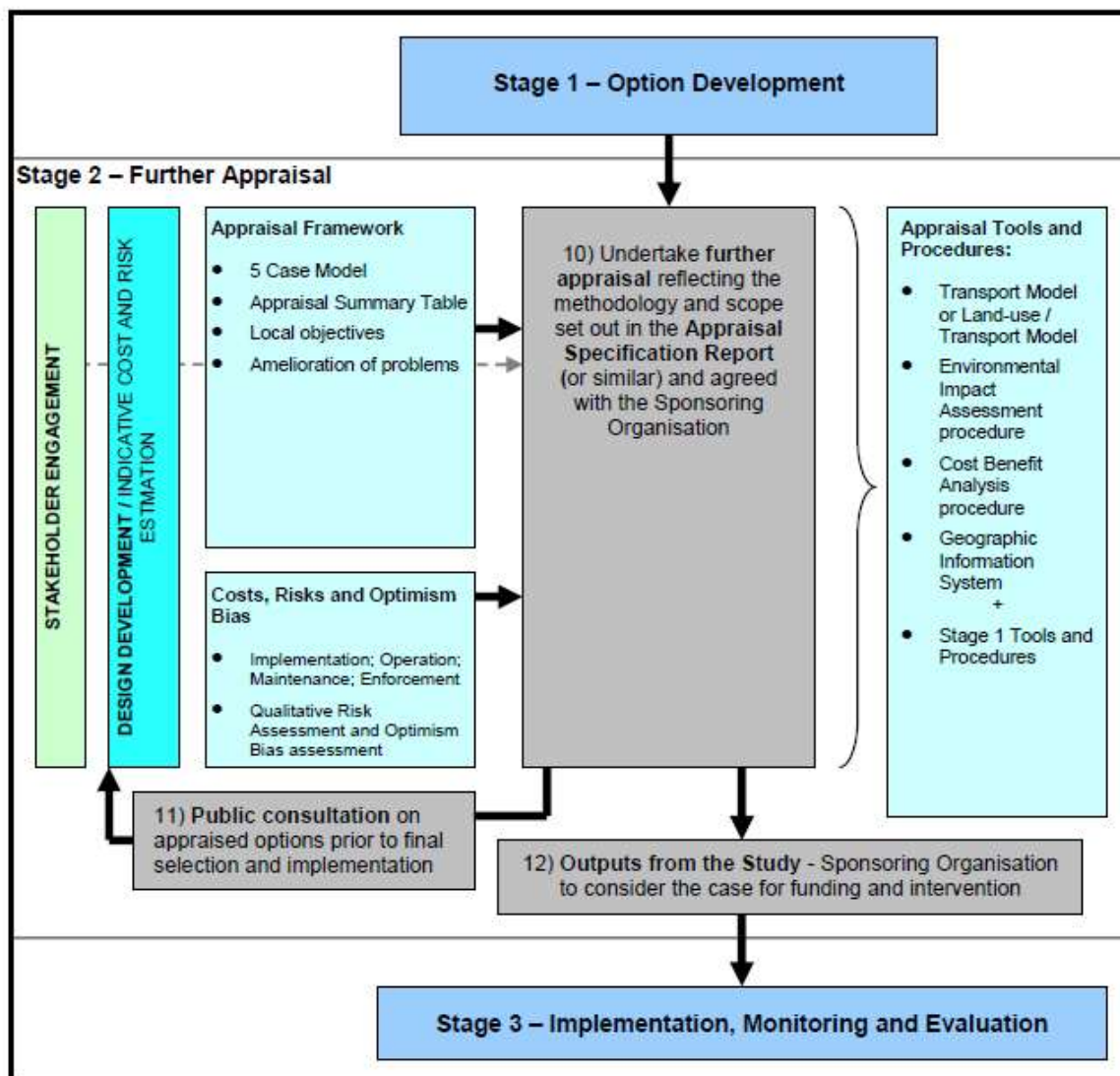


Figure 1 – Study Area



Reproduced from the Ordnance Survey map with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright and database rights 2018 Ordnance Survey 100024168.

Figure 2 – Further Appraisal Process



1.3. SWTP OBJECTIVES

1.3.1. Objectives specific to the SWTP were developed from:

- A review of national, regional and local policies and strategies;
- A review of evidence of current and likely future conditions (including those identified by the various technical studies undertaken in respect of Hereford’s transport network);
- Opportunities and constraints that impact the performance of the transport network;
- Causes of the problems experienced by transport users and local residents, and
- Engagement with stakeholders.

1.3.2. The objectives were developed at three levels, namely:

- Level 1 – Strategic Objectives (SO) – Defined as objectives to which transport contributes, but not always in a direct manner. These result in outcomes that are reflected over a wider area and/or to non-transport issues such as health;

- Level 2 – South Wye Area Package Objectives (AO) – Defined as the objectives which reflect the direct effects of transport intervention. They also include the outputs and outcomes which are intended to occur in the study area itself; and
- Level 3 – Operational Objectives (OpO) – Defined as desirable outputs which are necessary for the strategic objectives to be achieved.

1.3.3. The three strategic objectives (SO) are to:

- Support economic growth in Hereford;
- Improve health outcomes; and
- Reduce the impacts of transport on air quality and noise.

1.3.4. The five South Wye area specific objectives are to:

- Improve access to the HEZ by all modes;
- Reduce vehicle delay for journeys accessing the HEZ from the west;
- Encourage use of active modes for journeys to, from and within the South Wye area;
- Improve road safety for all modes within the South Wye area; and
- Reduce the air quality and noise impacts from road transport on key receptors in the South Wye area.

1.4. PURPOSE OF OPTION REFINEMENT REPORT

1.4.1. This report describes the processes used to:

- Identify and appraise possible routes for an SLR;
- Identify a preferred route and outline the process by which the design has subsequently been refined;
- Identify and appraise possible active travel schemes;
- Arrive at a set of preferred active travel schemes and describe how they were refined; and
- Identify the preferred SWTP package.

2. SOUTHERN LINK ROAD – ROUTE DEVELOPMENT

2.1. INTRODUCTION

2.1.1. This chapter discusses the design requirements and function of the Southern Link Road, and describes each of the routes considered. Much of the information was taken from the SWTP Preferred Option Report, dated November 2014, which formed a background paper to the November 2014 Herefordshire Council Cabinet meeting¹.

2.2. DESIGN REQUIREMENTS AND FUNCTION

2.2.1. The key function requirements for a SLR were for a route to improve access to the HEZ for motor vehicles, including freight, and reduce the air quality and noise impacts from road transport on key receptors in the South Wye area. The intention was to design a route which would contribute to improved road safety for all modes and enable through traffic to reroute onto the new road from existing roads, as well as encourage the use of active travel modes for journeys within the South Wye area.

2.2.2. Its design was developed in accordance with the standards set out for all-purpose trunk roads in the Design Manual for Roads and Bridges (DMRB). The DMRB notes that whilst the standards have been developed principally for motorways and all-purpose trunk roads, they may be applicable in part to other roads with similar characteristics. The SLR and its intended functions were considered to share these characteristics. In addition, the SLR may in future form part of an alternative route west of Hereford for the A49, which is designated as a trunk road through the city.

DESIGN TRAFFIC FLOWS

2.2.3. Table 1 outlines the forecast traffic flows for the SLR, calculated at the time of the design assessment, for an Opening Year of 2017 and Design Year of 2032.

Table 1 – Design traffic flow ranges

Year	Traffic Flow (AADT)
Opening Year (2017)	6,500
Design Year (2032)	11,004

2.2.4. DMRB document reference TA46/97² outlines a range of opening year economic traffic flow ranges for different road standards, reproduced in Table 2 below.

¹ [Herefordshire Council Cabinet papers 13 November 2014](#)

² Traffic Flow Ranges for Use In The Assessment of New Rural Trunk Roads

Table 2 – Opening Year Economic Flow Ranges

Carriageway Standard	Opening year AADT	
	Minimum	Maximum
Single carriageway 7.3m (S2)	Up to 13,000	
Wide single carriageway 10m (WS2)	6,000	21,000
Dual carriageway 2 lane all purpose (D2AP)	11,000	39,000
Dual carriageway 3 lane all purpose (D3AP)	23,000	54,000

2.2.5. Based on the design flow ranges, all considered routes adopt a S2 7.3m single carriageway cross-section standard (with two 1m hardstrips), in accordance with DMRB document reference TD27/05³.

2.2.6. Appendix A illustrates the environmental designations and other key features of the area which were taken into account as part of the design assessment.

2.3. ROUTES

2.3.1. Having identified the need for a SLR, the Council commissioned Amey to carry out the *Hereford Relief Road South Core - Corridor Assessment* which reported its findings in May 2012. It considered six routes, two of which (SC1 and SC2) originated from the Hereford Relief Road Study Of Options report (Amey, September 2010) and a further four (SC3-6) arose from a review of the Department of Transport route from the 1990s. The Belmont Transport Package Stage 2 Appraisal (Amey, February 2013) included an additional two routes for consideration. Route SC2A followed route SC2 but would pass underneath the Hereford to Newport railway rather than over it and SC7 was a hybrid of routes SC5 and SC6.

2.3.2. On the basis of the technical work in the Stage 2 Appraisal, the four better performing, southern, routes (SC2, SC2A, SC5 and SC7) were taken forward for further consideration. The more northerly routes (SC1, SC3, SC4 and SC6) were discounted, mainly on the basis of their likely environmental impacts and the significant cost required to mitigate these impacts. The main impact identified with these northern routes was the need to traverse Newton Coppice and Hayleasow Wood, categorised as ancient semi-natural woodland.

2.3.3. The four better performing routes for a SLR were presented at the formal Public Consultation Exhibition held in Hereford between 30 June and 3 July 2014. These were the four shortlisted (southern) routes SC2, SC2A, SC5 and SC7 identified within the SLR Route Corridor. These are illustrated in Figures 1 to 4 in Appendix B.

³ <http://www.standardsforhighways.co.uk/ha/standards/dmr/vol6/section1/td2705.pdf>

- 2.3.4. A number of alternative alignments or amendments to the remaining shortlisted routes were suggested by the public and third parties during the summer 2014 public consultation. Three additional routes were deemed viable and were appraised to the same level of detail as the four initial routes. These were assigned route references SC8, SC8A and SC9. Appendix B also contains plans showing the alignment and longitudinal sections of these three routes.

ROUTE SC2

- 2.3.5. Route SC2 (Appendix B, Figure 1) would involve construction of a new section of road between the A49 Ross Road / Rotherwas Access Road Roundabout and a new roundabout constructed on the A465. The route would pass through the centre of Grafton Wood and continue westwards over Grafton Lane and Withy Brook before crossing above the existing railway line. The route would then immediately straighten up, heading in a north-west direction towards the A465 and to the south-west of Merry Hill/Beech Grove. It would avoid Hayleasow Wood, passing to its south-west.
- 2.3.6. In addition to the new section of road connecting the A49 and the A465, SC2 would also include a new direct link from the A465 to the B4349 Clehonger Road, passing east of the property known as Pykeways. This proposed road section is subsequently referred to as the Clehonger Link in this report.
- 2.3.7. With some adjustment to the horizontal and vertical alignments this route would be most the likely to re-use all the material excavated. This is because the vertical alignment, in the main, follows the rolling profile of the countryside, except where it passes over the railway and under Haywood Lane.

ROUTE SC2A

- 2.3.8. The alignment of Route SC2A (Appendix B, Figure 2) is identical to SC2, except that the new road would pass underneath the railway line in a deep excavation, rather than over it. Although the vertical alignment on the east side would follow the rolling profile of the countryside, it would be forced deep in cutting to cross underneath the railway and Haywood Lane. This could give rise to groundwater and road drainage problems as well as generating a large amount of excess spoil, which could not be reused on the scheme.

ROUTE SC5

- 2.3.9. Route SC5 would pass through the northern part of Grafton Wood and, in a generally north-westerly direction, then cross the densely wooded area between Grafton Lane and Withy Brook (shown in Appendix B, Figure 3). It would also cross a site of archaeological importance before turning in a more westerly direction to cross underneath the railway line. The route would continue through Merry Hill and under Haywood Lane. This alignment would require the demolition of the outbuildings to the south of Merryhill Farm. From this location the route would turn in a slightly more northerly direction to overlap with the western alignment of Routes SC2 and SC2A, avoiding Hayleasow Wood.

- 2.3.10. Route SC5 would involve the construction of a new roundabout on the A465. The Clehonger Link (to connect to the B4349) for Route SC5 would be located further south-west than other routes to avoid the property known as Pykeways. At the time of determining routes the type of junction for the connection between the A465 and B4349 had not been chosen (ghost island turning, signalised junction etc.).
- 2.3.11. Although the vertical alignment of Route SC5 would follow the rolling profile of the countryside at its eastern end, it would then be forced into deep cutting through Merry Hill and under Haywood Lane. This could give rise to groundwater and road drainage problems, as well as generating a large amount of excess spoil which could not be re-used on the scheme. The route would cross existing overhead power lines a number of times (including a 66kV) and would be located partly within the main corridor of electricity cables running east to west.

ROUTE SC7

- 2.3.12. Route SC7 (Appendix B, Figure 4) would pass through the northern tip of Grafton Wood but avoid the southern extent of the dense wooded area between Grafton Lane and Withy Brook. It would also avoid the site of archaeological importance and runs to the south of Merryhill Lane before cutting through Merry Hill and under Haywood Lane. From this location the route would head in a westerly direction to overlap with the western alignment of Route SC2, SC2A and SC5, avoiding Hayleasow Wood.
- 2.3.13. Route SC7 would involve the construction of a new roundabout on the A465. As an addition to the new section of road connecting the A49 and the A465, SC7 would also include a new direct link (the Clehonger Link) from the A465 to the B4349 Clehonger Road, passing east of the property known as Pykeways.
- 2.3.14. Although the vertical alignment on the east side would largely follow the rolling profile of the countryside, it would be forced into deep cutting through Merry Hill and under Haywood Lane. This could give rise to groundwater and road drainage problems, as well as generating a large amount of excess spoil that could not be re-used on the scheme.
- 2.3.15. The route would cross existing overhead power lines a number of times (including a 66kV) and would be located largely within the main corridor of electricity cables running east to west. The route would cross Grafton Lane on a high embankment where existing services are present. This could be problematic in terms of providing a new (north to south) route for the National Cycle Network (NCN) Route 46.
- 2.3.16. Although the sinuous alignment at the eastern end of the scheme would help to avoid environmental constraints, in so doing, it would require a speed limit restriction of 50mph instead of the standard national speed limit of 60mph for single carriageway roads.

ROUTE SC8

- 2.3.17. Route SC8 would pass through the northern part of Grafton Wood and, in a generally westerly direction, cross to the south of the densely wooded area between Grafton Lane and Withy Brook. The route is shown in Appendix B, Figures 5 and 6. It would cross Grafton Lane at grade and avoid the nearby site of archaeological importance. The route would climb over the railway line on embankment and then dip down in cutting underneath Haywood Lane, passing to the south of Beech Grove/Merry Hill. The alignment would pass to the south of the outbuildings located to the south of Merryhill Farm. From this location, the route would turn in a north-westerly direction avoiding Hayleasow Wood before tying into a new roundabout on the A465. A new link would be provided from this roundabout to the B4349 Clehonger Road avoiding the property known as Pykeways (The Clehonger Link).
- 2.3.18. The excavation underneath Haywood Lane would be the main source of fill to create the embankment to cross over the railway. With some adjustment to the horizontal and vertical alignments, this route could potentially achieve an earthworks balance. However, this need for a deep excavation could give rise to groundwater and road drainage problems. The route would cross existing overhead power lines located at the eastern and western ends of the scheme (including a 66kV) but would generally avoid them within the middle section.

ROUTE SC8A

- 2.3.19. The alignment of Route SC8A would be identical to SC8 above, except that the new road would pass underneath the railway line in a deep excavation (Appendix B, Figures 5 and 7). The road would remain in a deep cutting underneath Haywood Lane, which in itself could give rise to groundwater and road drainage problems. The lack of embankments along the route would give rise to a scheme which requires the disposal of a very large amount of excess spoil.

ROUTE SC9

- 2.3.20. Route SC9 (shown in Appendix B, Figures 5 and 8), would largely be based on the horizontal alignment of Route SC8. The difference would lie within the central section, where the route would be aligned to cross the railway line at a near perpendicular angle, to simplify the bridge crossing. In so doing the route would climb over the railway on embankment and then turn westwards towards Haywood Lane to pass over the lane. This is the only route under consideration which would cross over Haywood Lane.
- 2.3.21. Between the railway and Haywood Lane the route would pass through Beech Grove/Merry Hill, requiring a small excavation over the top of the land feature. The route would pass just to the south of the outbuildings belonging to Merryhill Farm on an embankment. A comparison of the earthworks generated from cuttings and the need for spoil to create embankments indicated this route was likely to generate a large shortage of material, which would require importation from an off-site source. Existing utilities would be affected in the same way as those described above for SC8 above.

3. SOUTHERN LINK ROAD PREFERRED ROUTE SELECTION

3.1. INTRODUCTION

- 3.1.1. This section describes the processes used to determine the preferred route for the SLR. Much of the information was taken from the SWTP Preferred Option Report, dated November 2014, which formed a background paper to the November 2014 Herefordshire Council Cabinet meeting.
- 3.1.2. Baseline data used to inform the route assessment are contained in the following documents:
- The SWTP OAR in respect of economic and social themes;
 - A desktop review of the Stage 2 Environment Assessment Report (Amey, October 2013) produced for the Belmont Transport Package to determine the baseline conditions in the study area; and
 - A full desk study and survey data completed by the time of the design assessment work (September 2014), which ultimately fed into Environmental Statement (Parsons Brinckerhoff, April 2015) submitted as part of the SLR planning application⁴.
- 3.1.3. The appraisal of the different elements of the SLR routes used the principles of a Stage 1 level of assessment outlined in the Department for Transport WebTAG to identify a preferred route for the SLR. This used a combination of both quantitative and qualitative appraisal and used the following criteria as the basis for route assessment:
- Design assessment, including considering requirements for highway structures, rail structures, earthworks, utilities, physical features along the route and application of highway design standards;
 - Impacts on the economy, including traffic modelling to inform future year traffic flows, reliability, congestion and collisions;
 - Impact on the environment; including noise and air quality modelling, and
 - Impact on the society.

3.2. DESIGN ASSESSMENT

ROUTE SC2

- 3.2.1. Earthworks - with some adjustment to the horizontal and vertical alignments, this is the route which would be most likely to achieve as near as possible a cut/fill balance. The vertical alignment would in the main follow the rolling profile of the countryside but with an embankment up to 7m high on the approaches to the railway and a 7.5m deep cutting under Haywood Lane. Preliminary bulk earthworks calculations suggested a net shortfall of 36,000m³.

⁴[Herefordshire Planning application website - details for application reference P151314/E](#)

- 3.2.2. Design Standards - 60mph design speed, with no Departures from Standard (i.e. variations or waiving of a requirement contained within DMRB) anticipated to be required at the time of design assessment. Opportunities for overtaking are also unlikely due to the topography (vertical curvature). The route would have a relatively straight crossing of the existing country lanes and railway. The provision of new accesses for land areas being severed by the scheme and the provision of drainage runoff storage were not determined at the design assessment stage.
- 3.2.3. Physical features - the route would pass through Grafton Wood, which, at the time of the design assessment, was not listed on the Natural England Ancient woodland inventory, but was identified as Candidate Ancient Woodland during the Ancient Woodland and Trees of Herefordshire Project.
- 3.2.4. Utilities - the route would pass underneath existing overhead power lines a number of times (including a 66kV) but would be located to the south of the main corridor of electricity cables running east to west. The route would cross Grafton Lane almost at grade where existing services run north to south including a water main.
- 3.2.5. Rail structure - the route would cross over the existing railway line which, for reasons relating to asset ownership and future maintenance liability, would be Network Rail's preferred solution. Initial discussions with Network Rail revealed that key issues that they look for in relation to a new crossing over the railway are (i) ownership and liabilities for the new bridge; (ii) headroom clearances; (iii) lateral clearances; (iv) any effect on the siting of their current infrastructure e.g. signals; (v) the ability to accommodate likely future improvements to the railway e.g. four-tracking and electrification; (vi) vehicular containment of highway vehicles; (vii) impact resistance of parts of the structure from derailed trains; (viii) railway disruption both during construction and ongoing future maintenance of the new structure; and (ix) whether the new road would provide them with opportunities to close any existing level crossings in the area.
- 3.2.6. Highway structures - a new bridge structure would be required to carry Haywood Lane over the new SLR thereby maintaining the north-south connectivity. The bridge would likely be in the form of a single span structure with prestressed concrete beams and an in-situ reinforced concrete deck. The alignment of Haywood Lane could need local raising to achieve the required vertical clearance. At the location where the SLR meets Grafton Lane (also the route of NCN route 46), the lane would be stopped up for motorised users, provision only being made for an at-grade crossing for non-motorised users. This would require local realignment of Grafton Lane to tie in with the alignment of the SLR.

ROUTE SC2A

- 3.2.7. Earthworks - the vertical alignment on the east side would follow the rolling profile of the countryside but would be forced deep into cutting (on average 7-8m deep) to cross underneath both the railway and Haywood Lane. This could give rise to groundwater and road drainage problems. Preliminary bulk earthworks calculations suggested a net surplus of 50,000m³.
- 3.2.8. Design Standards - 60mph design speed, with no Departures from Standard anticipated to be required at the time of design assessment. Opportunities for overtaking were considered to be unlikely due to the topography (vertical curvature). The route would have a relatively straight crossing of the existing country lanes and railway. The provision of new accesses for land areas being severed by the scheme and the provision of drainage runoff storage were not determined at the design assessment stage.

- 3.2.9. Physical features - the route would pass through Grafton Wood, which, at the time of the design assessment, was not listed on the Natural England Ancient woodland inventory, but was identified as Candidate Ancient Woodland during the Ancient Woodland and Trees of Herefordshire Project.
- 3.2.10. Utilities - the route would pass underneath existing overhead power lines a number of times (including a 66kV) but would be located to the south of the main corridor of electricity cables running east to west. The route would cross Grafton Lane almost at grade where existing services run north to south including a water main.
- 3.2.11. Rail structure - the route would cross underneath the existing railway line, which would not be Network Rail's preferred solution, as they would be responsible for the future maintenance of the bridge.
- 3.2.12. Highway structures - a new bridge structure would be required to carry Haywood Lane over the new SLR thereby maintaining the north-south connectivity. The bridge would likely be in the form of a single span structure with prestressed concrete beams and an in-situ reinforced concrete deck. The alignment of Haywood Lane could need local raising to achieve the required vertical clearance. At the location where the SLR meets Grafton Lane (also the route of NCN Route 46), the lane would be stopped up for motorised users, provision only being made for an at-grade crossing for non-motorised users. This would require local realignment of Grafton Lane to tie in with the alignment of the SLR.

ROUTE SC5

- 3.2.13. Earthworks - the vertical alignment on the east side would follow the rolling profile of the countryside but would be forced into cutting after Grafton Lane to cross under the railway. There would be a significant 13m deep cutting through Merry Hill to enable the route to cross under Haywood Lane which could give rise to groundwater and road drainage problems. Preliminary bulk earthworks calculations suggested a net surplus of 150,000m³.
- 3.2.14. Design Standards - 60mph design speed, with no Departures from Standard anticipated likely to be required at the time of the design assessment. Opportunities for overtaking would be unlikely. The angled crossing of existing country lanes and the railway would increase cost. The provision of new accesses for land areas being severed by the scheme and the provision of drainage runoff storage were not yet determined at the design assessment stage.
- 3.2.15. Physical features - the route would pass through Grafton Wood, which, at the time of the design assessment, was not listed on the Natural England Ancient woodland inventory, but was identified as Candidate Ancient Woodland during the Ancient Woodland and Trees of Herefordshire Project. It would also pass through a wooded area between Grafton Lane and Withy Brook, a site of archaeological importance known as Grafton Enclosure and a barn yard situated south-west of the Merryhill Lane junction with Haywood Lane.
- 3.2.16. Utilities - the route would pass underneath existing overhead power lines a number of times (including a 66kV) and would be located partly within the main corridor of electricity cables running east to west. The route would cross Grafton Lane at grade where existing services run north to south, including a water main. The route would also conflict with a concentration of overhead and buried services in/around Haywood Lane including Openreach cables and a water main.

- 3.2.17. Rail structure - the route would pass underneath the existing railway line, which would not be Network Rail's preferred solution, as they would be responsible for the future maintenance of the bridge.
- 3.2.18. Highway structures - A new bridge structure would be required to carry Haywood Lane over the new SLR thereby maintaining the north-south connectivity. The bridge would likely be in the form of a single span structure with prestressed concrete beams and an in situ reinforced concrete deck. The alignment of Haywood Lane could need local raising to achieve the required vertical clearance. At the location where the SLR meets Grafton Lane (also the route of NCN Route 46), the lane would be stopped up for motorised users, with provision only being made for an at-grade crossing for non-motorised users. This would require local realignment of Grafton Lane to tie in with the alignment of the SLR.

ROUTE SC7

- 3.2.19. Earthworks - the vertical alignment on the east side would follow the rolling profile of the countryside but would be forced into cutting after Grafton Lane to cross under the railway. There would be a significant 13m deep cutting through Merry Hill to enable the route to cross under Haywood Lane which could give rise to groundwater and road drainage problems. Preliminary bulk earthworks calculations suggested a net surplus of 85,000m³.
- 3.2.20. Design Standards - 50mph design speed, with no Departures from Standard anticipated to be required at the time of the design assessment. There would be no opportunity for overtaking due to the sinuous alignment. The angled crossing of existing country lanes and the railway would increase cost. The provision of new accesses for land areas being severed by the scheme and the provision of drainage runoff storage were not determined at the time of the design assessment.
- 3.2.21. Physical features - being of a sinuous nature would result in the route avoiding many physical constraints but it would pass through the northern tip of Grafton Wood. At the time of the design assessment Grafton Wood was not listed on the Natural England Ancient woodland inventory, but was identified as Candidate Ancient Woodland during the Ancient Woodland and Trees of Herefordshire Project.
- 3.2.22. Utilities - the route would pass underneath existing overhead power lines a number of times (including a 66kV) and would be located largely within the main corridor of electricity cables running east to west. The route would cross Grafton Lane on a 3m high embankment where overhead Openreach cables and buried water services are present. The route would also conflict with a concentration of overhead and buried services in/around Haywood Lane, including Openreach cables and a water main.
- 3.2.23. Rail structure - the route would cross underneath the existing railway line, which would not be Network Rail's preferred solution as they would be responsible for the future maintenance of the bridge.

- 3.2.24. Highway structures - a new bridge structure would be required to carry Haywood Lane over the new SLR thereby maintaining the north-south connectivity. The bridge would likely be in the form of a single span structure with prestressed concrete beams and an in situ reinforced concrete deck. The alignment of Haywood Lane could need local raising to achieve the required vertical clearance. At the location where the SLR meets Grafton Lane (also the route of NCN Route 46), the lane would be stopped up for motorised users, provision only being made for an at-grade crossing for non-motorised users. This would require local realignment of Grafton Lane to tie in with the alignment of the SLR in view of the SLR being on a 3m high embankment at this location.

ROUTE SC8

- 3.2.25. Earthworks - Route SC8 would require the construction of an embankment up to 8m high to cross over the railway line and a cutting over 7m deep to pass underneath Haywood Lane. This could give rise to groundwater and road drainage problems. Preliminary bulk earthworks calculations suggested a net surplus of 16,000m³, which could be used in landscaping works. However, with some adjustment to the horizontal and vertical alignments, this route could achieve an earthworks balance. Design Standards - 60mph design speed, with no Departures from Standard anticipated to be required at the time of the design assessment. Opportunities for overtaking would be unlikely due to the topography (vertical curvature). Angled crossing of the existing railway would increase cost but the crossing of Haywood Lane would be relatively straight. The provision of new accesses for land areas being severed by the scheme and the provision of drainage runoff storage were not determined at the time of the design assessment.
- 3.2.26. Physical features - the route would skirt around the south-west corner of Hayleasow Coppice (designated as Ancient Woodland) and through the northern section of Grafton Wood. At the time of the design assessment Grafton Wood was not listed on the Natural England Ancient woodland inventory, but was identified as Candidate Ancient Woodland during the Ancient Woodland and Trees of Herefordshire Project. The route would also pass to the south of the wooded area between Grafton Lane and Withy Brook as well as to the south of the barn yard belonging to Merryhill Farm. The route would pass to the south of Grafton Enclosure and Beech Grove (see commentary on Route SC9).
- 3.2.27. Utilities - the route would conflict with existing overhead power lines located at the eastern and western ends of the scheme (including a 66kV) but would generally avoid them within the central area. The route would cross Grafton Lane at grade (or with limited changes to vertical alignment) where Openreach cables and water services are present. The route would conflict with a concentration of overhead and buried services in/around Haywood Lane including Openreach cables, a water main and a sewer.

- 3.2.28. Rail structure - the route would cross over the existing railway line, which would be Network Rail's preferred solution, for reasons relating to asset ownership and future maintenance liability. Initial discussions with Network Rail revealed that key issues that they look for in relation to a new crossing over the railway are (i) ownership and liabilities for the new bridge; (ii) headroom clearances; (iii) lateral clearances; (iv) any effect on the siting of their current infrastructure e.g. signals; (v) the ability to accommodate likely future improvements to the railway e.g. four-tracking and electrification; (vi) vehicular containment of highway vehicles; (vii) impact resistance of parts of the structure from derailed trains; (viii) railway disruption both during construction and ongoing future maintenance of the new structure; and (ix) whether the new road would provide them with opportunities to close any existing level crossings in the area.
- 3.2.29. Highway structures - a new bridge structure would be required to carry Haywood Lane over the new SLR thereby maintaining the north-south connectivity. The bridge would likely be in the form of a single span structure with prestressed concrete beams and an in-situ reinforced concrete deck. The alignment of Haywood Lane could need local raising to achieve the vertical clearance required. At the location where the SLR meets Grafton Lane (also the route of NCN Route 46), the lane would be stopped up for motorised users, with provision only being made for an at-grade crossing for non-motorised users. This will require local realignment of Grafton Lane to tie in with the alignment of the SLR.

ROUTE SC8A

- 3.2.30. Earthworks - to cross underneath the railway line and Haywood Lane, Route SC8A requires an extensive cutting up to 11m deep which could give rise to groundwater and road drainage problems. Preliminary bulk earthworks calculations suggested a net surplus of 167,000m³ requiring disposal off-site.
- 3.2.31. Design Standards - 60mph design speed with no Departures from Standard anticipated to be required at the time of the design assessment. Opportunities for overtaking would be unlikely due to the topography (vertical curvature). Angled crossing of the existing railway would increase cost but the crossing of Haywood Lane is relatively straight. The provision of new accesses for land areas being severed by the scheme and the provision of drainage runoff storage were not determined at the time of the design assessment.
- 3.2.32. Physical features - the route skirts around the south-west corner of Hayleasow Wood (designated as Ancient Woodland) and through the northern section of Grafton Wood. At the time of the design assessment Grafton Wood was not listed on the Natural England Ancient woodland inventory but was identified as Candidate Ancient Woodland during the Ancient Woodland and Trees of Herefordshire Project. The route also passes to the south of the wooded area between Grafton Lane and Withy Brook as well as to the south of the barn yard belonging to Merryhill Farm. The route passes to the south of Grafton Enclosure and Beech Grove (see commentary on Route SC9).
 Utilities - the route would conflict with existing overhead power lines located at the eastern and western ends of the scheme (including a 66kV) but would generally avoid them within the central area. The route would cross Grafton Lane at grade (or thereabouts) where Openreach cables and water services are present. The route would conflict with a concentration of overhead and buried services in/around Haywood Lane including Openreach cables, a water main and a sewer.

- 3.2.33. Rail structure - the route would cross underneath the existing railway line, which would not be Network Rail's preferred solution as they would be responsible for the future maintenance of the bridge.
- 3.2.34. Highway structures - a new bridge structure would be required to carry Haywood Lane over the new SLR thereby maintaining the north-south connectivity. The bridge would likely be in the form of a single span structure with prestressed concrete beams and an in situ reinforced concrete deck. The alignment of Haywood Lane could need local raising to achieve the vertical clearance required. At the location where the SLR meets Grafton Lane (also the route of NCN Route 46), the lane would be stopped up for motorised users, with provision only being made for an at-grade crossing for non-motorised users. This would require local realignment of Grafton Lane to tie in with the alignment of the SLR.

ROUTE SC9

- 3.2.35. Earthworks - the route is predominantly on an embankment on both sides of Beech Grove/Merry Hill. Route SC9 would require the construction of an embankment up to 8.5m high to cross over the railway line and another embankment up to 8m high to pass over Haywood Lane. The small cutting over Beech Grove would be up to 4m deep. Preliminary bulk earthworks calculations suggested a net shortfall of 110,000m³ which would need to be brought in from an external source.
- 3.2.36. Design Standards - 60mph design speed with no Departures from Standard likely to be required. Opportunities for overtaking would also be unlikely due to the topography (vertical curvature). A straighter crossing of railway would reduce the cost of the structure. The provision of new accesses for land areas being severed by the scheme and the provision of drainage runoff storage were not determined at the time of the design assessment.
- 3.2.37. Physical features - being of a sinuous nature means that the route would avoid many physical constraints except the northern section of Grafton Wood. At the time of the design assessment Grafton Wood was not listed on the Natural England Ancient woodland inventory but was identified as Candidate Ancient Woodland during the Ancient Woodland and Trees of Herefordshire Project. It passes close to the wooded area between Grafton Lane and Withy Brook and the barn yard belonging to Merryhill Farm. The route would cross the railway at a near perpendicular angle which would be beneficial in engineering and cost terms.
- 3.2.38. The unique distinction between this route and the other routes considered is that it would pass through the middle of Beech Grove. At the time of the design assessment it had not been confirmed whether the feature has archaeological relevance/significance or otherwise. Beech Grove does not appear as a specific record on the Herefordshire Historic Environment Record (HER) and is not listed as a Scheduled Ancient Monument. On the other hand Grafton Enclosure (off Grafton Lane) does appear on the HER and is believed to be a lost early medieval castle site. However, it would not be affected by the alignment of Route SC9, the route passing well to the south of it.
- 3.2.39. Utilities - the route would conflict with existing overhead power lines located at the eastern and western ends of the scheme (including a 66kV) but would generally avoid them within the central area. The route would cross Grafton Lane at grade (or with limited changes to vertical alignment) where Openreach cables and water services are present. The route would conflict with a concentration of overhead and buried services in/around Haywood Lane including Openreach cables, a water main and a sewer.

- 3.2.40. Rail structure - the route would cross over the existing railway line, which would be Network Rail's preferred solution for reasons relating to asset ownership and future maintenance liability. Initial discussions with Network Rail revealed that key issues which they look for in relation to a new crossing over the railway are (i) ownership and liabilities for the new bridge; (ii) headroom clearances; (iii) lateral clearances; (iv) any effect on the siting of their current infrastructure e.g. signals; (v) the ability to accommodate likely future improvements to the railway e.g. four-tracking and electrification; (vi) vehicular containment of highway vehicles; (vii) impact resistance of parts of the structure from derailed trains; (viii) railway disruption both during construction and ongoing future maintenance of the new structure; and (ix) whether the new road would provide them with opportunities to close any existing level crossings in the area.
- 3.2.41. Highway structures - a new bridge structure would be required to carry the SLR over Haywood Lane. The bridge would likely be in the form of a single span structure with prestressed concrete beams and an in-situ reinforced concrete deck. The need to cross over Haywood Lane would be likely to cause difficulty in tying the lane back to existing levels either side of it, particularly to the north at its junction with Merryhill Lane. At the location where the SLR meets Grafton Lane (also the route of NCN Route 46), the lane would be stopped up for motorised users, with provision only being made for an at-grade crossing for non-motorised users. This would require local realignment of Grafton Lane to tie in with the alignment of the SLR.

DEPARTURES AND RELAXATIONS FROM DESIGN STANDARDS

- 3.2.42. The design assessment assumed that application of relevant standards within DMRB would be adequate to address Highways England requirements. The design process identified that various constraints on the SLR routes meant that it was not possible to design to the full DMRB standards. Any desirable or necessary reductions in standards would be dealt with as design Relaxations or Departures from Standard. All Departures from Standard would require formal approval from the relevant Technical Approval Authority (Herefordshire Council, or Highways England in relation to any works at the A49 roundabout).
- 3.2.43. Based on the preliminary design work carried out for the seven routes, relaxations one step down from the standards were anticipated in relation to Stopping Sight Distance. These were considered justifiable and therefore the designs would remain in accordance with Design Standards.

ACTIVE TRAVEL INFRASTRUCTURE

- 3.2.44. All of the routes identified would bisect Grafton Lane, which forms part of NCN Route 46. In addition, the routes would also bisect a varying number of Public Rights of Way (PRoW), as shown in Table 3 below.

Table 3 – Number of Public Rights of Way bisected by each route

	Route						
	SC2	SC2A	SC5	SC7	SC8	SC8A	SC9
Number of PRow bisected	2	3	4	2	3	3	3

3.2.45. The difference in numbers of PRow bisected is due to the varying possible alignments for the Clehonger Link, to the north of the A465. For example, SC7 would not include a Clehonger Link and as such would not affect the PRow in this location, whereas SC5 bisects both PRows in this area.

RAILWAY AND STRUCTURES

3.2.46. All routes considered for the SLR would need to cross the Hereford to Newport railway line. Four of the seven routes (SC2A, SC5, SC7, and SC8A) would pass underneath the railway line whilst routes SC2, SC8 and SC9 would cross over it. In close proximity to routes SC2 and SC2A, there is infrastructure associated with the railway consisting of a mast and a generator building. These would be affected by the proposals unless a local horizontal realignment can be achieved. At the time of the design assessment, no other engineering structures e.g. bridges were considered likely to be affected by the proposals.

DRAINAGE

3.2.47. At the time of the design assessment, drainage proposals were envisaged to be a combination of carrier drains, filter drains, and grassed surface water channels or similar such as swales. Sustainable Urban Drainage Systems were assumed to be utilised where possible.

3.2.48. The design assessment anticipated that, where appropriate, drainage would be provided at the top and bottom of embankments and, if necessary, also within the cutting slopes. It was considered that attenuation ponds might be required to control the flow of highway drainage water entering a watercourse. Affected minor watercourses would be diverted and/or culverted. Appropriate measures to intercept any pollutants entering the highway drainage system would need to be agreed with the Environment Agency.

LAY-BYS

3.2.49. The recommended spacing for lay-bys in both directions on a single carriageway road is between 2 and 5km. With the SLR being just over 3km long between the A49(T) and the A465 the design assessment found no requirement in the relevant standards to provide a lay-by along the proposed new road.

ROAD LIGHTING

3.2.50. The design assessment proposed that road lighting would be provided for the roundabouts only. In view of the proximity of the new A465 roundabout to some properties it was considered that a lower standard of lighting might be appropriate at that location, in conjunction with Herefordshire Council's policy for lighting which also includes phased dimming overnight.

ROAD RESTRAINT SYSTEMS [E.G. VEHICLE CONTAINMENT BARRIERS]

3.2.51. The design assessment proposed that road restraint systems would be provided in accordance with Standards contained in the DMRB.

STATUTORY UNDERTAKERS

3.2.52. The design assessment recognised that diversionary works would be required and assumed that these would be determined and agreed with the Statutory Undertakers.

SCHEME COST OF ROUTES

3.2.53. Table 4 shows the estimated scheme costs (prepared at the time of the design assessment) for each route, based on 2012 prices. A contingency allowance of 44% on construction cost was included. If the contingency were not required, the scheme cost would be the lower of the two values.

Table 4 – Estimated cost of routes

	SC2	SC2A	SC5	SC7	SC8	SC8A	SC9
Scheme cost (with and without contingency)	£16.5m-£25m	£19.5m-£29m	£24m-£35m	£21m-£31m	£17.9m-£26.5m	£25.4m-£38.6m	£17.2m-£25.3m

DESIGN ASSESSMENT CONCLUSION

3.2.54. In conclusion, and based on the information available at the time of the design assessment, route SC2 performed better than the other routes with regards to design considerations. This was based on the following elements of the route:

- Would broadly follow the ground profile (except where it has to go over the railway and under Haywood Lane);
- Most likely to achieve a balance of bulk earthworks;
- Not in very deep cut and would remove the potential for groundwater/drainage issues;
- 60mph design speed throughout;
- No Departures from Standards expected for road geometry;
- Would affect the fewest private properties;
- Would pass over the railway so aligning with Network Rail's expectation;
- Located to south of the main corridor of electricity cables running east-west; and
- Least expensive of the seven routes.

3.3. OTHER FACTORS

TECHNICAL AND OPERATIONAL FEASIBILITY

3.3.1. Technical and operational feasibility considers implementation, buildability and influence on network resilience for each route. Each of the seven routes considered were considered to be technically feasible and if introduced would offer greater network resilience.

- 3.3.2. However, Routes SC2 and SC8 were considered to offer a less challenging technical solution than the other five routes because they would cross over the railway line (rather than pass underneath), in accordance with Network Rail's preferences. There were considered to be fewer programming challenges in terms of securing any necessary track closures and construction phasing for routes crossing over the railway than the ones that cross underneath. Routes SC2 and SC8 also reduce the potential for groundwater/drainage issues associated with a very deep cut.

FINANCIAL AFFORDABILITY AND DELIVERABILITY

- 3.3.3. Financial affordability and deliverability acknowledges the estimated scheme costs, opportunities for phased construction and likelihood of third-party funding.
- 3.3.4. There were no identified funding issues associated with any particular route. It is worth noting however, that the SC2 construction rates of £4.6m/km was at least 8% less than the other routes.

3.4. TECHNICAL ASSESSMENT OF ROUTES

IMPACTS ON THE ECONOMY

- 3.4.1. The methodologies used to assess the routes have taken account of the Department for Transport and Highways England technical and guidance documents. The assessments used actual and predicted traffic volumes on the road network in the study area.

Scenarios

- 3.4.2. The 'Do Minimum' scenario in the Hereford Transport Model accounts for traffic and development growth that would occur regardless of whether or not one of the SLR routes is constructed. The 'Do Minimum' scenario also includes committed highway schemes in the city such as the Hereford City Centre Package and the new City Link Road. The 'Do Something' scenario includes all of the above and an SLR.

Future Year Traffic Flows

- 3.4.3. As part of the design assessment, traffic flows were predicted for a 2017 opening year (the year which, at the time of the design assessment, the SLR was anticipated to be completed and opened to traffic). The traffic flows were also predicted for a 2032 design year (15 years after the year of opening, at the time of the design assessment). Forecast traffic flows with the SLR in place ('Do Something' Scenario) are shown in Table 5. There were considered to be no significant differences between routes in terms of forecast traffic volumes.

Table 5 – Forecast annual average daily traffic flows in Do Something scenario (with SLR in place)

Link	Direction	2017 DM	2017 DS	% Change	2032 DM	2032 DS	% Change
A465 west of SLR	NE	3,606	3,221	-11%	4,255	4,439	4%
A465 west of SLR	SW	3,761	3,702	-2%	4,716	4,171	-12%
A465 Belmont Rd west of Tesco Roundabout	NE	5,318	5,406	2%	5,485	6,025	10%
A465 Belmont Rd west of Tesco Roundabout	SW	6,441	6,911	7%	7,682	7,932	3%
A465 Belmont Rd west of Belmont Roundabout	NE	8,466	8,562	1%	10,007	9,850	-2%
A465 Belmont Rd west of Belmont Roundabout	SW	9,885	9,563	-3%	12,264	11,302	-8%
Walnut Tree Avenue	EB	4,646	3,978	-14%	4,848	4,794	-1%
Walnut Tree Avenue	WB	4,078	3,401	-17%	4,603	4,145	-10%
A49 north of Walnut Tree Avenue	NB	14,192	13,949	-2%	20,766	18,839	-9%
A49 north of Walnut Tree Avenue	SB	12,164	12,167	0%	14,864	14,172	-5%
Holme Lacy Road east of A49	EB	7,767	7,566	-3%	9,729	8,911	-8%
Holme Lacy Road east of A49	WB	8,706	8,406	-3%	10,942	10,813	-1%
B3499 Rotherwas Access Road	NB	2,371	2,615	10%	4,887	4,383	-10%
B3499 Rotherwas Access Road	SB	2,201	2,279	4%	6,944	5,963	-14%

Note: DM = Do Minimum scenario. DS = Do Something scenario.

- 3.4.4. Appendix C contains diagrams of forecast traffic flows on key routes in the South Wye area for the Do Minimum and Do Something scenarios. They illustrate forecast traffic flows for the 2017 and 2032 AM and PM weekday peak periods.
- 3.4.5. The results show that traffic is forecast to reduce on the A465 except where it routes to reach the SLR, and there would be broadly no change in traffic flows on the A49 north of Walnut Tree Avenue, taking into account two-way flows. Traffic levels on Walnut Tree Avenue are forecast to reduce.

Reliability

- 3.4.6. The assessment work did not consider there to be a significant difference between routes in terms of reliability. Reduced congestion along the A465 would provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.

Impacts on the Economy – Summary

- 3.4.7. The assessment work did not consider there to be a significant difference between the SLR routes in terms of economy, with no significant differences in journey times, affordability, or accidents. However, the routes do have different construction costs which would affect the overall cost benefit ratio for each route. Scheme costs are detailed in Table 4.
- 3.4.8. The scheme is anticipated to result in reduced congestion along the A465 Belmont Road due to diversion of traffic onto the SLR, resulting in journey time savings for existing users. There is likely to be increased traffic along the A49 in some time periods, but the level of delay at the A49/A465 junction is proposed to remain at existing levels.
- 3.4.9. All routes would provide a direct connection to the Hereford Enterprise Zone (HEZ) from the A465. This would encourage development at the HEZ and improve the infrastructure serving the wider Rotherwas estate having subsequent benefits to the promotion of inward investment relating to both residential and employment development.

ENVIRONMENTAL IMPACTS

Air Quality

- 3.4.10. A high level assessment of the air quality impacts of all routes was undertaken as part of the design assessment. As no detailed design had been undertaken at the time of assessment, impacts were qualitatively assessed.
- 3.4.11. Assessment criteria included the change in proximity of the road centreline to sensitive receptors, including residential premises and designated habitats. This criterion was assumed to represent the potential changes in exposure of sensitive receptors to vehicle emissions that the particular routes brought.
- 3.4.12. To distinguish between the potential impacts from each of the routes, the number of sensitive receptors within 200m either side of the scheme was recorded. These were summarised into the total numbers of residential properties within each 50m band, up to 200m from the centreline of the road.

Assumptions

- 3.4.13. It was assumed that all traffic flows along each of the routes would be identical in terms of the number of vehicles and the fleet mix (% of Heavy Goods Vehicles⁵ and non-Heavy Goods Vehicles).
- 3.4.14. In addition, for the purpose of the technical assessment, it was assumed that the air quality impact upon Hereford city centre would be identical for all of the routes. Therefore, impacts upon the Hereford City Air Quality Management Area were considered to be identical for each route and therefore not assessed at the design assessment stage.

⁵ defined as vehicles with a gross weight of more than 3.5 tonnes

Potential Effects

- 3.4.15. Air quality impacts from the operation of all routes would be a result of the introduction of traffic into areas which were previously free from road traffic or had experienced very low traffic, or reducing volumes on existing roads as traffic re-routes to take advantage of the SLR.
- 3.4.16. Table 6 shows the number of residential properties within 200m of each route, split into bands. This only includes instances where the scheme introduces a new section of road and does not include existing roads.

Table 6 - Residential properties within 200m of each route

Distance from Road Centreline	Number of Properties						
	SC2	SC2A	SC5	SC7	SC8	SC8A	SC9
0m – 50m	0	0	0	0	0	0	0
50m – 100m	4	4	7	4	4	4	3
100m – 200m	5	5	11	14	5	5	4
Total	9	9	18	18	9	9	7

- 3.4.17. There would also be potential secondary effects upon woodland habitats from air pollutants as a result of traffic flows across each of the routes. All routes would have identical secondary impacts upon Hayleasow Wood, Newton Coppice and Grafton Wood. However, Routes SC2 and SC2A would have some secondary impacts upon Veddoes Coppice, which is to the east of the Hereford to Newport railway line

Noise

- 3.4.18. For each of the routes identified, a qualitative assessment of potential noise and vibration impacts was undertaken. Table 7 contains the number of properties within 600m of each route.

Table 7 - Residential properties within 600m of each route

Distance from Road Centreline	Number of Receptors by Route						
	SC2	SC2A	SC5	SC7	SC8	SC8A	SC9
0m – 50m	0	0	0	0	0	0	0
50m – 100m	4	4	7	4	4	4	3
100m – 200m	5	5	11	14	5	5	4
200m – 300m	14	14	26	16	13	13	13
300m – 600m	82	82	68	71	81	81	78
Total	105	105	112	105	103	103	98

Greenhouse Gases

- 3.4.19. The seven routes were assessed for their potential greenhouse gas production (CO₂eq) in relation to the scheme length, change in vehicle speeds and changes to journey lengths as a consequence of the road traffic use of the proposed routes.
- 3.4.20. The Department for Transport Emissions Factor Toolkit (v6.016) was used to estimate the change in CO₂ emissions as a consequence of changes in vehicle speeds along the route. The total carbon production (in tonnes per year) was calculated for a baseline year (2013), opening year (2017⁷) and future year (2032), for a range of speeds between 50 to 90kph.

Assumptions

- 3.4.21. It was assumed that all routes were of a similar length and that traffic speeds would be similar between each route. It was also assumed that traffic using all routes would be required to travel over slightly greater distances than the traffic currently using the local road network. As a guide the percentage of Heavy Goods Vehicles predicted to use the routes was assumed to remain unchanged, at 5% for all assessment years.

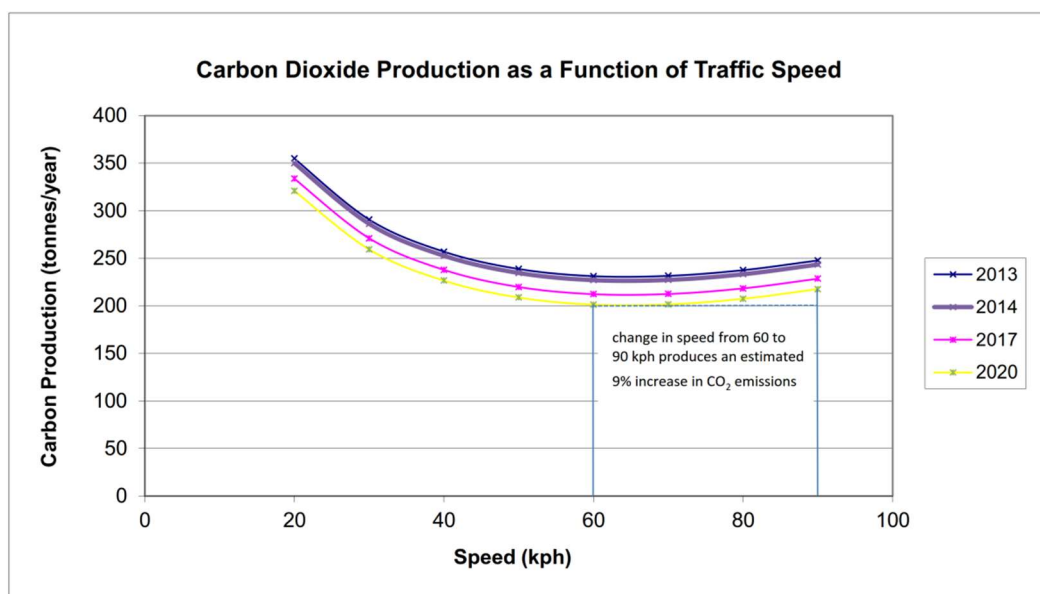
Potential Effects

- 3.4.22. It was considered highly probable that local traffic speeds will increase as a result of the scheme development. In addition, the distance that vehicles will be required to travel is estimated to increase slightly as a result of the scheme development.
- 3.4.23. Figure 3 illustrates that increases in vehicle speeds between 60 to 90 kph increases CO₂ emissions. Therefore, it is possible that all routes would have a slight adverse impact on greenhouse gases due to vehicles travelling greater distances and at higher speeds.

⁶ <https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html>

⁷ Assumed opening year at the time of the technical assessment

Figure 3 - Carbon Dioxide Production as a Function of Traffic Speed



Source: Emissions Factor Toolkit v6.01, Defra

Landscape/Townscape

Routes SC2 and SC2A

- 3.4.24. Routes SC2 and SC2A would pass through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although the routes would lie within the Herefordshire Lowlands character area, it is more typical of South Herefordshire and Over Severn character areas. In terms of woodland, the routes would cut through the centre of Grafton Wood, which at the time of the design assessment, was not designated for biodiversity importance. The rest of Routes SC2/SC2A would be free of woodland and avoid Newton Brook.
- 3.4.25. The routes would pass Haywood Lodge Farm and associated properties with a resultant potential for adverse visual effects. One route would pass over the railway (SC2) and one route would pass under (SC2A). As a result, SC2 is likely to have more visual impact due to the increased earthworks and visibility of the highway and associated structures. A new roundabout on A465 and a short section of road connecting to B4349, would introduce further built infrastructure. The landscape in this area was classed as being of medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource is likely to be influenced by the additional sections of road, roundabout, embankments for the bridge over the railway in Route SC2 and the proximity to residential properties.

Route SC5

- 3.4.26. SC5 would pass through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route would fall within the Herefordshire Lowlands character area, it is more typical of South Herefordshire and Over Severn character areas. In terms of woodland, the route would cut through the centre of Grafton Wood, which at the time of the design assessment, was not designated for biodiversity importance, and a dense copse near Withy Brook. It would run close to residential properties along Grafton Lane and involve the loss of a large commercial premises accessed from Haywood Lane. It would avoid Newton Brook and Hayleasow Wood. A new roundabout on A465 and an upgrade to the existing lane connecting to the B4349, would introduce further built infrastructure and would adversely affect the character of the lane.
- 3.4.27. The landscape in this area was classed as being of medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource is likely to be influenced by the loss of woodland, the route going through a large Site of Archaeological Importance, the proximity of residential properties, the loss of commercial premises, and a new roundabout with loss of character due to the upgrade of the existing lane. Therefore, the magnitude of effect on the landscape resource is likely to be influenced by the loss of woodland, hedges and key local landscape characteristics.

Route SC7

- 3.4.28. SC7 would pass through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route would fall within the Herefordshire Lowlands character area, it is more typical of South Herefordshire and Over Severn character areas. In terms of woodland, the route would cut through the centre of Grafton Wood which, at the time of the design assessment, was not designated for biodiversity importance. It would run close to residential properties along Grafton Lane. It would avoid Newton Brook and Hayleasow Wood. A new roundabout would be constructed on the A465 and a new section of road connecting with the B4349 would introduce further built infrastructure.
- 3.4.29. The landscape in this area was classed as being of medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource is likely to be influenced by the loss of woodland, the proximity of residential properties, and a new roundabout with additional section of road. Therefore, the magnitude of effect is likely to be influenced by the loss of some local landscape features.

Route SC8

- 3.4.30. SC8 would pass through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route would fall within the Herefordshire Lowlands character area, it is more typical of the South Herefordshire character area. In terms of woodland, it would cut through the centre of Grafton Wood, which, at the time of the design assessment, was not designated for biodiversity importance and has a low density of trees. This route would run in close proximity to Haywood Lodge Farm and associated properties, with potential for visual amenity effects. It would avoid Newton Brook. The alignment of the eastern half of the route would run in a straight line and cuts across the grain of the landscape. The route would therefore fail to take into account the undulating topography and irregular field pattern. SC8 would require extensive works to create embankments to take the route over the railway line resulting in a visible central section (as it passes over the railway line) and would have engineered slopes disruptive to the character of the local topography.
- 3.4.31. The landscape in this area was classed as being of medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource with the additional sections of road, roundabout and proximity to residential properties, was considered to be moderate (loss of resource, at odds with the local pattern and landform, visually intrusive and would adversely impact on the landscape).

Route SC8A

- 3.4.32. SC8A would pass through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route would fall within the Herefordshire Lowlands character area, it is more typical of the South Herefordshire character area. In terms of woodland, it cuts through the centre of Grafton Wood, which, at the time of the design assessment, was not designated for biodiversity importance and has a low density of trees. This route runs in close proximity to Haywood Lodge Farm and associated properties, with potential for visual amenity effects. It avoids Newton Brook. The alignment of the eastern half of the route would run in a straight line and cut across the grain of the landscape. The route would therefore fail to take into account the undulating topography and irregular field pattern. SC8A would require extensive works to create a cutting to take the route under the railway and will involve engineered slopes that will be disruptive to the character of the local topography.
- 3.4.33. The landscape in this area was classed as being of medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource with the additional sections of road, roundabout and proximity to residential properties, was considered to be moderate (loss of resource, at odds with the local pattern and landform, visually intrusive and will adversely impact on the landscape).

Route SC9

- 3.4.34. SC9 would pass through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route would fall within the Herefordshire Lowlands character area, it is more typical of South Herefordshire character area. In terms of woodland, the route would cut through the centre of Grafton Wood, which, at the time of the design assessment, was not designated for biodiversity importance and has a low density of trees. This route would be visible from Haywood Lodge Farm and associated properties, however it would curve away in a north-westerly direction after crossing the railway line. As it takes a north-westerly direction it would pass directly through a local landscape feature called Beech Grove. Similar to other more southerly routes, it would avoid Newton Brook.
- 3.4.35. The landscape in this area was classed as being of medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource was considered to be major (is at considerable variance with the landform, scale and pattern of the landscape, is visually intrusive and will adversely impact on the landscape).

Historic Environment

Routes SC2 and SC2A

- 3.4.36. The technical assessment found that this route would have no effect on any Scheduled Monument or its setting resulting in no significant effect.
- 3.4.37. This route would encroach within 300m of, but be largely screened from, the Listed Building complex at Haywood Lodge, containing one Grade II* and three Grade II structures. It would encroach within 350m of, but be largely screened from, the Grade II Listed Buildings at Merryhill. It would encroach within 220m of, but be largely screened from, the agricultural structures at Clehonger Court, which are Grade II Listed Buildings. It would encroach within 150m of and be visible from the Grade II milestone on the A465.
- 3.4.38. The Listed Buildings in the study area are of high value. Although passing close to the listed milestone on the A465, the roadside is the appropriate setting for structure and, therefore, this route would have no significant effect. It would have a minor impact on the settings of the listed structures at Haywood Lodge, Merryhill and Clehonger Court, resulting in a slight to moderate effect.
- 3.4.39. This route would traverse four fields from which significant artefacts have been recovered. As they consist of findspots, the undesignated sites are of uncertain value, though the effect upon them could be major.

Route SC5

- 3.4.40. This route would have no effect on any Scheduled Monument or its setting resulting in no significant effect.
- 3.4.41. This route would encroach within 220m of, but be largely screened from, the Grade II Listed Buildings at Merryhill. It would encroach within 400m of, but be largely screened from, the Listed Building complex at Haywood Lodge, containing one Grade II* and three Grade II structures. It would encroach within 220m of, but be largely screened from, the agricultural structures at Clehonger Court, which are Grade II Listed Buildings. It would encroach within 150m of and be visible from the Grade II milestone on the A465.

- 3.4.42. The Listed Buildings in the study area are of high value. Although passing close to the listed milestone on the A465, the roadside is the appropriate setting for this structure and, therefore, this route would have no significant effect. It would have a minor impact on the settings of the listed structures at Clehonger Court, Merryhill and Haywood Lodge, resulting in a slight to moderate effect.
- 3.4.43. This route would traverse the medieval site in Field 15 and two cropmark sites in Fields 10 and 34, as well as four fields from which significant artefacts have been recovered (see plan in Appendix D). As well as the findspots, which are of uncertain value, there are two cropmark sites, one of which is of medium value, and this route would have a major impact upon them, resulting in a moderate to large effect.

Route SC7

- 3.4.44. This route would have no effect on any Scheduled Monument or its setting. The Scheduled Ancient Monuments in the extended study area are of high value, but this route would have no effect upon them or their settings, resulting in no significant effect.
- 3.4.45. This route would encroach within 200m of, but be largely screened from, the Grade II Listed Buildings at Merryhill. It would encroach within 520m of, but be largely screened from, the Listed Building complex at Haywood Lodge, containing one Grade II* and three Grade II structures. It would encroach within 220m of, but be largely screened from, the agricultural structures at Clehonger Court, which are Grade II Listed Buildings. It would encroach within 150m of and be visible from the Grade II milestone on the A465.
- 3.4.46. The Listed Buildings in the study area are of high value. Although passing close to the listed milestone on the A465, the roadside is the appropriate setting for this structure and, therefore, this route would have no significant effect. It would have a minor impact on the settings of the listed structures at Merryhill, Clehonger Court and Haywood Lodge resulting in a slight to moderate effect.
- 3.4.47. This route would traverse the medieval site in Field 15 and a cropmark site in Field 10, as well as four fields from which significant artefacts have been recovered (see Appendix D). As well as the findspots, which are of uncertain value, there is a cropmark site, also of uncertain value, upon which this route would have a major effect.

Routes SC8 and SC8A

- 3.4.48. These routes would have no effect on any Scheduled Monument or its setting. The Scheduled Monuments in the extended study area are of high value, but these routes would have no effect upon them or their settings, resulting in no significant effect.
- 3.4.49. SC8 and SC8A would encroach within 370m of, but be largely screened from, the Listed Building complex at Haywood Lodge, containing one Grade II* and three Grade II structures. It would encroach within 320m of, but be largely screened from, the Grade II Listed Buildings at Merryhill. It would encroach within 220m of, but be largely screened from, the agricultural structures at Clehonger Court, which are Grade II Listed Buildings. It would encroach within 150m of and be visible from the Grade II milestone on the A465.
- 3.4.50. The Listed Buildings in the study area are of high value. Although passing close to the listed milestone on the A465, the roadside is the appropriate setting for structure and, therefore, these routes would have no significant effect. It would have a minor impact on the settings of the listed structures at Haywood Lodge, Merryhill and Clehonger Court, resulting in a slight to moderate effect.

3.4.51. These routes would traverse four fields from which significant artefacts have been recovered. As they consist of findspots, the undesignated sites are of uncertain value, though the effect upon them could be major.

Route SC9

3.4.52. This route would have no effect on any Scheduled Monument or its setting. The Scheduled Monuments in the extended study area are of high value, but this route would have no effect upon them or their settings, resulting in no significant effect.

3.4.53. This route would encroach within 420m of, but be largely screened from, the Listed Building complex at Haywood Lodge, containing one Grade II* and three Grade II structures. It would encroach within 250m of, but be largely screened from, the Grade II Listed Buildings at Merryhill. It would encroach within 220m of, but be largely screened from, the agricultural structures at Clehonger Court, which are Grade II Listed Buildings. It would encroach within 150m of, and be visible from, the Grade II milestone on the A465.

3.4.54. The Listed Buildings in the study area are of high value. Although passing close to the listed milestone on the A465, the roadside is the appropriate setting for structure and, therefore, this route would have no significant effect. It would have a moderate impact on the settings of the listed structures at Haywood Lodge and Merryhill and a minor impact on Clehonger Court, resulting in a moderate effect.

3.4.55. This route would traverse five fields from which significant artefacts have been recovered. As they consist of findspots, the undesignated sites are of uncertain value, though the effect upon them could be major.

Biodiversity

Statutory and non-statutory designated sites

3.4.56. At the time of the design assessment none of the seven routes were considered to directly affect any sites which had statutory or non-statutory designations. Impacts and mitigation measures were considered likely to be similar for all routes and as such were not considered to affect the technical assessment.

Badgers

3.4.57. Minimal evidence of badger activity was recorded during the surveys which had been undertaken at the time of the design assessment. Badgers are protected on the grounds of animal welfare rather than rarity / population decline and as such were not considered to affect the environmental appraisal. At the time of the technical assessment there was no evidence to suggest badger-related road traffic collision risk would differ significantly between any of the routes.

Dormice

3.4.58. The presence or absence of this species had not been determined at the time of the technical assessment which meant that there was insufficient information to fully consider this species.

Otters

3.4.59. Otters were identified using Withy Brook. All routes cross this brook, therefore impacts and mitigation were considered likely to be similar for all routes.

Water voles

- 3.4.60. No evidence of this species had been recorded at the time of the technical assessment, therefore it was not considered further.

Bats

- 3.4.61. At the time of the design assessment, it had been determined that the site is, in general, 'bat rich' with at least 10 species recorded to date. This includes two Annex 2 species (barbastelle and lesser horseshoe bat). These records were spread throughout the site, with no 'hotspots' identified for these species.
- 3.4.62. Foraging and commuting activity levels were considered to be relatively high, with continuous foraging activity recorded at several locations, on several occasions and for several different species. Bat activity was recorded at all locations surveyed, with all routes affecting areas where both higher and lower levels of activity had been recorded. As the seven routes would follow the same broad corridor and affect the same or very similar habitat features (such as woodlands and hedgerows), impacts and mitigation were considered likely to be similar for all routes.
- 3.4.63. The level of roosting activity recorded at the time of the technical assessment was limited to two minor soprano pipistrelle roosts in two adjacent orchard trees. As these trees would not be directly affected by any of the routes, this data was not considered to affect the technical assessment.

Birds

- 3.4.64. As the seven routes would follow the same broad corridor and affect the same or very similar habitat features (such as woodlands, arable fields and margins, and hedgerows), impacts and mitigation were considered likely to be similar for all routes. Barn owls were recorded flying and likely foraging and one likely roost was recorded near to Haywood Lane. It was considered unlikely that any routes would directly affect any barn owl roosts, should they be found during remaining surveys, and therefore this data was unlikely to affect the technical assessment.

Reptiles

- 3.4.65. Common reptile species had been recorded in low numbers within woodland glade and field margin habitats across the site. As the seven routes would follow the same broad corridor and affect the same or very similar habitat features, impacts and mitigation were considered likely to be similar for all routes.

Amphibians

- 3.4.66. A medium population of great crested newts were recorded at several ponds within 500m of the proposed routes. None of the proposed routes would directly affect any ponds, therefore impacts to great crested newts were considered to be limited to terrestrial habitats.
- 3.4.67. Routes SC2 and SC2A would be the most proximate to the medium population recorded at Haywood Lodge; however it was considered that the scheme offered the potential for a net gain in the quality and quantity of suitable great crested newt habitats. Therefore the residual effects of the routes were considered likely to be similar. It was therefore considered that this receptor would not affect the technical assessment.

Flora

- 3.4.68. At the time of the design assessment Hedgerows Regulations data had not yet been analysed and thus there was insufficient information consider this.

Consideration of the seven routes

- 3.4.69. For the reasons detailed above, a majority of the potential ecological receptors were not considered to influence the technical assessment at this stage. The main differences between the routes were in terms of the habitats which would be directly affected, and to some degree the invertebrate assemblages that these habitats support.

Routes SC2 and SC2A

- 3.4.70. Routes SC2 and SC2A would pass through the centre of Grafton Wood, which at the time of the design assessment was identified as candidate ancient woodland by the updated ancient woodland inventory. This route would lead to habitat loss and fragmentation of the woodland.
- 3.4.71. Routes SC2/SC2A would bisect species-rich hedgerows along and near to Grafton Lane, leading to habitat loss and fragmentation. Withy Brook would also be bisected. The route would pass close to, though not directly affect, Hayleasow ancient woodland / plantation on ancient woodland, traditional orchard habitat, a further area of candidate ancient woodland, and a veteran oak tree.
- 3.4.72. There was considered to be a slight preference for Route SC2A relative to SC2, as passing under the existing railway may allow an unmodified habitat corridor to be retained and enhanced along the railway line.

Route SC5

- 3.4.73. Route SC5 would pass through Grafton Wood, slightly to the north of Routes SC2/SC2A, with habitat loss and fragmentation impacts likely to be similar to those routes. Route SC5 would also lead to habitat loss and fragmentation within an area of candidate ancient woodland adjacent to Grafton Lane.
- 3.4.74. In similarity to Routes SC2/SC2A, Route SC5 would bisect species rich hedgerows along and near to Grafton Lane, leading to habitat loss and fragmentation. Withy Brook would also be bisected.
- 3.4.75. The route would pass close to, though not directly affect, traditional orchard habitat and veteran oak trees. Route SC5 would pass south of Hayleasow Wood ancient woodland, including a buffer zone of approximately 50-100 m.

Route SC7

- 3.4.76. Route SC7 would pass through the northern edge of Grafton Wood; fragmentation impacts may therefore be less than for Routes SC5 and SC2/SC2A, though habitat loss impacts would be similar.
- 3.4.77. In similarity to the other routes, SC7 would bisect species rich hedgerows along Grafton Lane, leading to habitat loss and fragmentation. This route would however bisect fewer hedgerows overall than the other routes. Withy Brook would be bisected. Route SC7 would also bisect the very upper reaches of Newton Brook.
- 3.4.78. The route would pass close to, though would not directly affect, Hayleasow ancient woodland, traditional orchard habitat, and veteran oak trees.

Routes SC8 and SC8A

- 3.4.79. Routes SC8/8A would pass through the centre of Grafton Wood and was considered likely to lead to the greatest extent of habitat loss / disturbance within Grafton Wood relative to other routes under consideration, with comparable impacts to SC2/2A and SC9.
- 3.4.80. In similarity to Routes SC2/SC2A, Routes SC8/8A would bisect species rich hedgerows along and near to Grafton Lane, leading to habitat loss and fragmentation. Withy Brook would also be bisected.
- 3.4.81. There was assessed to be a slight preference to bridge over the railway, which would allow the railway corridor to act as an underpass under the road.

Route SC9

- 3.4.82. SC9 would pass through the centre of Grafton Wood and was considered likely to lead to the greatest extent of habitat loss/disturbance within Grafton Wood relative to other routes under consideration, with comparable impacts to SC2/2A and SC8/8A.
- 3.4.83. In similarity to Routes SC2/SC2A, Route SC9 would bisect species rich hedgerows along and near to Grafton Lane, leading to habitat loss and fragmentation. Withy Brook would also be bisected
- 3.4.84. Route SC9 would pass over Haywood Lane via an overbridge, the only route to do so. Haywood Lane could therefore provide an underpass for use by bats (providing this can be unlit), which could provide a more easily effective mitigation solution than having the proposed road passing under Haywood Lane. However, SC9 would directly affect several mature/veteran trees within hedgerows to the east of the railway (some of which have high bat roosting potential), which would not be affected by other routes.

Conclusions

- 3.4.85. There was considered to be little difference in impacts and mitigation measures between the seven routes for a majority of the ecological receptors, based on the desk study and survey data gathered at the time of the design assessment.
- 3.4.86. It was identified that the chosen route should seek to minimise the impacts on the remaining pockets of woodland in a largely farmed landscape. On that basis Route SC7 was considered to be the preferred route as fragmentation impacts on Grafton Wood are likely to be reduced, and this route would avoid impacts to other areas of candidate ancient woodland. Route SC7 would also bisect fewer hedgerows than the other routes. Route SC7 could be improved by shifting the eastern end alignment slightly north to avoid Grafton Wood altogether, and by shifting the western end slightly south near Hayleasow Wood to increase the buffer distance here.
- 3.4.87. The technical assessment considered that any route selected would need to include suitable mitigation measures in relation to ecological impacts, with impacts predicted to arise for all routes.

Water Environment

- 3.4.88. The technical assessment considered that the most significant impacts to the water environment were likely to be associated with water quality and flood risk, specifically:
- Polluted surface water runoff during the construction phase consisting of high sediment load, chemicals, hydrocarbons and oils that may migrate or be discharged to surface water features or groundwater resources;
 - Polluted surface water runoff during operation of the road containing silts and hydrocarbons that may migrate or be discharged to surface water features or groundwater resources;
 - Increased rates and volumes of surface water runoff during operation of the road from an increase in impermeable area and/or changes to the existing drainage regime leading to a potential increase in flood risk;
 - Flood risk as a result of construction within areas identified to be at flood risk and flood risk to people and property elsewhere as a result of the proposals; and
 - Impact to the hydromorphological and ecological quality of watercourses associated with works within or in close proximity to Withy Brook and Newton Brook.
- 3.4.89. The information available at the time of the design assessment suggested that there was no significant difference between the routes.

Impacts on the Environment – Conclusion

- 3.4.90. The appraisal outcome reflects the assessment results from the Stage 2 Environment Assessment Report and the Appraisal Summary Tables (ASTs) produced in April 2014. All of the routes would have adverse effects on the environment. On balance, Route SC7 performed the least worst of the seven routes while Route SC9 performed the worst.

IMPACTS ON SOCIETY

- 3.4.91. This section summarises the social appraisal of the seven SLR routes, assessed against the following criteria:
- Physical activity;
 - Journey quality;
 - Security;
 - Access to services;
 - Affordability; and
 - Severance.
- 3.4.92. The appraisal was qualitative and proportionate to the characteristics of the scheme.

Commuting and other users (Journey time and reliability)

- 3.4.93. The same scores were adopted as for the assessment of journey times and reliability for business users and transport providers, under the economy theme above. The assessment work did not consider there to be a significant difference between the SLR routes in terms of journey times or reliability.

Physical Activity

- 3.4.94. Physical activity has an important role to play in preventing weight gain and obesity, and in improving mental health. Transport can affect physical activity levels by encouraging or discouraging walking and cycling (active travel).
- 3.4.95. Physical activity impacts can be important for schemes targeted at walking or cycling interventions. This was not considered to be the case with any of the routes, if assessed in isolation from the supporting sustainable transport improvements. All seven routes were considered to have the potential for adverse impacts on active travel levels in the rural area, discouraging these activities by increasing severance on existing routes and loss of rural amenity through the introduction of traffic noise and proximity to traffic.
- 3.4.96. A numerical assessment of the number of pedestrians and cyclists who may be affected was not possible based on the data available at the time of assessment, and, given the type of scheme being assessed, not considered necessary. The seven routes were assessed as having a moderate adverse impact on physical activity.

Journey Quality

- 3.4.97. Journey quality is a measure of the real and perceived physical and social environment experienced when travelling. The guidance breaks down the journey quality impacts into three groups:
- Traveller care - cleanliness, level of facilities, information and the general environment;
 - Travellers' views - pleasantness of the external surroundings; and
 - Traveller stress - frustration, fear of accidents and route uncertainty.
- 3.4.98. Both travellers' views and traveller stress are of relevance to the appraisal of the SLR routes. It is the intention of all seven routes to divert traffic from existing built-up areas of the A465 and A49, to a new more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents for users.
- 3.4.99. There were, however, considered to be some counteracting adverse impacts for A465 and A49 users that would not use the SLR. These relate to having to negotiate new SLR connecting junctions, and to the degraded views of earthworks associated with both those junctions and the SLR route itself.
- 3.4.100. On balance, all seven SLR routes were assessed to have a beneficial impact on journey quality. Differences between the schemes relate to the scale and works associated with:
- The new A465 roundabout arrangement – which would impose additional stress to travellers on the A465 and those connecting between the B4349 and A465, and
 - The extent of earthworks and cuttings required to take the SLR route over or under the railway and other structures, restricting views from the A465, A49 and SLR respectively.
- 3.4.101. SLR routes SC2, SC2A, SC8, SC8A and SC9 were assessed as moderate beneficial in respect of journey quality. Routes SC5 and SC7 were assessed as slight beneficial.

Personal Injury Collisions (Accidents)

- 3.4.102. The assessment work did not consider there to be a significant difference between the routes in terms of personal injury collisions. Route SC7 would have a 50mph design speed, which is lower than the other routes and is likely to reduce the collision rate. However, this is likely to be offset by a relative increase in collisions due to the poor overtaking opportunities and sinuous alignment.
- 3.4.103. The latest design standards would be applied to all routes and the SLR was anticipated to be safer than the A465 and A49. A reduction in traffic along the A465 would result in a reduced collision rate along this section of road, although the increase in traffic along the A49 in some time periods may cause the collisions rate to increase on this section of road.

Security

- 3.4.104. Security impacts relate to fear of, and vulnerability to, crime. These impacts can be important for public transport users, but there are no formal guidelines for road users. The only impact relevant to the SLR routes was considered to be reduced vulnerability to crime where users are less likely to be required to stop their vehicles or travel at slow speeds. This benefit can be attributed to users of the A465, A49 and SLR itself. The slight beneficial impact was assessed to be the same for all seven routes.

Access to Services

- 3.4.105. Access to services relates to opportunities for people to travel and access the services they require or desire. Accessibility impacts are primarily concerned with households that do not have access to a car, and with interventions that influence opportunities to access services by public transport, walking and cycling. In the case of the SLR, all seven routes would provide a potential new bus route between the A465 and A49, but not one that serves the key local destinations in Hereford city centre. For this reason, such a bus service is considered unlikely to materialise.
- 3.4.106. Each route was assessed as potentially leading to some improved access to services for car and public transport users as a result of reduced journey times. This would be for journeys both into Hereford City Centre on the A465 and A49, and to key destinations located south of the city including HEZ. According to the guidance, consideration of accessibility is not concerned with car users. The assessment was therefore neutral for the seven SLR routes.

Affordability

- 3.4.107. Monetary costs can be a barrier to mobility for low-income groups, affecting their ability to access key destinations. Changes to the transport network involving changes in user charges can have a strong impact on people in low-income groups.
- 3.4.108. The SLR, when appraised in isolation of supporting active travel options, is primarily concerned with re-routing to facilitate more efficient journeys. This would have the impact of reducing congestion on the A465 and A49 to the north of the scheme, whilst increasing speeds and reducing distances for journeys between the A465 and A49.
- 3.4.109. Both would impact positively on the personal affordability of car drivers, saving on fuel costs. The impact was assessed as slight beneficial for all seven routes.

Severance

- 3.4.110. Severance is concerned with the physical separation of people from the facilities and services they use, or would use, within their community. Severance is important where infrastructure and / or traffic using it presents a barrier to safe pedestrian movement. According to the guidance the appraisal of severance is concerned only with pedestrians, and not with the movement of cyclists, car users, or other user groups. Severance is classified according to hindrance of movement and the numbers of people affected.
- 3.4.111. When considering the SLR in isolation, all seven routes would increase severance significantly, but for a very low number of residents located in rural communities. Scheme mitigation associated with Grafton Lane, other minor lanes and a number of PRowWs, however, would have the effect of reducing/ minimising this severance. The severance experienced by a few, as a direct result of the SLR infrastructure, should be more than compensated by the reduction in severance resulting from reduced volumes of traffic on Belmont Road and in the Holme Lacy Road area.
- 3.4.112. The net assessment of severance for the SLR was slightly beneficial, with no material difference in impact between the seven routes.

Social Assessment Conclusion

- 3.4.113. There is little difference between the routes in respect of the social impact appraisal criteria. The marginal differences between the seven routes would be in relation to:
- The number and nature of PRowWs and minor lanes affected;
 - The complexity and scale of the junctions connecting the SLR with the A465 and B4349; and
 - The extent of earthworks and cuttings associated with the route.
- 3.4.114. In conclusion, Routes SC2, SC2A, SC8, SC8A and SC9 would be associated with slightly more social benefits than Routes SC5 and SC7. It should be stated, however, that the identified differences between all seven routes were slight.

SUMMARY OF APPRAISAL

- 3.4.115. The results of the appraisal are summarised in Table 8 below. ASTs comparing the different SLR routes are contained in Appendix E. Route SC2 was assessed to have the highest overall AST score of 1.5. Route SC5 was assessed to have the lowest score of -1.5.

Table 8 – Appraisal summary of SLR routes

Appraisal Criteria	SC2	SC2A	SC5	SC7	SC8	SC8A	SC9
Economy							
Business users and transport providers	1	1	1	1	1	1	1
Reliability impact on business users	1	1	1	1	1	1	1
Regeneration	3	3	3	3	3	3	3
Wider Impacts	2	2	2	2	2	2	2
Environment							
Noise	-3	-3	-3	-3	-3	-3	-3
Air quality (Local)	-2	-2	-2	-2	-2	-2	-2
Greenhouse gases	-1	-1	-1	-1	-1	-1	-1
Landscape/townscape	-2	-2	-3	-2	-2	-2	-3
Historic environment	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-2
Biodiversity	-2	-2	-2	-1.5	-2	-2	-2
Water environment	-1	-1	-1	-1	-1	-1	-1
Social							
Commuting and other users	1	1	1	1	1	1	1
Reliability impact on commuting and other users	1	1	1	1	1	1	1
Physical activity	-2	-2	-2	-2	-2	-2	-2
Journey quality	2	2	1	1	2	2	2
Personal Injury Collisions (Accidents)	0	0	0	0	0	0	0
Security	1	1	1	1	1	1	1
Access to services	0	0	0	0	0	0	0
Affordability	1	1	1	1	1	1	1
Severance	1	1	1	1	1	1	1
Option and non-use values	0	0	0	0	0	0	0
Public Accounts							
Cost to broad transport budget	~ £16-20M	~ £21-£25M	~ £21-£25M	~ £21-£25M	~£17.9M-£26.5M	~£25.4M-£38.6M	~£17.2M-£25.3M
	2	1	1	1	1.5	0	2
Indirect tax revenues	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Score	1.5	0.5	-1.5	0	1	-0.5	0

*Note: The scores are made up of criteria under the main headings of Economy, Environment, Social and Public Accounts. The scores range from -3 (Large Adverse), to 0 (Neutral), to +3 (Large Beneficial). For some routes the historic environment and biodiversity appraisals identified a *slight to moderate adverse* impact and where this occurred the summary AST tables accord a value of 1.5 as appropriate.

Route SC2

3.4.116. This route would provide a range of benefits to the economy, for instance reducing congestion and improving journey times, as well as enhancing accessibility to employment opportunities at the HEZ. However, there would be adverse impacts on the environment, including increasing road traffic noise and reducing air quality, with impacts upon woodlands, and the impact on the landscape and biodiversity. There would be a range of social benefits, however, including improvements to journey quality, making the roads safer and reducing the number of collisions.

Route SC2A

3.4.117. As with route SC2, this route would have many social and economic benefits, with a reduction in congestion, improvements to journey enjoyment, and an increase in accessibility to employment and services. However, there would be some negative impacts on the environment, including increasing road traffic noise and reducing air quality, with impacts upon woodlands and to the landscape and biodiversity.

Route SC5

3.4.118. This route would have a range of social benefits, as well as benefits to the economy. It would reduce congestion and improve journey times, as well as enhance accessibility to services and employment opportunities. There would be some negative impacts to the environment, including increasing road traffic noise and reducing air quality. This route would also have a significant impact to the landscape, as it would involve the loss of woodland, and cause severe damage to key characteristics.

Route SC7

3.4.119. This route would have many benefits, for instance reducing congestion and improving journey reliability, as well as enhancing accessibility to services and employment. Furthermore, Route SC7 was considered the most ecologically preferable, with minimal impact on biodiversity and habitats. There would be some negative impacts to the environment, however, including increasing road traffic noise and reducing air quality. As with the other routes, there would be a range of social benefits, including making roads safer and reducing the number of collisions. Other routes, however, would see greater benefits to journey quality by reducing driver stress.

Route SC8

3.4.120. This route was assessed as having a range of social and economic benefits, reducing congestion and improvements to journey reliability. There would be several social benefits, including improvements to journey quality, making the roads safer and reducing the number of collisions. It would also improve access to services. However, it was assessed as having some negative impacts to the environment, including increasing road traffic noise and reducing air quality, with impacts upon woodlands and to the landscape and biodiversity.

Route SC8A

3.4.121. This route was assessed as having many social benefits, as well as benefits to the economy. It would improve journey times, enhance accessibility to services and employment opportunities, as well as reducing congestion. There would be some negative impacts to the environment, including increasing road traffic noise and reducing air quality. This route would have the greatest cost to the transport budget.

Route SC9

3.4.122. This route was assessed as having many social benefits, as well as benefits to the economy. It would reduce congestion, enhance accessibility to services and employment opportunities and improve journey times. There would be some negative impacts to the landscape and historic environment, as well on air quality.

3.5. PUBLIC CONSULTATION

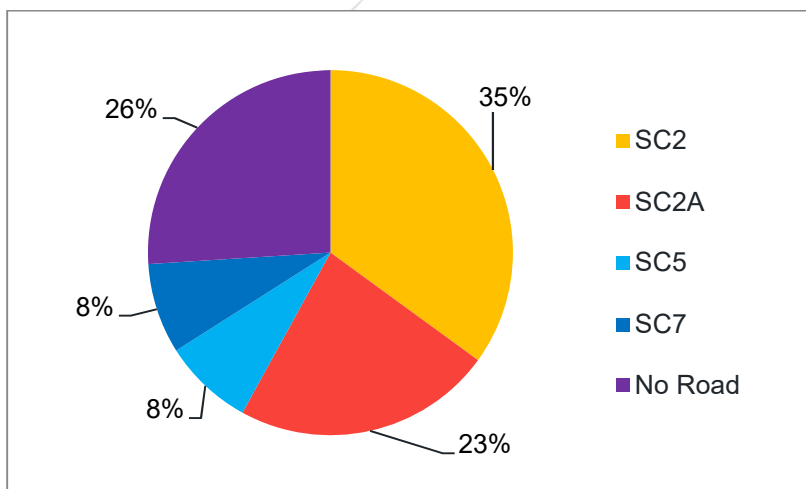
PUBLIC AND STAKEHOLDER ACCEPTABILITY

3.5.1. This section considers the likelihood that a proposal would be accepted by the public and stakeholders and is based on the results of the public consultation. The information is taken from the SWTP Report on Consultation, dated November 2014, which formed a background paper to the November 2014 Herefordshire Council Cabinet meeting⁸.

PUBLIC CONSULTATION

- 3.5.2. The study included public consultation to obtain public opinion on the routes developed as part of the SWTP. The possible improvements to encourage sustainable travel were included in the consultation, as well as the four initial routes for the SLR (SC2, SC2A, SC5, and SC7).
- 3.5.3. The consultation period covered a six-week period from the 1 July 2014 to 8 August 2014. A total of 199 people attended a public exhibition at the Three Counties Hotel, Hereford, held between the 30 June and 3 July 2014. Additional exhibitions were held at Belmont Library on the 15 July 2014 and Hereford City Library on the 18 July 2014.
- 3.5.4. 231 questionnaires were received in response to the consultation, as well as 24 letters and submissions. In general, the responses to questions relating to the solutions for solving the transportation problems in the area demonstrated that the public felt that a SLR would be the best solution, with a combination of more cycling infrastructure and greater public transport provision.
- 3.5.5. Respondents were asked to select a preferred route and the results from 404 respondents are shown in Figure 4 below.

Figure 4 – Preferred route by percentage



⁸ <http://councillors.herefordshire.gov.uk/ieListDocuments.aspx?CId=251&MId=5062&Ver=4>

- 3.5.6. The responses from the questionnaires identified that the greatest preference shown by the public was for route SC2. This route was also supported by a 73-name petition, and 'scored' highly in the appraisal of the SLR routes.
- 3.5.7. The alternative 'No Road' response received the second highest number of positive responses.
- 3.5.8. Route SC2A was also well received. This route would follow the same alignment as SC2, only differing by going under the railway line.
- 3.5.9. The two SLR routes that would have a more northerly alignment, SC5 and SC7, received the lowest amount of support from the public.
- 3.5.10. As well as the questionnaire responses, letters and emails provided additional feedback from the public and other stakeholders. Some of these debated which route choice would affect residents the most, with more responses concluding that the alignments for SC2 and SC2A would affect fewer properties.
- 3.5.11. The responses from local residents also included requests to re-consider the proposed alignments in relation to their land and properties. Opinions were expressed that perhaps additional routes could be designed to achieve a route that would affect fewer residents.
- 3.5.12. The four routes with northerly alignments (SC1, SC3, SC4 and SC6) were not consulted on as they had previously been discounted, mainly on environmental grounds, along with the significant cost to mitigate this impact. The main identified environmental constraint would be the need to cross the ancient semi-natural woodland located to the north, Newton Coppice and Hayleasow Wood. However, consultation responses put forward various suggestions to amend the shortlisted routes, or include additional alternative routes. This led to three additional routes – SC8, SC8A, and SC9 – being deemed to be viable routes and appraised to the same level of detail as the four initial routes.

STAKEHOLDER VIEWS

- 3.5.13. Hereford City Council provided feedback on the proposals, and commented that improving facilities for cyclists generally is highly desirable. It recognised that there may be some difficulties installing a cycle lane on the length of the Belmont Road, given the narrow width at points. If safe separation can be achieved without increasing congestion on an over-crowded road, then the Council would support such a plan. It was acknowledged that local Councillors regard congestion in Belmont Road as a real concern, pointing out that this was echoed in the community consultation responses.
- 3.5.14. The Highways Agency (now Highways England) provided its views in writing. It acknowledged the commitment of £34.98 million towards the SWTP from the Marches Local Enterprise Partnership single growth fund settlement. It noted that the SWTP would provide a series of complementary transport measures, which was welcomed in principle. It supported the proposed improvements to walking and cycling on the A465, but wanted to understand the traffic implications to the A49 if a bus priority measure were to be included. The Agency noted that the route alignments appeared to reflect the need to consider local topography. It gave in principle support to the location of the junction with the A49 at the roundabout with the Rotherwas Access Road, provided assessments of capacity are undertaken.

- 3.5.15. English Heritage (now Historic England) provided its views in writing. They outlined that the organisation was not directly consulted on the earlier consultation of (at that time) four routes. It acknowledged that there are a number of heritage assets, both designated and undesignated, that may be affected by the routes. It outlined that a more detailed assessment of the harm to the significance of the heritage assets, including their settings, would be required.
- 3.5.16. Jesse Norman MP provided a written response to the consultation in his capacity as Member of Parliament for Hereford and South Herefordshire. He welcomed the objectives of the SWTP, and was broadly in favour of the measures proposed to improve accessibility and reduce congestion in Hereford. He however, had some caveats and concerns, including the need for costings and detailed traffic modelling to appraise the effect of the SLR. He wished to see a detailed cost-benefit analysis before approval. He also recognised the need for sensitivity towards the environment and local residents, and urged that their concerns were understood.

3.6. IDENTIFICATION OF PREFERRED ROUTE

- 3.6.1. The seven routes were assessed in terms of design considerations, economic outcomes, impact on the environment, and the social implications of each route on the basis of the information which was available at the time of the assessment. The performance of these routes within the appraisal was mixed.
- 3.6.2. The design assessment concluded that routes SC2 and SC8 performed better than the other routes. Some of the reasons for this, as discussed in the previous sections of this report, include that they would follow the ground profile (except where routes would pass over the railway and under Haywood Lane), removed the potential for groundwater/drainage issues, would have a 60mph design speed throughout, and would accord with Network Rail's preference for a design passing over the railway.
- 3.6.3. In relation to the scheme costs, route SC8A would be the most expensive of the seven routes whilst Route SC2 would be the cheapest.
- 3.6.4. All seven routes performed well against economic criteria, by providing significant regeneration and wider economic impacts. There was not expected to be a significant difference between the routes with regards to the economic benefits, as all seven were anticipated to reduce congestion along the A465, and provide access to the HEZ.
- 3.6.5. All seven routes performed negatively against environment criteria. Route SC7 performed the least worst of the routes as it was considered the most preferable in ecological terms, with minimal impacts on biodiversity and habitats. Route SC9 performed the worst due to its significant impact upon the landscape.
- 3.6.6. All the routes performed well in respect to the social impacts, with marginal differences between the seven routes. Routes SC2, SC2A, SC8, SC8A and SC9 demonstrate slightly more social benefits than Routes SC5 and SC7.
- 3.6.7. Overall, route SC2 had the highest score for the appraisal although SC8 also scored highly within the appraisal. Both of these performed the best of the seven routes against the design criteria.

- 3.6.8. The results of the appraisal demonstrated that all of the routes are considered to provide many benefits to the economy, reduce congestion, and improve journey times. All of the routes would cross greenfield land and have a negative impact to the environment, including increasing traffic noise, reducing air quality, and impacts to the landscape.
- 3.6.9. Based on the level of design and information available at the time, the appraisal work demonstrated that route SC2 was the best performing route within the technical assessment. This route also received the highest level of support as a proportion of feedback received of the initial four routes taken to public consultation. This led to route SC2 being identified as the preferred route for the SLR.



4. SOUTHERN LINK ROAD – REFINEMENT OF PREFERRED ROUTE

4.1. INTRODUCTION

4.1.1. Following the identification of the preferred route, described in the previous chapter, additional design work was carried out to refine the SLR preferred route (SC2). The work occurred in two key phases, as follows:

- Subsequent to the identification of the preferred route (November 2014) through to grant of planning permission (July 2016), including identification of measures to mitigate environmental impacts; and
- Changes to the design since grant of planning permission (July 2016 to date).

4.2. CHANGES AT PLANNING APPLICATION STAGE

4.2.1. The planning application for a *new single carriageway road (Southern Link Road) and associated works*⁹ was granted planning permission, subject to conditions, on 18 July 2016. Preparatory work for the planning application led to two major changes to the design - the introduction of an underpass at the point where the SLR crosses Grafton Lane, in place of the previous design for an at-grade crossing, and confirming the layout of the Clehonger Link and associated details. Information on these design changes was set out in documents submitted as part of the planning application, including the Transport Assessment, Environmental Statement, Planning Statement, as well as a suite of drawings. The relevant design changes are discussed in turn below.

CLEHONGER LINK

- 4.2.2. The preferred route included a new direct link from the A465 to the B4349 Clehonger Road, passing east of the property known as Pykeways. During the preparation of the planning application documents this section of the scheme became known as the Clehonger Link.
- 4.2.3. The Clehonger Link was designed to a 70kph/40mph design speed. In similarity to the SLR the alignment curvature, visibility and super-elevation were designed in full compliance with the current standards set out in DMRB document TD/9/93. Hard strips on either side of the carriageway – which are a proposed feature of the SLR – were omitted from the Clehonger Link design.
- 4.2.4. Application documents confirmed that the Clehonger Link would connect at its eastern end to a four-arm roundabout junction with the A465 and SLR and curve westwards to join the existing B4349 alignment between Clehonger Court and Dunan Lodge. On completion all vehicular traffic to and from the direction of Clehonger on the B4349 would travel via the new roundabout and the section of Clehonger Road east of Clehonger Court would, in terms of vehicular access, become a cul-de-sac. Vehicular access to properties on this section of Clehonger Road would be solely via the existing A465/B4349 junction.

⁹ Application reference 151314

https://www.herefordshire.gov.uk/info/200142/planning_services/planning_application_search/details?id=151314&search=southern%20link%20road#tab1

- 4.2.5. Application documents outlined the intention for Herefordshire Council to make an order prohibiting motor vehicles from using the section of the existing B4349 east of the Clehonger Link. The prohibition of motor vehicles order would relate to a section of highway from a point where new road diverges away from the existing alignment at its western end (near Clehonger Court) to a point just west of the cottages named 1-2 Forest View. Provision for pedestrians, cyclists and equestrians would be maintained on this section of highway to connect into and out of the cul-de-sac section of Clehonger Road. Barriers or gates would be installed at each end to prevent unauthorised vehicular access.
- 4.2.6. The Clehonger Link would also sever the northern end of the minor public highway connecting from the B4349 at Clehonger Court and terminating at the A465 (unclassified road reference U73200). The Transport Assessment stated that the section of the lane from just north of the property named Pykeways would be stopped up to all traffic where it crosses the route of the Clehonger Link. A diversionary route was designed for these user groups from the southern end of the section of the U73200 proposed to be stopped up to enable a crossing the Clehonger Link further west.
- 4.2.7. The closure of the existing eastern section of the B4349 to through traffic will require the bus services which use the road to be diverted onto the Clehonger Link and the pair of bus stops to be relocated. Bus services will continue to serve the stops to the east of the A465/B4349 junction.

STRUCTURES ON THE SLR

- 4.2.8. The design assessment anticipated the need for two structures along the route – one to carry the SLR over the railway line, and a second to carry Haywood Lane across the proposed road. At that time Grafton Lane was to be stopped up to motor vehicles at the point where it was bisected by the SLR, with an at-grade crossing for non-motorised users.
- 4.2.9. Preparatory work for the planning application has led to a further six structures being incorporated into the design. Each structure is briefly discussed in the paragraphs below.

Grafton Lane

- 4.2.10. Preparatory work for the planning application found that an underpass would be required where the SLR crossed Grafton Lane to maintain routes for the passage of protected bat species which would otherwise be at risk of collision with vehicles using the new road.
- 4.2.11. Planning application drawings show the underpass design (structure reference SO2) as 5m wide and 5.3m high. These dimensions were chosen to enable through movements by vehicles, by cycles and those on foot to be retained along Grafton Lane, and would avoid the need for at-grade crossings of the SLR by active travellers on Grafton Lane.

Railway Overbridge

- 4.2.12. The planning application documents proposed that the railway overbridge would be a steel composite bridge 32.9m in length and 14.3m in width (between parapets) with earthworks on both road approaches. The bridge was designed to provide 5.1m clearance over rail level. The planning application stated that provision would be made for a 1.8m high vehicle containment parapet, with 3.0m minimum width access / maintenance tracks on the northern side of the railway and a 5.0m minimum width access / maintenance track on the southern side to enable agricultural vehicles to pass between the otherwise severed parts of the fields.

Haywood Lane Bridge

- 4.2.13. The planning application documents proposed that the Haywood Lane overbridge would be a single span steel concrete composite bridge of 41.5m in length and 6.0m wide (between parapets). The proposed bridge would give 5.3m clearance above the carriageway level. No localised raising of Haywood Lane was proposed.

Other structures

- 4.2.14. Preparatory work for the planning application led to the following additional structures being incorporated into the design:
- Three culverts to carry the road over watercourses. Two of the culverts, Grafton Wood and Newton Brook Culverts (structure references SO1 and SO7) were designed as 1.2m in diameter and one (Withy Brook Culvert; structure reference SO3) as 1.5m in diameter; and
 - Two underpasses 4m wide by 4m high to allow for the passage of bats underneath the new road – Central Underpass (reference SO4) and Newton Brook Underpass (SO8).
- 4.2.15. The planning application drawings and documents confirmed that water runoff would discharge into existing ditches and/or into Newton Brook and Withy Brook.

SLR ALIGNMENT

- 4.2.16. The SLR was designed to a 100kph/62mph design speed, to accord with the 60mph national speed limit for single carriageway roads. The alignment was designed in accordance with the details set out in DMRB document TD/9/93 entitled Highway Link Design to ensure that standards of curvature, visibility and super-elevation are suitable for the anticipated vehicle speeds on the road.
- 4.2.17. The Transport Assessment which accompanied the planning application identified that there would be very little demand for a cycleway or footway adjacent to, or along the length of, the SLR or the Clehonger Link. As such, neither were included as part of the planning application submission design.

PUBLIC RIGHTS OF WAY

- 4.2.18. The routes of three PRow would be severed by the SLR and one by the Clehonger Link. The TA submitted with the planning application described the proposed diversions and crossings to be put in place to retain connections and explained that a Side Roads Order would be made for these under section 14 of the Highways Act 1980. The proposals are summarised below:
- Public footpath GF3 (A49 to Grafton Lane) – northern section of path diverted along southern boundary of SLR to new termination point on Grafton Lane near the property named The Green. Existing northern section of path would be extinguished. New public path would be created north of the SLR as shorter alternative to walking on the public highway (Grafton Lane) to connect back to existing path start point;
 - Public footpath HA7 (Merry Hill Lane to Haywood Lane) – section of path diverted to follow the proposed farm accommodation track where the SLR crosses the railway line via an overbridge;
 - Public footpath HA3 (Haywood Lane to A465) – public footpath diverted to avoid the proposed attenuation pond and make use of the Newton Brook Underpass before running westwards to reach public bridleway HA6, which connects the footpath to the A465 adjacent to Golden Post Cottage. The northern section of the existing footpath (north of grid reference SO 479 372) would be extinguished; and
 - Public footpath CH9 (B4349 to A465) – an at-grade crossing of the Clehonger Link would be provided at the point where public footpath CH9 meets the new road, at a location where at least 90m visibility of approaching vehicles is available. The northern end of the U73200 would be stopped up to all traffic from a point just to the north of the entrance to Pykeways. In addition, a path for equestrians, pedestrians and cyclists would run along the southern boundary of the Clehonger Link to connect the stub of severed U73200 with the at-grade crossing (where footpath CH9 reaches the new road).

MAINTENANCE AND AGRICULTURAL ACCESS

- 4.2.19. The design assessment found no requirement within the design guidance to provide a layby on a road with the length of the SLR. However, the designs for the planning application included three maintenance laybys to enable maintenance activities to take place. These would be located as follows:
- North-west of Grafton Wood and adjacent to the eastbound carriageway, from which an access track would lead to a nearby flood attenuation and water treatment pond;
 - A short distance to the west of the railway overbridge adjacent to the eastbound carriageway; and
 - Adjacent to the flood attenuation and water treatment pond south of Newton Brook.
- 4.2.20. Provision for agricultural accesses were agreed and finalised at the planning application stage.

ROAD LIGHTING

- 4.2.21. No refinements were proposed to the location of road lighting during the preparation of the planning application documents.

LANDSCAPE DESIGN

- 4.2.22. Some of the proposed scheme would be elevated above adjacent ground levels within a generally open, undulating landscape. To merge the proposed road with the surrounding landform and minimise intrusion into views, the planning application documents proposed that the southern embankment faces either side of the railway bridge be eased to a 1 in 4 gradient.
- 4.2.23. A series of measures were proposed to fulfil nature conservation and biodiversity or landscape integration functions. The key elements of this (in terms of land area) would be located as follows:
- South of the proposed SLR, in the field to the east of Grafton Wood and west of the A49 where an area of new woodland and woodland edge species would be planted and a new pond formed, with associated plants; and
 - Due south of the railway bridge, adjacent to the SLR embankment, where woodland edge species would be planted and a new pond formed, with associated plants.
- 4.2.24. The remainder of the SLR and Clehonger Link would be planted to create a range of landscape elements, including linear belts of trees, scrub and shrubs, some of which would also have visual amenity and visual screening functions.
- 4.2.25. The extent of proposed tree and shrub planting was intended to more than offset those that would be lost as part of the scheme.

4.3. CHANGES AFTER GRANT OF PLANNING PERMISSION

- 4.3.1. Following the grant of planning permission for the SLR and Clehonger Link, subject to conditions, a number of modifications were identified which changed the design proposals, in particular to the alignment of the SLR and its associated structures. The relevant design changes are highlighted in turn below.

SLR ALIGNMENT, STRUCTURES AND EARTHWORKS

- 4.3.2. Following an engineering assessment of the scheme proposals, the following significant changes were made to the design:
- Railway Bridge (SO5) – the SLR mainline carriageway and its approaches to the bridge were raised by approximately 0.5m to give additional clearance between the railway and the structure;
 - Haywood Lane overbridge (SO6) – the SLR mainline carriageway was lowered by approximately 0.3m to give additional clearance between Haywood Lane and the structure;
 - Newton Brook Underpass (SO8) – structure was widened by 0.5m to 4.5m and made 1m taller to 5m to enable use by agricultural vehicles. The mainline carriageway was raised by approximately 0.5m to accommodate the change to the structure; and
 - Grafton Lane Underpass (SO2) – Grafton Lane was lowered at the point where it would be crossed the SLR to give the required clearance for vehicles using the lane. In addition, reinforced earth slopes were introduced on the south-western side of the Grafton Lane underpass and the wingwall lengthened;

4.3.3. In addition, the following additional changes of note were made to the design:

- Verges were widened near Newton Brook Underpass adjacent to the eastbound carriageway and on the Clehonger Link north of the A465 roundabout to improve visibility;
- The embankment slopes were extended between the Withy Brook underpass and Railway Bridge;
- The verges to the mainline carriageway were widened on the approach to the railway bridge from 2.5m to 3.5m, and earthworks revised to incorporate a more robust vehicle restraint system and parapet structure;
- The earthworks on the south-western embankment to the railway bridge were reinforced to accommodate a proposed maintenance track;
- An additional vehicle access track and turning head were included due south of railway bridge; and
- A turning head was included in the vicinity of Pykeways south of the Clehonger Link.

PUBLIC RIGHTS OF WAY / NON-MOTORISED USERS

4.3.4. Proposals for active travellers along the section of Clehonger Road east of the Clehonger Link have been confirmed since the grant of planning permission. A 3m-wide paved route would be created for use by pedestrians, cyclists and equestrians along the section of Clehonger Road between Clehonger Court and Forest View. The remainder of the former carriageway width would be broken up, with the hedgeline moved north and a strip of former highway transferred to agricultural use.

MAINTENANCE AND AGRICULTURAL ACCESS

4.3.5. A total of four direct accesses will be provided on the SLR; two for maintenance and two for agricultural access. A further four maintenance access points are to be provided from side roads. Several agricultural accesses from side roads and the existing highway network are to be provided following negotiation with landowners.

DRAINAGE AND ECOLOGY

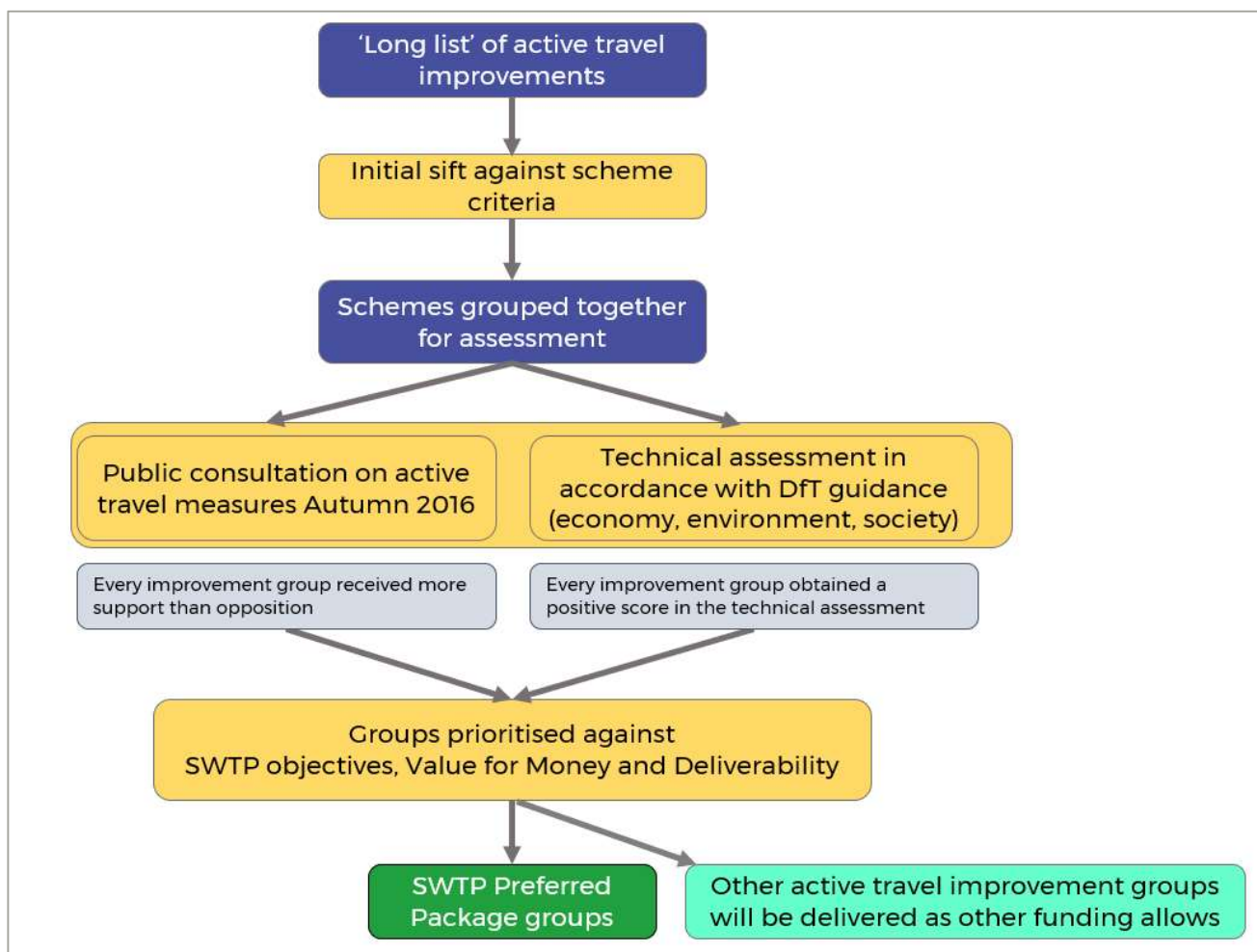
4.3.6. Drainage assessments post planning permission enabled the two proposed attenuation ponds to be reduced in size. A third attenuation pond was introduced south of the A465 roundabout to enable drainage runs to be installed at shallower depths and reduce depths of trench excavations during construction. A fourth pond formed part of the subject of the separate planning application for the accommodation works (P182314/CD3), which was submitted 2nd July 2018 and granted on 2nd October 2018. It will be located west of Grafton Lane and to the south of the proposed route, in the vicinity of the property known as "The Green". Introducing this pond will remove some of the in-pipe, buried, flood storage requirements and will simplify future maintenance requirements.

5. ACTIVE TRAVEL MEASURES – SCHEME DEVELOPMENT

5.1. INTRODUCTION

- 5.1.1. As documented in the OAR, a range of options were identified which had the potential to address the transport-related problems in the study area. Following an initial sift to discard poorly performing options the remaining options were packaged together into three options. An active travel measures option was created which combined four previous separate options – 20mph zones, bus priority, pedestrian infrastructure and cycling infrastructure. Use of the Option Assessment Framework found that a package combining two of the remaining options – SLR and active travel measures – would contribute to the delivery of the study objectives, with each performing better against different assessment areas. As a consequence these two better performing options were combined to establish an option which performed well across a majority of the assessment areas, and this preferred option was then taken forward for further refinement.
- 5.1.2. The process outlined in Figure 5 describes the process followed to refine the active travel measures. The methodology accords with Transport Appraisal Process Stage 1 steps 5 (*generate options*), 6 (*undertake initial sift*) and 7 (*develop assess potential options / undertake public consultation*). More information on the methodology and the criteria applied at each step are set in the rest of the chapter.

Figure 5 - Option refinement process – key steps



5.2. SCHEME GENERATION AND INITIAL SIFTING

SCHEME GENERATION

5.2.1. The following means were used to identify possible active travel schemes:

- Using the review and analysis of problems;
- Analysis of existing and future short distance car journeys;
- A site visit in July 2015 to better understand existing conditions for walking and cycling in South Wye;
- Policies and plans, including the Local Transport Plan, draft Hereford Cycle Strategy and (at the time) draft Core Strategy; and
- Discussions with Herefordshire Council officers.

5.2.2. The schedule of possible schemes which were identified is set out in Appendix F, along with a short description. As explained in the OAR, whilst revenue expenditure measures can form part of the wider SWTP strategy, the major transport scheme funding (which requires the submission of a Business Case, and which the OAR forms a component part) is for capital expenditure. On that basis only capital expenditure schemes were considered further through the assessment process.

INITIAL SIFTING

5.2.3. A process of initial sifting was undertaken to discard those schemes which would not meet the criteria set out in Step 6 of the guidance (*clearly fail to meet key objectives identified for intervention, do not fit with existing programmes and strategies, or are unlikely to be deliverable, technically sound, financially affordable or acceptable to stakeholders and the public*). Examples included:

- *Improve crossing of the B4224 Eign Road at the railway bridge* (outside of study area); and
- *Widening existing footway on Wye Bridge for shared foot / cycleway* (works unlikely to be deliverable on ancient monument).

5.2.4. The outcome of the initial sift and the rationale behind the decision-making is set out in Appendix F.

5.3. GROUPING FOR CONSULTATION AND TECHNICAL ASSESSMENT

5.3.1. Following the initial sift, schemes located in the same area or with the same aim (e.g. access to the HEZ) were grouped together. These groups were to form the basis for the technical assessment of the schemes, including estimating costs, and the public consultation. Through the rest of the report these are referred to as groups of possible improvements (or improvement groups), in line with the phrase used in the public consultation.

5.3.2. Further refinement took place to ensure that the groups of possible improvements presented to the public were logical and coherent, and took on board relevant advice from stakeholders, such as the HEZ Executive Board.

5.3.3. The resulting nine groups of possible improvements were as follows:

- (1) 20mph residential areas;
- (2) Belmont Road bus priority measures;
- (3) Belmont Road walking and cycling improvements;
- (4) Belmont Road weight restriction;
- (5) Belmont Road (West) walking and cycling improvements;
- (6) Better walking and cycling routes to HEZ;
- (7) Hoarwithy Road and Hinton Road walking and cycling links;
- (8) Holme Lacy Road - further walking and cycling improvements; and
- (9) Walnut Tree Avenue / Hunderton Road traffic reduction.

5.3.4. A short description of each improvement group is set out in Table 9, and a table explaining the refinements which were made to the groups of possible improvements is contained in Appendix G. The public exhibition boards illustrating the groups of possible improvements are contained in Appendix H.

5.3.5. It was determined that some of the improvement groups might rely in part on the implementation of other groups to create a coherent package. On that basis three variants of the groups were also assessed. These are described in Table 9.

RELATIONSHIP TO OBJECTIVES

- 5.3.6. As documented in the OAR, objectives for the SWTP were developed from:
- A review of national, regional and local policies and strategies;
 - A review of evidence of current and likely future conditions (including those identified by the various technical studies undertaken in respect of Hereford's transport network);
 - Identification of opportunities and constraints that impact the performance of the transport network;
 - Consideration of the causes of the problems experienced by transport users and local residents; and
 - Engagement with stakeholders.
- 5.3.7. Table 10 sets out how each group of possible improvements meets the objectives. The assessment assumes the SLR is in place and is based on the assumed long-term impacts these interventions have the potential to achieve, rather than more detailed analysis of immediate scheme impacts based on existing travel behaviours.

Table 9 - Description of groups of possible improvements

Group of possible improvements	Description of key features	Benefits
1) 20mph residential areas	<ul style="list-style-type: none"> Area-wide 20mph limit on all Herefordshire Council residential roads in South Wye, with 20mph limit signs at entry points and repeater signs Amending junction designs, focused on the widest bellmouth junctions on the Hunderton Estate west of Great Western Way and north of Belmont Road 	<ul style="list-style-type: none"> More walking and cycling friendly streets Better connected local communities Quieter streets Safer journeys for all road users Healthier and happier journeys to school
2) Belmont Road bus priority measures	<ul style="list-style-type: none"> Inbound bus lane on the A465 (Hunderton Road to Asda Roundabout) New shared use footway/cycleway on A465 Belmont Road near Belmont Avenue - Upgrade existing crossing to toucan 	<ul style="list-style-type: none"> Improved bus journey times to the city centre Encourages inexperienced and returning cyclists Safer journeys to the city centre Healthier and happier journeys Easier to cross Belmont Road
3) Belmont Road walking and cycling improvements	<ul style="list-style-type: none"> Cycle infrastructure along section of Belmont Road from Tesco to Walnut Tree Avenue Improvement of existing pelican crossing of Belmont Road by The Oval Improved north-south crossings for pedestrians and cyclists at Tesco Roundabout and improved approach route from Eastholme Avenue Upgrade Newton Brook path to shared use footway/cycleway, provide toucan crossing on Belmont Road and create new connecting shared use footway/cycleway to Goodrich Grove south of the A465 Streetscape improvements including avenue tree planting and narrowing of the Belmont Road carriageway Improved links to Great Western Way 	<ul style="list-style-type: none"> Improved environment and more quality space for walking and cycling Easier to cross Belmont Road and side road junctions Easier and safer walking and cycling routes at Tesco Roundabout Better connected local communities on either side of Belmont Road Safer journeys to school Healthier and happier journeys to school Improved links to existing walking and cycling routes, such as Great Western Way Improved links to bus stops Encourages inexperienced and returning cyclists
3A) Belmont Road walking and cycling improvements	<p>As per group 3, but with the addition of:</p> <ul style="list-style-type: none"> A465 Belmont Road at Walnut Tree Avenue and Hunderton Road junctions – raised table covering both junctions and new toucan crossing of Belmont Road New shared use footway/cycleway on Belmont Road between Hunderton Road and Walnut Tree Avenue 	<ul style="list-style-type: none"> Improved links to existing walking and cycling routes, such as Great Western Way Improved links to bus stops Encourages inexperienced and returning cyclists
4) Belmont Road weight restriction	<ul style="list-style-type: none"> Weight restriction Traffic Regulation Order on Belmont Road 	<ul style="list-style-type: none"> Quieter streets Healthier and happier journeys to work and school

Group of possible improvements	Description of key features	Benefits
5) Belmont Road (West) walking and cycling improvements	<ul style="list-style-type: none"> ▪ New shared use footway/ cycleway on northern side of A465 ▪ Completion of shared use footway/ cycleway between Ruckhall Lane & Dorchester Way (west of Canterbury Close) ▪ Toucan crossing on A465 between Ruckhall Lane and Haywood Lane ▪ Extend 30mph limit on A465 west from Tesco to Haywood Lane ▪ Pedestrian refuge on A465 east of Clehonger Road turn ▪ Advisory cycle lanes over narrow bridge at Belmont Pool ▪ Improved links to existing paths near Belmont Pool ▪ Raised tables on Haywood Lane and Ruckhall Lane to facilitate easier pedestrian crossing 	<ul style="list-style-type: none"> ▪ New and improved walking and cycling and routes ▪ Better connected local communities ▪ Safer journeys for all ▪ Cleaner air quality ▪ Quieter streets ▪ Easier to cross Belmont Road ▪ Improved links to bus stops ▪ Encourages new and returning cyclists
6) Better walking and cycling routes to Hereford Enterprise Zone	<ul style="list-style-type: none"> ▪ New off-road shared use footway/cycleway between Hereford Academy and Ross Road adjacent to Marlbrook Road ▪ Improve shared use footway/cycleway access to Great Western Way from Ethelstan Crescent and Brampton Road ▪ Shared use footway/cycleway under railway bridge with associated one way priority working or shuttle traffic signals ▪ Improved crossing of Ross Road (subject to third party agreement with Highways England) ▪ Lighting, signing and vegetation clearance on Watery Lane and Lower Bullingham Lane ▪ On-road markings ▪ Route signage and removal of barriers and posts 	<ul style="list-style-type: none"> ▪ Tackling barriers to walking and cycling ▪ Opening up new links and opportunities for walking and cycling ▪ Safer journeys to school and work ▪ Healthier and happier journeys to school and work ▪ Encourages inexperienced and returning cyclists
6A) Better walking and cycling routes to Hereford Enterprise Zone	<p>As per group 6, but without:</p> <ul style="list-style-type: none"> ▪ Shared use footway/cycleway under railway bridge with associated one way priority working or shuttle traffic signals 	
7) Hoarwithy Road and Hinton Road walking and cycling links	<ul style="list-style-type: none"> ▪ Improved routes across Bishop's Meadow from swimming pool to Hinton Road ▪ Convert Hinton Road zebra crossing to toucan crossing ▪ Better footway/cycleway connection from Bishop's Meadow with/onto Hinton Road ▪ Improvements to cycle infrastructure on Hoarwithy Road between Saxon Gate & Holme Lacy Road ▪ Shared use footway/cycleway between Grafton Depot park and choose site and Bullingham Lane ▪ Raised table on Hoarwithy Road near Orchard Avenue to facilitate easier pedestrian crossings 	<ul style="list-style-type: none"> ▪ Connecting communities with the city and HEZ ▪ Better local walking and cycling connections ▪ Easier to cross Hoarwithy Road and Hinton Road ▪ Opening up new links and opportunities for walking and cycling ▪ Encourages inexperienced and returning cyclists ▪ Safer journeys to school and work ▪ Encouraging shift from car to active travel modes

Group of possible improvements	Description of key features	Benefits
8) Holme Lacy Road – further walking and cycling improvements	<ul style="list-style-type: none"> ▪ New shared use footway / cycleway on northern side of Holme Lacy Road between railway bridge and eastern end of existing scheme at Co-op ▪ Block paved table tops constructed at junctions to facilitate easier pedestrian and cycle crossings of Holme Lacy Road ▪ Shared use footway/ cycleway under railway bridge with associated one way priority working or shuttle traffic signals for motor vehicles ▪ Holme Lacy Road westbound approach to A49 traffic signals - carriageway narrowed to one lane to facilitate shared use footway / cycleway (subject to third party agreement and partnership funding by HE & HC) ▪ A49 / Holme Lacy Road junction – toucan crossings to facilitate safer crossing of Ross Road (subject to third party agreement and partnership funding by HE & HC) 	<ul style="list-style-type: none"> ▪ Better connected local communities ▪ Joining up recent improvements on Holme Lacy Road ▪ Safer journeys to school and work ▪ Improved connections to the HEZ ▪ Encourages inexperienced and returning cyclists ▪ Opening up new links and opportunities for walking and cycling
8A) Holme Lacy Road – further walking and cycling improvements	<p>As per group 8, but without:</p> <ul style="list-style-type: none"> ▪ Shared use footway/ cycleway under railway bridge with associated one way priority working or shuttle traffic signals for motor vehicles 	
9) Walnut Tree Avenue / Hunderton Road traffic reduction	<ul style="list-style-type: none"> ▪ Filtered permeability on section of Hunderton Road and Walnut Tree Avenue (closure to vehicular traffic, except buses and cycles) ▪ Walnut Tree Avenue - raised priority crossings for pedestrians ▪ A465 Belmont Road at Walnut Tree Avenue and Hunderton Road junctions – raised table covering both junctions and new toucan crossing of Belmont Road ▪ New shared use footway/cycleway on Belmont Road between Hunderton Road and Walnut Tree Avenue 	<ul style="list-style-type: none"> ▪ Through traffic removed from residential streets ▪ Better connected local communities ▪ Quieter streets ▪ Safer journeys to work and school ▪ Walking and cycling friendly environment ▪ Healthier and happier journeys to work and school

The shared use footway underneath the railway bridge at the eastern end of Holme Lacy Road forms part of group 6 and 8.

Table 10 – How the groups of possible improvements meet the SWTP objectives

Group of possible improvements	Improve access to the HEZ by all modes	Reduce vehicle delay for journeys accessing the HEZ from the west	Encourage use of active modes for journeys to, from and within the South Wye area	Improve road safety for all modes	Reduce the air quality and noise impacts from road transport at key receptors
1) 20mph residential areas	✓	✓	✓	✓	✓
2) Belmont Road bus priority measures	✓	✓	✓	✓	✓
3) Belmont Road walking and cycling improvements	✓	✓	✓	✓	✓
3a) Belmont Road walking and cycling improvements	✓	✓	✓	✓	✓
4) Belmont Road weight restriction	✓	✓	✓	✓	✓
5) Belmont Road (West) walking and cycling improvements	✓	✓	✓	✓	✓
6) Better walking and cycling routes to Hereford Enterprise Zone	✓	✓	✓	✓	✓
6a) Better walking and cycling routes to Hereford Enterprise Zone	✓	✓	✓	✓	✓
7) Hoarwithy Road and Hinton Road walking and cycling links	✓	✓	✓	✓	✓
8) Better walking and cycling routes to Hereford Enterprise Zone	✓	✓	✓	✓	✓
8a) Better walking and cycling routes to Hereford Enterprise Zone	✓	✓	✓	✓	✓
9) Walnut Tree Avenue / Hunderton Road traffic reduction	✓	x	✓	✓	✓

5.4. TECHNICAL ASSESSMENT OF ACTIVE TRAVEL SCHEMES

DESIGN ETHOS AND STANDARDS

- 5.4.1. Feasibility level design drawings were prepared for each of the groups of possible improvements. The objective was to design high-quality infrastructure which took account of best practice and recognised guidance, such as:
- Manual for Streets 2 (2010)¹⁰;
 - London Cycling Design Standards (2014)¹¹;
 - Design Guidance Active Travel (Wales) Act 2013 (2014)¹²; and
 - Draft chapters from Sustrans Design Manual (2014-2015)¹³.
- 5.4.2. The designs took into account the existing active travel network and, where applicable, sought to improve the infrastructure to meet modern standards for active travel infrastructure.
- 5.4.3. The feasibility design stage led to a number of design decisions being made regarding the active travel schemes. Examples of the decisions made include:
- The shared use cycleway/footways were designed with raised tables and set-back give way markings at side roads in line with best practice;
 - For group 2 (Belmont Road bus priority measures) an off-carriageway shared use footway/cycleway was included because carriageway width constraints would not enable a wider bus lane to be provided (which could be used by cyclists as well as buses); and
 - For group 9 (Walnut Tree Avenue / Hunderton Road traffic reduction) the proposed Walnut Tree Avenue road closure (except buses and cycles) was designed to be located immediately west of Hazel Grove junction where there is the potential to provide space for vehicles to make turning manoeuvres.
- 5.4.4. Appendix I contains the feasibility drawings of the groups of the possible improvements. It should be noted that some refinements to the groupings took place after these drawings were prepared but the schemes themselves were not amended.

SCHEME APPRAISAL METHODOLOGY

INTRODUCTION

- 5.4.5. The principles set out in Stage 1 Step 7 of TAG¹⁴ were used to distinguish the relative costs, benefits and the impacts of the groups of possible improvements under consideration and identify the better performing ones. The improvement groups were assessed against each of the assessment areas set out in Option Appraisal Framework (Appendix A of TAG) under the three headings of *impact on the economy*, *impact on the environment* and *impact on the society*.

¹⁰ <https://www.gov.uk/government/publications/manual-for-streets-2>

¹¹ <https://tfl.gov.uk/corporate/publications-and-reports/streets-toolkit#on-this-page-2>

¹² <http://gov.wales/docs/det/publications/141209-active-travel-design-guidance-en.pdf>

¹³ <http://www.sustrans.org.uk/our-services/our-expertise/route-design/sustrans-design-guidance>

¹⁴ <https://www.gov.uk/government/publications/webtag-transport-appraisal-process>

5.4.6. A qualitative approach was adopted for each assessment area, informed by evidence and data where available. For each assessment area a table is provided which sets out the qualitative scores given to each improvement group. This enables the impacts of each improvement group to be compared with each other and to a scenario where no active travel interventions are constructed. Where TAG sets out a qualitative scale to be used for an assessment area this was used, and these are described in Table 11.

Table 11 – TAG qualitative scales

Scale advised in TAG	Scale categories	Assessment areas
7-point scale*	Large Adverse, Moderate Adverse, Slight Adverse, Neutral, Slight Beneficial, Moderate Beneficial, Large Beneficial	Environment – Noise, Air Quality, Landscape and Townscape, Historic Environment, Biodiversity, Water Environment
		Society – Reliability and Connectivity Impacts for Commuting and Non-Business Journeys, Physical Activity, Accidents, Personal Injury Collisions, Access to Public Transport Services, Affordability, Severance
4-point scale	None, Slight, Moderate, Large Scale	Economy – Regeneration and Wider Economic Impacts
3-point scale	Adverse, Neutral, Beneficial	Economy – Reliability for Business Users and Transport Providers Society – Journey Quality, Security
No scale given#	n/a	Economy – Time Savings and Reliability Impacts Environment – Greenhouse Gases

Notes: * all of these assessment areas can use 3-point scale rather than 7-point scale, if deemed appropriate # TAG does not set out a quantitative assessment methodology for these assessment areas

5.4.7. For most assessment areas TAG sets out that a 7-point or 3-point scale can be used, as appropriate. It adds that the scale chosen should be appropriate to distinguish the relative impacts and that, in some cases, it is sufficient to use a 3 point scale. TAG does not outline a quantitative assessment methodology for two assessment areas (*time savings and reliability impacts* under economy and *greenhouse gases* under environment); however, in line with the level of appraisal being undertaken, and for consistency, the 7-point scale was also adopted for these, highlighted below in Table 12.

5.4.8. For some assessment areas some groups of possible improvements were considered to have negligible impacts. For the purposes of this assessment these were categorised as neutral.

Table 12 - Overall scoring approach used to distinguish relative impacts of each scheme group

Appraisal Score						
-3	-2	-1	0	+1	+2	+3
Greatest disbenefits / most adverse			Neutral or no change			Greatest benefits / most beneficial

5.4.9. The methodology approach, and the outcome of the assessment, is set out below for each assessment area in turn.

FORECASTING FUTURE LEVELS OF WALKING AND CYCLING GENERATED BY GROUPS OF POSSIBLE IMPROVEMENTS

5.4.10. Several of the assessment areas required consideration to be given to the amount of additional active travel journeys likely to be generated by the proposed schemes. These are listed in Table 13 below.

Table 13 - Assessment areas which require evidence of likely scale of change in travel behaviour

Assessment areas		Data required
Impacts on the economy	Reliability for motor vehicle users (Decongestion)	Likely reduction in numbers of vehicle trips. See Table 15.
Impacts on the environment	Traffic noise Air quality Greenhouse gases	
Impacts on the society	Reliability and connectivity for non-business users	Improvement in connectivity. See column A in Table 16
	Health and physical activity	Likely increase in numbers of active travel trips (comprised of new trips and trips previously made by motor vehicle). See Table 16

5.4.11. As indicated in the OAR, a large number of journeys currently made in Hereford by motor vehicle have both an origin and destination in the city and many of these could be made by active travel modes. In addition a substantial proportion of city residents cannot drive and/or do not have access to a car, or are deterred from making everyday journeys due to concerns about road danger, for example.

Assumptions

- 5.4.12. Recent design guidance¹⁵ identifies that, at present, walking as a mode of travel predominates for journeys of less than 2 miles whilst those by cycle are made for journeys up to five miles in length. A combination of factors influences the success of active travel schemes and the volume of people using them (and, if relevant, whether those people transfer from using motor vehicles for the trips).
- 5.4.13. For the purposes of making a relative assessment between different groups of possible improvements the following assumptions were adopted:
- An active travel scheme which generates the largest number of additional active travel journeys is one which:
 - Connects key journey origins and destinations, taking account of likely future changes in population, housing and employment;
 - Has a large catchment area (the number of people in the surrounding area which can make use of it); and
 - Is of a type of infrastructure and design standard which is associated with the highest degree of changes in travel behaviour.
 - An active travel scheme which leads to the greatest reduction in car journeys is one which meets the above criteria plus:
 - Connects origins and destinations for which a large proportion of journeys are currently made by private car.
- 5.4.14. The Government has set targets¹⁶ to double cycling journeys over the 12-year period from 2013 to 2025, increase walking activity and increase the proportion of children walking to school. This provides a context in which assessments should be planning for substantial growth in active travel demand.
- 5.4.15. These decision-making criteria are further described in Table 14.

¹⁵ <http://gov.wales/docs/det/publications/141209-active-travel-design-guidance-en.pdf>

¹⁶ [Local Walking and Cycling Infrastructure Plans Technical Guidance \(DfT, April 2017\)](#)

Table 14 - Evidence used to inform assessment on future levels of walking and cycling generated by groups of possible active travel improvements

	Criteria	Assessment methodology
A. Connectivity	Do the improvements connect key existing and future journey origins and destinations?	Identify key destinations (HEZ, city centre, etc.) and give qualitative assessment of how well the improvements will connect them.
B. Scheme catchment	How many people in the surrounding area could make use of the improvements (scheme catchment), now and in the future?	Relative quantitative assessment of numbers of surrounding households who could access the improvements.
C. Type of infrastructure	Is the chosen type of infrastructure and design standard of the improvements sufficient to encourage widespread change in travel behaviour?	Comparative study into types of active travel infrastructure and the additional walking and cycling trips generated by them – see text below table.
D. Reduction in car use	Are there substantial numbers of car trips currently made between the origins and destinations served by the improvements?	Identify key origin-destination pairs which currently have high levels of car trips from analysis of travel demand matrix set out in Hereford Transport Strategy Phasing Study (JMP, 2014) ¹⁷ .

Comparative Study

- 5.4.16. As referred to above, a comparative study was carried out to understand the causal relationship between specific types of active travel infrastructure and the additional active travel demand generated by them. TAG identifies this methodology as being the simplest and least costly approach to estimating future levels of cycling and it is therefore considered appropriate for this scale of appraisal. A range of existing research literature was reviewed in relation to different types of active travel measures. The research findings are set out in full in Appendix J. The comparative study informed assumptions to be made regarding the likely degree of change in travel behaviour arising from the introduction of different types of active travel infrastructure in the study area.
- 5.4.17. The evidence demonstrated the positive relationship between providing good quality infrastructure for sustainable transport and the increased use of those modes. Schemes taken together as a package were found to give rise to a greater degree of change than any scheme in isolation. However, this does make it challenging to identify the change in travel behaviour attributable to any one type of intervention or any specific element in a package of measures.

¹⁷ https://www.herefordshire.gov.uk/download/downloads/id/2113/hereford_transport_strategy_phasing_study_strategic_phasing.pdf
 The seven city sectors identified as having car journeys with the greatest potential for conversion to active travel were: Westfield-City Centre, Tupsley-City Centre, Broadlands-City Centre, Broadlands-Holmer, Belmont-South Wye, Whitecross-Rotherwas and Lower Bullingham-Rotherwas.

5.4.18. The comparative study also indicated the importance of a wide range of supporting factors which strengthen the change to active travel journeys, and cycling in particular. These supporting factors included:

- The directness and overall coherence of routes and avoidance of compromise designs;
- Investing in cycling measures as one part of an integrated approach to decreasing car mode share; and
- Political support and long-term commitment;
- Respectful driving culture; and
- Enhancing the information available to the travelling public and raising levels of cycling skills.

5.4.19. Local evidence¹⁸ has identified the contribution which other interventions have in generating additional active travel demand. These include active travel promotion activities (including Herefordshire Council's *Choose How You Move* campaign and personalised travel planning) and public transport upgrades to provide high quality shelters with level access, real-time information and multi-operator ticketing.

Relative Assessment of Likely Additional Active Travel Demand and Reduction in Car Trips

5.4.20. The outcome of the assessment of the groups of possible improvements against the above criteria is set out below in Table 15 (for likely reduction in motor vehicle trips) and Table 16 (for likely additional active travel demand). These tables indicate that:

- Group 8 was considered to have the greatest impact on decongestion as it would strongly meet the four chosen assessment criteria in Table 15 (providing direct connections between key origins and destinations, connecting origins and destinations with existing high levels of car trips, large catchment and type of infrastructure likely to encourage widespread change in travel behaviour); and
- Groups 3 and 8 were considered to lead to the greatest increase in active travel as they would strongly meet the three chosen assessment criteria in Table 16 (providing direct connections between key origins and destinations, large catchment and type of infrastructure likely to encourage widespread change in travel behaviour).

¹⁸ [DfT Access Fund - Destination Hereford phase 3 \(DH3\) - Herefordshire Council Decision](#)

Table 15 – Relative assessment of active travel scheme groups – likely reduction in motor vehicle trips

Key to table – anticipated levels of reduction in car trips generated by groups of possible improvements

higher reduction in motor vehicle trips	medium reduction in motor vehicle trips	lower reduction in motor vehicle trips
---	---	--

Improvement Group	Criteria				Outcome – Impact on Reduction in Car Trips
	A. Connectivity (O&D)	B. Scale of catchment	C. Main types of infrastructure proposed	D. Relevant O&D pairs with existing high levels of car trips	
1) 20mph residential areas	Local connections	Large - covers all residential area in South Wye	20mph and minor junction redesigns	North-south across the A465; Hinton/Saxon Gate/Lower Bullingham to HEZ; Whitecross to HEZ	Medium reduction in car trips
2) Belmont Road bus priority measures	Direct route to city centre and links to potential new HE scheme towards Asda, Old Bridge	Large – Hunderton, Belmont and Newton Farm, plus communities in South West Hereford and South West Herefordshire served by buses along A465	Shared footway/cycleway and crossing facilities, plus inbound bus lane	Less well-related to key O-D patterns with high levels of car trips	Medium reduction in car trips
3) Belmont Road walking and cycling improvements	Direct route to key destinations in HEZ, City centre and local facilities either side of Belmont Road	Large – covers much of SW Hereford	New shared use paths and signalised crossings	North-south across the A465	Larger reduction in car trips
3A) Belmont Road walking and cycling improvements	Direct route to key destinations in HEZ, City centre and local facilities either side of Belmont Road	Large – covers much of SW Hereford	New shared use paths and signalised crossings	North-south across the A465	Larger reduction in car trips

Improvement Group	Criteria				Outcome – Impact on Reduction in Car Trips
	A. Connectivity (O&D)	B. Scale of catchment	C. Main types of infrastructure proposed	D. Relevant O&D pairs with existing high levels of car trips	
4) Belmont Road weight restriction	Reduction in Heavy Goods Vehicle movements will encourage walking and cycling on Belmont Road corridor	Medium – Hunderton, Belmont and Newton Farm	Weight restriction Traffic Regulation Order on A465	North-south across the A465	Lower reduction in car trips
5) Belmont Road (West) walking and cycling improvements	Completes missing links for journeys from rural communities to Hereford destinations	Local – western edge of Hereford and rural hinterland	New shared use paths and signalised crossings	North-south across the A465	Medium reduction in car trips
6) Better walking and cycling routes to Hereford Enterprise Zone	Route to HEZ and schools for people living in parts of Newton Farm and Redhill	Medium – Red Hill and areas west of Great Western Way	Improved and new shared use paths	Less well-related to key O-D patterns with high levels of car trips	Medium reduction in car trips
6A) Better walking and cycling routes to Hereford Enterprise Zone	Route to HEZ and schools for people living in parts of Newton Farm and Redhill. Omission of shared use footway/cycleway under railway bridge will lead some journeys to the HEZ to divert onto less direct routes	Medium – Red Hill and areas west of Great Western Way	Improved and new shared use paths	Less well-related to key O-D patterns with high levels of car trips	Medium reduction in car trips
7) Hoarwithy Road and Hinton Road walking and cycling links	Direct route from parts of Saxon Gate & Hinton to city centre	Local – parts of Saxon Gate & Hinton	New and improved shared use paths; new signal crossing	Less well-related to key O-D patterns with high levels of car trips	Medium reduction in car trips
8) Holme Lacy Road – further walking and cycling improvements	Direct route to HEZ from SW Hereford	Large – most of South Wye	Off-road cycleway, segregated foot/cycleway and crossings	North-south across the A465; Hinton/Saxon Gate/Lower Bullingham to HEZ; Whitecross to HEZ	Larger reduction in car trips

Improvement Group	Criteria				Outcome – Impact on Reduction in Car Trips
	A. Connectivity (O&D)	B. Scale of catchment	C. Main types of infrastructure proposed	D. Relevant O&D pairs with existing high levels of car trips	
8A) Holme Lacy Road – further walking and cycling improvements	Direct route to HEZ from SW Hereford. Omission of shared use footway/cycleway under railway bridge will lead some journeys to the HEZ to divert onto less direct routes	Large – most of South Wye	Off-road cycleway, segregated foot/cycleway and crossings	North-south across the A465; Hinton/Saxon Gate/Lower Bullingham to HEZ; Whitecross to HEZ	Larger reduction in car trips
9) Walnut Tree Avenue / Hunderton Road traffic reduction	Direct route to HEZ from SW Hereford	Medium - Hunderton, Belmont and Newton Farm	Filtered permeability on streets (reducing through traffic)	North-south across the A465; Hinton/Saxon Gate/Lower Bullingham to HEZ; Whitecross to HEZ	Larger reduction in car trips

Table 16 – Relative assessment of active travel scheme groups – likely additional active travel demand generated

Key to table – anticipated levels of walking and cycling demand generated by groups of possible improvements

higher levels of additional active travel demand	medium levels of additional active travel demand	lower levels of additional active travel demand
---	---	--

Improvement Group	Criteria			Outcome – Impact Active Travel Demand
	A. Connectivity (O&D)	B. Scale of catchment	C. Main types of infrastructure proposed	
1) 20mph residential areas	Encourages local connections in residential areas	Large - covers all residential area in South Wye	20mph and minor junction redesigns	Medium levels of additional active travel demand
2) Belmont Road bus priority measures*	Direct route to city centre and links to potential new HE scheme towards Asda, Old Bridge	Medium – Hunderton, Belmont and Newton Farm	Shared footway/cycleway and crossing facilities, plus inbound bus lane	Medium levels of additional active travel demand
3) Belmont Road walking and cycling improvements	Direct route to key destinations in HEZ, City centre and local facilities either side of Belmont Road	Large – covers much of SW Hereford	New shared use paths and signalised crossings	Larger levels of additional active travel demand
3A) Belmont Road walking and cycling improvements	Direct route to key destinations in HEZ, City centre and local facilities either side of Belmont Road	Large – covers much of SW Hereford	New shared use paths and signalised crossings	Larger levels of additional active travel demand
4) Belmont Road weight restriction	Reduction in Heavy Goods Vehicle movements likely to result in relatively low levels of additional walking and cycling on Belmont Road corridor	Medium – Hunderton, Belmont and Newton Farm	Weight restriction Traffic Regulation Order on A465	Lower levels of additional active travel demand

Improvement Group	Criteria			Outcome – Impact Active Travel Demand
	A. Connectivity (O&D)	B. Scale of catchment	C. Main types of infrastructure proposed	
5) Belmont Road (West) walking and cycling improvements	Completes missing links for journeys from rural communities to Hereford destinations	Local – western edge of Hereford and rural hinterland	New shared use paths and signalised crossings – associated with large-scale active travel uptake	Medium levels of additional active travel demand
6) Better walking and cycling routes to Hereford Enterprise Zone	Route to HEZ and schools for people living in parts of Newton Farm and Redhill	Medium – Red Hill and areas west of Great Western Way	Improved and new shared use paths	Medium levels of additional active travel demand
6A) Better walking and cycling routes to Hereford Enterprise Zone	Route to HEZ and schools for people living in parts of Newton Farm and Redhill. Omission of shared use footway/cycleway under railway bridge will lead some journeys to the HEZ to divert onto less direct routes	Medium – Red Hill and areas west of Great Western Way	Improved and new shared use paths	Medium levels of additional active travel demand
7) Hoarwithy Road and Hinton Road walking and cycling links	Direct route from parts of Saxon Gate & Hinton to city centre	Local – parts of Saxon Gate & Hinton	New and improved shared use paths; new signal crossing	Larger levels of additional active travel demand
8) Holme Lacy Road – further walking and cycling improvements	Direct route to HEZ from SW Hereford	Large – most of South Wye	Off-road cycleway, segregated foot/cycleway and crossings	Larger levels of additional active travel demand
8A) Holme Lacy Road – further walking and cycling improvements	Direct route to HEZ from SW Hereford. Omission of shared use footway/cycleway under railway bridge will lead some journeys to the HEZ to divert onto less direct routes	Large – most of South Wye	Off-road cycleway, segregated foot/cycleway and crossings	Larger levels of additional active travel demand

Improvement Group	Criteria			Outcome – Impact Active Travel Demand
	A. Connectivity (O&D)	B. Scale of catchment	C. Main types of infrastructure proposed	
9) Walnut Tree Avenue / Hunderton Road traffic reduction	Direct route to HEZ from SW Hereford	Medium - Hunderton, Belmont and Newton Farm	Filtered permeability on streets (reducing through traffic)	Larger levels of additional active travel demand

* Group 2 is anticipated to generate additional bus journeys, which raises the level of impacts against certain assessment areas – see relevant sections overleaf

IMPACTS ON THE ECONOMY

Journey Time Savings and Reliability

Introduction

- 5.4.21. In respect of the active travel schemes, two aspects were considered:
- Firstly, the time savings for journeys by active travel modes due to dedicated quality infrastructure; and
 - Secondly, the decongestion impacts experienced by those continuing to travel by motor vehicle, which would result from trips transferring from vehicle journeys to active travel modes.
- 5.4.22. In many cases the road danger presented by heavily trafficked urban streets with limited or no segregated cycle infrastructure leads to existing cyclists taking indirect routes to reach their destination. Routes that avoid delays at traffic signals, or which avoid the need to continually stop and start en route, also offer significant journey time savings. For pedestrians, concerns about traffic and road danger may limit the routes they choose to take and make heavily trafficked roads difficult or frightening to cross. Poor infrastructure dissuades some people from cycling or walking at all, or limits the destinations they feel comfortable travelling to. Improved infrastructure, particularly segregated from motorised traffic, can in many cases reduce the perception of road danger and enable the use of routes which are shorter in distance (and thus with time savings) than the routes used previously. Investment in active travel infrastructure can also ensure that pedestrians and cyclists have priority at side junctions, have improved opportunities to cross heavily trafficked streets and that cyclists no longer have to share congested road space with motor vehicles, and that pedestrians feel safer walking near busy roads. These can all reduce delays for active travel user groups.
- 5.4.23. A qualitative assessment was undertaken to identify which schemes would enable more direct, shorter distance journeys to be made by cycling for journeys between residential areas and key employment zones, in comparison to the avoiding heavily trafficked roads at present. The results are summarised in Table 17 below. Some groups of possible improvements also have features which may increase delay (and hence journey times) for motor vehicle users on certain routes.

Table 17 - Assessment of Impact – Time Savings for Active Travellers

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Neutral	Large beneficial	Large beneficial	Large beneficial	Slight beneficial	Large beneficial	Slight beneficial	Slight Beneficial	Slight beneficial	Large beneficial	Moderate beneficial	Large beneficial

5.4.24. In summary:

- Groups 2, 3, 3a, 5, 8 and 9 were assessed as having a large beneficial impact due to the likely time savings for active travellers, particularly cyclists, by enabling the use of direct routes which would otherwise be avoided by the majority of existing or potential future cyclists;
- Group 8a was assessed as having a moderate beneficial impact. Whilst it would enable active travellers, especially cyclists, to use direct routes which would otherwise be avoided this variant of group 8 does not include the works to segregate cyclists from motor traffic underneath the railway bridge, necessitating some travellers to use less direct routes into the HEZ;
- Groups 6, 6a and 7 were considered to have a slight beneficial impact as there will be a smaller number of active travellers whose behaviour (and journey routes) will be expected to change;
- Group 4 was considered to have a slight beneficial impact as, in isolation, the measure may not be sufficient to address concerns about road danger for those considering walking and cycling along Belmont Road; and
- Group 1 was assessed as having a neutral impact as it is considered that the improvements are unlikely to lead to travellers changing routes and therefore no time savings would be experienced by active travellers.

Reliability impacts on business users (decongestion)

5.4.25. A combination of quantitative and qualitative assessment methods were used to inform the assessment of decongestion impacts. Schemes which would lead to the greatest transfer of journeys from car trips to active travel are assumed to bring about the greatest decongestion benefits, and the results from the assessment against the four criteria in Table 15 were used to inform this. Some improvement groups have features which may increase delay (and hence journey times) for motor vehicle users on certain routes and this was taken into account in a proportionate manner.

5.4.26. The results of this assessment are set out in Table 18.

Table 18 – Assessment of Impact – Reliability impacts on business users (decongestion)

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Moderate beneficial	Large beneficial	Large beneficial	Large beneficial	Slight beneficial	Moderate beneficial	Moderate beneficial	Moderate Beneficial	Moderate beneficial	Large beneficial	Large beneficial	Moderate beneficial

5.4.27. In summary:

- Groups 3, 3a, 8 and 8a were assessed as having large beneficial impacts on decongestion as they would strongly meet the majority of the four chosen assessment criteria;
- Group 2 was also considered to have a large beneficial impact as a result of the likely benefits to bus journeys associated with bus priority;
- Group 9 was assessed as having moderate beneficial impacts on decongestion. Whilst the proposed improvement is considered likely to lead to large beneficial impacts, in terms of the relative number of car trips transferring to walking and cycling with the improvements in place, this was assumed to be counterbalanced by a degree of additional congestion as vehicles would need to re-route away from Walnut Tree Avenue and Hunderton Road with the improvements in place;
- Groups 1, 5, 6, 6a and 7 were assessed as having moderate beneficial impacts on decongestion as they perform well across some, but not all, of the four chosen assessment criteria; and
- Group 4 was assessed as having slight beneficial impacts on decongestion as, in isolation, the improvement was considered likely to have a minor impact on vehicle trips and active travel uptake.

Regeneration and wider impacts

5.4.28. Some of the possible improvements were considered to be particularly well-related to the delivery of new homes and jobs and would contribute to the widening of the labour market.

5.4.29. The HEZ, at the eastern end of the study area, is a particular focus for employment in Hereford. It is covered by a Local Development Order, a simplified form of planning permission, which permits certain forms of development and avoids the need for occupiers or landowners to submit individual planning applications if their proposals are in line with the Local Development Order¹⁹. Development is however excluded from the Local Development Order if a cap on traffic generation from the HEZ during the morning and evening peak periods has already been exceeded or if the proposed development would lead to the cap being exceeded. The cap is set in a Memorandum of Understanding between Herefordshire Council and Highways England and is intended to prevent the capacity of the A49 from being exceeded. Increasing levels of active travel to the HEZ would be a way of ensuring the cap of traffic generation is not reached and enabling additional development to come forward through the Local Development Order.

5.4.30. A review was undertaken to understand how the groups of possible improvements relate to growth areas, employment zones and areas of deprivation. The outcome of this review informed a qualitative assessment. A summary of this assessment is set out below in Table 19.

Table 19 - Assessment of Impact – Regeneration & Wider Economic Impacts

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Slight	Large scale	Large scale	Large scale	Large scale	Slight	Large scale	Moderate	Large scale	Large scale	Moderate	Large scale

¹⁹ http://www.skylonpark.co.uk/media/9942/Enterprise_Zone_LDO_Nov_2014.pdf

5.4.31. Each group of possible improvements was considered to generate regeneration impacts, as follows:

- Groups 2, 3, 3a, 4, 6, 8 and 9 were assessed as having large-scale impacts on regeneration. In particular, Groups 2, 3 and 3a would improve connections in the parts of South Wye undergoing transformative housing regeneration, including connections across the heavily trafficked Belmont Road. Group 2 would also improve bus accessibility to the city centre from these regenerated areas. Groups 6, 8 and 9 would improve walking and cycling routes to and from the HEZ, which is a key employment area for the city. Group 7 would be on a key route from the Lower Bullingham urban expansion site to the city centre;
- Groups 6a and 8a were assessed as having moderate impacts on regeneration. Whilst they are similar to groups 6 and 8 in improving walking and cycling routes to the HEZ, they do not include works to segregate cyclists from motor traffic underneath the railway bridge, necessitating some travellers to use less direct routes into the HEZ; and
- Groups 1 and 5 were assessed as having slight impacts on regeneration as they would be less well-related to areas of areas of regeneration, employment or housing growth.

IMPACTS ON THE ENVIRONMENT

Traffic Noise

5.4.32. All of the active travel schemes are intended to increase the number of journeys made by walking and cycling in the area, with a consequent decrease in the number of motor vehicle trips (and thus the traffic noise associated with those trips). Schemes which lead to the greatest transfer of journeys from car trips to active travel are assumed to bring about the greatest reduction in traffic noise, and the results from Table 15 were used to inform the assessment.

A summary of this assessment is set out in Table 20.

Table 20 – Assessment of Impact – Traffic Noise

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Moderate beneficial	Moderate beneficial	Large beneficial	Large beneficial	Slight beneficial	Moderate beneficial	Moderate beneficial	Moderate Beneficial	Moderate beneficial	Large beneficial	Large beneficial	Large beneficial

5.4.33. All of the groups of possible improvements were considered to reduce numbers of vehicle trips and hence reduce traffic noise. In particular groups 3, 3a, 8, 8a and 9 were considered to have large beneficial impacts due to trips transferring from vehicles to walking and cycling and vehicles re-routing onto the SLR / Rotherwas Access Road (where traffic noise will affect relatively fewer key receptors).

5.4.34. All of the groups of possible improvements would be likely to lead to a slight adverse impact on noise during the construction phase.

Air Quality

- 5.4.35. All of the active travel schemes were intended to increase the number of journeys made by walking and cycling in the area (with a consequent decrease in the number of vehicle trips, which emit air pollutants and particulates). Schemes which lead to the greatest transfer of journeys from car trips to active travel are assumed to bring about the greatest air quality benefits, and the results from Table 15 were used to inform the assessment.
- 5.4.36. A summary of this assessment is set out below in Table 21.

Table 21 – Assessment of Impact – Air Quality

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Moderate beneficial	Moderate beneficial	Large beneficial	Large beneficial	Slight beneficial	Moderate beneficial	Moderate beneficial	Moderate Beneficial	Moderate beneficial	Large beneficial	Large beneficial	Large beneficial

- 5.4.37. All of the groups of possible improvements were considered to reduce the number of trips made by motor vehicle (and hence improve to air quality). In particular, groups 3, 3a, 8, 8a and 9 were considered to have large beneficial impacts due to trips transferring from vehicles to walking and cycling and vehicles re-routing away onto the SLR / Rotherwas Access Road (where air quality will affect relatively key receptors). The same improvement groups would result in some motor vehicle journeys being longer in distance when the schemes are implemented, due to re-routing. This in part reduces the benefits which would accrue (as longer journey distances would result in additional particulates from vehicles).
- 5.4.38. All of the groups of possible improvements would be likely to lead to a slight adverse impact on air quality during the construction phase through increased particulates.

Greenhouse Gases

- 5.4.39. All of the active travel schemes are intended to increase the number of journeys made by walking and cycling in the area. Schemes which lead to the greatest transfer of journeys from car trips to active travel were assumed to bring about the greatest reduction in greenhouse gases, and the results from Table 15 were used to inform the assessment. A summary of this assessment is set out below in Table 22.

Table 22 – Assessment of Impact – Greenhouse Gases

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Moderate beneficial	Moderate beneficial	Large beneficial	Large beneficial	Slight beneficial	Moderate beneficial	Moderate beneficial	Moderate Beneficial	Moderate beneficial	Large beneficial	Large beneficial	Large beneficial

- 5.4.40. All the groups of possible improvements were considered to reduce the number of trips made by motor vehicle (and hence reduce greenhouse gas emissions). In particular, groups 3, 3a 8, 8a and 9 were considered to have large beneficial impacts due to the likely reduction in vehicle trips associated with these schemes. The same improvement groups would result in some motor vehicle journeys being longer in distance when the schemes are implemented, due to re-routing (e.g. those no longer able to use Walnut Tree Avenue). This in part reduces the benefits which would accrue (as longer journey distances would result in additional greenhouse gas emissions).
- 5.4.41. All of the schemes were anticipated to lead to a slight adverse impact during the construction phase due firstly to the use of materials and secondly from construction vehicle emissions.

Landscape / Townscape

- 5.4.42. A qualitative assessment was made of the impact of the possible improvements on landscape and townscape. The summary of this assessment is set out below in Table 23.

Table 23 – Assessment of Impact – Landscape / Townscape

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Neutral	Neutral	Large beneficial	Large beneficial	Neutral	Slight adverse	Neutral	Neutral	Slight adverse	Neutral	Neutral	Neutral

- 5.4.43. The majority of improvement groups (1, 2, 4, 6, 6a, 8, 8a and 9) were assessed as having a neutral impact on landscape/townscape. Groups 3 and 3a was considered to have a large beneficial impact due to the substantial tree planting proposed as part of the boulevard and the converting some of existing carriageway space to greenspace. Two groups (5 and 7) were assessed as having slight adverse impacts due to new active travel infrastructure crossing undeveloped land.

Historic Environment

- 5.4.44. An assessment was made of the proximity of the possible improvements to national statutory and local non-statutory heritage designations. A summary of this assessment is set out below in Table 24.

Table 24 – Assessment of Impact – Historic Environment

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Neutral	Neutral	Neutral	Neutral	Neutral	Slight adverse	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral

- 5.4.45. Improvement groups 1-4 and 6-9 were all considered to have neutral impacts. Improvement group 5 was considered to have the potential for a slight adverse impact on the historic environment if the schemes impact on setting of Belmont Abbey, Home Farm and the Almshouses to the north.

Biodiversity

5.4.46. A qualitative assessment was made of the proximity of the possible improvements to national statutory and local non-statutory biodiversity designations and on habitats in general. A summary of this assessment is set out below in Table 25.

Table 25 – Assessment of Impact – Biodiversity

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Neutral	Neutral	Slight beneficial	Slight beneficial	Neutral	Slight adverse	Slight adverse	Slight adverse	Slight adverse	Neutral	Neutral	Neutral

5.4.47. In all cases impacts were considered to be neutral or slight. Further details are set out below:

- Groups 5, 6, 6a and 7 were assessed as having a slight adverse impact on biodiversity associated with removal of small areas of grass;
- Groups 3 and 3a were accorded a slight beneficial impact due to the substantial tree planting proposed; and
- Groups 1, 2, 4, 8, 8a and 9 were considered to have neutral impacts on biodiversity.

Water Environment

5.4.48. A qualitative assessment was undertaken on the potential for the possible improvements to impact on watercourses. A summary of this assessment is set out below in Table 26.

Table 26 – Assessment of Impact – Water Environment

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Neutral	Neutral	Slight beneficial	Slight beneficial	Neutral	Slight adverse	Slight adverse	Slight adverse	Slight adverse	Neutral	Neutral	Neutral

5.4.49. Groups 1, 2, 4, 8, 8a and 9 were considered to have a neutral impact on the water environment. Groups 3 and 3a were assessed as having as slight beneficial impact due to the increase in permeable ground area and new planting. Groups 5, 6, 6a and 7 were assessed as having a slight adverse impact due to the additional impermeable surfacing associated with new shared use footway/cycleway.

IMPACTS ON THE SOCIETY

Reliability & Connectivity impacts for commuting and non-business journeys

5.4.50. This assessment was largely based on the outcome of column A in Table 16. A summary of this assessment is set out below in Table 27.

Table 27 - Assessment of Impact – Reliability and Connectivity Impacts on Commuting / non-business journeys

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Slight beneficial	Large beneficial	Large beneficial	Large beneficial	Slight beneficial	Moderate beneficial	Moderate beneficial	Moderate beneficial	Large beneficial	Large beneficial	Moderate beneficial	Large beneficial

5.4.51. All the groups of possible improvements were assessed as having a beneficial impact on reliability and connectivity, as follows:

- Group 2 was considered to have a large beneficial impact as a particular result of the connectivity and reliability benefits to bus journeys associated with bus priority;
- Groups 3, 3a, 7, 8 and 9 were assessed as having large beneficial impacts in terms of active travel connectivity to key destinations;
- Groups 5, 6, 6a and 8a were assessed as having moderate beneficial impacts in terms of improved active travel connectivity to key destinations; and
- Groups 1 and 4 were assessed as having slight beneficial impacts on decongestion as, in isolation, the improvements were considered likely to lead to relatively minor changes in active travel connectivity and reliability.

Physical Activity (including Health Impacts)

5.4.52. Each of the proposed schemes aims to enable additional active travel journeys by cycle or on foot by a range of people. An increased level of active travel is associated with improved mental and physical health and reduced social isolation. The proposed schemes are designed to be accessible to, and used by, young and old and those with disabilities. The schemes are also intended to reduce the numbers of trips made by motorised vehicles, and would therefore reduce the negative noise, air quality and greenhouse gas impacts on human health which motorised journeys give rise to.

Reduced Mortality

5.4.53. The World Health Organisation (WHO) has developed a Health Economic Assessment Tool (HEAT)²⁰ that calculates the economic benefit of preventing early mortality by increasing the number of people regularly exercising through walking and cycling. The tool requires estimates of the number of new cyclists as a result of the scheme; the time per day they will spend active; and mortality rates applicable to the group affected by the scheme. The tool then provides an economic benefit of reduced mortality based on the value of a prevented fatality. Schemes which lead to the greatest number of new and returning cyclists and additional walking journeys will be associated with the greatest health benefits.

²⁰ [Health Economic Assessment Tool \(HEAT\) for walking and cycling by WHO/Europe](#)

Business Benefits: Absenteeism

5.4.54. Research carried out by the WHO²¹ found that absenteeism from work is expected to decrease when more people cycle to work. Moderate physical activity is seen to lead to a reduction in sick days taken from work and hence provides a benefit to the employer. This is in addition to the benefit of better health for the individual. In the UK the average absence of employees is 6.8 days per year, of which 95% is accounted for by short-term sick leave²². Research by the WHO suggests an expected reduction in absenteeism from increased cycling or walking of 6% based on 30 minutes of exercise per day (i.e. 15 minutes in each direction). Improvements which enable the greatest number of new commuting trips were considered to be associated with the greatest reduction in absenteeism.

Outcome

5.4.55. The results from Table 16 were used to inform the assessment and the results are set out below in Table 28.

Table 28 – Assessment of Impact – Health and Physical Activity

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Moderate beneficial	Large beneficial	Large beneficial	Large beneficial	Slight beneficial	Moderate beneficial	Moderate beneficial	Moderate beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial

5.4.56. All the groups of possible improvements were assessed as having a beneficial impact on health and physical activity, as follows:

- Groups 2, 3, 3a, 7, 8, 8a and 9 were assessed as having large beneficial impacts as they would strongly meet the majority of the three chosen assessment criteria (providing direct connections between key origins and destinations, large catchment and type of infrastructure likely to encourage widespread change in travel behaviour);
- Groups 1, 5, 6 and 6a were considered to have a moderate beneficial impact by strongly meeting two of the three assessment criteria but only weakly meeting the third; and
- Groups 4 was considered to have a slight beneficial impact, generating the lowest level of additional active travel trips.

Journey Quality

5.4.57. Journey quality is an important consideration in appraising active travel schemes. As the fear of a collision is influenced by the concerns about road safety, schemes that include segregated cycle tracks and improvements to intimidating junctions were particularly considered to contribute to improved cycle journey quality.

5.4.58. A qualitative assessment, based on the scheme feasibility drawings, was undertaken to assess the likely change in journey quality. A summary of this assessment is set out below in Table 29.

²¹ World Health Organisation (WHO) (2003) 'Physical Activity Fact Sheet'

²² [TAG Unit 4.1 para 3.2.18](#)

Table 29 - Assessment of Impact – Journey Quality

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Slight beneficial	Large beneficial	Large beneficial	Large Beneficial	Slight beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial

5.4.59. All the groups of possible improvements were assessed as having a beneficial impact on journey quality, as follows:

- Group 2 was assessed as having large beneficial impacts due the provision of segregated cycling facilities where none exist at present, and improvements to bus users’ perception of their journey arising from the provision of the bus lane;
- Groups 3 and 3a was assessed as having large beneficial impacts due to the provision of infrastructure segregated from vehicle traffic, additional crossings of Belmont Road plus shorter crossing distances of side roads;
- Groups 5-8a were assessed as having large beneficial impacts due to the provision of infrastructure segregated from vehicle traffic;
- Group 9 was assessed as having large beneficial impacts due to the re-routing of much of the general vehicular traffic away from Walnut Tree Avenue and Hunderton Road. There was considered to be a possible impact on the journey quality for some motor vehicle users who would no longer have these roads available to them for through journeys; however, in some instances the SLR will offer a less stressful alternative route;
- Group 1 was assessed as having slight beneficial impacts due to the reduced vehicle speeds arising from 20mph zones and shorter crossing distances for pedestrians at junctions; and
- Group 4 was assessed as having a slight beneficial impact as a result of a reduction in the number of heavy vehicles which active travellers would share the road with.

Personal Injury Collisions

5.4.60. All improvement groups are aimed at providing the conditions to enable safe walking and cycling, or both, and increase the numbers of people travelling by active travel modes, including by public transport. The shift from journeys made by private vehicle to active travel would reduce traffic flows on the roads with consequential reduction in the frequency and severity of collisions. Quality dedicated provision for cycling separated from road traffic was anticipated to reduce collisions. However, there is a risk that the number of cycle collisions may increase post-scheme implementation, because new and returning cyclists would still need to travel along existing infrastructure to reach them.

5.4.61. A qualitative assessment, based on the scheme feasibility drawings, was undertaken to assess the likely change in collisions. Reference was also made to quantitative analysis of collisions in Hereford involving pedestrians and cyclists, which identified that a substantial number of personal injury collisions occurred on main radial highway corridors, with a cluster site on Holme Lacy Road. The A465 (between Tesco Roundabout and Asda Junction) has a higher than average collision rates for pedal cyclists. The assessment also took account of the number of people who may be travelling actively as a result of each improvement and who might be exposed to collisions.

5.4.62. A summary of the outcome of the assessment is set out in Table 30.

Table 30 - Assessment of Impact – Personal Injury Collisions

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Slight beneficial	Moderate beneficial	Large beneficial	Large beneficial	Slight beneficial	Moderate beneficial	Moderate beneficial	Moderate beneficial	Moderate beneficial	Large beneficial	Large beneficial	Large beneficial

5.4.63. The results of the assessment was as follows:

- Groups 3, 3a, 8 and 8a were assessed as having a large beneficial impact due to the provision of new routes for cycling segregated from motor traffic in locations where the greatest numbers of new active travel journeys would be likely to be generated, and on routes with a history of pedestrian and cyclist casualties;
- Group 9 was assessed as having a large beneficial impact due to the likely reduction of volumes of motorised traffic on key active travel routes;
- Groups 2, 5, 6 and 7 were assessed as having moderate beneficial impact as these would include new active travel routes segregated from traffic but the increase in numbers of active travel journeys was considered to be less substantial than for groups 3, 8 and 9; and
- Groups 1 and 4 were assessed as having a slight beneficial impact on collisions. They would not provide segregated routes for cyclists but were considered, in the case of group 1, to reduce the average speeds of vehicles, while group 4 would result in a reduction in the number of heavy vehicles.

Security

5.4.64. A qualitative assessment, based on the scheme feasibility drawings, was undertaken to assess the likely impact on security. All the improvement groups were assessed as having a neutral impact on security.

Access to services (by public transport)

5.4.65. TAG Unit 4.2²³ emphasises that this assessment area relates to public transport accessibility to employment, services and social networks, including access to bus stops. A qualitative assessment compared the impact the improvement groups would have on improving access to public transport.

5.4.66. A summary of the assessment is set out in Table 31.

²³<https://www.gov.uk/government/publications/webtag-tag-unit-a4-2-distributional-impact-appraisal-december-2015>

Table 31 – Assessment of Impact – Accessibility

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Slight beneficial	Large beneficial	Large beneficial	Large Beneficial	Slight beneficial	Large beneficial	Slight beneficial	Slight beneficial	Slight beneficial	Large beneficial	Large beneficial	Moderate beneficial

5.4.67. The results of the assessment ranged from neutral to large beneficial impact, depending on the degree to which the improvement groups would improve accessibility to public transport and the number of travellers the schemes would improve access for, as follows:

- Group 2 was assessed as having large beneficial impact as it would provide a bus lane, to enhance bus accessibility to the city centre from South-West Hereford on a congested road corridor;
- Groups 3, 3a, 5, 8 and 8a were considered to also have a large beneficial impact as the proposals would improve accessibility to bus stops on foot or by cycle;
- Group 9 was assessed as having a moderate beneficial impact as walking and cycling routes to bus stops would be enhanced and the improvements would be likely to improve the bus accessibility; and
- Groups 1, 4, 6, 6a and 7 were assessed as having a slight beneficial impact, with relatively minor improvements to routes to bus stops.

Personal Affordability

5.4.68. All the groups of possible improvements are intended to enable more journeys on foot or by cycle, which are relatively low cost forms of transport. Reference was made to the income deprivation domain of the Index of Multiple Deprivation²⁴ and the Census 2011 data on car or van availability²⁵ to inform the assessment of impacts on affordability. Table 32 summarises the outcome of the assessment.

Table 32 – Assessment of Impact - Affordability

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Large beneficial	Large beneficial	Large beneficial	Large Beneficial	Large beneficial	Slight beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial	Large beneficial

²⁴ <http://dclgapps.communities.gov.uk/imd/idmap.html>

²⁵ <https://www.nomisweb.co.uk/census/2011/qs416ew>

5.4.69. All the improvement groups were assessed as having beneficial impact on personal affordability, by facilitating active travel journeys. Groups 1-4 and 6-9 were assessed as having large beneficial impacts on personal affordability due to their strong relationship with, and close proximity to areas with some of the highest levels of income deprivation and lowest levels of car availability in Herefordshire. Group 5 was assessed as having a slight beneficial impact on affordability as it is less well related to Herefordshire’s most income deprived and low car ownership areas.

Severance

5.4.70. A qualitative assessment, based on the scheme feasibility drawings, was undertaken to assess the likely change in severance arising from the schemes. Particular reference was made to whether the schemes would introduce new or improved opportunities to cross streets, the level of motorised traffic on those streets and the number of pedestrians or cyclists who would benefit from improvements. Table 33 summarises the outcome of the assessment.

Table 33 – Assessment of Impact – Severance

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Slight beneficial	Slight beneficial	Large beneficial	Large Beneficia	Moderate beneficial	Moderate beneficial	Large beneficial	Neutral	Slight beneficial	Large beneficial	Slight beneficial	Large beneficial

5.4.71. The assessment scores ranged from neutral to large beneficial impact, as follows:

- Large beneficial impact assessments were given for:
 - Group 9, where substantial reduction of traffic volumes were considered likely on key active travel routes; and
 - Groups 3, 3a, 6 and 8, which would include new controlled crossings for pedestrians and cyclists and designs to enable easier crossing of side streets;
- Moderate beneficial impact assessments were given for:
 - Group 4, as it will reduce the proportion of heavy traffic on Belmont Road;
 - Group 5, as it would include a new signal crossing of a heavily trafficked roads, but in an area with a smaller catchment population;
- Slight beneficial impacts assessment were accorded to:
 - Group 1, due to the proposed 20mph zones and redesigns of junctions in residential areas, which would enable pedestrians to cross roads more easily;
 - Groups 2 and 7, as they would include an upgrade to existing crossing facilities; and
 - Group 8a, which includes designs to enable easier crossing of side streets;
- Group 6a was assessed as being neutral as it would not feature substantial changes to crossings of heavily trafficked roads.

Option and non-use values

5.4.72. The improvement groups would not directly result in additional public transport services and therefore all of them were assessed as having a neutral impact on this assessment area.

PUBLIC ACCOUNTS

- 5.4.73. Cost estimates were calculated, and for the majority of items these costs were based on rates in Spon’s Civil Engineering and Highway Works 2015. Where Spon’s rates were not applicable, contemporary rates were applied from similar schemes in the locality. Further allowances were made to account for Contractor Overheads and Preliminaries, Traffic Management, works by the Statutory Undertakers and optimism bias. The sums allowed for both Statutory Undertakers and Traffic Management were based on engineering judgement having considered the likely presence of existing utilities, the current highway alignments and the typical daily traffic flows.
- 5.4.74. Table 34 below summarises the cost estimates. None of the schemes considered were anticipated to generate an income.

Table 34 – Public Accounts

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
£1.09m	£1.61m	£3.15m	£3.89m	£0.03m	£1.87m	£1.40m	£0.86m	£1.28m	£2.27m	£1.73m	£1.07m
Moderate costs	Moderate costs	High costs	High costs	Low costs	Moderate costs	Moderate costs	Low costs	Moderate costs	High costs	Moderate costs	Moderate costs

- 5.4.75. The outcome of the assessment was as follows:
- Improvement group 3a was estimated to have the highest estimated cost, totalling £3.89m to upgrade active travel infrastructure along a substantial length of Belmont Road;
 - Improvement groups 3 and 8 also had an estimated cost of greater than £2m;
 - Improvement groups 1, 2, 5, 6, 7, 8a and 9 were estimated to have moderate costs of between £1m and £2m;
 - Improvement group 4 was estimated to be the cheapest scheme with an estimated cost of £0.03m; and
 - Improvement group 6a also had an estimated cost of less than £1m.

VALUE FOR MONEY ASSESSMENT

- 5.4.76. A value for money (VfM) assessment was undertaken, which compared the environment, economy and society impacts (see Table 35) against the required public expenditure for the improvement group. The results of this assessment were divided into three equal categories as follows:
- Higher value for money – between £1,549 and £30,491 for every assessment score point;
 - Moderate value for money – between £30,491 and £59,434 for every assessment score point; and
 - Lower value for money – between £59,434 to £88.377 for every assessment score point.

Table 35 – Assessment of Value for Money

Group of Possible Improvements											
1	2	3	3A	4	5	6	6A	7	8	8A	9
Moderate VfM	Moderate VfM	Lower VfM	Lower VfM	Higher VfM	Lower VfM	Moderate VfM	Moderate VfM	Moderate VfM	Moderate VfM	Moderate VfM	Higher VfM

5.4.77. The VfM assessment indicated that:

- Groups 4 and 9 offered higher value for money, with substantial benefits and relatively low scheme costs;
- Groups 2, 6, 6A, 8 and 8A offered moderate value for money, with moderate benefits and moderate costs;
- Groups 1 and 7 offered moderate value for money, with lower benefits but also lower costs;
- Groups 3 and 3A offered lower value for money, with substantial benefits but very high costs; and
- Group 5 offered lower value for money, with lower benefits and high costs.

OUTCOME OF ASSESSMENT

5.4.78. A set of twelve ASTs, one for each improvement group, including the three variants, were used to compile the results for each assessment area. The full ASTs are set out in Appendix K and a summary sheet is shown in Table 36.

Table 36 – Active Travel Schemes Appraisal Summary

Appraisal Criteria	Group of Possible Improvements											
	1	2	3	3A	4	5	6	6A	7	8	8A	9
Economy												
Business users and transport providers	0	3	3	3	1	3	1	1	1	3	2	3
Reliability impact on business users	2	3	3	3	1	2	2	2	2	3	3	2
Regeneration and Wider Impacts	1	3	3	3	3	1	3	2	3	3	2	3
<i>Economy summary</i>	3	9	9	9	5	6	6	5	6	9	7	8
Environment												
Noise	2	2	3	3	1	2	2	2	2	3	3	3
Air quality	2	2	3	3	1	2	2	2	2	3	3	3
Greenhouse gases	2	2	3	3	1	2	2	2	2	3	3	3
Landscape/townscape	0	0	3	3	0	-1	0	0	-1	0	0	0
Historic environment	0	0	0	0	0	-1	0	0	0	0	0	0
Biodiversity	0	0	1	1	0	-1	-1	-1	-1	0	0	0
Water environment	0	0	1	1	0	-1	-1	-1	-1	0	0	0
<i>Environment summary</i>	6	6	14	14	3	2	4	4	3	9	9	9
Society												
Reliability impact on commuting and other users	1	3	3	3	1	2	2	2	3	3	2	3
Physical activity	2	3	3	3	1	2	2	2	2	3	3	3
Journey quality	1	3	3	3	1	3	3	3	3	3	3	3
Accidents	1	2	3	3	1	2	2	2	2	3	3	3

134

Appraisal Criteria	Group of Possible Improvements											
	1	2	3	3A	4	5	6	6A	7	8	8A	9
Security	0	0	0	0	0	0	0	0	0	0	0	0
Access to services	1	3	3	3	1	3	1	1	1	3	3	2
Affordability	3	3	3	3	3	1	3	3	3	3	3	3
Severance	1	1	3	3	2	2	3	0	1	3	1	3
Option and non-use values	0	0	0	0	0	0	0	0	0	0	0	0
<i>Society summary</i>	10	17	21	21	10	15	16	13	15	21	18	20
<i>Combined score for economy, environment and society</i>	19	33	44	44	18	23	26	22	24	39	34	37
Public Accounts												
Estimated Cost	£1.09m	£1.61m	£3.15m	£3.89m	£0.03m	£1.87m	£1.40m	£0.86m	£1.28m	£2.27m	£1.73m	£1.07m
VfM	2	2	1	1	3	1	2	2	2	2	2	3
Total Score	21	35	45	45	21	24	28	24	26	41	36	40

5.4.79. The headline outcomes were as follows:

- Each group of possible improvements had highly positive combined scores ranging from 20 to 45;
- Each group of possible improvements were appraised as having:
 - positive overall scores in terms of impacts on the economy (ranging from +3 to +9);
 - positive overall scores in terms of impacts on the environment (ranging from +2 to +14);
 - positive overall scores in terms of impact on the society (ranging from +10 to +21); and
 - impacts on public accounts ranging from £0.03m to £3.89m.

Ranking the groups of possible improvements

5.4.80. The improvement groups were ranked in descending order of their combined score. The rankings are outlined below in Table 37.

Table 37 – Ranking the groups of possible improvements

Rank	Score	Improvement group reference	Description
=1	45	3	Belmont Road walking and cycling improvements
=1	45	3a	Belmont Road walking and cycling improvements
3	41	8	Holme Lacy Road – further walking and cycling improvements
4	40	9	Walnut Tree Avenue / Hunderton Road traffic reduction
5	36	8a	Holme Lacy Road – further walking and cycling improvements
6	35	2	Belmont Road bus priority measures
7	28	6	Better walking and cycling routes to Hereford Enterprise Zone
8	26	7	Hoarwithy Road and Hinton Road walking and cycling links
=9	24	6a	Better walking and cycling routes to Hereford Enterprise Zone
=9	24	5	Belmont Road (West) walking and cycling improvements
=11	21	1	20mph residential areas
=11	21	4	Belmont Road weight restriction

Group 1 – 20mph residential areas

5.4.81. This group was assessed as having benefits across the economy, environment and society themes but performed poorly relative to the other improvement groups (lowest score). It scored relatively poorly in economic terms, primarily through its limited impact on additional active travel trips. The reduction in vehicle trips arising from the improvements would have a number of environmental benefits. In social terms, this group is generally anticipated to have positive impacts with lower vehicle speeds allowing for the local population to make journeys on foot or by cycle with more ease; however, other groups perform better against the same assessment areas. The group was identified as representing moderate value for money, as it is of relatively low cost but also has a low appraisal score.

Group 2 – Belmont Road bus priority measures

- 5.4.82. This group performed well against many of the assessment areas, partly down to its strong performance across the economic indicators. It was considered to benefit bus users and cyclists, especially for journeys to and from areas currently undergoing transformative regeneration at The Oval. The subsequent expected reduction in vehicle trips was anticipated to have positive impacts on the environment. In social terms the improvements were assessed as having large beneficial impacts on reliability, physical activity, journey quality, access to services and affordability, through the improved connections for bus passengers and cyclists between important origins and destinations. Balancing the benefits against estimated costs, the group was considered to represent moderate value for money.

Group 3 – Belmont Road walking and cycling improvements

- 5.4.83. This was the joint highest performing group, considered to give substantial benefits across the economic, environmental and social elements of the appraisal. The comprehensive improvements for walking and cycling along the Belmont Road corridor were assessed as being highly beneficial in economic terms, likely to result in a major shift from private vehicle usage to active modes, especially in areas that are undergoing large scale regeneration. This large mode shift was considered to result in beneficial impacts on the environment assessment areas of noise, air quality and greenhouse gases, whilst the substantial proposed tree planting also led to a large beneficial landscape / townscape score. The provision of significant segregated infrastructure was considered to bring numerous social benefits, with large beneficial impacts on reliability, physical activity, journey quality, accidents, access to services, affordability and severance. The group of improvements was estimated to have a high estimated construction cost, and this means that it scored less well in terms of value for money.

Group 3a – Belmont Road walking and cycling improvements (with Toucan crossing at Walnut Tree Avenue junction and associated works)

- 5.4.84. This group was the joint highest performing group along with group 3 and received the same assessment scores as group 3. In addition to the improvements forming group 3, group 3a would include raised tables covering the junction of Belmont Road with Walnut Tree Avenue and Hunderton Road, a new toucan crossing of Belmont Road and an additional section of shared use footway/cycleway on Belmont Road.

Group 4 – Belmont Road weight restriction

- 5.4.85. This group was assessed as having benefits across economy, environment and society but performed poorly relative to the other improvement groups, with the joint lowest score. The beneficial impacts on the economy were considered to be limited, though it would have large beneficial impacts on areas undergoing regeneration. As the shift to active travel was considered to only be minor, the improvement group was anticipated to have relatively limited environment and social benefits. However, as the cost of the improvement would be very small, it would represent higher value for money.

Group 5 – Belmont Road (West) walking and cycling improvements

- 5.4.86. Whilst this group was assessed as having benefits across economy, environment and society it performed poorly relative to many other improvement groups. In economic terms it was moderately beneficial, as it would be located further from regeneration, employment or housing growth areas. While there would be environmental benefits through a reduction in vehicle trips, there would be a number of disbenefits associated with building on undeveloped land, removal of grassland, subsequent addition of impermeable surfaces and proximity to heritage assets. In social terms the improvements were assessed as having large benefits in terms of journey quality and access to services. However, the balance of a low overall score and moderate estimated construction cost meant the group of improvements was considered to represent lower value for money.

Group 6 – Better walking and cycling routes to Hereford Enterprise Zone

- 5.4.87. This group was assessed as having benefits across economy, environment and society but had an average score when compared with all of the improvement groups. In economic terms, benefits were limited as there was not expected to be a significant shift to active modes of travel, however the improvements would be targeted at accessibility to the HEZ, considered to be a key regeneration area. Similar to group 5, the environmental benefits arising from a reduction in vehicle trips would to an extent be offset by the adverse impacts on biodiversity and water environment as a result of the removal of grassland and construction of impermeable surfaces. The group performed well in social terms, with active travel infrastructure segregated from heavily trafficked roads giving large beneficial impacts in journey quality, affordability and severance. The scheme would be of low cost, and when balanced against the appraisal score, the group of improvements would represent moderate value for money.

Group 6a – Better walking and cycling routes to Hereford Enterprise Zone (without shared use footway/cycleway under railway bridge)

- 5.4.88. This was a variant of group 6 and excluded the proposals for a shared use footway/cycleway under railway bridge. The exclusion of this element of improvements led to it being accorded lower scores for regeneration and severance than group 6.

Group 7 – Hoarwithy Road and Hinton Road walking and cycling links

- 5.4.89. As with the previous group, the modest economic benefits for this group were strengthened by their location on a strategic route (between the city centre and the Lower Bullingham urban expansion site). Some of the environmental benefits arising from reduced vehicle trips were counteracted by the minor adverse impacts on landscape, townscape, biodiversity and water environment that would arise from building on undeveloped land, removing grassland and constructing impermeable surfaces. In social terms well-located active travel infrastructure segregated from motor vehicles led to strong positive scores, assessed as having large beneficial impacts on reliability and connectivity for commuting and non-business journeys, journey quality and affordability. Balancing the scores against a low estimated cost means that it was considered to represent moderate value for money.

Group 8 – Holme Lacy Road – further walking and cycling improvements

5.4.90. This group was assessed as having significant benefits across the economy, environment and society themes and performed well relative to most other improvement groups. The comprehensive range of improvements were considered to have numerous economic benefits, in terms of decongestion impacts, reliability and regeneration impacts, due to its location on a key walking and cycling route to the HEZ. The likely significant reduction in vehicle trips means that there would be large environmental benefits, in terms of noise, air quality and greenhouse gas impacts. The group similarly performed well in social terms, as a result of the proposed segregated cycle infrastructure between key origins and destinations, being assessed as having large beneficial impact on reliability and connectivity for commuting and non-business journeys, physical activity, journey quality, accidents, access to services, affordability and severance. The scheme would be of moderate cost, and once compared against the assessment score, the group was considered to represent moderate value for money.

Group 8a – Holme Lacy Road – further walking and cycling improvements (without shared use footway/cycleway under railway bridge)

5.4.91. This was a variant of group 8 and excluded the proposals for a shared use footway/cycleway under railway bridge. The exclusion of this element of improvements led to it being accorded lower scores than group 6 for journey time savings to business users, reliability and connectivity impacts for commuting and non-business users, for regeneration and severance.

Group 9 – Walnut Tree Avenue / Hunderton Road traffic reduction

5.4.92. Group 9 was assessed as having significant benefits across the economy, environment and society themes and performed well relative to most other improvement groups. Cyclists and pedestrians would benefit significantly as a result of the closure of the roads to vehicle traffic, so a significant shift to active travel is expected, assessed as giving large beneficial impacts on all economy assessment areas. The transfer of trips away from private car use would have environmental benefits, with large beneficial impacts on noise, air quality and greenhouse gases. The group was assessed as having significant social benefits, primarily as a result of the reduction in motor traffic, and better connecting key origins and destinations. It was assessed as having large beneficial impacts on reliability, physical activity, journey quality, accidents, affordability and severance. The group would be of comparatively low cost, and with significant benefits. It was therefore considered to represent higher value for money.

5.5. PUBLIC CONSULTATION

5.5.1. A public consultation dedicated to possible active travel improvements in the study area ran for a period of six weeks from 14 September to 25 October 2016, during which comments were invited. A total of 336 questionnaires were returned in response to the consultation (a combination of online and paper-based), with an additional 22 partially completed online. The consultation strategy, the materials presented and the full analysis of the responses is set out in the separate SWTP Active Travel Consultation Report²⁶.

²⁶

<https://councillors.herefordshire.gov.uk/documents/s50053138/Appendix%201%20for%20South%20Wye%20Transport%20Package%20-%20Active%20Travel%20Measures.pdf>

5.5.2. Question 3 of the survey asked respondents to score their level of support for each of the possible improvements between 1 (strongly oppose) to 5 (strongly support). The results are summarised in Table 38, and ranked according to the combined proportion of 'support' and 'strong support' they received.

Table 38 – Questionnaire Responses – Levels of Support for Each Possible Improvement

Rank	Possible Improvement	Level of Support						
		Sum of 1 and 2 (strongly oppose / oppose)	1 (Strongly oppose)	2 (oppose)	3 (neutral)	4 Support	5 (Strongly support)	Sum of 4 and 5 (support / strongly support)
1	(1) 20 mph residential areas	20%	12%	8%	22%	16%	42%	58%
=2	(3) Belmont Road walking and cycling improvements	23%	10%	13%	21%	19%	37%	56%
=2	(5) Belmont Road (West) walking and cycling improvements	21%	8%	13%	23%	19%	37%	56%
4	(6) Better walking and cycling routes to Hereford Enterprise Zone	21%	8%	13%	25%	20%	35%	55%
5	(7) Hoarwithy Road and Hinton Road walking and cycling links	24%	10%	14%	25%	21%	30%	51%
=6	(9) Walnut Tree Avenue / Hunderton Road traffic reduction	28%	17%	11%	26%	18%	29%	47%
=6	(8) Holme Lacy Road—further walking and cycling improvements	29%	14%	15%	25%	16%	31%	47%
8	(4) Belmont Road weight restriction	19%	9%	10%	36%	18%	27%	45%
9	(2) Belmont Road bus priority measures	33%	21%	12%	26%	15%	26%	41%

Note: Possible improvements ranked by the combined percentage of 'support' and 'strong support' they received. Group 3 was shown at consultation without the improvements between the junctions with Hunderton Road and Walnut Tree Avenue. The three variants (group 3a, 6a and 8a) were not specifically consulted on.

OUTCOME OF PUBLIC CONSULTATION

5.5.3. The key findings of the consultation were:

- In terms of support:
 - All possible improvements had more support than opposition;
 - Group 1 (20mph residential areas) had the highest levels of support (58%);
 - Group 3 (Belmont Road walking and cycling improvements) had the second highest level of support (56%), and therefore performed well in the technical appraisal and the consultation feedback;
 - Group 5 (Belmont Road (West) walking and cycling improvements) performed well in the consultation feedback (56% respondents supporting) but worst on the technical assessment;
- In term of neutral views (neither supporting nor opposing):
 - Most improvement groups received between 20-30% of responses with neutral views. This rose to 36% of respondents having neutral views on group 4 (Belmont Road weight restriction);
- In terms of opposition:
 - Group 2 (Belmont Road bus priority measures) had the highest levels of opposition (33%) and the lowest levels of support (41%);
 - Group 8 (Holme Lacy Road—further walking and cycling improvements) had the second highest level of opposition (29% of respondents) but performed well in the technical assessment;
 - Group 9 (Walnut Tree Avenue / Hunderton Road traffic reduction) had the third highest level of opposition (28% of respondents) but performed well in the technical assessment; and
 - All possible improvements had more support than opposition.

5.5.4. Changes were made to group 9 to reflect the views expressed in the consultation. In particular the Hunderton Road access restriction element was omitted because:

- Feedback from the members of the public during the consultation process consistently indicated that there was not perceived to be an existing rat running issue associated with traffic diverting through the Hunderton area to avoid congestion on Belmont Road;
- The project team was concerned that the proposed access restriction could significantly impact on local residents by requiring all vehicles accessing the Hunderton Estate to route via Beattie Avenue, thereby adding to congestion on Belmont Road;
- Select link analysis undertaken using the Hereford Transport Model, and prompted by the consultation feedback, indicated that diverting from Belmont Road through the Hunderton area is not likely to be a rational choice (in terms of time, distance or cost advantage) in typical peak time conditions;
- The project team considered that, without evidence of an existing problem, rat running seemed highly unlikely to occur when the SLR is open. This would largely invalidate the proposal; and
- All the benefits of improvement group 9 could still be achieved by retaining the Walnut Tree Avenue element in combination with the improved crossing on Belmont Road.

5.6. IDENTIFICATION OF PREFERRED PACKAGE

- 5.6.1. This section sets out the preferred active travel schemes and outlines the elements which, together with the SLR, would comprise the SWTP.
- 5.6.2. As highlighted above, every improvement group obtained a positive score in the technical assessment and more support than opposition in the public consultation. A methodology was devised to enable the improvements to be prioritised using three assessment criteria – alignment with South Wye area objectives, value for money and an assessment of the issues which may arise in delivering the scheme. Table 39 describes the assessment categories, the information used and how these align with the five case business model.

Table 39 - Prioritisation Process – Categories of Information Used

Business Case	Assessment category	Information used	Assessment method	Scale used
Strategic	Assessment against South Wye area objectives	AO1 - Improve access to the HEZ by all modes	Qualitative assessment on resultant change in access to the HEZ	7-point assessment scale*
		AO2 - Reduce vehicle delay for journeys accessing the HEZ from the west	Qualitative assessment of change in vehicle delay (both decongestion to vehicles due to extra active travel journeys taking place and/or additional vehicle delay due to introduction of active travel improvement)	
		AO3 - Encourage use of active modes for journeys to, from and within the South Wye area)	Informed by data from Table 28 (Assessment of Impact - Health and Physical Activity)	
		AO4 - Reduce the air quality and noise impacts from road transport on key receptors in the South Wye area	Informed by data from Table 20 and Table 21 (Assessment of Impact - Traffic Noise / Air Quality)	
		AO5 - Improve road safety for all modes within the South Wye area	Informed by data from Table 30 (Assessment of Impact - Personal Injury Collisions)	
Economic	Value for money	Estimated scheme costs and total score given to objectives	Estimated scheme cost divided by the total score given to objectives AO1-AO5 above	£ per total objective score
Management	Assessment of issues which may arise in delivering the scheme	Practical feasibility	Complexity of construction works and likely potential for resolving issues	3-point assessment scale**
		Legal issues	Requirements for land purchase or traffic regulation orders	
		Public acceptability	Proportion of responses to public consultation who supported or strongly supported the improvement.	3-point assessment scale#

Notes:

* Score of +1 = weakly meets the objective; score of +2 = moderately meets the objective; score of +3 = strongly meets the objective; 0 = neutral; score of -1 = improvement weakly works against meeting the objective; score of -2 = improvement moderately works against the achievement of the objective; score of -3 = improvement strongly works against achievement of the objective

** Score of +1 given where significant issues were identified but there is a realistic prospect of them being resolved, a score of +2 give where some issues were identified but they should not pose problems to deliverability and a score of +3 given where no significant issues were identified outside the normal course of scheme delivery

positive scores accorded where greater proportion of respondents supported or strongly supported improvement than opposed or strongly opposed it. Support ranged from 41% to 58% of respondents. Score of +1 given to improvements with levels of consultation support in the lower third of the range (41%-45%), +2 to middle third of the range (47-52%) and +3 to higher third of the range (53-58%).

5.6.3. Table 40 outlines the prioritisation scores which result from the above methodology.

Table 40 - Active travel improvements - results of prioritisation

Assessment Category		Group of active travel Improvements											
		1	2	3	3A	4	5	6	6A	7	8	8A	9
Assessment against South Wye area objectives	Objective AO1	1	1	3	3	1	1	3	2	1	3	2	2
	Objective AO2	0	0	3	3	1	1	1	1	0	1	1	-1
	Objective AO3	2	2	3	3	1	2	2	2	2	3	3	3
	Objective AO4	2	2	3	3	1	2	2	2	2	3	3	3
	Objective AO5	1	2	3	3	1	2	2	2	2	3	3	3
	<i>Totals</i>	6	7	15	15	5	8	10	9	7	13	12	10
Value for money	£m per objective score	0.182	0.230	0.210	0.259	0.006	0.234	0.140	0.086	0.183	0.175	0.133	0.107
Assessment of issues which may arise in delivering the scheme	Practical feasibility	3	2	1	1	3	3	2	3	3	2	3	3
	Legal issues	2	1	3	3	2	2	3	3	2	3	3	1
	Public consultation support	3	1	2	2	1	3	3	3	2	2	2	2
	<i>Totals</i>	8	4	7	7	6	8	7	8	7	6	7	6

5.6.4. The results from Table 40 were then distilled down into a single score per assessment category (+1, +2 or +3), as set out in Table 41. The appropriate score was identified by dividing all of the results from each assessment category into three even ranges; the poorest performing third were accorded a score of +1, the middle third accorded a score of +2 and the highest performing third a score of +3. The objectives score was accorded a double weighting in view of the importance of implementing schemes which strongly achieve the objectives.

Table 41 - Active travel improvements – summary prioritisation scoring table

Assessment Category	Data and Scores	Group of active travel Improvements											
		1	2	3	3A	4	5	6	6A	7	8	8A	9
Assessment against South Wye area objectives	Score from Table 40	6	7	15	15	5	8	10	9	7	13	12	10
	Category score (1,2 or3)	1	1	3	3	1	1	2	2	1	3	2	2
	Double weighting	2	2	6	6	2	2	4	4	2	6	4	4
Value for money	Data from Table 40 (£m)	0.182	0.230	0.210	0.259	0.006	0.234	0.140	0.086	0.183	0.175	0.133	0.107
	Category score (1,2 or3)	1	1	1	1	3	1	2	3	1	1	2	2
Assessment of whether the scheme is deliverable	Score from Table 40	8	4	7	7	6	8	7	8	7	6	7	6
	Category score (1,2 or 3)	3	1	2	2	2	3	3	3	2	2	3	2

Note: 3A, 6A and 8A are variants of active travel groups 3, 6 and 8.

5.6.5. The results of the prioritisation are summarised and ranked in Table 42.

Table 42 - Active travel improvements – results of prioritisation

Assessment Category	Group of active travel Improvements											
	1	2	3	3A	4	5	6	6A	7	8	8A	9
Assessment against South Wye area objectives	2	2	6	6	2	2	4	4	2	6	6	4
Value for money	1	1	1	1	3	1	2	3	1	1	2	2
Assessment of whether the scheme is deliverable	3	1	2	2	2	3	3	3	2	2	3	2
Totals	6	4	9	9	7	6	9	10	5	8	11	8
Ranking	9	12	=1	=1	8	9	=1	=1	11	=1	=1	7

Note: 3A, 6A and 8A are variants of active travel groups 3, 6 and 8.

- 5.6.6. Groups 3, 3A, 6, 6A, 8 and 8A were the joint highest scoring improvements. As these groups contain variants of the same improvements, only three of the six listed groups were taken forward. They were chosen on the basis of being the better performing variant and the ability to form a coherent package. Group 3A includes a Toucan crossing near Walnut Tree Avenue to assist with east-west journeys, which was considered to give greater benefits. The combination of groups 6A and 8 was taken forward on the basis that it received a higher joint score in Table 36 than groups 6 and 8A.
- 5.6.7. The planning application for the Southern Link Road (reference P/151314) was considered by Herefordshire Council's Planning and Regulatory Committee in June 2016. The committee resolved that the application be granted, subject to a series of conditions. One of the conditions stated that: *"Prior to the first operation of the road hereby approved, a weight restriction on Belmont Road shall be implemented and effective unless an alternative timescale is submitted to and approved in writing by the Local Planning Authority"*. On that basis, and although not forming one of the better performing active travel measures defined by the prioritisation process, Group 4: *Belmont Road weight restriction* was also included in the SWTP preferred package.
- 5.6.8. Together, groups 3A, 4, 6A and 8 were considered to constitute the preferred active travel package. The total estimated cost of these four groups of improvements was £7.05m, based on the designs prepared for the 2016 SWTP active travel measures public consultation. The estimated cost was comprised of:
- £3.89m for Group 3A - Belmont Road walking and cycling improvements, including for the Toucan crossing on Belmont Road west of Walnut Tree Avenue and associated traffic calming works;
 - £0.03m for Group 4 – Belmont Road weight restriction;
 - £0.86m for Group 6A - Better walking and cycling routes to Hereford Enterprise Zone (without priority working and a shared footway/cycleway underneath railway bridge); and
 - £2.27m for Group 8 - Holme Lacy Road - further walking and cycling improvements (with priority working and a shared footway/cycleway underneath railway bridge).

It should be noted that these figures were preliminary cost estimates reflective of the relative maturity of the scheme designs at the time of the prioritisation process. The costs for the preferred package of measures will be refined as the detailed design for each scheme comprising the preferred package is developed and subjected to value engineering.

- 5.6.9. Table 43 summarises the key features of the preferred active travel package, along with their estimated costs and their benefits. Figure 6 shows the location of the elements of the preferred package. Note that additional elements which are funded separately are not outlined in this table but are discussed later in the chapter.

Table 43 – Preferred Package of Active Travel Improvements – Key Features, Estimated Costs and Benefits

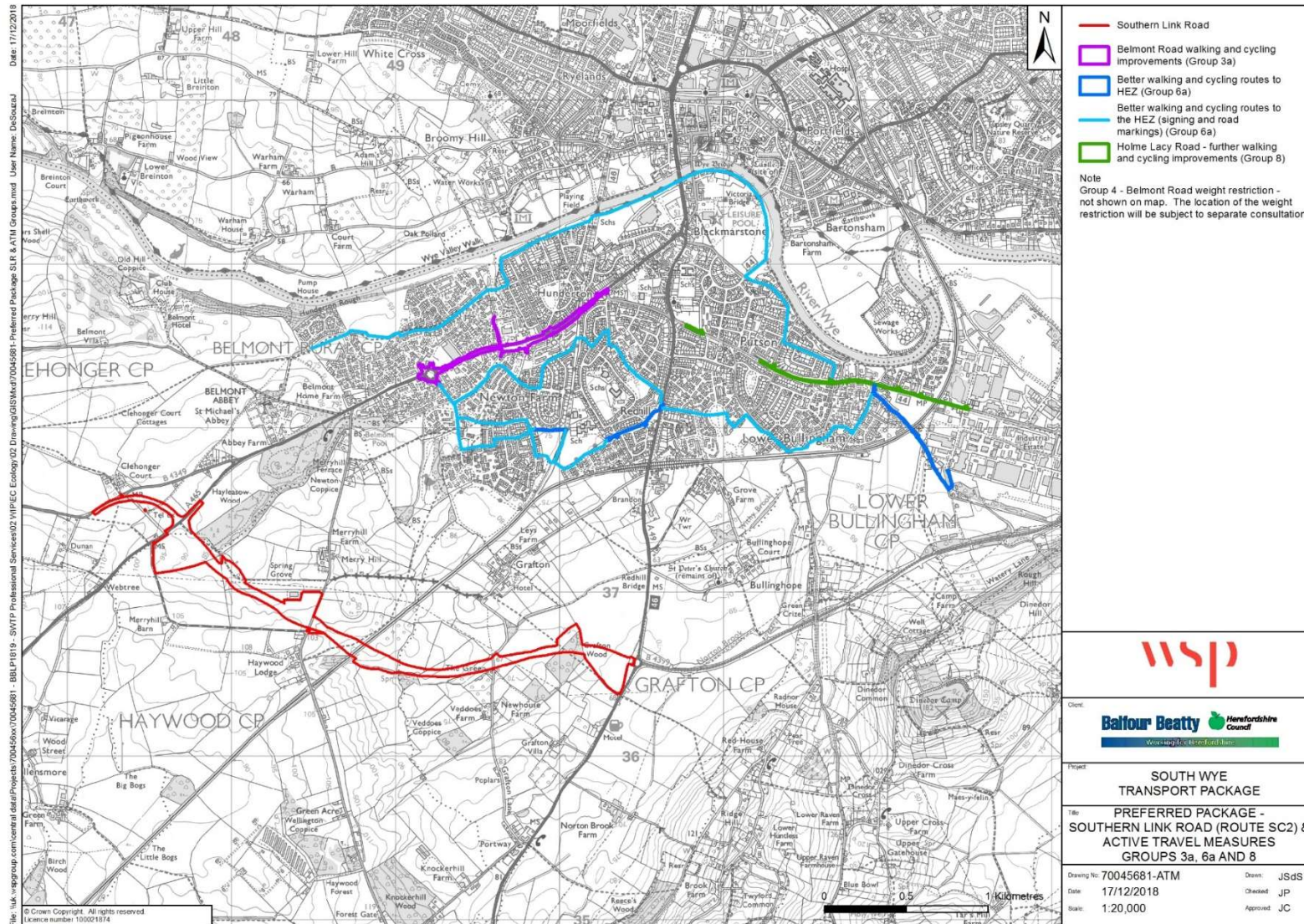
Improvement Group	Key features	Estimated Costs (£)	Benefits
3A) Belmont Road walking and cycling improvements	<p>Cycle infrastructure along section of Belmont Road from Tesco to Walnut Tree Avenue</p> <p>Improvement of existing pelican crossing of Belmont Road by The Oval</p> <p>Improved north-south crossings for pedestrians and cyclists at Tesco Roundabout and improved approach route from Eastholme Avenue</p> <p>Upgrade Newton Brook path to shared use footway/cycleway, provide toucan crossing on Belmont Road and create new connecting shared use footway/cycleway to Goodrich Grove south of the A465</p> <p>Streetscape improvements including avenue tree planting and narrowing of the Belmont Road carriageway</p> <p>Improved links to Great Western Way</p> <p>Belmont Road at Walnut Tree Avenue and Hunderton Road junctions – raised table covering both junctions and new toucan crossing of Belmont Road</p> <p>New shared use footway/cycleway on Belmont Road between Hunderton Road and Walnut Tree Avenue</p>	<p>£3.89m</p>	<p>Improved environment and more quality space for walking and cycling</p> <p>Easier to cross Belmont Road and side road junctions</p> <p>Easier and safer walking and cycling routes at Tesco Roundabout</p> <p>Better connected local communities on either side of Belmont Road</p> <p>Safer journeys to school</p> <p>Healthier and happier journeys to school</p> <p>Improved links to existing walking and cycling routes, such as Great Western Way</p> <p>Improved links to bus stops</p> <p>Encourages inexperienced and returning cyclists</p>
4) Belmont Road weight restriction	<p>Weight restriction Traffic Regulation Order on Belmont Road</p>	<p>£0.03m</p>	<p>Quieter streets</p> <p>Healthier and happier journeys to work and school</p>

6A) Better walking and cycling routes to Hereford Enterprise Zone	<p>New off-road shared use footway/cycleway between Hereford Academy and Ross Road adjacent to Marlbrook Road</p> <p>Improve shared use footway/cycleway access to Great Western Way from Ethelstan Crescent and Brampton Road</p> <p>Lighting, signing and vegetation clearance on Watery Lane and Lower Bullingham Lane</p> <p>On-road markings</p> <p>Route signage and removal of barriers and posts</p>	<p>£0.86m*</p>	<p>Tackling barriers to walking and cycling</p> <p>Opening up new links and opportunities for walking and cycling</p> <p>Safer journeys to school and work</p> <p>Healthier and happier journeys to school and work</p> <p>Encourages inexperienced and returning cyclists</p>
8) Holme Lacy Road – further walking and cycling improvements	<p>Improved cycle provision on Holme Lacy Road between railway bridge and eastern end of existing scheme at Co-op</p> <p>Block paved table tops constructed at junctions to facilitate easier pedestrian and cycle crossings of Holme Lacy Road</p> <p>Shared use footway/cycleway under railway bridge with associated one way priority working or shuttle traffic signals</p> <p>Holme Lacy Road westbound approach to A49 traffic signals - carriageway narrowed to one lane to facilitate shared use footway / cycleway (subject to third party agreement and partnership funding by HE & HC)</p>	<p>£2.27m</p>	<p>Better connected local communities</p> <p>Joining up recent improvements on Holme Lacy Road</p> <p>Safer journeys to school and work</p> <p>Improved connections to the HEZ</p> <p>Encourages inexperienced and returning cyclists</p> <p>Opening up new links and opportunities for walking and cycling</p>
Total costs		<p>£7.05m</p>	

* Does not include the costs of the design element comprising priority working and a shared footway/cycleway underneath railway bridge at the eastern end of Holme Lacy Road. This is included in the costs of group 8.



Figure 6 – SWTP Preferred Package – Location of Elements



149

5.6.10. The infrastructure and measures to be funded by the SWTP will be complemented by a series of additional elements funded separately which contribute to making a coherent package across South Wye. These comprise:

- The lighting scheme of the Hereford Greenway, funded by a partnership between Herefordshire Council and the HEZ, encouraging greater levels of use during the hours of darkness on the already popular route;
- A scheme for an off-road footway/cycleway adjacent to The Straight Mile, funded by a partnership between Herefordshire Council and the HEZ, from the entrance to Thorn Business Park to the Business Solutions Centre, by Coldnose Road;
- Developer contributions from Keepmoat Housing to fund interim improvements to the existing signal crossing on Belmont Road outside The Oval;
- Highways England's walking and cycling infrastructure schemes for the Ross Road corridor, including widening footways on the eastern side to form shared footway/cycleways (phase 1), simplified signal crossing of the Holme Lacy Road arm (phase 2) of the Broadleys crossroads and higher quality crossing of the Ross Road north arm (phase 3) of the same junction;
- Ongoing road and footway maintenance schemes funded by Herefordshire Council;
- Ongoing programme of travel planning measures led by the HEZ for employers and their employees, including the enhanced bus service 78A/78X, which commenced in October 2016; and
- Citywide programmes funded as part of Destination Hereford under the *Choose How You Move* brand.

5.6.11. Transport measures will also be delivered by planning applicants of new developments in the South Wye area, forming part of the SWTP. In particular Core Strategy policy HD6 identifies that the southern urban expansion (Lower Bullingham) will be expected to provide:

- Vehicular access principally from the B4399;
- Park and choose²⁷ site (both land and infrastructure) adjacent to the A49 / Rotherwas Access Road roundabout; and
- New direct walking, cycling and bus links from the urban extension to the park and choose site to the west, Hereford Enterprise Zone to the east and existing communities and the city centre to the north.

The supporting text in the Core Strategy indicates that access to and from the north (into the city) and to the employment areas of the HEZ to the east will be restricted to and/or prioritised for buses, walking and cycling, with a new link to the Hereford Greenway. It adds that the expansion of the existing bus network into the site will be key to the transportation strategy, to further encourage sustainable travel choices. The exact nature of these improvements is not yet determined.

²⁷ Park and choose sites are facilities which seek to reduce town centre congestion and support more sustainable and active travel modes by encouraging motorists to leave their vehicles on the edge of the urban area, and continue their journey by a range of sustainable travel options. This may be by regular bus service, walking, cycling or car-sharing. There are already several park and choose sites across Hereford, shown on the Hereford walking and cycling map.

SUMMARY OF PACKAGE BENEFITS

5.6.12. The preferred package is considered to maximise the benefits of investment across the area, as follows:

- Group 3A (Belmont Road walking and cycling improvements) would transform the look, feel and use of a substantial section of Belmont Road, which has a key role in enabling more journeys to be made by active travel modes to access the HEZ, the city centre and local facilities. This would provide connections to the key existing quality off-road route (Great Western Way) and extend the availability of quality off-road active travel infrastructure. The improved or new crossings along the length of the road would make it easier to cross and connect communities on either side of the road;
- Group 4 (Belmont Road weight restriction) would divert heavy goods vehicles away from the road except those with legitimate access requirements. This would improve the environment for walking and cycling;
- Group 6A (Better walking and cycling routes to Hereford Enterprise Zone, without priority working a shared footway/cycleway underneath the railway bridge) would create a signed and waymarked quietway cycle route from Newton Farm to the HEZ mainly using side roads. This would provide an alternative route to access employment areas, local facilities and schools; and
- Group 8 (Holme Lacy Road – further walking and cycling improvements, with priority working a shared footway/cycleway underneath the railway bridge) would make east-west walking and cycling links easier, quieter and safer, linking homes to the employment areas at the HEZ.

North-south walking and cycling journeys will be made easier by Highways England's proposals for an off-road shared footway/cycleway on the eastern side of Ross Road.

5.6.13. The preferred package, with emphasis on quality provision, would fit well with the Hereford Cycling Strategy objectives of a high quality and coherent cycle network across Hereford for commuting and local trips that meets the needs of all levels of cyclists. The preferred package would also be well aligned with the list of priority schemes in South Wye in the cycling strategy. The Cycling Strategy notes that investment in active travel infrastructure tends to represent good value for money on reduced mortality alone, and high value for money when other key issues such as congestion reduction, air quality and carbon emissions are taken into account.

5.6.14. The preferred package would also support many of the suggested actions in the Living Streets Groundwork for the Hereford Walking Strategy document. It particularly supports those under the headings for (1) design and maintenance of the public realm, (2) high quality network of routes and (5) reducing road danger. It for example identifies the A49 Ross Road and A465 Belmont Road arterial roads as having potential to be improved as walking routes, highlights managing Heavy Goods Vehicle access in residential areas and implementing 20mph zones where people live and work.

THE WIDER INVESTMENT PICTURE

5.6.15. The SWTP sits within the Hereford 2020 context of transport infrastructure investment across the city as a whole. This includes the Hereford City Centre Transport Package – construction of which is currently underway – and Hereford Transport Package, including a western bypass over the River Wye and a suite of active travel measures for the urban area north of the Wye. Removing the A49 through traffic would give the opportunity to make walking and cycling the default mode of travel for intra-city trips, with active travel measures and behavioural change campaigns.

6. CONCLUSION

6.1. BACKGROUND

6.1.1. The ORR was a recommendation arising from the OAR as means of documenting the processes used to identify a preferred route for the SLR and preferred active travel schemes which, together, comprise the SWTP. The use of an ORR to document this process was specifically agreed with the Department for Transport. It constitutes the first element of *Stage 2 - Option Development* – in the Transport Appraisal Process, as set out in Department for Transport guidance.

6.2. SLR ROUTES

6.2.1. Seven routes for the SLR were identified, four of which were presented at the 2014 public consultation, and the remaining three were generated by stakeholder responses to the consultation. The design assessment concluded that, on the basis of the information available at that time, route SC2 performed better than other routes in terms of design considerations.

6.2.2. A technical assessment, based on the information available at the time, considered impact on the economy, environment, society and public accounts. Each route scored positively in economic terms; however, there was no significant difference between routes. Each route scored negatively in terms of environmental impact, with SC9 being the worst performing, and SC7 performing best. Impacts on society were broadly positive, with slight differentiation between routes, and SC5 and SC7 scoring performing slightly less well than other routes. Impact on public accounts ranged from £16-20m for SC2 to around £25.4m-£38.6m for SC8A. In public consultation route SC2 received the highest level of support for a preferred route, followed by SC2A (which follows the same alignment but would involve a bridge under the railway).

6.2.3. The TAG score, the appraisal discussions and public consultation were all taken into account when identifying a preferred route.

6.3. SLR PREFERRED ROUTE AND ALIGNMENT

6.3.1. Route SC2 was identified as the preferred route for the SLR. The evidence available at the time indicated that this route:

- Had a relatively low cost (cheapest route);
- Had a low chance of issues such as drainage issues;
- Could be constructed with a profile which broadly followed ground level;
- Could be constructed with a 60mph design speed;
- Aligned with Network Rail's preferences for bridge over railway;
- Gave economic benefits such as regeneration;
- Had positive social impacts; and
- Had the most support from public consultation.

6.3.2. A number of refinements were then implemented at the planning application and post-planning permission stages. These include:

- Additional structures such as underpasses and culverts;
- Alterations to the design of structures on the route;
- Changes in alignment;
- Provision of additional active travel infrastructure;
- Additional agricultural access; and
- Improved landscape design.

6.4. ACTIVE TRAVEL SCHEMES

6.4.1. A range of active travel schemes were identified from the OAR review of problems, a site visit, from policies and plans and from discussions with Herefordshire Council officers. An initial sift discarded schemes which were considered to not meet the criteria in Step 6 of TAG, and the remaining active travel schemes were packaged together into nine improvement groups for technical assessment. A qualitative approach was adopted for each assessment area, informed by evidence and data where available. Key aspects of the technical assessment were the consideration of (i) the amount of additional active travel journeys likely to be generated by the proposed schemes and (ii) the likely reduction in vehicle trips, with a comparative study being carried out to inform these aspects.

6.4.2. Combined appraisal scores were positive across all three assessment areas but there was considerable variation in scores between the nine groups of possible improvements. Impacts on the economy and society were positive, there were a range of positive and negative impacts on the environment and the impact on public accounts ranged from £0.03m to £3.89m. Belmont Road walking and cycling improvements (group 3 and variant, group 3A) were the best performing. The Belmont Road weight restriction (group 4) and 20mph residential areas (group 2) performed least well.

6.4.3. Feedback from public consultation in 2016 found all the possible improvements had more support than opposition. There was strongest support for 20mph residential areas (group 1), Belmont Road walking and cycling improvements (group 3) and Belmont Road (west) walking and cycling improvements (group 5). Belmont Road bus priority measures (group 2) and Belmont Road weight restriction (group 4) had lowest levels of public support. Belmont Road bus priority measures (group 2) and Holme Lacy Road – further walking and cycling improvements (group 8) received the highest levels of opposition.

6.5. ACTIVE TRAVEL PACKAGE

6.5.1. Every improvement group obtained a positive score in the technical assessment and more support than opposition in the public consultation. A methodology was devised to enable the improvements to be prioritised, using three assessment criteria – alignment with South Wye area objectives, value for money and an assessment of the issues which may arise in delivering the scheme. A double weighting was accorded to the objectives score in view of the importance of implementing schemes which strongly achieve the objectives.

- 6.5.2. Applying this methodology identified that the active travel improvement groups which received the joint highest overall scores were groups were 3 and 3A (two variants of Belmont Road walking and cycling improvements), 6 and 6A (two variants of Better walking and cycling routes to Hereford Enterprise Zone) and 8 and 8A (two variants of Holme Lacy Road further walking and cycling improvements). These are the schemes which would have the highest priority.
- 6.5.3. As the groups listed above contain variants of the same improvements, only three of the six listed groups were taken forward (groups 3A, 6A and 8). They were chosen on the basis of being the better performing variant and the ability to form a coherent package.
- 6.5.4. The planning application for the Southern Link Road (reference P/151314) was considered by Herefordshire Council's Planning and Regulatory Committee in June 2016. The committee resolved that the application be granted, subject to a series of conditions. One of the conditions stated that: *"Prior to the first operation of the road hereby approved, a weight restriction on Belmont Road shall be implemented and effective unless an alternative timescale is submitted to and approved in writing by the Local Planning Authority"*. On that basis, and although not forming one of the better performing active travel measures defined by the prioritisation process, Group 4: *Belmont Road weight restriction* was also included in the SWTP preferred package.
- 6.5.5. The preferred package of active travel improvements is summarised below:
- Group 3A (Belmont Road walking and cycling improvements, including Toucan crossing near Walnut Tree Avenue) would transform the look, feel and use of a substantial section of Belmont Road, which has a key role in enabling more journeys to be made by active travel modes to access the HEZ, the city centre and local facilities. This would provide connections to the key existing quality off-road route (Great Western Way) and extends the availability of quality off-road active travel infrastructure. The improved or new crossings along the length of the road would make it easier to cross and connect communities on either side of the road;
 - Group 4 (Belmont Road weight restriction) would divert heavy goods vehicles away from the road except those with legitimate access requirements. This would improve the environment for walking and cycling;
 - Group 6A (Better walking and cycling routes to Hereford Enterprise Zone without the shared use footway/cycleway under the railway bridge) would create a signed and waymarked quietway cycle route from Newton Farm to the HEZ mainly using side roads. This would provide an alternative route to access employment areas, local facilities and schools; and
 - Group 8 (Holme Lacy Road – further walking and cycling improvements with the shared use footway/cycleway under the railway bridge) would make east-west walking and cycling links easier, quieter and safer, linking homes to the employment areas at the HEZ.
- 6.5.6. The total estimated cost of the three groups of improvements was estimated to be £7.05m²⁸ at the time of the prioritisation exercise. It should be noted that this figure was a preliminary cost estimate reflective of the relative maturity of scheme designs at the time of the prioritisation process being undertaken. The costs for the preferred package of measures will be refined as the detailed design for each scheme comprising the preferred package is developed and subjected to value engineering.

²⁸ The estimated £7.05m cost is comprised of £3.89m for Group 3A (Belmont Road walking and cycling improvements), plus £0.03 for Group 4 (Belmont Road weight restriction), £0.86m for Group 6A (Better walking and cycling routes to Hereford Enterprise Zone) and £2.27m for Group 8 (Holme Lacy Road - further walking and cycling improvements).

- 6.5.7. These schemes would be effective in fulfilling the objectives of the SWTP because:
- Together they are considered to maximise the benefits of investments across the area;
 - They would constitute value for money;
 - The walking and cycling infrastructure would improve access to the HEZ, city centre and other local destinations, which will encourage uptake of these modes;
 - The walking and cycling infrastructure and reduced speed limits would contribute to a reduction in the severity and incidence of road collisions and would improve the perception of safety of active travel modes;
 - The uptake of walking and cycling would contribute to a reduction in traffic noise and reduce air pollutants associated with vehicle traffic and improve public health; and
 - They support many actions in the Living Streets Groundwork for the Hereford Walking Strategy document.

6.6. WIDER SWTP PICTURE

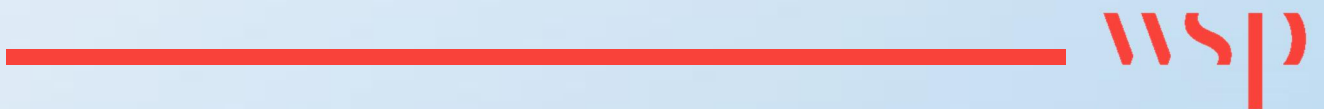
- 6.6.1. The infrastructure and measures to be funded by the SWTP would be complemented by a series of additional elements funded separately which contribute to making a coherent package across South Wye. This includes private sector funding for infrastructure, Highways England active travel schemes for the A49 corridor and supporting revenue expenditure on behaviour change and promotion.

6.7. RECOMMENDATIONS

- 6.7.1. It is recommended that the preferred package is a combination of SLR route SC2 (as subsequently refined through the planning application and post-planning permission stages) and groups of proposed active travel improvements 3A, 4, 6A and 8. The business case will demonstrate that these elements are the package to be progressed.

Appendix A

KEY ENVIRONMENTAL DESIGNATIONS



Environmental Constraints

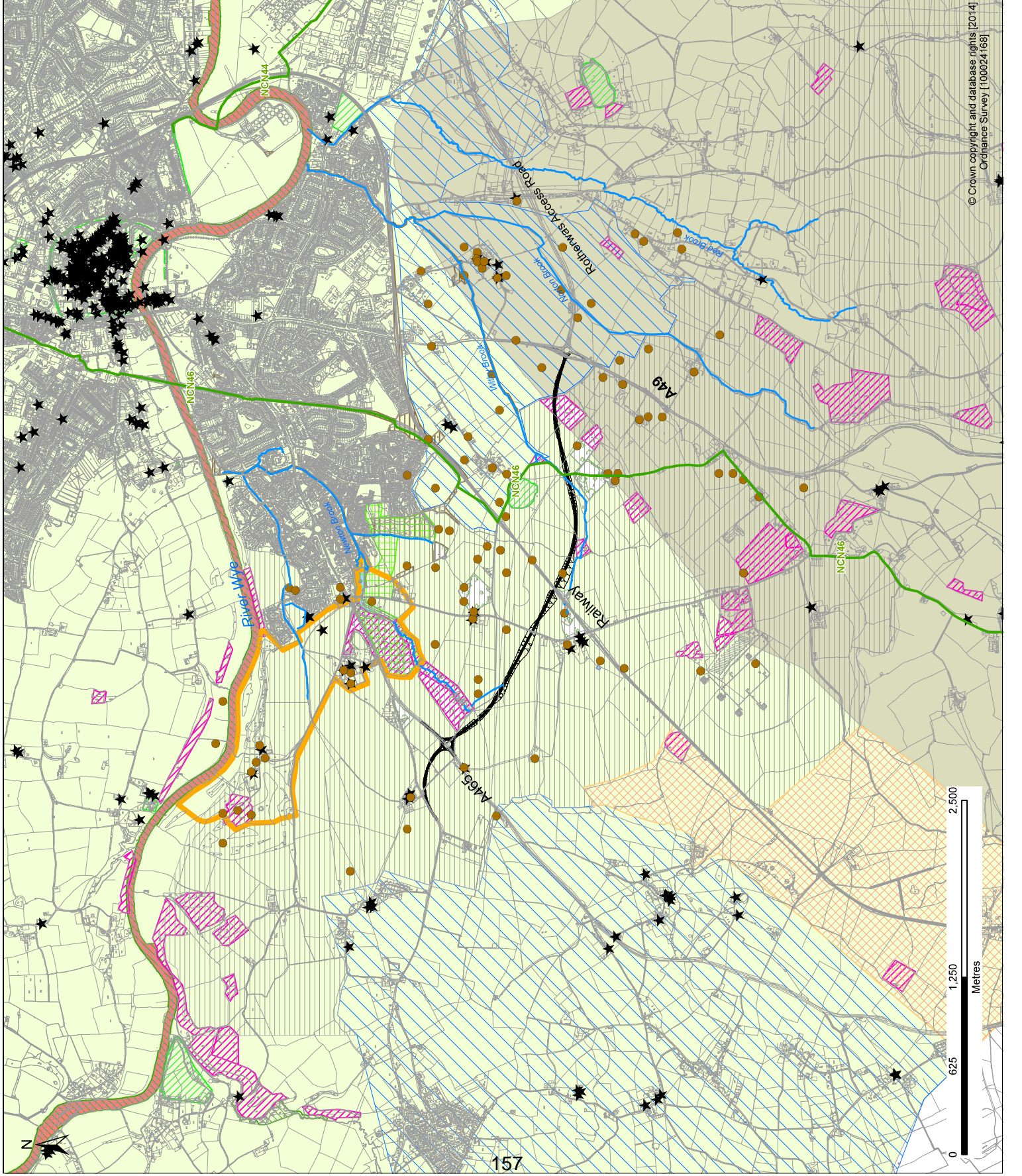
- Southern Link Road
- Woodland
- Belmont Haywood Park (Jubilee Park)
- Site of Importance for Nature Conservation (SINC)
- Revised Ancient Woodland
- Site of Special Scientific Interest (SSSI)
- Special Area of Conservation (SAC)
- Ponds
- River
- Site of Archaeological Importance
- Site of Archaeological Importance
- Unregistered historic parks and gardens
- Listed Buildings
- National Cycle Network Routes (NCN)
- Landscape Character Areas
- National (NCA)
- NCA 100: Herefordshire Lowlands
- NCA 104: South Herefordshire and Over Severn
- Local Landscape Types
- Wooded Estatelands
- Principal Settled Farmlands
- Wet Pasture Meadows

Rev	Date	Description	By	Chk	App
A	24-03-15	Amendment to Scale and Legend	JUS	PJ	PJ

WSP | **PARSONS BRINCKERHOFF**
 Kings Orchard, 1 Queen Street, Bristol, BA2 0HQ
 Tel: 44-(0)117-9306200
Herefordshire Council

Client: **HEREFORDSHIRE SWTP SOUTHERN LINK ROAD**
 Title: **MAIN ENVIRONMENTAL CONSTRAINTS**

Drawn: JUS	Checked: PJ
Designed: LW	Approved: KR
Date: 12/12/2017	Scale: 1:25,000 A3 Sheet: []
Project Number: 3512983L-HHB	Drawing Number: FIGURE 7.1
	Revision: A

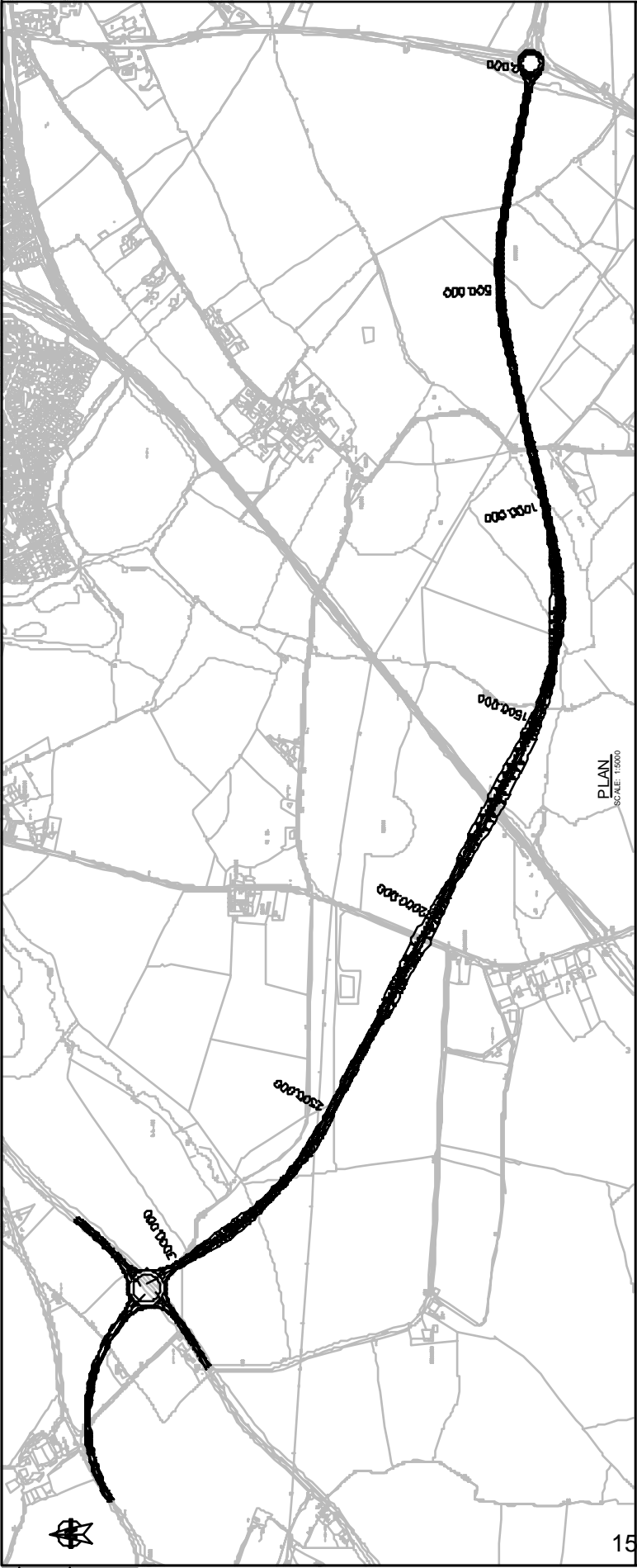


Appendix B

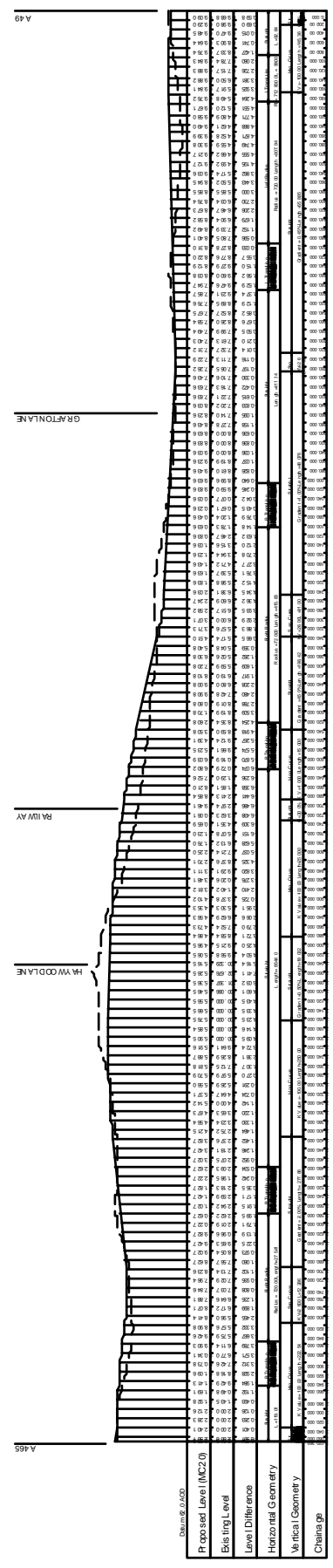
SLR ROUTES



NOTES:
 1. DO NOT SCALE FROM THIS DRAWING. USE FIGURE D DIMENSIONS ONLY.
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN



159



LONGITUDINAL SECTION
 SCALE: 1:5000 H:1:1000V

PRELIMINARY
PARSONS BRINCKERHOFF
 20 CHILWELL ROAD
 CHILWELL, NOTTINGHAM NG9 6FJ
 TEL: 44 (0)20 300 3000
 FAX: 44 (0)20 300 7000
 WWW.PARSONSBRINCKERHOFF.COM

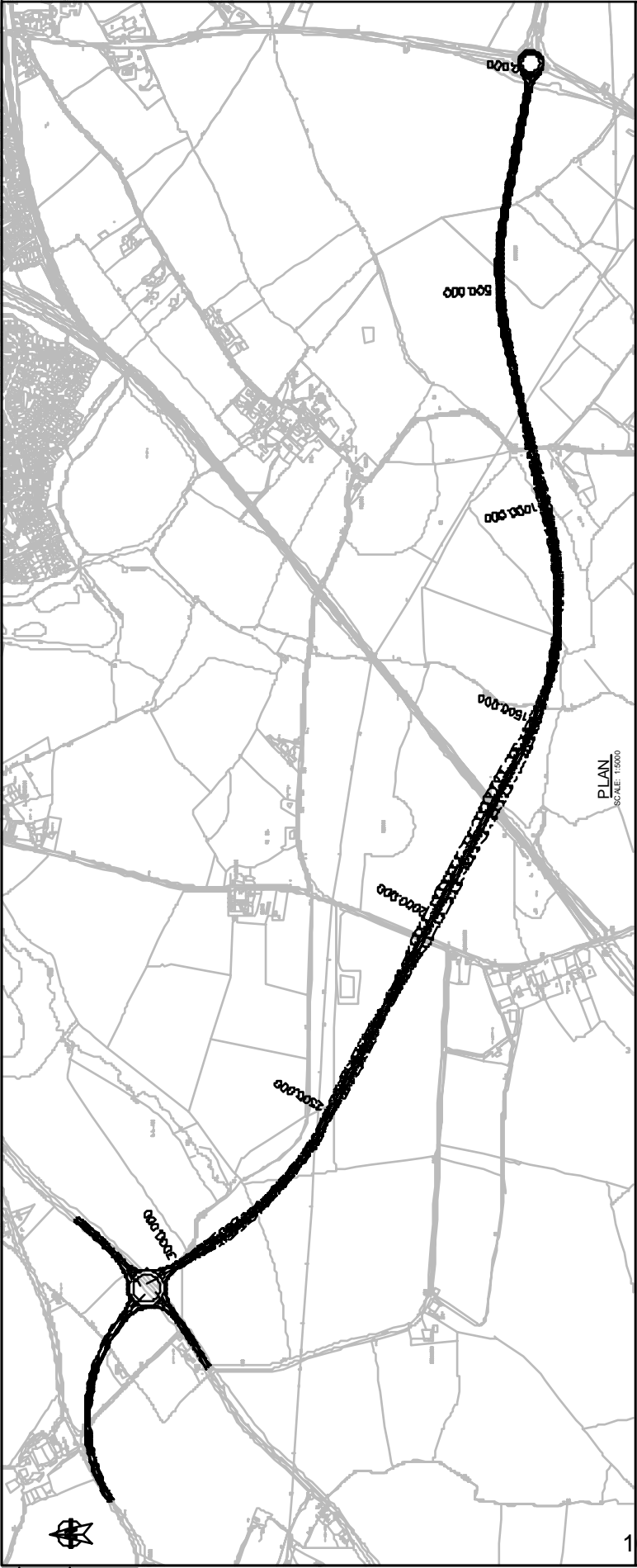
HE REFORDSHIRE
 SWTP
 SOUTHERN LINK ROAD

PLAN AND
 LONGITUDINAL SECTION
 OPTION SC2

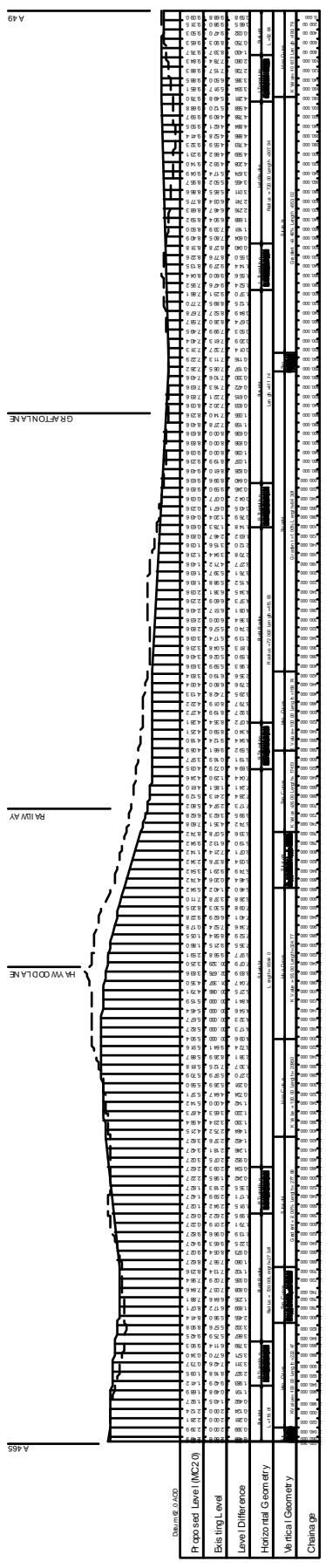
351 2983A-HHR Figure 12
 © Copyright Parsons Brinckerhoff

NOTES:
 1. DO NOT SCALE FROM THIS DRAWING. USE FIGURE D DIMENSIONS ONLY.
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN

USL
 --- PROPOSED PROFILE
 --- EXISTING PROFILE



160



LONGITUDINAL SECTION
 SCALE: 1:5000 H 1:1000V

PRELIMINARY
PARSONS BRINCKERHOFF
 20 Cliff Walk Drive
 Cliff Walk
 Christchurch
 New Zealand
 Tel: +64 (0)3 338 3000
 Fax: +64 (0)3 338 3000
 Email: info@parsonsbrinckerhoff.com

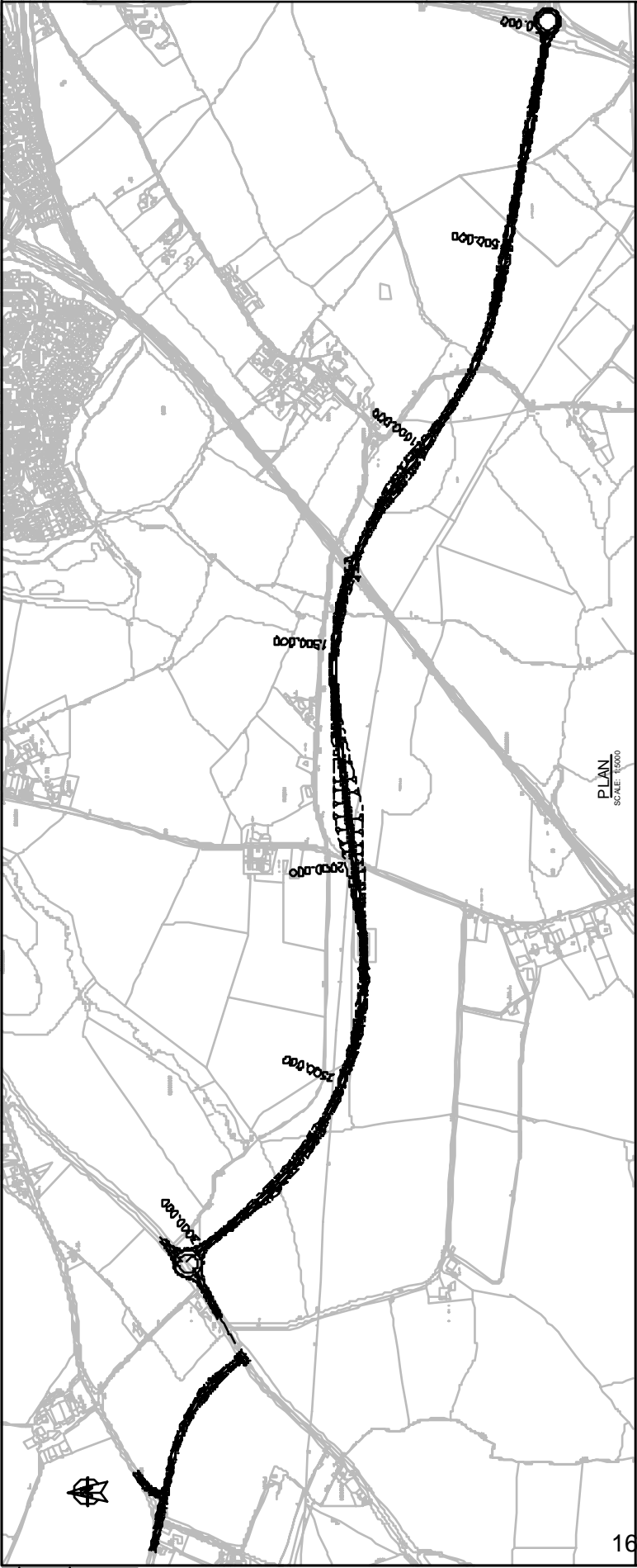
HE REFORDSHIRE
 SWTP
 SOUTHERN LINK ROAD

PLAN AND
 LONGITUDINAL SECTION
 OPTION SC2A

Drawn	IM	Checked	IC
Designed	JEP	Reviewed	IC
Date	03/03/2014	By	J.A.S. SUTHERLAND
Project No.	351 2983A-HHR		
Sheet No.	Figure 13		

© Copyright 2014 Parsons Brinckerhoff

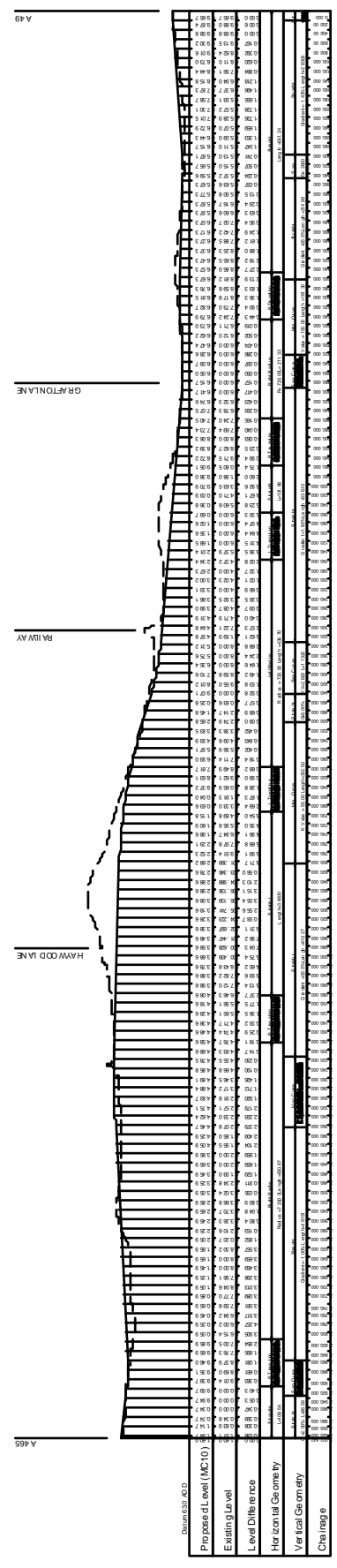
NOTES:
 1. DO NOT SCALE FROM THIS DRAWING. USE FIGURE D DIMENSIONS ONLY.
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN



PLAN
SCALE: 1:5000

161

PROPOSED PROFILE
 EXISTING PROFILE



LONGITUDINAL SECTION
SCALE: 1:5000 H:1:10000

PRELIMINARY

PARSONS BRINCKERHOFF

20 Cliff Walk Drive
 Cliff Walk
 Cliff Walk
 Tel: 441-233-3300
 Fax: 441-233-3301
 Email: info@parsonsbrinckerhoff.com

Herfordshire Council

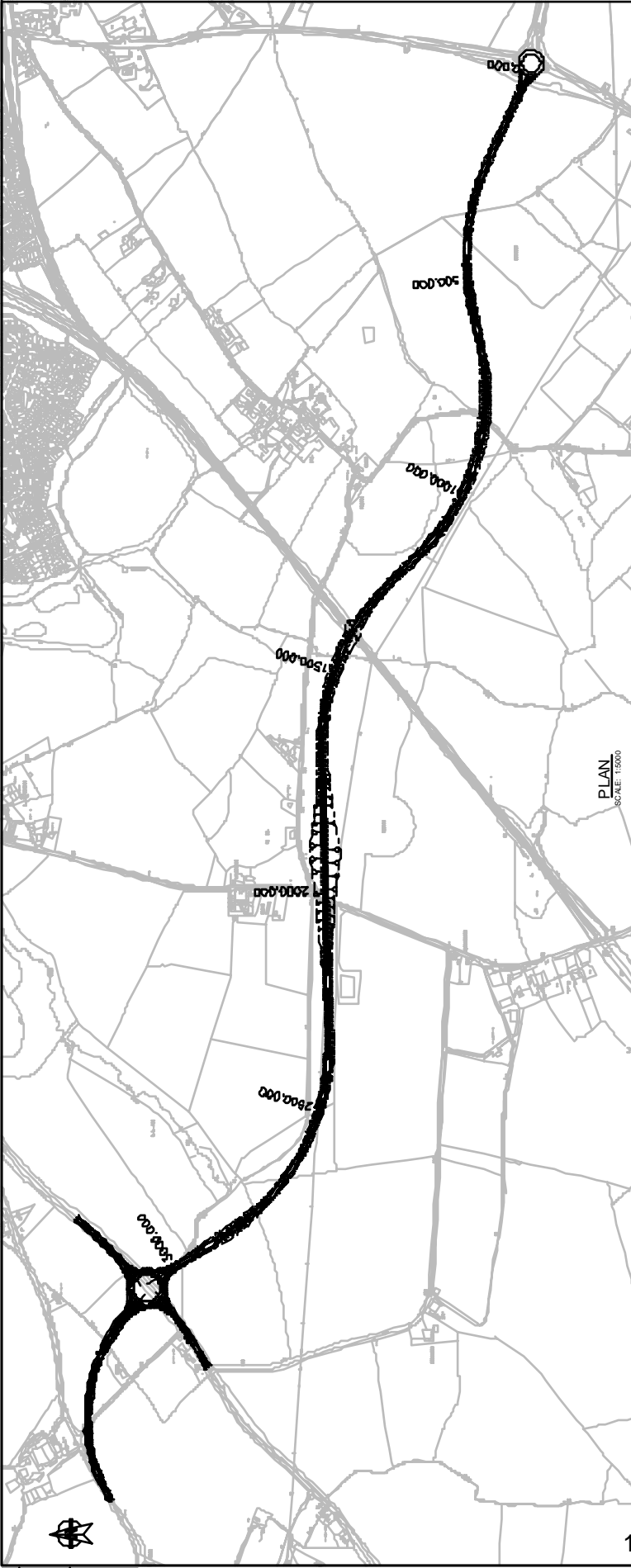
HE REFORDSHIRE
 SWTP
 SOUTHERN LINK ROAD

PLAN AND
 LONGITUDINAL SECTION
 OPTION SC5

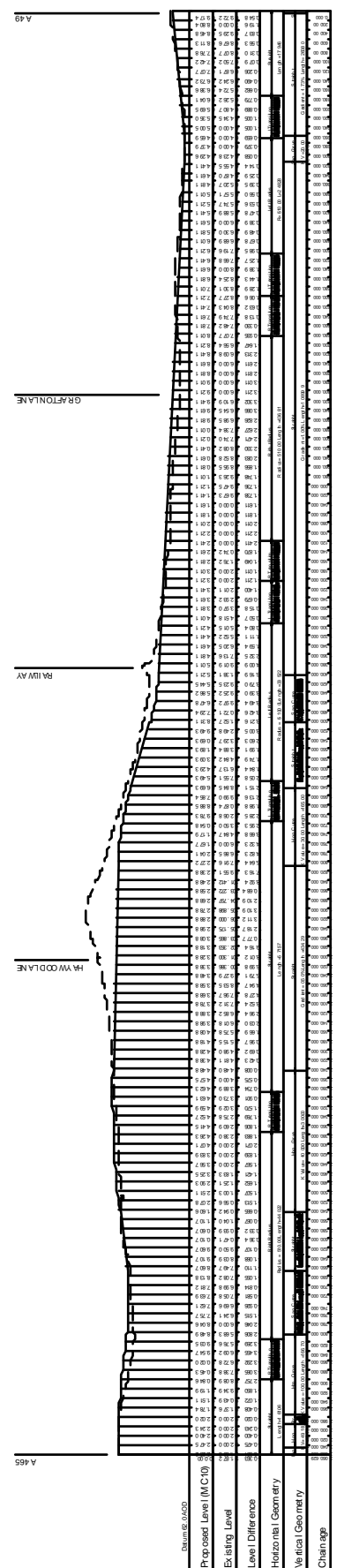
351 2983A-HHR Figure 14

© Copyright Herfordshire Council

NOTES:
 1. DO NOT SCALE FROM THIS DRAWING. USE FIGURE D DIMENSIONS ONLY.
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN



162



LONGITUDINAL SECTION
 SCALE: 1:5000 H x 1:1000 V

PRELIMINARY

PARSONS BRINCKERHOFF



20 CHURCH STREET
 CHESHAM
 TEL: 44 (0)1293 30300
 FAX: 44 (0)1293 07700
 WWW.PARSONSBRINCKERHOFF.CO.UK

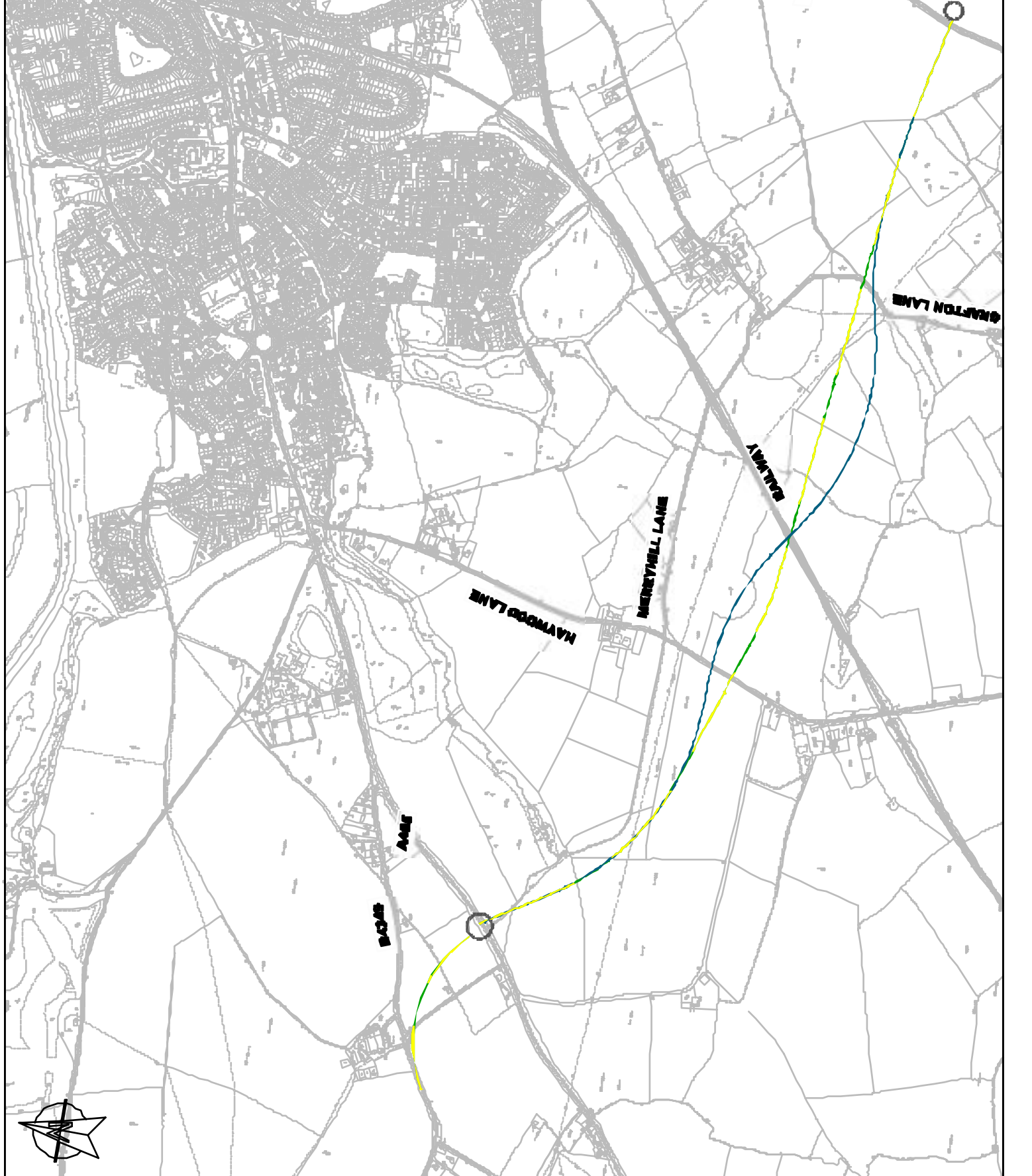
HE REFORDSHIRE
 SWTP
 SOUTHERN LINK ROAD

PLAN AND
 LONGITUDINAL SECTION
 OPTION SC7

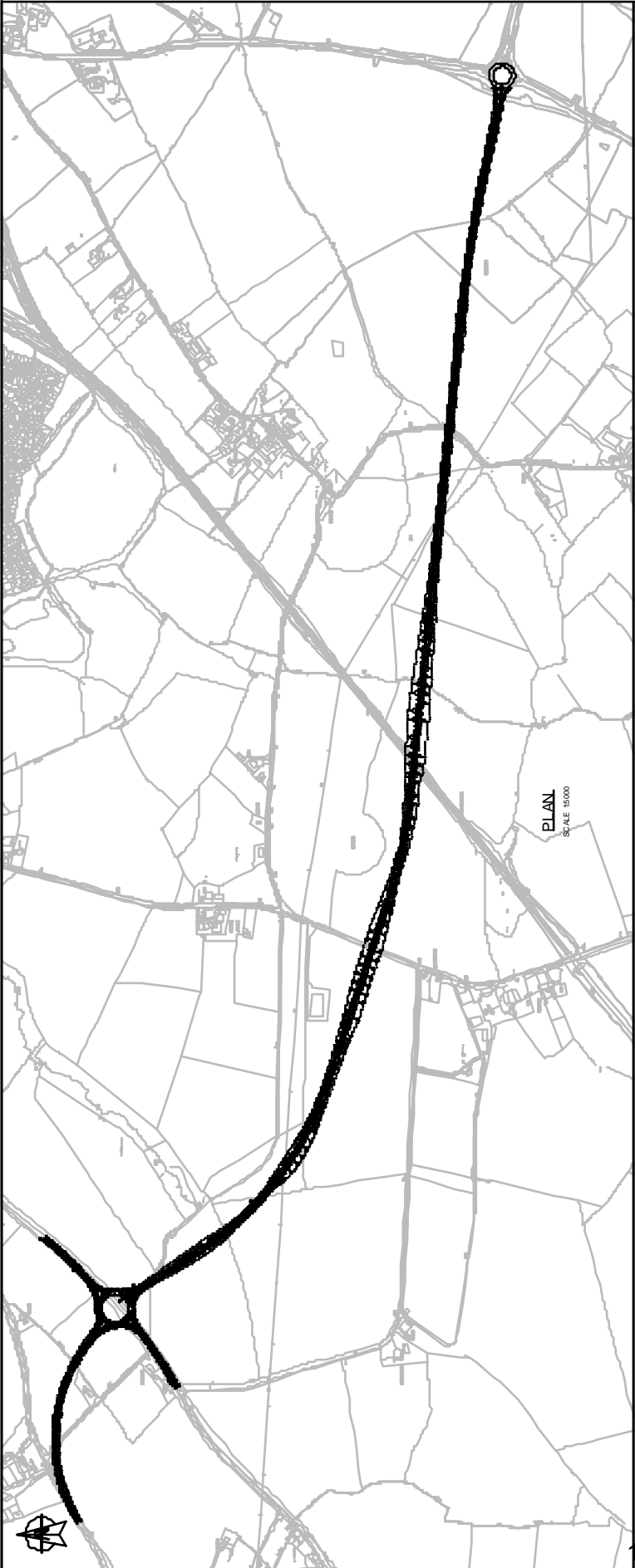
351 2983A-HHR Figure 15

© Copyright Parsons Brinckerhoff

Rev	Date	Description	By	Chk	To
<p>KEY:</p> <p>- SC8 —</p> <p>- SC8A —</p> <p>- SC9 —</p>					
 <p>PARSONS BRINCKERHOFF</p> <p>29 Oldfield Rd CFL, FLA</p> <p>Tel: 407.292.0820 Fax: 407.292.7000</p>			 <p>Herrington Capital</p>		
<p>Client: HERINGTON CAPITAL</p> <p>Site: 4410020202000</p>					
<p>Sheets: SOUTH WYE TRANSPORT PACKAGE</p>					
<p>Title: ADDITIONAL ROUTE OPTIONS</p>					
Drawn: JM	Checked: JC				
Designed: JM	Approved: JC				
Date: 16/10/2014	Scale: 1:1,000	A3	Sheet:		
Project Number:	Drawn Number:				
3512983A-HHR			Figure 21		

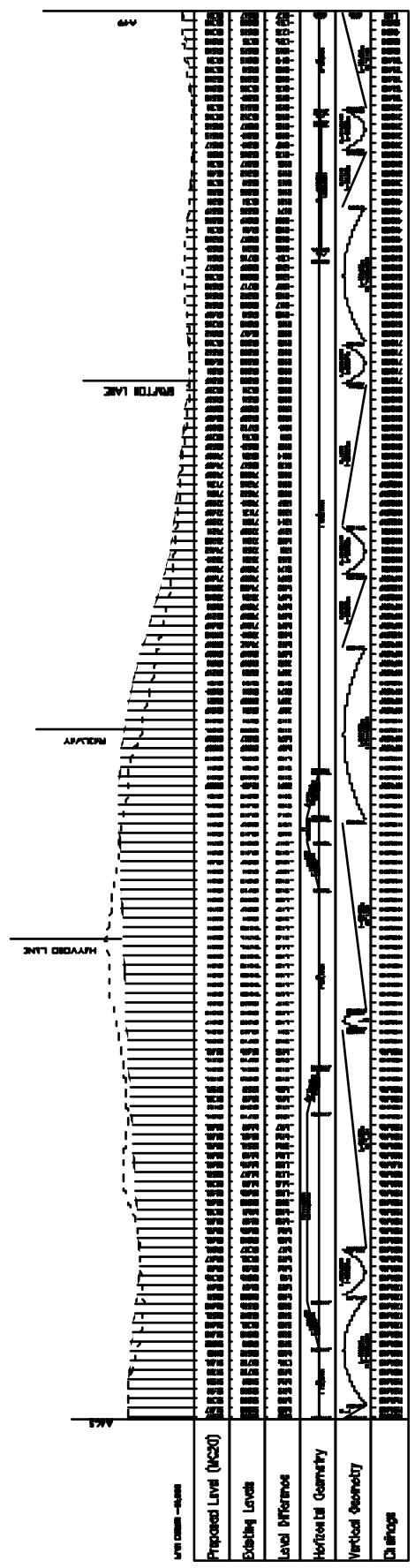


NOTES:
 1. DO NOT SCALE FROM THIS DRAWING. USE FIGURE D DIMENSIONS ONLY.
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN



PROPOSED PROFILE
 EXISTING PROFILE

PLAN
 SCALE 1:5000



LONGITUDINAL SECTION
 SCALE 1:500 H, SCALE 1:100 V

NO.	DATE	DESCRIPTION	BY	CHK

PRELIMINARY

PARSONS BRINCKERHOFF

25 GLEN WAVERLEY
 CHESHAM, CHESHIRE, UK
 TEL: 44 (0)1293 203 300
 FAX: 44 (0)1293 203 200

Herefordshire Council

Project: HEREFORDSHIRE SWTP
 SOUTHERN LINK ROAD

Plan AND LONGITUDINAL SECTION
 OPTION SC8

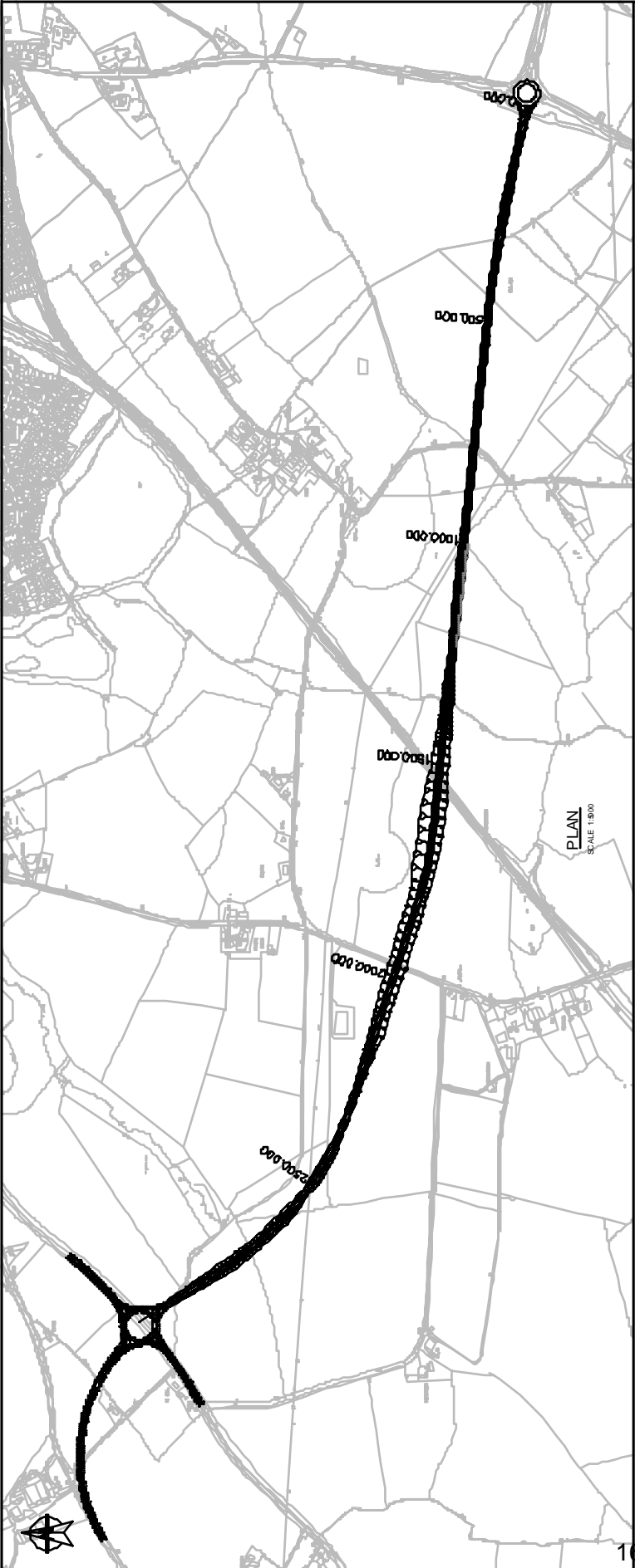
Drawn	GS	Checked	LEP
Design	AE	Approved	CL
Date	15/10/2014	Scale	AS SHOWN
Drawn By	GS	Scale	1:500
Checked By	AE	Scale	1:100

351 2983A-HHR Figure 22

© Copyright Parsons Brinckerhoff

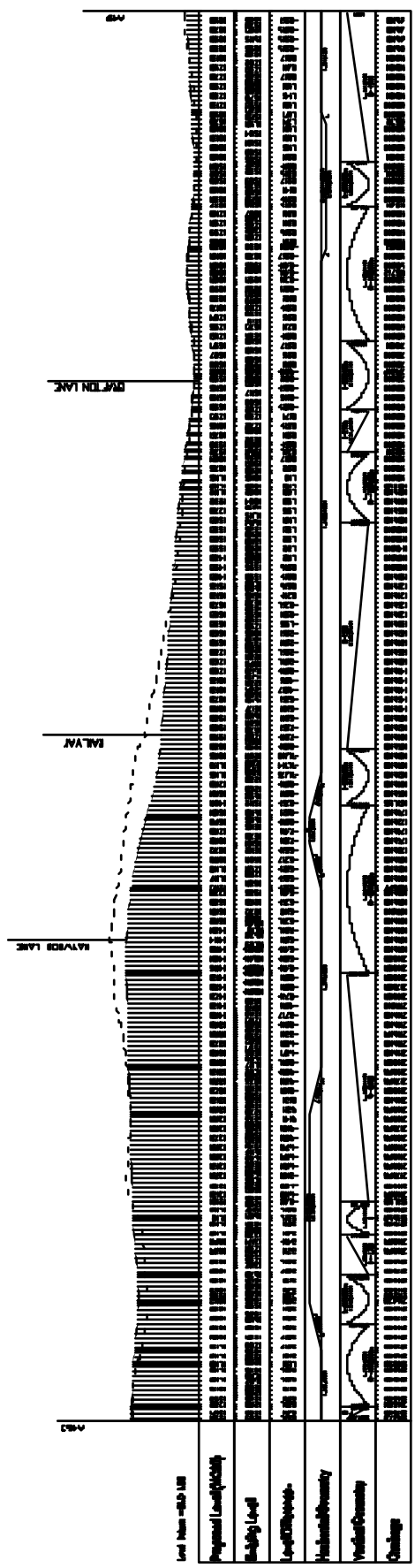
1. DON'T SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS ONLY.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.

NEW
 PROPOSED PROFILE
 EXISTING PROFILE



PLAN
 SCALE 1:500

165



LONGITUDINAL SECTION
 SCALE 1:100 H. SCALE 1:100 V

PRELIMINARY

PARSONS BRINCKERHOFF

14400 30th Street, Suite 100
 Denver, CO 80202
 Tel: 303.733.1000
 Fax: 303.733.1001

Project: HEREFORDSHIRE SWTP SOUTHERN LINK ROAD

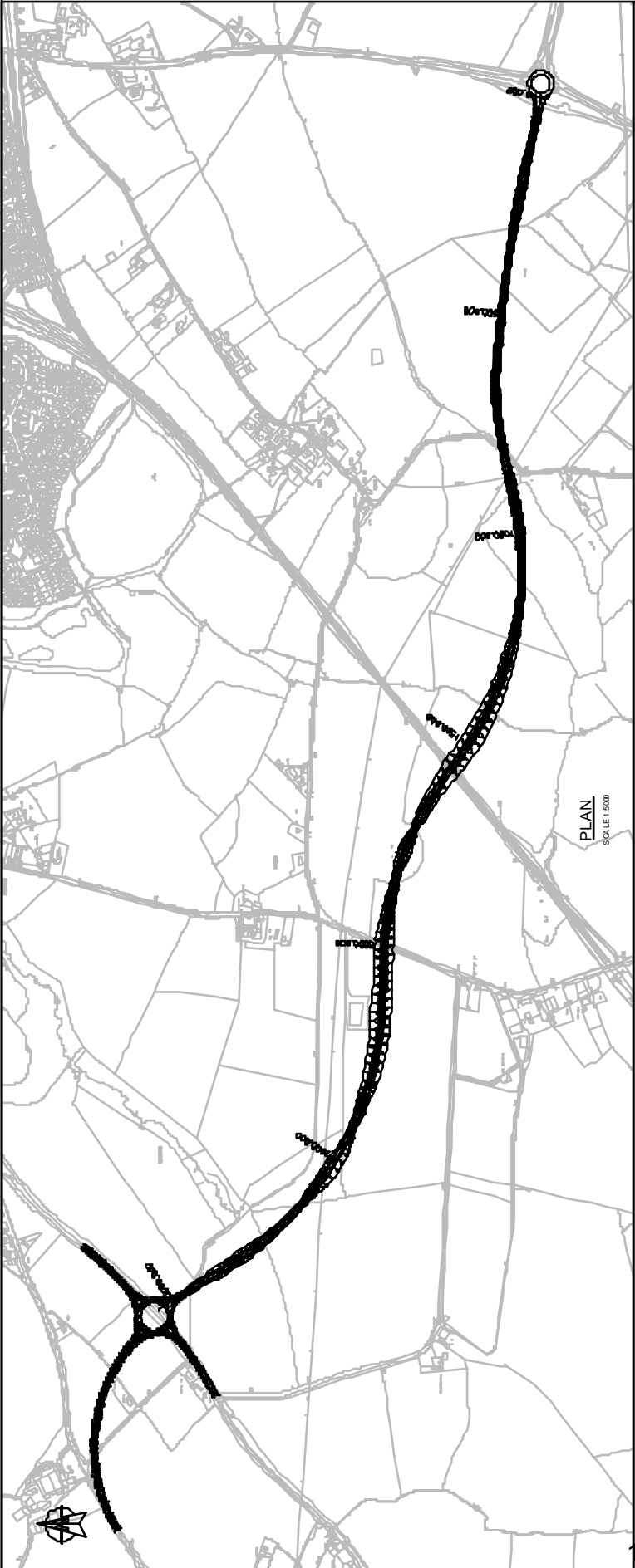
Client: Herefordshire Council

Drawn: GS
 Checked: ELP
 Date: 16/10/2014
 Scale: 1:100
 Sheet: 1 OF 1

3512983A-HHR Figure 23

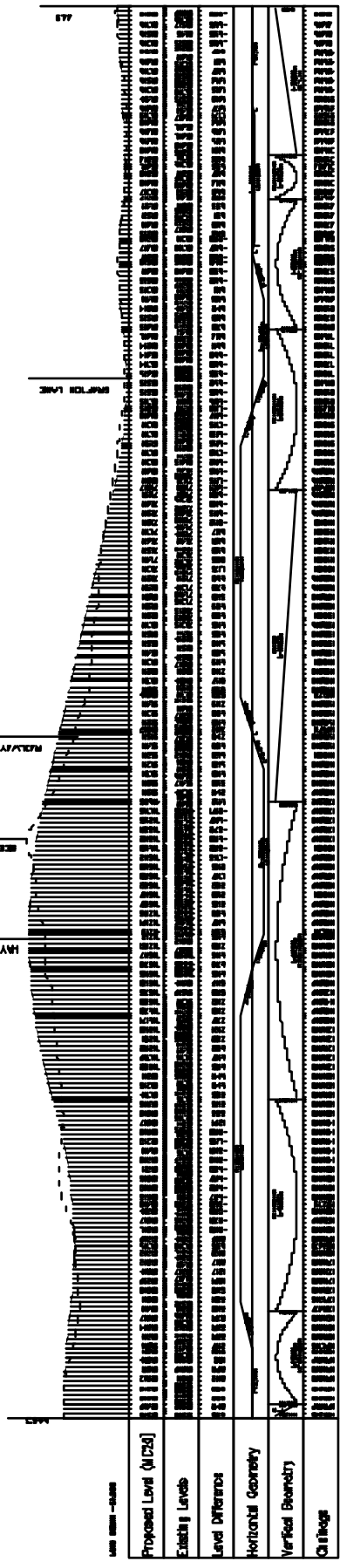
© I.C. 2014/15. All Rights Reserved.

NOTES:
 1. DO NOT SCALE FROM THIS DRAWING. USE FIGURE D DIMENSIONS ONLY.
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN



66

PROPOSED PROFILE
 EXISTING PROFILE



LONGITUDINAL SECTION
 SCALE 1:1000 H, SCALE 1:1000 V

A. 0000000		0000000		0000000	
NO.	DATE	BY	CHKD.	APP.	DATE

PRELIMINARY

PARSONS BRINCKERHOFF

25 CATHARIAN ROAD
 CHITRA
 TEL: 441020 200 3000
 FAX: 4103 9300 7000

Herfordshire Council

Site Project: HERFORDSHIRE SWTP SOUTHERN LINK ROAD

PLAN AND LONGITUDINAL SECTION OPTION SC9

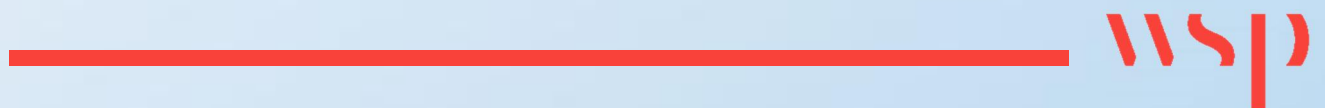
Drawn:	GS	Checked:	LEP
Design:	AE	Approved:	CL
Date:	16/10/2014	Scale:	AS SHOWN
Sheet:	24	Of:	24

351 2983A-HHR Figure 24

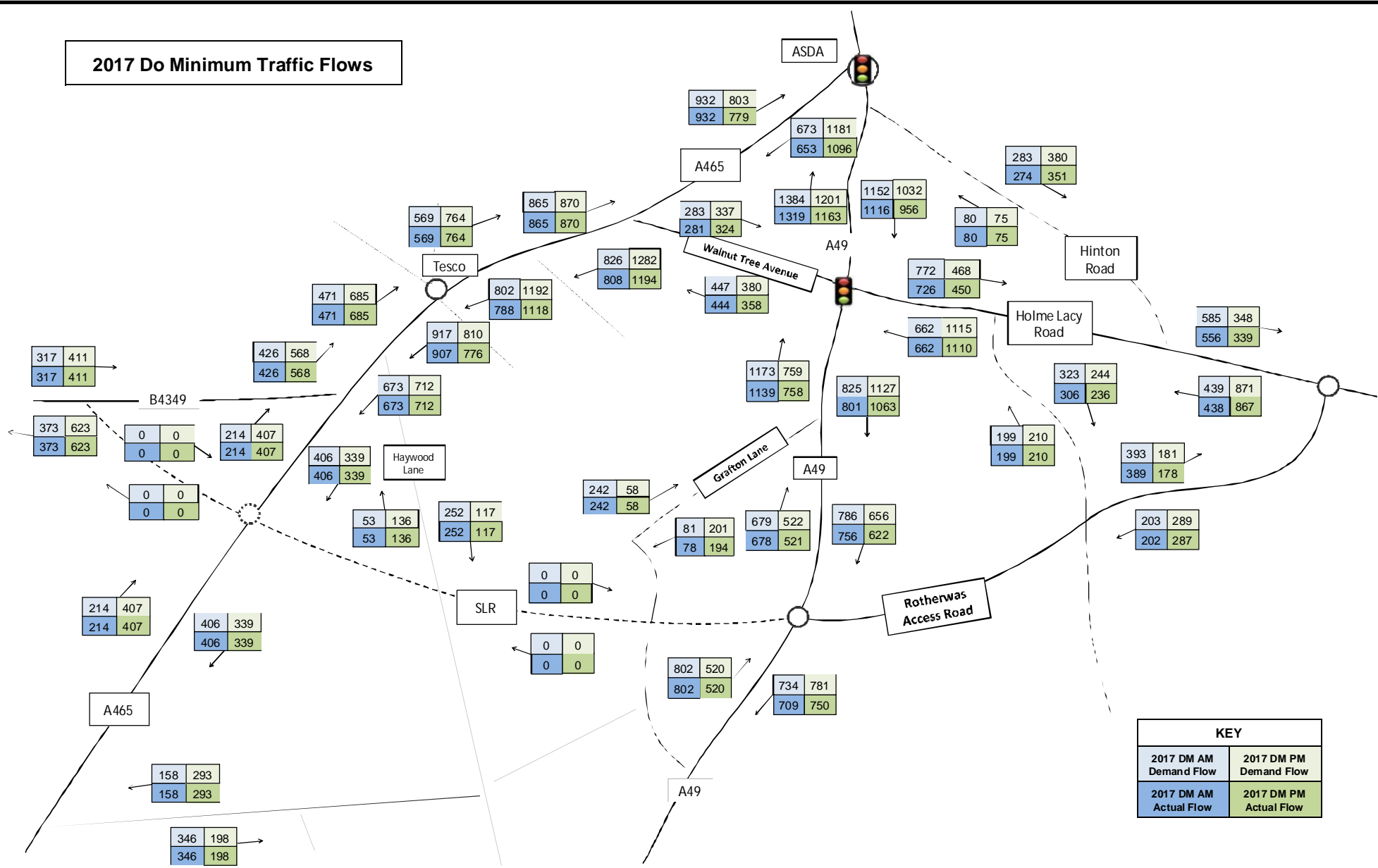
© Copyright 2014 Parsons Brinckerhoff

Appendix C

SLR TRAFFIC FLOW DIAGRAMS FOR
2017 AND 2032 WEEKDAY PEAK
PERIODS



2017 Do Minimum Traffic Flows



168

KEY	
2017 DM AM Demand Flow	2017 DM PM Demand Flow
2017 DM AM Actual Flow	2017 DM PM Actual Flow

PARSONS BRINCKERHOFF

29 Cathedral Road,
Cardiff, CF11 9HA
Tel: +44 (0)29 2082 7000
Fax: +44 (0)29 2082 7001

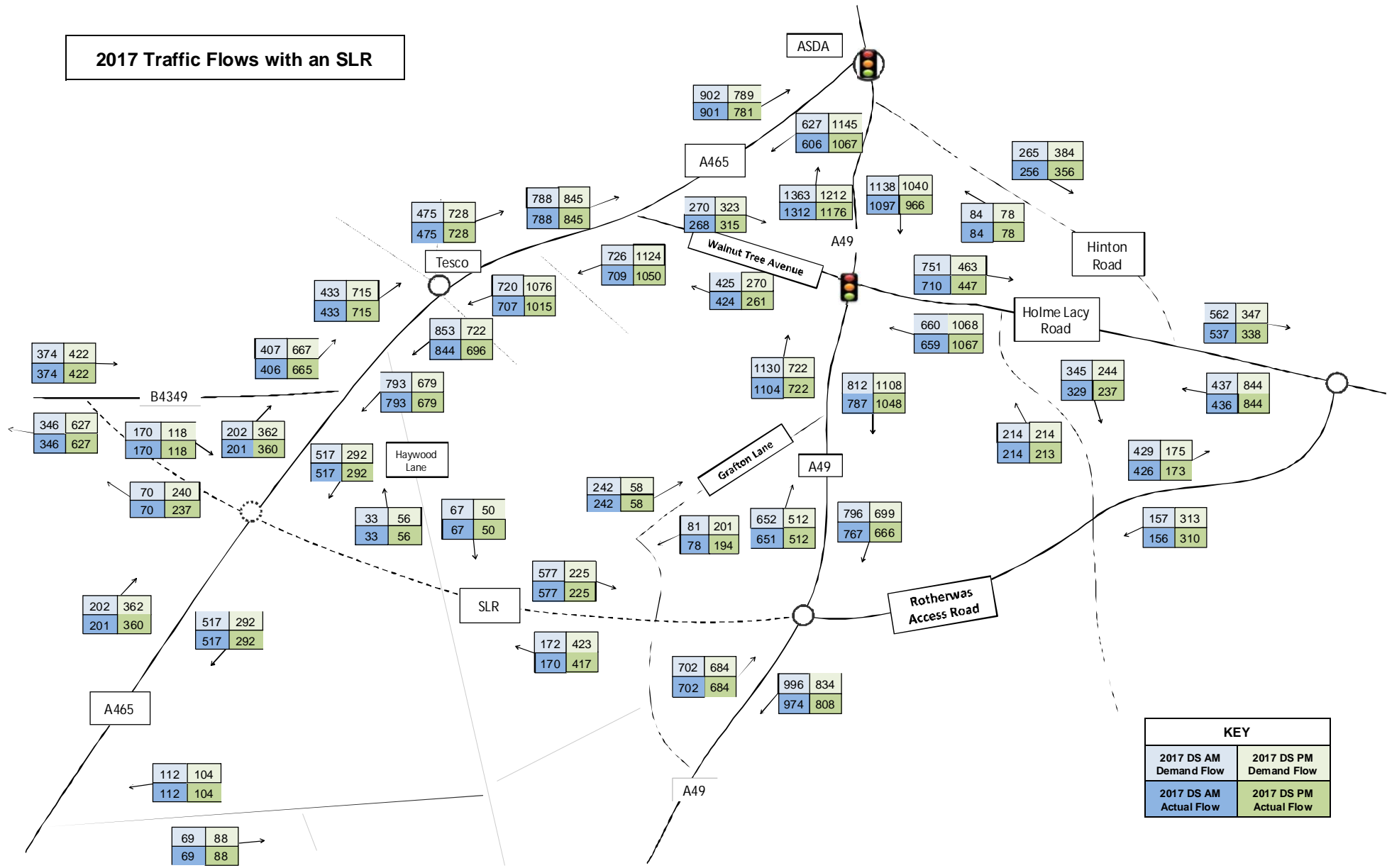
CLIENT/PROJECT
Herefordshire Council
PROJECT
South Wye Transport Package
DRAWING TITLE
2017 Do Minimum Traffic Flows

Figure 16

PRODUCED
AS
CHECKED
JC
APPROVED
JC

© Copyright Parsons Brinckerhoff

2017 Traffic Flows with an SLR



KEY	
2017 DS AM Demand Flow	2017 DS PM Demand Flow
2017 DS AM Actual Flow	2017 DS PM Actual Flow

169



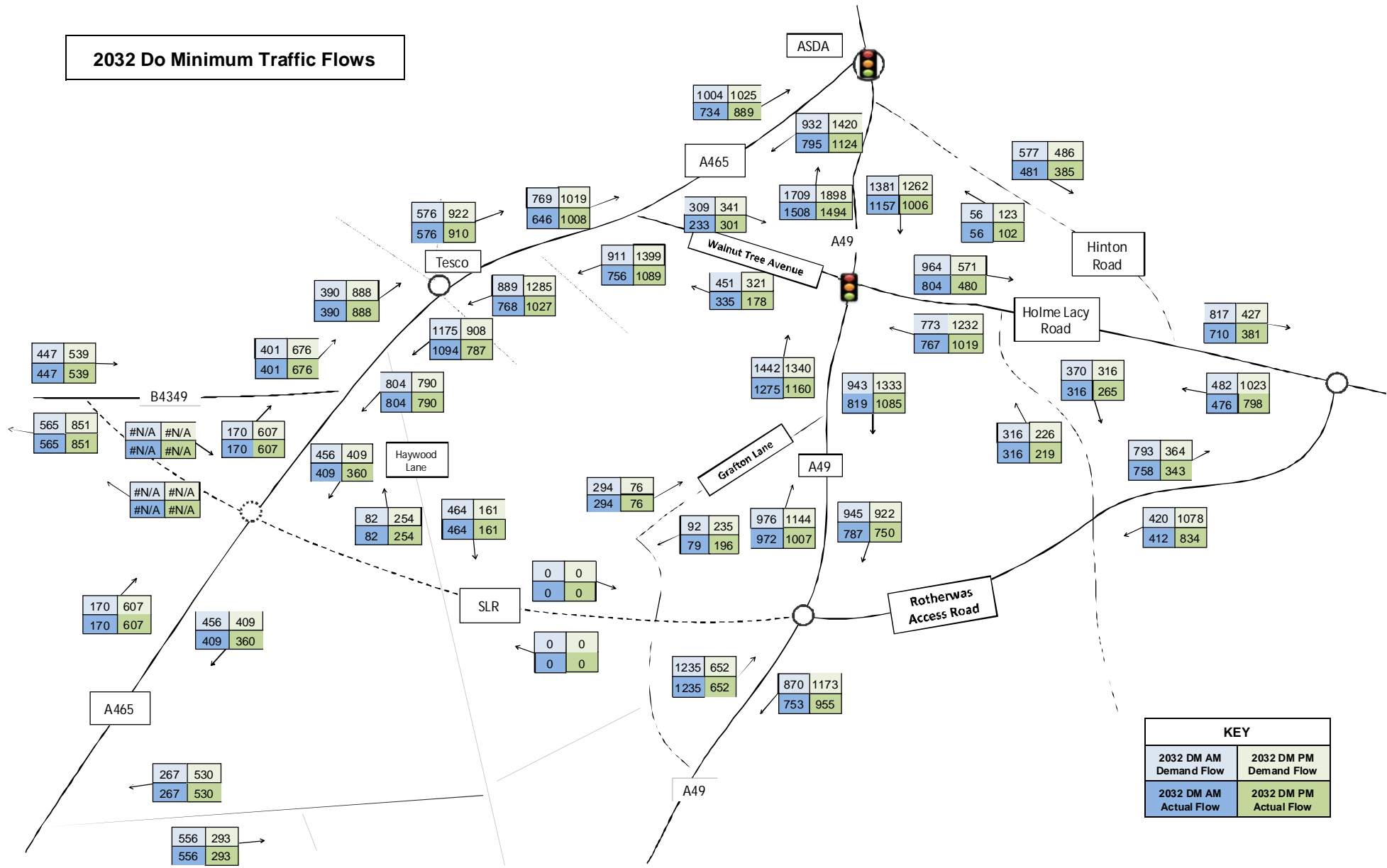
29 Cathedral Road,
Cardiff, CF11 9HA
Tel: +44 (0)29 2082 7000
Fax: +44 (0)29 2082 7001

CLIENT/PROJECT
Herefordshire Council
PROJECT
South Wye Transport Package
DRAWING TITLE
2017 Traffic Flows with an SLR
Figure 17

PRODUCED
AS
CHECKED
JC
APPROVED
JC
© Copyright Parsons Brinckerhoff

DATE 03/09/2014

2032 Do Minimum Traffic Flows



KEY	
2032 DM AM Demand Flow	2032 DM PM Demand Flow
2032 DM AM Actual Flow	2032 DM PM Actual Flow



29 Cathedral Road,
Cardiff, CF11 9HA
Tel: +44 (0)29 2082 7000
Fax: +44 (0)29 2082 7001

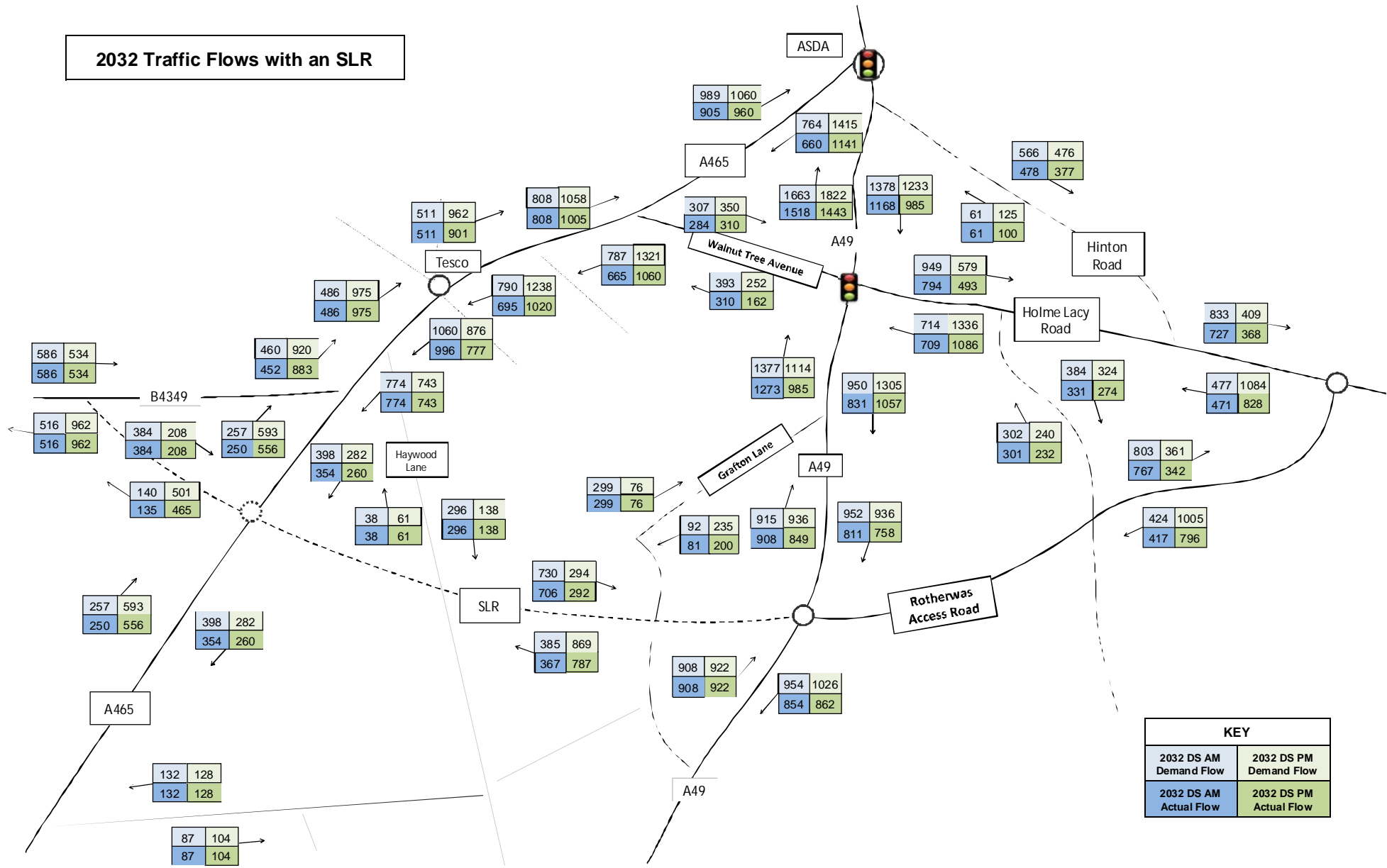
CLIENT/PROJECT
Herefordshire Council
PROJECT
South Wye Transport Package
DRAWING TITLE
2032 Do Minimum Traffic Flows

Figure 18

PRODUCED
AS
CHECKED
JC
APPROVED
JC

© Copyright Parsons Brinckerhoff

2032 Traffic Flows with an SLR



KEY	
2032 DS AM Demand Flow	2032 DS PM Demand Flow
2032 AS AM Actual Flow	2032 AS PM Actual Flow

171



29 Cathedral Road,
Cardiff, CF11 9HA
Tel: +44 (0)29 2082 7000
Fax: +44 (0)29 2082 7001

CLIENT/PROJECT
Herefordshire Council
PROJECT
South Wye Transport Package
DRAWING TITLE
2032 Traffic Flows with an SLR
Figure 19

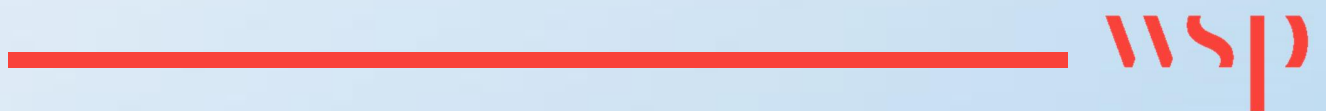
PRODUCED
AS
CHECKED
JC
APPROVED
JC

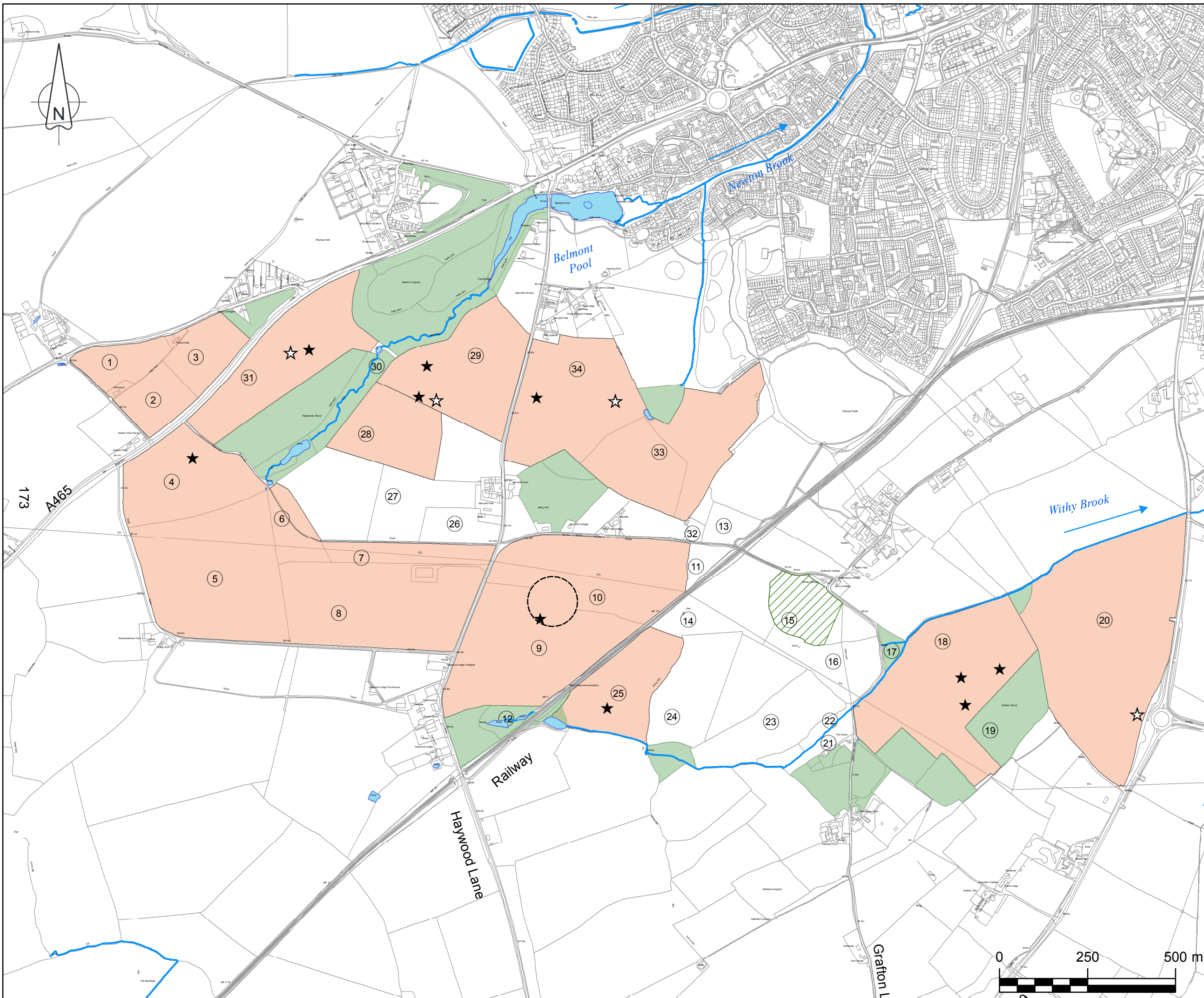
© Copyright Parsons Brinckerhoff

DATE 03/09/2014

Appendix D

PLAN OF CULTURAL HERITAGE FEATURES





- Legend**
- ②② Field Number
 - Rivers (With Flow Direction)
 - ★ Flint Finds
 - ☆ Other Lithics
 - Feature
 - ▨ Medieval Complex
 - Woodland
 - Ploughed Field

Rev	Revision Details	Chkd	Appd	Date
Drawn : ACT		Preliminary		
Design : DH		For Comment		
Chkd : DH		For tender		
Appd : OF		For construction		
Date : May 2013		As constructed		
		Other		



Client :
 Brockington, 35 Halford Road, Hereford, HR1 1SH Tel: (01432) 260000 Fax: (01432) 260286

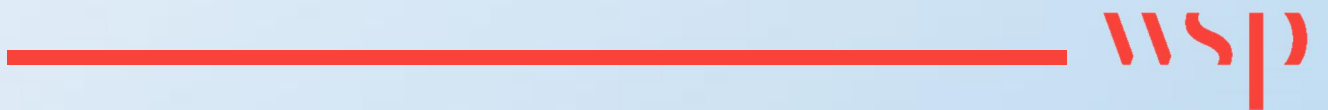
Project Name :
Belmont Transport Package

Drawing Title :
Environmental Field Survey

Original Drawing Size : A3	Scale : 1 : 10,000	Dimensions :
Drawing No TEXT	Rev R0	

Appendix E

APPRAISAL SUMMARY TABLES OF
SLR ROUTES



Name of scheme:		South Wye Transport Package - Option SC2	
Description of scheme:		Option SC2 passes through the centre of Grafton Wood and continues westwards over Grafton Lane and Withy Brook. Thereafter, it straightens up immediately heading in a north-west direction to the A465. SC2 involves the construction of a new roundabout on the A465/B4349 Clehonger Road Junction.	
Impacts		Summary of Key Impacts	Qualitative Assessment
Economy	Business users & transport providers	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those business users who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Business users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Regeneration	Southern Link Road provides direct connection to the Hereford Enterprise Zone (HEZ) from the A465. Improves the supply of employment land by allowing the planning conditions that presently limit development at the HEZ to be extinguished, therefore removing substantial barriers to inward investment relating to both residential and employment development. Regeneration benefits within Belmont enhanced due to greater accessibility to employment opportunities within the HEZ.	Major Beneficial +++
	Wider Impacts	Potential for greater agglomeration benefits across Hereford and as a result of greater connections to the HEZ. Scheme will support the adopted economic growth of the Marches Sub-region.	Moderate Beneficial ++
Environmental	Noise	Significant increase in road traffic noise likely at properties close to new road. Possible decreases in noise at properties adjacent to A465 and A49 (DEFRA Noise Action Planning Important Area on A465 between Tesco and Asda Roundabouts).	Major Adverse ---
	Air Quality	Air quality along both Belmont Road and Ross Road is relatively poor but, at property facades, is currently just below the air quality objective. Traffic is expected to decrease on Belmont Road and increase on Ross Road. This will result in an improvement of air quality on Belmont Road and a deterioration on Ross Road. The deterioration in air quality could potentially lead to exceedance of the air quality objective. The option is not expected to affect the Hereford AQMA itself, since traffic flows across the river are not expected to be affected although some changes at the A465/A49 junction may result in highly localised air quality impacts. Regional air quality is likely to show a slight adverse impact for all options, due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel. Any impacts on congestion relief on roads into Hereford cannot be assessed at present.	Moderate Adverse (local) Slight Adverse (regional) --
	Greenhouse gases	The option will have a slight adverse impact on greenhouse gas emissions due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel.	Slight Adverse -
	Landscape	Route passes through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route is within the Herefordshire Lowlands character area, more typical of South Herefordshire. In terms of woodland, it cuts through the centre of Grafton Wood (not designated and low density of trees) but then is free of woodland for its entire length. This route brings the road closest to Haywood Lodge Farm and associated properties with a resulting increase in adverse visual effects. It avoids Newton Brook. A new roundabout on A465 and a short section of road connecting to B4349, introduces further built infrastructure. The landscape in this area would be classed as being of Medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource is the least of all the routes, however with the additional sections of road, roundabout and proximity to residential properties, the magnitude is Moderate (loss of resource, but not affecting the integrity/ key characteristics of the rural scene).	Moderate Adverse - Has the least effect on woodland when compared to the other routes --
	Townscape	N/A	
	Historic Environment	Direct impact (minor) on the significance of the setting of a Grade II* and three Grade II listed buildings at Haywood Lodge; direct impact (minor) on the significance of the setting of the Grade II Clehonger Court buildings; direct impact (minor) on the significance of the setting of a Grade II listed milestone; direct physical impact (slight to moderate) on potential buried archaeological remains in four fields.	Slight to Moderate Adverse -

	Biodiversity	<p>Route Option SC2 passes through the centre of Grafton Wood, which supports a mature tree canopy with some indicators of ancient woodland present. This Option is therefore likely to lead to the greatest extent of habitat loss/disturbance within Grafton Wood relative to other Route Corridor Options under consideration.</p> <p>All of the Route Corridor Options pass through extents of improved grassland and arable farmland, with fields separated by a network of hedgerows in varying condition. In terms of these habitats there is little to separate the different route corridor options or the species they are likely to support. The impacts of each Route Corridor Option on significant off-site receptors (for example receptors such as The River Wye SAC and bat roosts) are also likely to be broadly similar.</p> <p>East and west of the railway line, Route Corridor SC2 passes in close proximity (within 250 m) of a series of ponds. Initial surveys have confirmed the presence of great crested newts (a species receiving full protection under the conservation of Habitats and species Regulations 2010, as amended) in several of these ponds. Route corridor SC2 could destroy terrestrial habitat and fragment habitats either side of the proposed road used by great crested newts. With suitable scheme design and targeted mitigation it is likely these impacts could be mitigated, and the project may be able to deliver enhancements via the creation of new/enhanced aquatic and terrestrial habitat.</p> <p>Route corridor option SC2 passes south of Newton Coppice/Hayleasow Wood which includes semi-natural ancient woodland and plantation on ancient woodland. Surveys conducted by Arney (Environmental Assessment Report, 2013) and Parsons Brinckerhoff (unpublished) have confirmed the ancient character of these woodland habitats. Route Corridor Option SC2 also passes upstream of currently open sections of Newton Brook, and hence has reduced potential for impacts on this watercourse upstream of Newton Coppice/Hayleasow Wood. Consultation responses from Natural England (letter dated November 2012) have identified that they consider a route option that passes through the ancient woodland areas as non-preferred. The National Planning Policy Framework identifies ancient woodland as an irreplaceable habitat, and it is unlikely to be possible to fully mitigate a Route Corridor Option that passes through the ancient woodland.</p>	Moderate Adverse --
	Water Environment	Assuming surface water management design and construction measures are implemented, the proposed alignment is likely to have low significance impacts on transport and dilution of waste products and biodiversity in Withy Brook and Newton Brook.	Slight Adverse -
Social	Commuting and Other users	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Commuting and Other users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Physical activity	Walking and cycling trips discouraged by severance of PROWs GF3 and HA7. Loss in rural amenity for recreational pedestrians using existing PROWs due to introduction of increased traffic noise and proximity to traffic.	Moderate Adverse --
	Journey quality	Road users benefiting from improved views and reduced traveller stress resulting from more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents (compared to existing urban routes through Hereford town centre). New road with associated earthworks will degrade views slightly from A49 and Haywood Lane. New A465 roundabout will add stress to travellers on this road. Connecting of B4349 to SC2 at A465 will reduce driver stress compared to existing junction arrangement.	Moderate Beneficial ++
	Accidents	Southern Link Road designed to latest design standards. Reduction in traffic along A465 will reduce accident rate along this section of road although the resultant increase in traffic along the A49 may cause the accident rate to increase on this section of road.	Neutral
	Security	Road users slightly less vulnerable to crime as this option reduces need to stop vehicles or reduce speeds compared to existing routes. No impact on security of PT passengers.	Slight Beneficial +
	Access to services	Scheme provides a new potential bus route (between the A465 and A49) but not one that better serves key local destinations in Hereford Town Centre.	Neutral
	Affordability	Rerouting will impact on journey speeds and congestion on both A465 and A49 (north of the scheme), impacting positively on personal affordability of car users.	Slight Beneficial +
	Severance	Scheme option increases severance significantly for very low number hamlets but reduces severance slightly (by reducing traffic flows) through Belmont and Redhill residential areas in vicinity of A49 and A465.	Slight Beneficial +
	Option and non-use values	No impacts identified.	Neutral

Public Accounts	Cost to Broad Transport Budget	Indicative cost of SC2 proposal is circa £16-£20M	Moderate Beneficial ++
	Indirect Tax Revenues	N/A	N/A
Other Issues	Technical and operational feasibility	<p>Earthworks – with some adjustment to the horizontal and vertical alignments this is the most likely option to achieve as near as possible a cut/fill balance. Vertical alignment in the main follows the rolling profile of the countryside.</p> <p>Design Standards – 60mph design speed and Departures from Standard unlikely. Opportunity for overtaking unlikely due to topography (vertical curvature). Straighter crossing of existing country lanes and railway. Side access issues yet to be looked at as well as any drainage runoff storage provision.</p> <p>Physical features – route goes through Grafton Wood (not designated).</p> <p>Utilities – route crosses existing overhead power lines a number of times (including a 66kV) but is located to the south of the main corridor of electricity cables running east to west. Route crosses Grafton Lane almost at grade where there is a concentration of services running north to south including HP gas, a trunk water main and a sewer.</p> <p>Rail structure – route crosses over the existing railway line so reduced risk for Network Rail's operations.</p>	

Name of scheme:		South Wye Transport Package - Option SC2A	
Description of scheme:		The SC2A option is identical to SC2, except that the new road section will pass under the railway line as opposed to passing over the top of it.	
Impacts		Summary of Key Impacts	Qualitative Assessment
Economy	Business users & transport providers	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those business users who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Business users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Regeneration	Southern Link Road provides direct connection to the Hereford Enterprise Zone (HEZ) from the A465. Improves the supply of employment land by allowing the planning conditions that presently limit development at the HEZ to be extinguished, therefore removing substantial barriers to inward investment relating to both residential and employment development. Regeneration benefits within Belmont enhanced due to greater accessibility to employment opportunities within the HEZ.	Major Beneficial +++
	Wider Impacts	Potential for greater agglomeration benefits across Hereford and as a result of greater connections to the HEZ. Scheme will support the adopted economic growth of the Marches Sub-region.	Moderate Beneficial ++
Environmental	Noise	Significant increase in road traffic noise likely at properties close to new road. Possible decreases in noise at properties adjacent to A465 and A49 (DEFRA Noise Action Planning Important Area on A465 between Tesco and Asda Roundabouts).	Major Adverse
	Air Quality	Air quality along both Belmont Road and Ross Road is relatively poor but, at property facades, is currently just below the air quality objective. Traffic is expected to decrease on Belmont Road and increase on Ross Road. This will result in an improvement of air quality on Belmont Road and a deterioration on Ross Road. The deterioration in air quality could potentially lead to exceedance of the air quality objective. The option is not expected to affect the Hereford AQMA itself, since traffic flows across the river are not expected to be affected although some changes at the A465/A49 junction may result in highly localised air quality impacts. Regional air quality is likely to show a slight adverse impact for all options, due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel. Any impacts on congestion relief on roads into Hereford cannot be assessed at present.	Moderate Adverse (local) Slight Adverse (regional)
	Greenhouse gases	The option will have a slight adverse impact on greenhouse gas emissions due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel.	Slight Adverse
	Landscape	Route passes through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route is within the Herefordshire Lowlands character area, more typical of South Herefordshire. In terms of woodland, it cuts through the centre of Grafton Wood (not designated and low density of trees) but then is free of woodland for its entire length. This route brings the road closest to Haywood Lodge Farm and associated properties with a resulting increase in adverse visual effects. It avoids Newton Brook. A new roundabout on A465 and a short section of road connecting to B4349, introduces further built infrastructure. The landscape in this area would be classed as being of Medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource is the least of all the routes, however with the additional sections of road, roundabout and proximity to residential properties, the magnitude is Moderate (loss of resource, but not affecting the integrity/ key characteristics of the rural scene).	Moderate Adverse - Has the least effect on woodland when compared to the other routes
	Townscape	N/A	
	Historic Environment	Direct impact (minor) on the significance of the setting of a Grade II* and three Grade II listed buildings at Haywood Lodge; direct impact (minor) on the significance of the setting of the Grade II Clehonger Court buildings; direct impact (minor) on the significance of the setting of a Grade II listed milestone; direct physical impact (slight to moderate) on potential buried archaeological remains in four fields.	Slight to Moderate Adverse

	Biodiversity	<p>Route Option SC2A passes through the centre of Grafton Wood, which supports a mature tree canopy with some indicators of ancient woodland present. This Option is therefore likely to lead to the greatest extent of habitat loss/disturbance within Grafton Wood relative to other Route Corridor Options under consideration.</p> <p>All of the Route Corridor Options pass through extents of improved grassland and arable farmland, with fields separated by a network of hedgerows in varying condition. In terms of these habitats there is little to separate the different route corridor options or the species they are likely to support. The impacts of each Route Corridor Option on significant off-site receptors (for example receptors such as The River Wye SAC and bat roosts) are also likely to be broadly similar.</p> <p>East and west of the railway line, Route Corridor SC2A passes in close proximity (within 250 m) of a series of ponds. Initial surveys have confirmed the presence of great crested newts (a species receiving full protection under the conservation of Habitats and species Regulations 2010, as amended) in several of these ponds. Route corridor SC2A could destroy terrestrial habitat and fragment habitats either side of the proposed road used by great crested newts. With suitable scheme design and targeted mitigation it is likely these impacts could be mitigated, and the project may be able to deliver enhancements via the creation of new/enhanced aquatic and terrestrial habitat.</p> <p>Route corridor option SC2A passes south of Newton Coppice/Hayleasow Wood which includes semi-natural ancient woodland and plantation on ancient woodland. Surveys conducted by Amey (Environmental Assessment Report, 2013) and Parsons Brinckerhoff (unpublished) have confirmed the ancient character of these woodland habitats. Route Corridor Option SC2A also passes upstream of currently open sections of Newton Brook, and hence has reduced potential for impacts on this watercourse upstream of Newton Coppice/Hayleasow Wood. Consultation responses from Natural England (letter dated November 2012) have identified that they consider a route option that passes through the ancient woodland areas as non-preferred. The National Planning Policy Framework identifies ancient woodland as an irreplaceable habitat, and it is unlikely to be possible to fully mitigate a Route Corridor Option that passes through the ancient woodland.</p> <p>There would be a slight preference for Route Corridor Option SC2A relative to SC2, as passing under the existing railway should allow an unmodified and unlit habitat corridor to be retained along the railway line.</p>	Moderate Adverse --
	Water Environment	Assuming surface water management design and construction measures are implemented, the proposed alignment is likely to have low significance impacts on transport and dilution of waste products and biodiversity in Withy Brook and Newton Brook.	Slight Adverse -
Social	Commuting and Other users	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Commuting and Other users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Physical activity	Walking and cycling trips discouraged by severance of PROWs GF3 and HA7. Loss in rural amenity for recreational pedestrians using existing PROWs due to introduction of increased traffic noise and proximity to traffic.	Moderate Adverse --
	Journey quality	<p>Road users benefiting from improved views and reduced traveller stress resulting from more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents (compared to existing urban routes through Hereford town centre).</p> <p>New road with associated earthworks will degrade views slightly from A49 and Haywood Lane.</p> <p>New A465 roundabout will add stress to travellers on this road.</p> <p>Connecting of B4349 to SC2A at A465 will reduce driver stress compared to existing junction arrangement.</p>	Moderate Beneficial ++
	Accidents	Southern Link Road designed to latest design standards. Reduction in traffic along A465 will reduce accident rate along this section of road although the resultant increase in traffic along the A49 may cause the accident rate to increase on this section of road.	Neutral
	Security	Road users slightly less vulnerable to crime as this option reduces need to stop vehicles or reduce speeds compared to existing routes. No impact on security of PT passengers.	Slight Beneficial +
	Access to services	Scheme provides a new potential bus route (between the A465 and A49) but not one that better serves key local destinations in Hereford Town Centre.	Neutral
	Affordability	Rerouting will impact on journey speeds and congestion on both A465 and A49 (north of the scheme), impacting positively on personal affordability of car users.	Slight Beneficial +

	Severance	Scheme option increases severance significantly for very low number hamlets but reduces severance slightly (by reducing traffic flows) through Belmont and Redhill residential areas in vicinity of A49 and A465.	Slight Beneficial +
	Option and non-use values	No impacts identified.	Neutral
Public Accounts	Cost to Broad Transport Budget	Indicative cost of SC2A proposal is circa £21-£25M	Slight Beneficial +
	Indirect Tax Revenues	N/A	N/A
Other Issues	Technical and operational feasibility	<p>Earthworks – Vertical alignment on the east side follows the rolling profile of the countryside but is forced deep in cutting to cross under the railway and Haywood Lane. This could give rise to groundwater and road drainage problems. Large amount of excess spoil generated.</p> <p>Design Standards – 60mph design speed and Departures from Standard unlikely. Opportunity for overtaking unlikely due to topography (vertical curvature). Straighter crossing of existing country lanes and railway. Side access issues yet to be looked at as well as any drainage runoff storage provision.</p> <p>Physical features – route goes through Grafton Wood (not designated).</p> <p>Utilities – route crosses existing overhead power lines a number of times (including a 66kV) but is located to the south of the main corridor of electricity cables running east to west. Route crosses Grafton Lane almost at grade where there is a concentration of services running north to south including HP gas, a trunk water main and a sewer.</p> <p>Rail structure - route crosses underneath the existing railway line so increased risk for Network Rail's operations.</p>	

Name of scheme:		South Wye Transport Package - Option SC5	
Description of scheme:		Route Option SC5 passes through the northern part of Grafton Wood and in a north-westerly direction, crosses the densely wooded area between Grafton Lane and Withy Brook and a site of archaeological importance before turning west to cross underneath the railway line. The route continues through Merry Hill and under Haywood Lane towards the A465.	
Impacts		Summary of Key Impacts	Qualitative Assessment
Economy	Business users & transport providers	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those business users who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Business users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Regeneration	Southern Link Road provides direct connection to the Hereford Enterprise Zone (HEZ) from the A465. Improves the supply of employment land by allowing the planning conditions that presently limit development at the HEZ to be extinguished, therefore removing substantial barriers to inward investment relating to both residential and employment development. Regeneration benefits within Belmont enhanced due to greater accessibility to employment opportunities within the HEZ.	Major Beneficial +++
	Wider Impacts	Potential for greater agglomeration benefits across Hereford and as a result of greater connections to the HEZ. Scheme will support the adopted economic growth of the Marches Sub-region.	Moderate Beneficial ++
Environmental	Noise	Significant increase in road traffic noise likely at properties close to new road. Possible decreases in noise at properties adjacent to A465 and A49 (DEFRA Noise Action Planning Important Area on A465 between Tesco and Asda Roundabouts).	Major Adverse ---
	Air Quality	Air quality along both Belmont Road and Ross Road is relatively poor but, at property facades, is currently just below the air quality objective. Traffic is expected to decrease on Belmont Road and increase on Ross Road. This will result in an improvement of air quality on Belmont Road and a deterioration on Ross Road. The deterioration in air quality could potentially lead to exceedance of the air quality objective. The option is not expected to affect the Hereford AQMA itself, since traffic flows across the river are not expected to be affected although some changes at the A465/A49 junction may result in highly localised air quality impacts. Regional air quality is likely to show a slight adverse impact for all options, due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel. Any impacts on congestion relief on roads into Hereford cannot be assessed at present.	Moderate Adverse (local) Slight Adverse (regional) --
	Greenhouse gases	The option will have a slight adverse impact on greenhouse gas emissions due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel.	Slight Adverse -
	Landscape	Route passes through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route is within the Herefordshire Lowlands character area, more typical of South Herefordshire. In terms of woodland, it cuts through the centre of Grafton Wood (not designated and low density of trees) and a dense copse near Withy Brook. It runs close to residential properties along Grafton Lane and involves the loss of a large commercial premises accessed from Haywood Lane. It avoids Newton Brook and Hayleasow Wood. A new roundabout on A465 and a separate short section of road connecting to B4349, introduces further built infrastructure. The landscape in this area would be classed as being of Medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource is influenced by the loss of woodland, the route going through a large Site of Archaeological Importance, the proximity of residential properties, the loss of commercial premises, a new roundabout and additional sections of road. Therefore the magnitude of effect on the landscape resource would be Major (loss of resource and severe damage to key characteristics).	Major Adverse ---
	Townscape	N/A	

	Historic Environment	Direct impact (minor) on the significance of the setting of Grade II listed Merryhill Stables; direct impact (minor) on the significance of the setting of Grade II listed Harwood Lodge; direct physical impact (moderate) on site of medieval fortifications (10467); direct physical impact (minor) on two cropmarks in fields 10 and 34; direct physical impact (slight to moderate) on potential buried archaeological remains in four fields.	Slight to Moderate Adverse -
	Biodiversity	<p>Route Corridor Option SC5 passes through Grafton Wood, slightly to the north of the most central alignments. It is therefore likely to lead to similar levels of Habitat Loss as Options SC1/2/3/4, but more than options SC6/7. Grafton Wood supports a mature tree canopy, with some indicator species for ancient woodland present.</p> <p>All of the Route Corridor Options pass through extents of improved grassland and arable farmland, with fields separated by a network of hedgerows in varying condition. In terms of these habitats and the species they are likely to support there is little to separate the different Route Corridor Options. The impacts of each Route Corridor Option on significant off-site receptors (for example The River Wye SAC, bat roosts etc) are also likely to be broadly similar.</p> <p>This Route Corridor Option is further away from ponds known to support great crested newts than options SC1/2. Impacts on great crested newts, a European Protected Species, are therefore likely to be reduced relative to the more southern options SC1/2.</p> <p>Route Corridor Option SC5 passes south of Newton Coppice/Hayleasow Wood including a buffer zone of approximately 50 - 100 m. Newton coppice/Hayleasow wood supports semi-natural ancient woodland and plantation on ancient woodland. Surveys conducted by Amey (Environmental Assessment Report, 2013) and Parsons Brinckerhoff (unpublished) have confirmed the ancient character of these woodland habitats. Route Corridor Option SC5 also passes upstream of currently open sections of Newton Brook, and hence has reduced potential for impacts on this watercourse relative to Routes passing through/adjacent to the woodland. Consultation responses from Natural England (letter dated November 2012) have identified that they consider a Route Corridor Option that passes through the ancient woodland areas as non-preferred. The National Planning Policy Framework identifies ancient woodland as an irreplaceable habitat, and it is unlikely to be possible to fully mitigate a Route Corridor Option that passes through the ancient woodland.</p>	Moderate Adverse --
	Water Environment	Assuming surface water management design and construction measures are implemented, the proposed alignment is likely to have low significance impacts on transport and dilution of waste products and biodiversity in Withy Brook and Newton Brook.	Slight Adverse -
Social	Commuting and Other users	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Commuting and Other users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Physical activity	Walking trips discouraged by severance of PROWs GF3, HA7, CH9 and CH10. Loss in rural amenity for recreational pedestrians on PROWs due to introduction of increased traffic noise and proximity to traffic.	Moderate Adverse --
	Journey quality	<p>Road users benefiting from improved views and reduced traveller stress resulting from more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents (compared to existing urban routes through Hereford town centre).</p> <p>New roundabout will degrade views slightly from A465.</p> <p>New A465 roundabout will add stress to travellers on this road.</p> <p>New link between B4349 and A465, in addition to the new A465 roundabout will increase stress for drivers connecting between the B4349 and SC5.</p>	Slight Beneficial +
	Accidents	Southern Link Road designed to latest design standards. Reduction in traffic along A465 will reduce accident rate along this section of road although the resultant increase in traffic along the A49 may cause the accident rate to increase on this section of road.	Neutral
	Security	road users slightly less vulnerable to crime as this option reduces need to stop vehicles or reduce speeds compared to existing routes. No impact on security of PT passengers.	Slight Beneficial +
	Access to services	Scheme provides a new potential bus route (between the A465 and A49) but not one that better serves key local destinations in Hereford Town Centre.	Neutral
	Affordability	Rerouting will impact on journey speeds and congestion on both A465 and A49 (north of the scheme), impacting positively on personal affordability of car users.	Slight Beneficial +

	Severance	Scheme option increases severance significantly for very low number hamlets but reduces severance slightly (by reducing traffic flows) through Belmont and Redhill residential areas in vicinity of A49 and A465.	Slight Beneficial +
	Option and non-use values	No impacts identified	Neutral
Public Accounts	Cost to Broad Transport Budget	Indicative cost of proposal is circa £21-£25M	Slight Beneficial +
	Indirect Tax Revenues	N/A	N/A
Other Issues	Technical and operational feasibility	<p>Earthworks – Vertical alignment on the east side follows the rolling profile of the countryside but is forced into cutting after Grafton Lane in order to cross under the railway. 13m deep cutting through Merry Hill in order to cross under Haywood Lane which could give rise to groundwater and road drainage problems. Significant excess spoil generated.</p> <p>Design Standards – 60mph design speed and Departures from Standard unlikely. Opportunity for overtaking unlikely. Angled crossing of existing country lanes and railway will increase cost. Side access issues yet to be looked at as well as any drainage runoff storage provision.</p> <p>Physical features – route goes through Grafton Wood (not designated), a wooded area between Grafton Lane and Wither Brook, a site of archaeological importance and a barn yard situated south-west of the Merryhill Lane junction with Haywood Lane.</p> <p>Utilities – route crosses existing overhead power lines a number of times (including a 66kV) and is located partly within the main corridor of electricity cables running east to west. Route crosses Grafton Lane at grade where there is a concentration of services running north to south including HP gas, a trunk water main and a sewer. Conflict with a concentration of overhead and buried services in/around Haywood Lane including BT, a water main and a sewer.</p> <p>Rail structure - route crosses underneath the existing railway line so increased risk for Network Rail's operations.</p>	

Name of scheme:		South Wye Transport Package - Option SC7	
Description of scheme:		Route Option SC7 passes through the northern tip of Grafton Wood but avoids the southern extent of the dense wooded area between Grafton Lane and Withy Brook. It then runs to the south of Merryhill Lane before cutting through Merry Hill and under Haywood Lane. From this location the road heads in a westerly direction to the A465.	
Impacts		Summary of Key Impacts	Qualitative Assessment
Economy	Business users & transport providers	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those business users who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Business users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Regeneration	Southern Link Road provides direct connection to the Hereford Enterprise Zone (HEZ) from the A465. Improves the supply of employment land by allowing the planning conditions that presently limit development at the HEZ to be extinguished, therefore removing substantial barriers to inward investment relating to both residential and employment development. Regeneration benefits within Belmont enhanced due to greater accessibility to employment opportunities within the HEZ.	Major Beneficial +++
	Wider Impacts	Potential for greater agglomeration benefits across Hereford and as a result of greater connections to the HEZ. Scheme will support the adopted economic growth of the Marches Sub-region.	Moderate Beneficial ++
Environmental	Noise	Significant increase in road traffic noise likely at properties close to new road. Possible decreases in noise at properties adjacent to A465 and A49 (DEFRA Noise Action Planning Important Area on A465 between Tesco and Asda Roundabouts).	Major Adverse ---
	Air Quality	Air quality along both Belmont Road and Ross Road is relatively poor but, at property facades, is currently just below the air quality objective. Traffic is expected to decrease on Belmont Road and increase on Ross Road. This will result in an improvement of air quality on Belmont Road and a deterioration on Ross Road. The deterioration in air quality could potentially lead to exceedance of the air quality objective. The option is not expected to affect the Hereford AQMA itself, since traffic flows across the river are not expected to be affected although some changes at the A465/A49 junction may result in highly localised air quality impacts. Regional air quality is likely to show a slight adverse impact for all options, due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel. Any impacts on congestion relief on roads into Hereford cannot be assessed at present.	Moderate Adverse (local) Slight Adverse (regional) --
	Greenhouse gases	The option will have a slight adverse impact on greenhouse gas emissions due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel.	Slight Adverse -
	Landscape	Route passes through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route is within the Herefordshire Lowlands character area, more typical of South Herefordshire. In terms of woodland, it cuts through the centre of Grafton Wood (not designated and low density of trees). It runs close to residential properties along Grafton Lane. It avoids Newton Brook and Hayleasow Wood. A new roundabout on A465 and a short section of road connecting to B4349, introduces further built infrastructure. The landscape in this area would be classed as being of Medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource is influenced by the loss of woodland, the proximity of residential properties, a new roundabout with additional section of road. Therefore, the magnitude is Moderate (loss of resource, but not affecting the integrity/ key characteristics of the rural scene.	Moderate Adverse --
	Townscape	N/A	
	Historic Environment	Direct impact (minor) on the significance of the setting of Grade II listed Merryhill Stables; direct impact (minor) on the significance of the setting of Grade II listed Harwood Lodge; direct physical impact (minor) on cropmark in field 10; direct physical impact (slight to moderate) on potential buried archaeological remains in five fields	Slight to Moderate Adverse -

	Biodiversity	<p>Route Corridor Option SC7 passes through the northern edge of Grafton Wood. Grafton Wood supports a mature tree canopy, with some indicator species for ancient woodland present. Route Corridor Option SC7 has a marginally increased impact on Grafton Wood relative to SC6, but less than SC1 - SC5.</p> <p>All of the Route Corridor Options pass through extents of improved grassland and arable farmland, with fields separated by a network of hedgerows in varying condition. In terms of these habitats and the species they are likely to support there is little to separate the different Route Corridor Options. The impacts of each Corridor on significant off-site receptors (for example The River Wye SAC, bat roosts etc) are also likely to be broadly similar.</p> <p>This Route Corridor Option is further away from ponds known to support great crested newts than options SC1/2. Impacts on great crested newts, a European Protected species, are therefore likely to be reduced relative to the more southern options SC1/2.</p> <p>Route corridor option SC7 passes south of Newton Coppice/Hayleasow Wood which includes semi-natural ancient woodland and plantation on ancient woodland, although it will be located close to the southern edge of the ancient woodland areas. Surveys conducted by Amey (Environmental Assessment Report, 2013) and Parsons Brinckerhoff (unpublished) have confirmed the ancient character of these woodland habitats. Route Corridor Option SC7 also passes upstream of currently open sections of Newton Brook, and hence has reduced potential for impacts on this watercourse relative to options passing through Newton Coppice/Hayleasow Wood. Consultation responses from Natural England (letter dated November 2012) have identified that they consider a Route Corridor Option that passes through the ancient woodland areas as non-preferred. The National Planning Policy Framework identifies ancient woodland as an irreplaceable habitat, and it is unlikely to be possible to fully mitigate a Route Corridor Option that passes through the ancient woodland.</p> <p>Route Corridor Option SC7 passes under the railway, and would therefore allow greater retention/enhancement of the habitat corridor along the railway line than the options involving overbridges.</p> <p>Route Corridor SC7 is considered the most ecologically preferable Option at this time, due to the minimal direct impacts on Grafton Wood and Hayleasow Wood/Newton Coppice, the location relative to emerging locations of great crested newt populations, and the inclusion of an underpass beneath the railway line. This Route Corridor Option could be improved further by moving the eastern end end of the alignment north of Grafton Wood (as per SC6), and moving the western end south to provide a buffer to Hayleasow wood/Newton Coppice (as per SC5).</p>	Moderate / Slight Adverse - - / -
	Water Environment	Assuming surface water management design and construction measures are implemented, the proposed alignment is likely to have low significance impacts on transport and dilution of waste products and biodiversity in Withy Brook and Newton Brook.	Slight Adverse -
Social	Commuting and Other users	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Commuting and Other users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Physical activity	Walking trips discouraged by severance of PROWs GF3, HA14, HAF, CH9 and CH10. Loss in rural amenity for recreational pedestrians on PROWs due to introduction of increased traffic noise and proximity to traffic.	Moderate Adverse - -
	Journey quality	<p>Road users benefiting from improved views and reduced traveller stress resulting from more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents (compared to existing urban routes through Hereford town centre).</p> <p>New road with associated earthworks will degrade views from A465, particularly where it is raised to bridge over Hayleasow Wood.</p> <p>New A465 roundabout will add stress to travellers on this road.</p> <p>New link between B4349 and A465, in addition to the new A465 roundabout will increase stress for drivers connecting between the B4349 and SC6.</p>	Slight Beneficial +
	Accidents	Southern Link Road designed to latest design standards. Reduction in traffic along A465 will reduce accident rate along this section of road although the resultant increase in traffic along the A49 may cause the accident rate to increase on this section of road.	Neutral
	Security	road users slightly less vulnerable to crime as this option reduces need to stop vehicles or reduce speeds compared to existing routes. No impact on security of PT passengers	Slight Beneficial +
	Access to services	Scheme provides a new potential bus route (between the A465 and A49) but not one that better serves key local destinations in Hereford Town Centre	Neutral

	Affordability	Rerouting will impact on journey speeds and congestion on both A465 and A49 (north of the scheme), impacting positively on personal affordability of car users.	Slight Beneficial +
	Severance	Scheme option increases severance significantly for very low number hamlets but reduces severance slightly (by reducing traffic flows) through Belmont and Redhill residential areas in vicinity of A49 and A465	Slight Beneficial +
	Option and non-use values	No impacts identified	Neutral
Public Accounts	Cost to Broad Transport Budget	Indicative cost of proposal is circa £21-£25M	Slight Beneficial +
	Indirect Tax Revenues	N/A	N/A
Other Issues	Technical and operational feasibility	<p>Earthworks – Vertical alignment on the east side follows the rolling profile of the countryside but is forced into cutting after Grafton Lane in order to cross under the railway. 13m deep cutting through Merry Hill in order to cross under Haywood Lane which could give rise to groundwater and road drainage problems. Large amount of excess spoil generated.</p> <p>Design Standards – 50mph design speed and Departures from Standard unlikely. No opportunity for overtaking due to the twisty alignment. Angled crossing of existing country lanes and railway will increase cost. Side access issues yet to be looked at as well as any drainage runoff storage provision.</p> <p>Physical features – being of a twisted nature the route manages to avoid many physical constraints but does go through the northern tip of Grafton Wood (not designated).</p> <p>Utilities – route crosses existing overhead power lines a number of times (including a 66kV) and is located largely within the main corridor of electricity cables running east to west. Route crosses Grafton Lane on a 3m high embankment where there is a concentration of services running north to south including HP gas, a trunk water main and a sewer. Conflict with a concentration of overhead and buried services in/around Haywood Lane including BT, a water main and a sewer.</p> <p>Rail structure - route crosses underneath the existing railway line so increased risk for Network Rail's operations.</p>	

Name of scheme:		South Wye Transport Package - Option SC8	
Description of scheme:		Option SC8 lies between the northern and southern options. The alignment is relatively straight over its entire length curving gradually north-west, west of the railway. It passes over the railway, underneath Haywood Lane and is at grade over Grafton Lane.	
Impacts		Summary of key impacts	Assessment Qualitative
Economy	Business users & transport providers	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those business users who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Business users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Regeneration	Southern Link Road provides direct connection to the Hereford Enterprise Zone (HEZ) from the A465. Improves the supply of employment land by allowing the planning conditions that presently limit development at the HEZ to be extinguished, therefore removing substantial barriers to inward investment relating to both residential and employment development. Regeneration benefits within Belmont enhanced due to greater accessibility to employment opportunities within the HEZ.	Significant Beneficial +++
	Wider Impacts	Potential for greater agglomeration benefits across Hereford and as a result of greater connections to the HEZ. Scheme will support the adopted economic growth of the Marches Sub-region.	Moderate Beneficial ++
Environmental	Noise	Significant increase in road traffic noise likely at properties close to new road. Possible decreases in noise at properties adjacent to A465 and A49 (DEFRA Noise Action Planning Important Area on A465 between Tesco and Asda Roundabouts)	Major Adverse
	Air Quality	Air quality along both Belmont Road and Ross Road is relatively poor but, at property facades, is currently below the air quality objective. Traffic is expected to decrease on Belmont Road and increase on Ross Road. This will result in an improvement of air quality on Belmont Road and a deterioration on Ross Road. The deterioration in air quality could potentially lead to exceedence of the air quality objective. The option is not expected to affect the Hereford AQMA itself, since traffic flows across the river are not expected to be affected although some changes at the A465/A49 junction may result in highly localised air quality impacts. Regional air quality is likely to show a slight adverse impact for all options, due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel. Any impacts on congestion relief on roads into Hereford cannot be assessed at present	Moderate Adverse (local), Slight Adverse (regional)
	Greenhouse gases	The option will have a slight adverse impact on greenhouse gas emissions due to the greater distance travelled by vehicles diverting onto the Southern Link Road and the greater speed of travel	Slight Adverse
	Landscape/Townscape	Route passes through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route is within the Herefordshire Lowlands character area, more typical of South Herefordshire. In terms of woodland, it cuts through the centre of Grafton Wood, which is not designated and has a low density of trees. This route runs in close proximity to Haywood Lodge Farm and associated properties, with potential for visual amenity effects. It avoids Newton Brook. The alignment of the eastern half of the route runs in a straight line and cuts across the grain of the landscape. The route therefore fails to take into account the undulating topography and irregular field pattern. SC8 will require extensive works to create embankments to take the route over the railway line resulting in a visible central section (as it passes over the railway line) and will have engineered slopes that will be disruptive to the character of the local topography. The landscape in this area would be classed as being of Medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource with the additional sections of road, roundabout and proximity to residential properties, is Moderate (loss of resource, at odds with the local pattern and landform, visually intrusive and will adversely impact on the landscape).	Moderate Adverse
	Historic Environment	Direct impact (minor) on the the setting of a Grade II* and three Grade II listed buildings at Haywood Lodge. Direct impact (minor) on the significance of the setting of the Grade II Clehonger Court buildings; direct impact (minor) on the significance of the setting of a Grade II listed milestone. Direct physical impact (slight to moderate) on potential buried archaeological remains in four fields.	Slight to Moderate Adverse

	Biodiversity	SC8 passes through the centre of Grafton Wood, which supports a mature tree canopy with some indicators of ancient woodland present. SC8 will likely to lead to the greatest extent of habitat loss / disturbance within Grafton Wood relative to other route options under consideration, with comparable impacts to SC2/2A and SC9. SC8 passes south of Newton Coppice / Hayleasow Wood which includes semi-natural ancient woodland and plantation on ancient woodland, although it will be located close to the southern edge of the ancient woodland areas. Recent surveys have confirmed the ancient character of these woodland habitats. SC8 also passes upstream of open sections of Newton Brook, and has reduced potential for impacts on this watercourse relative to route options passing through Newton Coppice / Hayleasow Wood. Consultation with Natural England has indicated that they would not prefer a route option that passes through ancient woodland areas. The National Planning Policy Framework identifies ancient woodland as an irreplaceable habitat, and it is unlikely to be possible to fully mitigate a Route Corridor Option that passes through the ancient woodland. SC8 is further away from ponds known to support great crested newts (GCN) than options SC2/2A. Impacts on GCNs, a European Pr+D25otected species, are therefore likely to be reduced relative to the more southern options SC2/2A. All of the route options pass through extents of improved grassland and arable farmland, with fields seperated by a network of hedgerows in varying condition. In terms of these habitats there is little to separate the different route corridor options or the species they are likely to support (other than GCN, see above). The impact of each route option on significant off-site receptors (e.g. River Wye SAC and bat roosts) are also likely to be broadly similar. SC8 would pass over the railway line, based on the current understanding of scheme-wide bat activity and design parameters (assuming the railway underpass would be unlit), SC8 would allow a wide underpass to be maintained under the new road alignment, subject to only infrequent train movements. Any overbridge would need to have wide vegetated margins in order to be as effective as an underpass.	Moderate adverse
	Water Environment	Assuming surface water management design and construction measures are implemented, the proposed alignment is likely to have low significance impacts on transport and dilution of waste products and biodiversity in Withy Brook and Newton Brook.	Slight Adverse
Social	Commuting and Other users	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Commuting and Other users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Physical activity	Walking and cycling trips discouraged by severance of PROWs GF3 and HA7. Loss in rural amenity for recreational pedestrians using existing PROWs due to introduction of increased traffic noise and proximity to traffic.	Moderate Adverse -
	Journey quality	Road users benefiting from improved views and reduced traveller stress resulting from more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents (compared to existing urban routes through Hereford town centre). New road with associated earthworks will degrade views slightly from A49 and Haywood Lane. New A465 roundabout will add stress to travellers on this roadConnecting of B4349 to SC8 at A465 will reduce driver stress compared to existing junction arrangement.	Moderate Beneficial ++
	Accidents	Southern Link Road designed to latest design standards. Reduction in traffic along A465 will reduction accident rate along this section of road although the resultant increase in traffic along the A49 may cause the accident rate to increase on this section of road.	Neutral
	Security	Road users slightly less vulnerable to crime as this option reduces need to stop vehicles or reduce speeds compared to existing routes. No impact on security of PT passengers	Slight Beneficial +
	Access to services	Scheme provides a new potential bus route (between the A465 and A49) but not one that better serves key local destinations in Hereford Town Centre	Neutral
	Affordability	Rerouting will impact on journey speeds and congestion on both A465 and A49 (north of the scheme), impacting positively on personal affordability of car users.	Slight Beneficial +
	Severance	Scheme option increases severance significantly for very low number hamlets but reduces severance slightly (by reducing traffic flows) through Belmont and Redhill residential areas in vicinity of A49 and A465	Slight Beneficial +
	Option and non-use values	No impacts identified	Neutral
Public Accounts	Cost to Broad Transport Budget	Indicative cost of SC8 proposal is circa £17.9M - £26.5M	Slight to Moderate Beneficial
	Indirect Tax Revenues	N/A	

Other Issues

Technical and operational feasibility

Earthworks – Vertical alignment of the option is similar at both the western and eastern ends of the route. The difference lies within the middle section either side of the railway line reflecting whether the route goes over or under it. To cross over the railway route Option SC8 requires the construction of an embankment up to 8m high. This could give rise to groundwater and road drainage problems. it may be possible to achieve a balanced earthworks scheme using alignment Option SC8.

Design Standards – 60mph design speed and Departures from Standard unlikely. Although a much straighter route on plan, an opportunity for overtaking is unlikely due to topography (vertical curvature). Angled crossing of existing railway will increase cost but the crossing of Haywood Lane is relatively straight. Side access issues yet to be looked at as well as any drainage runoff storage provision.

Physical features – the route skirts around the south-west corner of Newton Coppice (designated as Ancient Woodland), through the northern section of Grafton Wood (not designated), to the south of the wooded area between Grafton Lane and Withy Brook and to the south of the barn yard situated south-west of the Merryhill Lane junction with Haywood Lane. The route also passes to the south of Grafton Enclosure and Beech Grove (refer to commentary on Option SC9).

Utilities – the route clashes with existing overhead power lines located at the eastern and western ends of the scheme (including a 66kV) but generally avoid them within the central area. Both routes cross Grafton Lane at grade (or thereabouts) where BT and water services are present. There is conflict with a concentration of overhead and buried services in/around Haywood Lane including BT, a water main and a sewer.

Rail structure – route option SC8 (which crosses over the existing railway line) offers reduced risk for Network Rail's operations.

Name of scheme:		South Wye Transport Package - Option SC8A	
Description of scheme:		The SC8A option alignment is identical to SC8 except that it crosses underneath the railway line.	
Impacts		Summary of key impacts	Assessment Qualitative
Economy	Business users & transport providers	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those business users who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Business users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Regeneration	Southern Link Road provides direct connection to the Hereford Enterprise Zone (HEZ) from the A465. Improves the supply of employment land by allowing the planning conditions that presently limit development at the HEZ to be extinguished, therefore removing substantial barriers to inward investment relating to both residential and employment development. Regeneration benefits within Belmont enhanced due to greater accessibility to employment opportunities within the HEZ.	Significant Beneficial +++
	Wider Impacts	Potential for greater agglomeration benefits across Hereford and as a result of greater connections to the HEZ. Scheme will support the adopted economic growth of the Marches Sub-region.	Moderate Beneficial ++
Environmental	Noise	Significant increase in road traffic noise likely at properties close to new road. Possible decreases in noise at properties adjacent to A465 and A49 (DEFRA Noise Action Planning Important Area on A465 between Tesco and Asda Roundabouts)	Major Adverse
	Air Quality	Air quality along both Belmont Road and Ross Road is relatively poor but, at property facades, is currently below the air quality objective. Traffic is expected to decrease on Belmont Road and increase on Ross Road. This will result in an improvement of air quality on Belmont Road and a deterioration on Ross Road. The deterioration in air quality could potentially lead to exceedence of the air quality objective. The option is not expected to affect the Hereford AQMA itself, since traffic flows across the river are not expected to be affected although some changes at the A465/A49 junction may result in highly localised air quality impacts. Regional air quality is likely to show a slight adverse impact for all options, due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel. Any impacts on congestion relief on roads into Hereford cannot be assessed at present	Moderate Adverse - (local), Slight Adverse (regional)
	Greenhouse gases	The option will have a slight adverse impact on greenhouse gas emissions due to the greater distance travelled by vehicles diverting onto the Southern Link Road and the greater speed of travel	Slight Adverse
	Landscape/Townscape	Route passes through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route is within the Herefordshire Lowlands character area, more typical of South Herefordshire. In terms of woodland, it cuts through the centre of Grafton Wood, which is not designated and has a low density of trees. This route runs in close proximity to Haywood Lodge Farm and associated properties, with potential for visual amenity effects. It avoids Newton Brook. The alignment of the eastern half of the route runs in a straight line and cuts across the grain of the landscape. The route therefore fails to take into account the undulating topography and irregular field pattern. SC8A will require extensive works to create a cutting to take the route under the railway and will involve engineered slopes that will be disruptive to the character of the local topography. The landscape in this area would be classed as being of Medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource with the additional sections of road, roundabout and proximity to residential properties, is Moderate (loss of resource, at odds with the local pattern and landform, visually intrusive and will adversely impact on the landscape).	Moderate Adverse
	Historic Environment	Direct impact (minor) on the significance of the setting of a Grade II* and three Grade II listed buildings at Haywood Lodge, Grade II Clehonger Court buildings and a Grade II listed milestone. Direct physical impact (slight to moderate) on potential buried archaeological remains in four fields.	Slight to Moderate Adverse

	Biodiversity	<p>SC8A passes through the centre of Grafton Wood, which supports a mature tree canopy with some indicators of ancient woodland present. SC8A will likely to lead to the greatest extent of habitat loss / disturbance within Grafton Wood relative to other route options under consideration, with comparable impacts to SC2/2A and SC9. SC8A passes south of Newton Coppice / Hayleasow Wood which includes semi-natural ancient woodland and plantation on ancient woodland, although it will be located close to the southern edge of the ancient woodland areas. Recent surveys have confirmed the ancient character of these woodland habitats. SC8A also passes upstream of open sections of Newton Brook, and has reduced potential for impacts on this watercourse relative to route options passing through Newton Coppice / Hayleasow Wood. Consultation with Natural England has indicated that they would not prefer a route option that passes through ancient woodland areas. The National Planning Policy Framework identifies ancient woodland as an irreplaceable habitat, and it is unlikely to be possible to fully mitigate a Route Corridor Option that passes through the ancient woodland. SC8A is further away from ponds known to support great crested newts (GCN) than options SC2/2A. Impacts on GCNs, a European Protected species, are therefore likely to be reduced relative to the more southern options SC2/2A. All of the route options pass through extents of improved grassland and arable farmland, with fields separated by a network of hedgerows in varying condition. In terms of these habitats there is little to separate the different route corridor options or the species they are likely to support (other than GCN, see above). The impact of each route option on significant off-site receptors (e.g. River Wye SAC and bat roosts) are also likely to be broadly similar. SC8A would pass under the railway line, based on the current understanding of scheme-wide bat activity and design parameters, SC8A would retain the rail corridor as a bridge, but with a 'drop-off' either side down to the road which is likely to lead to increased bat mortality / habitat fragmentation compared with SC8.</p>	Moderate adverse
	Water Environment	<p>Assuming surface water management design and construction measures are implemented, the proposed alignment is likely to have low significance impacts on transport and dilution of waste products and biodiversity in Withy Brook and Newton Brook.</p>	Slight Adverse
Social	Commuting and Other users	<p>Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.</p>	Slight Beneficial +
	Reliability impact on Commuting and Other users	<p>Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.</p>	Slight Beneficial +
	Physical activity	<p>Walking and cycling trips discouraged by severance of PROWs GF3 and HA7. Loss in rural amenity for recreational pedestrians using existing PROWs due to introduction of increased traffic noise and proximity to traffic.</p>	Moderate Adverse -
	Journey quality	<p>Road users benefiting from improved views and reduced traveller stress resulting from more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents (compared to existing urban routes through Hereford town centre). New road with associated earthworks will degrade views slightly from A49 and Haywood Lane. New A465 roundabout will add stress to travellers on this road. Connecting of B4349 to SC8A at A465 will reduce driver stress compared to existing junction arrangement.</p>	Moderate Beneficial ++
	Accidents	<p>Southern Link Road designed to latest design standards. Reduction in traffic along A465 will reduce accident rate along this section of road although the resultant increase in traffic along the A49 may cause the accident rate to increase on this section of road.</p>	Neutral
	Security	<p>road users slightly less vulnerable to crime as this option reduces need to stop vehicles or reduce speeds compared to existing routes. No impact on security of PT passengers</p>	Slight Beneficial +
	Access to services	<p>Scheme provides a new potential bus route (between the A465 and A49) but not one that better serves key local destinations in Hereford Town Centre</p>	Neutral
	Affordability	<p>Rerouting will impact on journey speeds and congestion on both A465 and A49 (north of the scheme), impacting positively on personal affordability of car users.</p>	Slight Beneficial +
	Severance	<p>Scheme option increases severance significantly for very low number hamlets but reduces severance slightly (by reducing traffic flows) through Belmont and Redhill residential areas in vicinity of A49 and A465</p>	Slight Beneficial +
	Option and non-use values	<p>No impacts identified</p>	Neutral
Public Account	Cost to Broad Transport Budget	<p>Indicative cost of SC8A proposal is circa £25.4M - £38.6M</p>	Neutral
	Indirect Tax Revenues	<p>N/A</p>	

Other Issues

Technical and operational feasibility

Earthworks – Vertical alignment of the option is similar at both the western and eastern ends of the route. The difference lies within the middle section either side of the railway line reflecting whether the route goes over or under it. To cross over the railway route Option SC8A requires the construction of a cutting up to 11m deep. This could give rise to groundwater and road drainage problems. The extensive cutting on Option SC8A is likely to generate a significant amount of surplus spoil.

Design Standards – 60mph design speed and Departures from Standard unlikely. Although a much straighter route on plan, an opportunity for overtaking is unlikely due to topography (vertical curvature). Angled crossing of existing railway will increase cost but the crossing of Haywood Lane is relatively straight. Side access issues yet to be looked at as well as any drainage runoff storage provision.

Physical features – the route skirts around the south-west corner of Newton Coppice (designated as Ancient Woodland), through the northern section of Grafton Wood (not designated), to the south of the wooded area between Grafton Lane and Wither Brook and to the south of the barn yard situated south-west of the Merryhill Lane junction with Haywood Lane. The route also passes to the south of Grafton Enclosure and Beech Grove (refer to commentary on Option SC9).

Utilities – the route clashes with existing overhead power lines located at the eastern and western ends of the scheme (including a 66kV) but generally avoid them within the central area. The route cross Grafton Lane at grade (or thereabouts) where BT and water services are present. There is conflict with a concentration of overhead and buried services in/around Haywood Lane including BT, a water main and a sewer.

Rail structure – route option SC8A offers increased risk for Network Rail's operations.

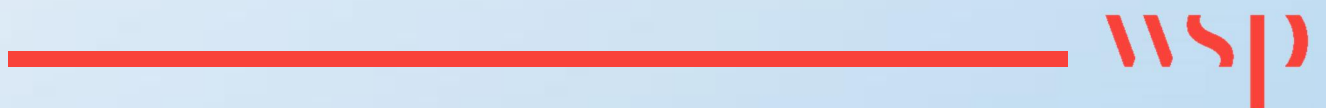
Name of scheme:		South Wye Transport Package - Option SC9	
Description of scheme:		This route is based on the alignment of Options SC8/SC8A except that it has a shorter, more direct crossing over the railway. It is the only option under consideration that crosses over Haywood Lane and through Beech Grove. Consequently the alignment is more twisted than Options SC8 and SC8A.	
Impacts		Summary of key impacts	Assessment Qualitative
Economy	Business users & transport providers	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those business users who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Business users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Regeneration	Southern Link Road provides direct connection to the Hereford Enterprise Zone (HEZ) from the A465. Improves the supply of employment land by allowing the planning conditions that presently limit development at the HEZ to be extinguished, therefore removing substantial barriers to inward investment relating to both residential and employment development. Regeneration benefits within Belmont enhanced due to greater accessibility to employment opportunities within the HEZ.	Significant Beneficial +++
	Wider Impacts	Potential for greater agglomeration benefits across Hereford and as a result of greater connections to the HEZ. Scheme will support the adopted economic growth of the Marches Sub-region.	Moderate Beneficial ++
Environmental	Noise	Significant increase in road traffic noise likely at properties close to new road. Possible decreases in noise at properties adjacent to A465 and A49 (DEFRA Noise Action Planning Important Area on A465 between Tesco and Asda Roundabouts)	Major Adverse
	Air Quality	Air quality along both Belmont Road and Ross Road is relatively poor but, at property facades, is currently below the air quality objective. Traffic is expected to decrease on Belmont Road and increase on Ross Road. This will result in an improvement of air quality on Belmont Road and a deterioration on Ross Road. The deterioration in air quality could potentially lead to exceedence of the air quality objective. The option is not expected to affect the Hereford AQMA itself, since traffic flows across the river are not expected to be affected although some changes at the A465/A49 junction may result in highly localised air quality impacts. Regional air quality is likely to show a slight adverse impact for all options, due to the greater distance travelled by vehicles diverting onto the bypass and the greater speed of travel. Any impacts on congestion relief on roads into Hereford cannot be assessed at present	Moderate Adverse - (local), Slight Adverse (regional)
	Greenhouse gases	The option will have a slight adverse impact on greenhouse gas emissions due to the greater distance travelled by vehicles diverting onto the Southern Link Road and the greater speed of travel	Slight Adverse
	Landscape/Townscape	Route passes through fertile, undulating farmland with extensive arable fields, with low hedges and occasional woodland. Although most of the route is within the Herefordshire Lowlands character area, more typical of South Herefordshire. In terms of woodland, it cuts through the centre of Grafton Wood, which is not designated and has a low density of trees. This route will be visible from Haywood Lodge Farm and associated properties, however it curves away in a NW direction after crossing the railway line. As it takes a NW direction it passes directly through a local landscape feature called Beech Grove. Similar to other more southerly routes, it avoids Newton Brook. The landscape in this area would be classed as being of Medium sensitivity (good quality example of Herefordshire rural landscape). The magnitude of effect on the landscape resource would be Major (is at considerable variance with the landform, scale and pattern of the landscape, is visually intrusive and will adversely impact on the landscape).	Major Adverse
Historic Environment	Direct impact (moderate) on the significance of the setting of Grade II listed Merryhill Stables, Grade II* and three Grade II listed buildings at Haywood Lodge. Direct impact (minor) on the significance of the setting of the Grade II Clehonger Court buildings and a Grade II listed milestone. Direct physical impact (ranging from slight to substantial) on potential buried archaeological remains in five fields including the almost complete destruction of a feature of unknown date and function.	Moderate Adverse	

	Biodiversity	SC9 passes through the centre of Grafton Wood, which supports a mature tree canopy with some indicators of ancient woodland present. SC9 is therefore likely to lead to the greatest extent of habitat loss / disturbance within Grafton Wood relative to other route options, with a level of impact comparable to SC2/2A and SC8/8A. SC9 passes south of Newton Coppice / Hayleasow Wood which includes semi-natural ancient woodland and plantation on ancient woodland, although it will be located close to the southern edge of the ancient woodland areas. Recent surveys have confirmed the ancient character of these woodland habitats. SC9 also passes upstream of currently open sections of Newton Brook, and hence has reduced potential for impacts on this watercourse relative to route options passing through Newton Coppice / Hayleasow Wood. Consultation with Natural England has determined that they do not prefer route options that pass through the ancient woodland areas. The National Planning Policy Framework identifies ancient woodland as an irreplaceable habitat, and it is unlikely to be possible to fully mitigate a route option that passes through the ancient woodland. SC9 is further away from ponds known to support great crested newts (GCNs) than SC2/2A. Impacts on GCNs, a European Protected species, are therefore likely to be reduced relative to the more southern options such as SC2/2A. All route options pass through areas of improved grassland and arable farmland, with fields separated by a network of hedgerows in varying condition. There is little to separate the impacts of the different route options on these habitats or the species they are likely to support (other than GCN, see above). The impacts of each route option on significant off-site receptors (e.g. River Wye SAC and bat roosts) is also likely to be broadly similar. SC9 would pass over Haywood Lane via an overbridge, the only route option which does so. Haywood Lane could therefore provide an underpass for use by bats (providing this can be unlit), which may provide a more easily effective mitigation solution than having the proposed road passing under Haywood Lane. However, SC9 would directly affect several mature / veteran trees within hedgerows to the east of the railway (some of which have high bat roosting potential), which would not be affected by other route options.	Moderate Adverse
	Water Environment	Assuming surface water management design and construction measures are implemented, the proposed alignment is likely to have low significance impacts on transport and dilution of waste products and biodiversity in Withy Brook and Newton Brook.	Slight Adverse
Social	Commuting and Other users	Reduced congestion along the A465 Belmont Road due to diversion of traffic onto the Southern Link therefore journey time savings for existing users of the A465. Longer journeys for those who divert to the Southern Link. Increased traffic along the A49 but level of delay at the A49/A465 junction proposed to remain at existing levels.	Slight Beneficial +
	Reliability impact on Commuting and Other users	Reduced congestion along the A465 provide greater journey time reliability for users of the A465. Journey times along the A49 are expected to remain at existing levels.	Slight Beneficial +
	Physical activity	Walking and cycling trips discouraged by severance of PROWs GF3 and HA7. Loss in rural amenity for recreational pedestrians using existing PROWs due to introduction of increased traffic noise and proximity to traffic.	Moderate Adverse -
	Journey quality	Road users benefiting from improved views and reduced traveller stress resulting from more open route with rural landscape vistas, greater route certainty, and reduced fear of accidents (compared to existing urban routes through Hereford town centre). New road with associated earthworks will degrade views slightly from A49 and Haywood Lane. New A465 roundabout will add stress to travellers on this road. Connecting of B4349 to SC9 at A465 will reduce driver stress compared to existing junction arrangement.	Moderate Beneficial ++
	Accidents	Southern Link Road designed to latest design standards. Reduction in traffic along A465 will reduce accident rate along this section of road although the resultant increase in traffic along the A49 may cause the accident rate to increase on this section of road.	Neutral
	Security	road users slightly less vulnerable to crime as this option reduces need to stop vehicles or reduce speeds compared to existing routes. No impact on security of PT passengers	Slight Beneficial +
	Access to services	Scheme provides a new potential bus route (between the A465 and A49) but not one that better serves key local destinations in Hereford Town Centre	Neutral
	Affordability	Rerouting will impact on journey speeds and congestion on both A465 and A49 (north of the scheme), impacting positively on personal affordability of car users.	Slight Beneficial +
	Severance	Scheme option increases severance significantly for very low number hamlets but reduces severance slightly (by reducing traffic flows) through Belmont and Redhill residential areas in vicinity of A49 and A465	Slight Beneficial +
	Option and non-use values	No impacts identified	Neutral
Public Account	Cost to Broad Transport Budget	Indicative cost of SC9 proposal is circa £17.2M - £25.3M	Moderate Beneficial ++
	Indirect Tax Revenues	N/A	

Other Issues	<p>Technical and operational feasibility</p>	<p>Earthworks – Vertical alignment on the east side follows the rolling profile of the countryside but west of Grafton Lane it starts climbing on an 8.5m high embankment in order to pass over the railway line. The route cuts through Beech Grove in a cutting up to 4m deep before passing over Haywood Lane. It then continues on an 8m high embankment before eventually dipping down to the existing topography at the western end of the scheme. With very little cut the scheme would require significant importation of fill in order to create the two large embankments either side of Beech Grove. Furthermore, the need to cross over Haywood Lane is likely to cause difficulty in tying the lane back to existing levels either side of it, particularly to the north at its junction with Merryhill Lane.</p> <p>Design Standards – 60mph design speed and Departures from Standard unlikely. Opportunity for overtaking unlikely. Straighter crossing of railway will reduce the cost of the structure. Side access issues yet to be looked at as well as any drainage runoff storage provision.</p> <p>Physical features – being of a twisted nature the route manages to avoid many physical constraints except the northern section of Grafton Wood (not designated). It passes close to the wooded area between Grafton Lane and Withy Brook and the barn yard situated south-west of the Merryhill Lane junction with Haywood Lane. The route crosses the railway at a near perpendicular angle which should be beneficial in engineering and cost terms. The unique distinction between this route and others under consideration is that it goes through the middle of Beech Grove. To date it has not been confirmed whether the feature has archaeological relevance/significance or otherwise. Beech Grove does not appear as a specific record on the Herefordshire Historic Environment Record (HER) and is not listed as a Scheduled Ancient Monument. Grafton Enclosure (off Grafton Lane) on the other hand does appear on the HER and is believed to be a lost early medieval castle site. However, it is not affected by the alignment of Option SC9, the route passing well to the south of it.</p> <p>Utilities – the route clashes with existing overhead power lines located at the eastern and western ends of the scheme (including a 66kV) but generally avoids them within the central area. The route crosses Grafton Lane at grade (or thereabouts) where BT and water services are present. There is conflict with a concentration of overhead and buried services in/around Haywood Lane including BT, a water main and a sewer.</p> <p>Rail structure - route crosses over the existing railway line so reduced risk for Network Rail's operations.</p>
---------------------	--	---

Appendix F

SCHEDULE OF ACTIVE TRAVEL
MEASURES AND OUTCOME OF
INITIAL SIFT



Appendix F: Schedule of potential active travel schemes and outcome of initial sift

Key to table

Outcome of Sifting Process	Description of category
<i>retained for further consideration</i>	Taken forward through SWTP. A selection of these will form the preferred package to be funded by SWTP.
<i>retained for further consideration, subject to third party agreement</i>	Schemes which are likely to contribute to a coherent active travel network in South Wye, but which are reliant on agreement, funding and implementation by third parties. In many cases the proposed schemes are along the A49 corridor, which is a trunk road operated and maintained by Highways England. In other cases schemes will be brought forward by planning applicants in association with, and at the time of new developments being constructed, such as the Lower Bullingham urban expansion, identified in the Local Plan Core Strategy.
<i>Ongoing work being funded separately</i>	Interventions which complement the SWTP and which are funded separately via existing Herefordshire Council (HC) funds, such as maintenance or LTP budgets
<i>Not to be taken forward in SWTP</i>	Where the schemes are: <ul style="list-style-type: none"> · Considered likely to be constructed beyond the timescales of SWTP; · Outside the study area for SWTP; · Not considered to have realistic prospect of being achieved (either through affordability or feasibility of construction); · No longer required as suitable alternatives exist; · Not aligned with the objectives of SWTP; or · Not in conformity with national or HC policy.

Category of possible improvement	Location	Details	Shown as possible option in 2014 public consultation	Outcome of initial sift	Rationale for decision
Enhancements to pedestrian and cycle crossings of major roads to reduce their severance effect	A465 Abergavenny Road between Ruckhall Lane and Haywood Lane	Provision for pedestrians to cross A465 to access the country park from Haywood Lane.	ü	<i>Retained for further consideration</i>	A crossing would help to better connect the cycle route to the north of the A465 (on Ruckhall Lane) and the country park to the south (immediately to the east of Haywood Lane) and from there towards Hereford city. Would also need infrastructure alongside the A465 and on sections of Ruckhall and Haywood Lanes to make a coherent scheme.
	A465 Abergavenny Road at Tesco roundabout	Improved north-south connections between Northholme Road / Dorchester Way (on the northern side) and Southolme Road (on the southern side)	ü	<i>Retained for further consideration</i>	Dedicated provision for pedestrians and cyclists is very limited at the roundabout and better infrastructure at this location would overcome the need for cyclists to negotiate the carriageway of the roundabout. No preferred infrastructure is identified at this stage but could for example involve a signalised crossing of Belmont Road in a revised location. Removing the barriers by Belmont Health Centre and replacing them with bollards would enhance the nearby off-road route. Cyclists from the south currently approach the pelican crossing directly in front of community centre, causing conflict with pedestrians. Signposting cyclists to use the path slightly further west of the community centre would overcome this conflict. This may be funded by the Local Transport Plan signage package but the option should be retained for consideration in SWTP as this may lead to faster implementation.
	A465 Belmont Road at Goodrich Grove junction	Improved crossing facilities for pedestrians and cyclists	ü	<i>Retained for further consideration</i>	Would formalise existing active travel desire lines and address severance on A465.
	A465 Belmont Road / Walnut Tree Avenue junction	Installation of new signal crossing for pedestrians and cyclists	ü	<i>Retained for further consideration</i>	Improved crossing facilities at this location would assist east-west journeys. Nature of the scheme may be dependent on outcome of the Walnut Tree Avenue options. Intervention will also be influenced affected by outcome of Hunderton Road option.
	A465 Belmont Road pelican crossing west of Belmont Avenue	Improve existing crossing facility	ü	<i>retained for further consideration</i>	Whilst an upgrade here could help to form a local link to connect the residential areas bounded by Belmont Road / Ross Road / Walnut Tree Avenue to Asda / primary school, it is reliant upon cycleways on either side to link it to residential streets. A49 proposals by Highways England would upgrade the nearby crossings on the Belmont Road arm of the Asda junction, provide a shared use path along the west side of Ross Road and a toucan crossing by Hinton Garage to a further shared use path on the east side which would help provide alternative connections for this residential area.
	A49(T) Ross Road pelican crossing south of Hinton Road	Improve existing crossing facility	ü	<i>Retained for further consideration subject to third party agreement</i>	Complementary measure requiring agreement, funding and implementation by third party (Highways England). Retained for further consideration until decision provided by Highways England. A plan prepared by Highway England's asset support contractor proposes to remove the crossing at its current location and construct a new toucan crossing further south by Hinton Garage. This proposal is still in the development stage.

Category of possible improvement	Location	Details	Shown as possible option in 2014 public consultation	Outcome of initial sift	Rationale for decision
	A49(T) Ross Road /Holme Lacy Road/Walnut Tree Avenue signal junction	Improved pedestrian crossing facilities as identified in the school travel plan	ü	<i>Retained for further consideration subject to third party agreement</i>	Complementary measure requiring agreement, funding and implementation by third party (Highways England). Retained for further consideration until decision provided by Highways England. Delivery, and benefits, are influenced by whether the Walnut Tree Avenue closure option is taken forward. An improvement to crossing facilities is shown indicatively on a plan prepared by Highways England's asset support contractor; however, no change to the crossings on the A49 arms is proposed. The proposal is still at the development stage.
	A49(T)/Bullingham Lane traffic signal junction	Improved cycle crossing facilities across A49(T)	ü	<i>Retained for further consideration subject to third party agreement</i>	Complementary measure requiring agreement, funding and implementation by third party (Highways England). Retained for further consideration until decision provided by Highways England. Pedestrians and cyclists are obliged to cross the A49(T) in two stages and there is constrained space for them to wait in the central refuge. An improved crossing would contribute to the wider network, in particular helping schoolchildren en route to Hereford Academy. An improvement to crossing facilities is shown indicatively on a plan prepared by Highways England's asset support contractor. The proposal is still at the development stage.
	Holme Lacy Road pelican crossing west of Hoarwithy Road junction	Convert to toucan crossing	ü	<i>Not to be taken forward in SWTP</i>	Upgrade is already part of the committed Holme Lacy Road scheme
	Holme Lacy Road at junction with Winston & Hinton Roads	Improved crossing facilities for pedestrians and cyclists	ü	<i>Retained for further consideration</i>	Would improve north-south routes across Holme Lacy Road to better connect residential communities
	Holme Lacy Road near Lower Bullingham Road	Improved crossing facilities for pedestrians and cyclists	ü	<i>Retained for further consideration</i>	Would improve north-south routes across Holme Lacy Road to better connect residential communities. Lower Bullingham Lane / Watery Lane forms an access route for pedestrians and cyclists to reach parts of the Hereford Enterprise Zone to the south of The Straight Mile.
	B4224 Eign Road at railway skew bridge	Improved crossing of B4224 to enhance access to Connect 2 scheme	ü	<i>Not to be taken forward in SWTP</i>	Proposal is north of the river, and thus outside of study area.
	Hinton Road zebra crossing	Convert to toucan crossing	ü	<i>Retained for further consideration</i>	A signal crossing may be a means of enabling cyclists to access and egress from the shared-use path across Bishop's Meadow. It is not illegal to cycle across a zebra crossing if there is shared-use route on either side, but it is contrary to Rule 64 of the Highway Code which states that cyclists should dismount and walk across zebra crossings
	A465 at The Oval pelican crossing	Improvement of existing pelican crossing	ü	<i>Retained for further consideration</i>	At present the crossing is only possible in two stages but this should be revisited in light of Southern Link Road being in place. Connections possible on both sides of the crossing onto residential streets.
New or improved cycle tracks across the area, with emphasis on greater segregation from general traffic and better connections of origins and destinations	A465 Belmont Road	Two-way cycle track between Haywood Lane and Walnut Tree Avenue.	ü	<i>Retained for further consideration</i>	Improved infrastructure for cyclists on this section of Belmont Road would help to create a better east-west cycle route. This section would then connect to the Great Western Way for journeys to the city centre, Hunderton Road to access the route adjacent to Riverside School and Walnut Tree Avenue for connections towards Hereford Enterprise Zone (other options for interventions on Walnut Tree Avenue are referred to elsewhere in this table)
	A49(T) from Asda roundabout to Redhill railway bridge	Segregated cycle provision adjacent to the carriageway	ü	<i>Retained for further consideration subject to third party agreement</i>	Complementary measure requiring agreement, funding and implementation by third party (Highways England). Retained for further consideration until decision provided by Highways England. A draft proposal has been prepared by Highways England's asset support contractor. Further work is required to establish if a suitable design can be designed within the available highway land. The proposal is still at the development stage.
	Holme Lacy Road from railway bridge	Cycle and pedestrian improvements – changes to crossings, cycle lanes and footways between rail bridge and A49(T)	ü	<i>Retained for further consideration</i>	A scheme for the section of road between the Coop and Oak Crescent has been funded separately to the SWTP by Herefordshire Council. A proposal for the remainder of the road could enable better walking and cycling provision to access the Hereford Enterprise Zone, including a wider shared use footway/cycleway under the railway bridge. Traffic impacts can be modelled in the Hereford transport model (SATURN program).
	Holme Lacy Road westbound approach to A49 traffic signals	Reduction of carriageway to one lane approach	ü	<i>Retained for further consideration subject to third party agreement and partnership funding by HC and HE</i>	Reduction in carriageway would enable a continuous cycleway to be provided up to the traffic signals, as part of the east-west route to the Enterprise Zone. Requires agreement of Highways England as would require works to the crossroads itself. Would be affected by traffic re-routing if another option was implemented (right turn from Hinton Road to Ross Road was banned).
	Wye Bridge	Improved provision for cyclists on bridge through slight widening of eastern footway and conversion into a shared-use path, including for two-way cycling	ü	<i>Not to be taken forward in SWTP</i>	The Bridge is a Grade I listed structure and Scheduled Ancient Monument. Any works to the bridge, including changing kerb lines or additional signs, is likely to trigger need for listed building consent and scheduled monument consent. There is limited available carriageway and footway width to share between users which may lead to greater conflict between cyclists and the high volume of pedestrians.

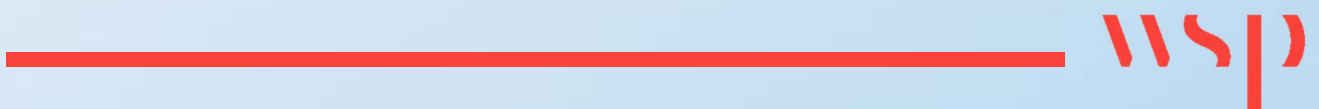
Category of possible improvement	Location	Details	Shown as possible option in 2014 public consultation	Outcome of initial sift	Rationale for decision
	Hereford Greenway (west of railway bridge) to Holme Lacy Road (opposite Lower Bullingham Lane)	Upgrade existing route, part of which is public footpath, alongside Red Brook and River Wye, to help form coherent off-road active travel network	ü	<i>Not to be taken forward in SWTP</i>	Likely to be significant difficulties involved in securing the necessary land for this proposal and in shoring up bank of the Wye. Intervention would in part duplicate the existing Greenway extension which runs parallel and to the west of the railway.
	Hoarwithy Road	Improved cycle provision	ü	<i>Retained for further consideration</i>	This road forms part of the active travel network linking the city centre to the residential areas of south Hereford. This option could connect into the existing sections of shared use path within the Saxon Gate housing estate parallel to Hoarwithy Road.
	Great Western Way	Painting of white lines to demarcate separate space for pedestrians and cyclists	ü	<i>Not to be taken forward in SWTP</i>	Not consistent with national (Department for Transport) or local policy (Herefordshire Council)
	Great Western Way	Lighting and maintenance improvements (Part revenue)	ü	<i>Retained for further consideration</i>	Option would encourage active travel during the hours of darkness. Intervention likely to have a safety benefit.
	Great Western Way – Ethelstan Crescent & Brampton Road access points	Widen shared use path approaches and install access barriers which are more 'cycle friendly'	ü	<i>Retained for further consideration</i>	Access is currently restricted with narrow paths and un-cycle-friendly barriers. Widening the shared use path and installing more cycle-friendly barriers will increase legibility of the existing route and enable increased use.
	Marlbrook Road between A49(T) and Hereford Academy entrance	Segregated cycle route alongside road to improving access to local schools	ü	<i>Retained for further consideration</i>	Creating a cycle route segregated from traffic will provide an additional link in the cycle network from the A49 to the Academy and enable safer travel for those cycling to the Academy.
	Walnut Tree Avenue	Improved cycle provision	ü	<i>Retained for further consideration</i>	This is a key east-west route in the city cycle network providing access to the Enterprise Zone but has no formal cycle infrastructure. What is appropriate will be shaped by the width of the road and the volumes of traffic using it.
	Cycle route across King George V Playing Field between swimming pool and Hinton Road	Improvement to existing cycle route	ü	<i>Retained for further consideration</i>	Could involve repositioning the existing zebra crossing further west / enough room have a cycle lane / bypass past the zebra crossing. Design needs to take account of ultimate origins / destinations of cyclists and pedestrians. Bishop's Meadow is owned by Herefordshire Council (open spaces team)
	Hinton Road (section between Hinton Crescent to A49(T) Ross Road)	Improvement to existing cycle route	ü	<i>Not to be taken forward in SWTP</i>	Space (in which to provide cycle lanes) is very constrained on Hinton Road. Hinton Road could have some merit as part of an east-west route towards the Enterprise Zone but would be dependent on bringing forward suitable crossings of A49 and A465 and cycle routes on the approaches. Intrinsically linked to HE proposals for A49 corridor. Some duplication with Walnut Tree Avenue / Holme Lacy Road east-west cycle route
	Springfield Avenue	New contraflow cycle route on one-way street	ü	<i>Not to be taken forward in SWTP</i>	Request arose from police in a PACTS meeting. This has subsequently been addressed by the cycle route adjacent to Riverside Primary School slightly to the north which provides a suitable alternative route.
	Grafton Depot park and choose to Bullingham Lane shared footway/cycleway	New shared use footway/cycleway	ü	<i>Retained for further consideration</i>	This would provide an off-road connection avoiding the A49 running from the park and choose site (80 spaces) at Grafton Depot to existing cycle routes north of the rail line. Route runs across third party land which is understood to be owned by The Church Commissioners.
	Sydwall Road to Goodrich Grove cycle route	Upgrade of Newton Brook Path north of A465 and off-road cycleway to Goodrich Grove south of A465	ü	<i>Retained for further consideration</i>	Would formalise existing active travel desire lines. Would connects onto Sydwall Road at one end and Goodrich Grove at the other. Would benefit from a new signal crossing of A465 where the Newton Brook path reaches A465.
	Cycle route west of Canterbury Close	Completion of cycle route between Ruckhall Lane and Dorchester Road	ü	<i>Retained for further consideration</i>	Completes the active travel network route north of the A465 from Ruckhall Lane to city centre. While route could broadly follow the line of the existing public footpath it would cross third party land.
	Hoarwithy Road to southern urban expansion area (Lower Bullingham)	Walking and cycling routes into urban expansion area	ü	<i>Retained for further consideration subject to third party agreement</i>	This would provide a good link onwards to the Enterprise Zone and would help make a coherent active travel network. This is directly related to the development of the urban expansion and is likely to be funded by the planning applicant of that site. Indication is that this would occur beyond the timescale for SWTP implementation. Exact nature of requirements unclear at this stage.
Improvements to streetscape as means of improving walking and cycling environment	Middle section of A465 between Newton Brook Bridge and Walnut Tree Avenue	Streetscape improvements with boulevard-style tree planting	ü	<i>Retained for further consideration</i>	Aim would be to create a more pleasant street environment with different paving materials and planting which encourages slower traffic speeds, reduces severance caused by traffic and enables pedestrians and cyclists to cross the road more easily. Width of carriageway (and thus the distances pedestrians have to cross) are key to this. A boulevard is likely to facilitate easier crossing of A465 by pedestrians and cyclists. It was highlighted that this option could be associated with ongoing higher maintenance costs.
	Hoarwithy Road	Streetscape improvements to enable safer walking and cycling	ü	<i>Not to be taken forward in SWTP</i>	Aim would be to create a more pleasant street environment with different paving materials and planting which encourages slower traffic speeds, reduces severance caused by traffic and enables pedestrians and cyclists to cross the road more easily. Traffic volumes on Hoarwithy Road are not considered to justify this scale of intervention and there are more suitable alternatives. The committed scheme on Holme Lacy Road will offer an improved east-west connection.

Category of possible improvement	Location	Details	Shown as possible option in 2014 public consultation	Outcome of initial sift	Rationale for decision
Bus lanes to reduce passenger journey times on radial corridors	A465 Belmont Road (Tesco to Hunderton Road)	Inbound bus lane	ü	<i>Not to be taken forward in SWTP</i>	This section of Belmont Road has a lower frequency of bus services than the section further east. It was concluded that a bus lane could only be supported where the bus frequency was highest.
	A465 Belmont Road (Hunderton Road to Asda)	Inbound bus lane	ü	<i>Retained for further consideration</i>	This section of Belmont Road has the highest frequency of bus services. A bus lane could enhance accessibility for Belmont residents (and thus address social exclusion and deprivation), and, depending on its width, potentially benefit cyclists (enabling them to use space segregated from general traffic). Workshop concluded there was a need to undertake traffic modelling and understand feasibility, benefits and impacts of proposal. Likely to be supported by Herefordshire Council passenger transport officer.
	Holme Lacy Road	Inbound bus lane from Hoarwithy Road to A49(T) signals	ü	<i>Retained for further consideration subject to third party agreement</i>	The case for a bus lane is likely to be strengthened when development takes place at Lower Bullingham Urban Expansion (site allocated for development in the Local Plan Core Strategy). This is likely to be beyond the timescale of SWTP.
Closure / restrictions on selected roads to reduce traffic levels	Walnut Tree Avenue	Closed to through traffic except and cycles	ü	<i>Retained for further consideration</i>	Workshop discussion determined that a road closure here could contribute to achieving SWTP objectives by enhancing the permeability of the area by active travel rather than motor vehicles. Need to consider impact on school and residential access and any implications of re-routing of traffic onto alternative routes for vehicle traffic. Account also needs to be taken of service 79 bus route which runs hourly eastwards from Home Lane to Ross Road at Broadleys Crossroads.
	Hunderton Road	Closed to through traffic except buses and cycles	ü	<i>Retained for further consideration</i>	Workshop discussion determined that a road closure here could contribute to achieving SWTP objectives by enhancing the permeability of the area by active travel rather than motor vehicles. Closing the road may help to simplify turning movements onto Belmont Road, and is thus also linked to the option to instal a signal crossing near the Belmont Road / Walnut Tree Avenue junction. The outcomes of the closure should be modelled, both in terms of impact of re-routing traffic and also in terms of benefits to active travel modes.
	Hinton Road / Ross Road Junction	Banning right-turn onto Ross Road	ü	<i>Retained for further consideration subject to third party agreement</i>	Suggested at workshop for inclusion. This route is used by traffic as an alternative route to queuing along Holme Lacy Road to the A49 traffic signals. Reducing the traffic on Hinton Road would help make it more attractive for active travel modes. Traffic Regulation Order, and any supporting infrastructure, would need to be progressed by Hhighway England. Impact arising from additional traffic routing through the Broadleys crossroads would need to be analysed in the traffic modell.
Changes to junction design to assist pedestrian and cycle journeys, such as kerb build-outs	Selected sites across South Wye area	Area-wide	ü	<i>Retained for further consideration</i>	Amending junction layouts, with tighter radii kerblines, will slow the speeds of turning vehicles and reduce the road width pedestrians are required to cross. This will encourage active travel journeys and improve road safety.
	A465/B4349 Clehonger Road junction	Pedestrian central refuge	ü	<i>Retained for further consideration</i>	Will help bus passengers cross the road en route to and from bus stops on A465
Introduction of lower speed limits in selected parts of urban area	A465 Abergavenny Road from Tesco roundabout to Haywood Lane	Extend 30mph limit from current termination point	ü	<i>Retained for further consideration</i>	Change in speed limit would support the improved pedestrian and cycle infrastructure along this section of A465. BBLP indicated that the opening of the Southern Link Road would be an appropriate time to reconsider the speed limits in this area.
	All Herefordshire Council residential roads in South Wye	Area-wide 20mph limit	ü	<i>Retained for further consideration</i>	Evidence suggests that the benefits of a blanket 20mph speed limit would support the majority of the SWTP objectives. Liaison with BBLP required to understand relationship of proposal with Herefordshire Council's speed limit policy
Reduction in numbers of HGVs on A465 Belmont Road	Weight restriction Traffic Regulation Order (TRO)		ü	<i>Retained for further consideration</i>	This scheme will lead to transfer of Heavy Goods Vehicles from Belmont Road to Southern Link Road and the A49. Removal of Heavy Goods Vehicles would help improve the active travel environment, improving perceptions of safety. Consultation with the police has previously revealed indicative support for this weight restriction
Other small-scale schemes	Warwick Road to Watery Lane	Removal of barriers and insertion of bollards on access from Watery Lane	ü	<i>Not to be taken forward in SWTP</i>	Unfeasible due to steepness of path and insufficient width available to make improvements in this location.
Upgrades to pedestrian and cycle direction signage	Area-wide	Area-wide	ü	<i>Ongoing work funded separately</i>	Complementary measure with ongoing funding by Herefordshire Council from other sources (Local Transport Plan). No additional funding sought through business case. Series of routes already being funded for signage improvements. Routes for upgrade need to be determined. Duplication with the Hereford Cycle Signage Project needs to be avoided. Should be coordinated with decluttering signage
Additional cycle parking	Area-wide	Area-wide	ü	<i>Ongoing work funded separately</i>	Providing cycle parking has benefit to the economy in terms of enabling more trips to local businesses. Specific sites for improvements need to be identified and data needs to be obtained on location of statutory undertaker apparatus or whether third party land involved. This is a complementary measure with ongoing funding by Herefordshire Council from other sources (Local Transport Plan). No additional funding sought through business case.
Upgrade bus stops to provide high quality shelters and level access	Area-wide	Area-wide	ü	<i>Ongoing work funded separately</i>	Complementary measure with ongoing funding by Herefordshire Council from other sources led by passenger transport and with developer contributions. No additional funding sought through business case.

Category of possible improvement	Location	Details	Shown as possible option in 2014 public consultation	Outcome of initial sift	Rationale for decision
Providing charging points for electric vehicles on HC owned premises	Area-wide	Area-wide	û	<i>Ongoing work funded separately</i>	Complementary measure with ongoing funding by Herefordshire Council from other sources (Local Transport Plan). No additional funding sought through business case. The Local Transport Plan includes policies seeking to provide the public with facilities to support electric and low carbon vehicles will reduce the environmental impacts of traffic, especially carbon dioxide, air quality and noise. This are directly related to the SWTP objectives.
Change the traffic signal timings at the to minimise delay and congestion	A49(T)/A465 Asda Roundabout	-	û	<i>Ongoing work funded separately</i>	Reviewing signal timings is a routine activity undertaken by Highways England in partnership with Herefordshire Council; does not need to be a separate scheme.
Active travel promotion	Examples include - Personalised Travel Planning for the South Wye Area - Continuation of Choose How You Move campaign - Cycle Ambassador and Cycle Forum Support - School travel plan support (updating them where necessary and funding schemes identified by staff and pupils) - Continued workplace travel plan support (working with employers to reduce solo car use, promote employee sustainable travel behaviours and reduce the need to travel for work)		û	<i>Ongoing work funded separately</i>	Complementary measure with ongoing funding by Herefordshire Council from other sources (Local Transport Plan). No additional funding sought through business case.
Maintenance schemes	Examples of potential maintenance scheme locations include surfacing works on Waterfield Road and Escley Drive, highlighted as requiring attention in Hereford Cycle Audit – Strategic overview; Rotherwas Industrial Estate to Belmont Ward, Strategic Overview Summary Report.		û	<i>Ongoing work funded separately</i>	Complementary measure with ongoing funding by Herefordshire Council from other sources (maintenance budget). No additional funding sought through business case. Improved maintenance and repair of roads will improve the quality of journey for cyclists on road, reduce potential damage to cycles and improve safety.
Park and choose	A49/B4399 roundabout	Park and choose site	û	<i>Ongoing work funded separately</i>	An additional park and choose site here is envisaged in the Local Plan Core Strategy (Policy HD6). This is a strategic location at which to provide rural commuters with more flexible options to change travel modes to car sharing, cycling and access to bus services, as well as reduce vehicle emissions within the city. The site is likely to be delivered by third parties (developers) in association with the Lower Bullingham urban expansion and the indication is that this would occur beyond the timescale for SWTP implementation. Should be considered in combination with foot/cycleway proposals to connect it to urban expansion / rest of Hereford

Appendix G

GROUPS OF POSSIBLE ACTIVE
TRAVEL MEASURES AND THEIR
SUBSEQUENT REFINEMENT



Active travel groups and subsequent refinement

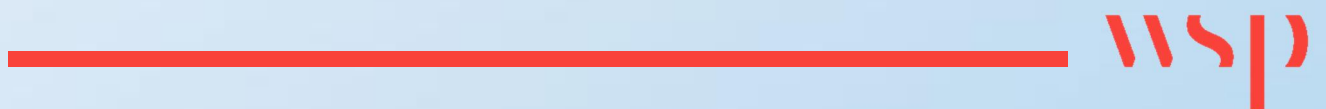
Original group name and reference letter	Constituent elements	New group name and reference number	Refinement of groups	Constituent elements
A <i>Western section of A465 corridor – interventions to overcome severance and improve active travel connectivity</i>	<ul style="list-style-type: none"> • New shared use footway/ cycleway on northern side of A465 • Completion of shared use footway/ cycleway between Ruckhall Lane & Dorchester Way (west of Canterbury Close) • Improved pedestrian/ cycle crossing on A465 between Ruckhall Lane and Haywood Lane • Extend 30mph limit on A465 west from Tesco to Haywood Lane • Pedestrian refuge on A465 east of Clehonger Road turn 	5 Belmont Road (West) walking and cycling improvements	Cycle infrastructure (advisory cycle lanes) added to connect proposed signal crossing on A465 to the country park east of Haywood Lane, and raised tables added to facilitate easier crossing of Ruckhall Lane and Haywood Lane	<ul style="list-style-type: none"> • New shared use footway/ cycleway on northern side of A465 • Completion of shared use footway/ cycleway between Ruckhall Lane & Dorchester Way (west of Canterbury Close) • Toucan signal crossing on A465 between Ruckhall Lane and Haywood Lane • Extend 30mph limit on A465 west from Tesco to Haywood Lane • Pedestrian refuge on A465 east of Clehonger Road turn • Advisory cycle lanes over narrow bridge at Belmont Pool • Improved links to existing paths near Belmont Pool • Raised tables on Haywood Lane and Ruckhall Lane to facilitate easier pedestrian crossing
B <i>Middle section of A465 corridor –Option 1 – package of interventions to overcome severance and improve active travel connectivity</i>	<ul style="list-style-type: none"> • Cycle infrastructure along section of Belmont Road from Tesco to Walnut Tree Avenue • Improvement of existing pelican crossing of Belmont Road by The Oval • Improved north-south crossings for pedestrians and cyclists at Tesco Roundabout • Improved crossing facilities for pedestrians and cyclists on Belmont Road by Goodrich Grove junction • Upgrade Newton Brook path to shared use footway/cycleway, create new connecting shared use footway/cycleway to Goodrich Grove south of A465 	3 Belmont Road walking and cycling improvements	Groups B and C combined to create comprehensive active travel scheme for the corridor Improved links to Great Western Way added to the group to create better connections onto existing off-road walking and cycling route Improved link from Eastholme Avenue added	<ul style="list-style-type: none"> • Cycle infrastructure along section of Belmont Road from Tesco to Walnut Tree Avenue • Improvement of existing pelican crossing of Belmont Road by The Oval • Improved north-south crossings for pedestrians and cyclists at Tesco Roundabout and improved approach route from Eastholme Avenue • Upgrade Newton Brook path to shared use footway/cycleway, provide toucan crossing on Belmont Road and create new connecting shared use footway/cycleway to Goodrich Grove south of A465 • Streetscape improvements including avenue tree planting and narrowing of the Belmont Road carriageway • Improved links to Great Western Way
C <i>Middle section of A465 corridor – Option 2 – as per Option 1, plus additional placemaking interventions to overcome severance</i>	<ul style="list-style-type: none"> • As per B plus streetscape improvements including avenue tree planting and narrowing of the Belmont Road carriageway 			
D <i>Improve connections to, and use of, Great Western Way</i>	<ul style="list-style-type: none"> • Improved lighting and maintenance on Great Western Way • New off-road shared use footway/cycleway between Hereford Academy and Ross Road adjacent to Marlbrook Road • Widen shared use footway/cycleway access to Great Western Way from Ethelstan Crescent and Brampton Road • Improved crossing of Ross Road (subject to third party agreement) 	6 Better walking and cycling routes to Hereford Enterprise Zone	Discussions with stakeholders confirmed that no significant changes to lighting on Great Western Way were considered necessary, and minor changes fell within the remit of other budgets (LTP) – this element was not taken forward. Liaison with the HEZ indicated that the remaining elements could be combined to create a quietway to the HEZ which avoided busier roads further north, with additional elements including signing, on-road markings at improvements to the Lower Bullingham Lane / Watery Lane route to the HEZ.	<ul style="list-style-type: none"> • New off-road shared use footway/cycleway between Hereford Academy and Ross Road adjacent to Marlbrook Road • Improve shared use footway/cycleway access to Great Western Way from Ethelstan Crescent and Brampton Road • Improved crossing of Ross Road (subject to third party agreement) • Lighting, signing and vegetation clearance on Watery Lane and Lower Bullingham Lane • On-road markings • Route signage and removal of barriers and posts

Original group name and reference letter		Constituent elements	New group name and reference number		Refinement of groups	Constituent elements
E	<i>Improving active travel infrastructure – north-south journeys to city centre</i>	<ul style="list-style-type: none"> Improved routes across Bishop's Meadow from swimming pool to Hinton Road Convert Hinton Road zebra crossing to toucan crossing Better footway/cycleway connection from Bishop's Meadow with/onto Hinton Road Improvements to cycle infrastructure on Hoarwithy Road between Saxon Gate & Holme Lacy Road Shared use footway/cycleway between Grafton Depot park and choose site and Bullingham Lane 	7	Hoarwithy Road and Hinton Road walking and cycling links	No changes	<ul style="list-style-type: none"> Improved routes across Bishop's Meadow from swimming pool to Hinton Road Convert Hinton Road zebra crossing to toucan crossing Better footway/cycleway connection from Bishop's Meadow with/onto Hinton Road Improvements to cycle infrastructure on Hoarwithy Road between Saxon Gate & Holme Lacy Road Shared use footway/cycleway between Grafton Depot park and choose site and Bullingham Lane Raised table on Hoarwithy Road near Orchard Avenue to facilitate easier pedestrian crossings
F	<i>Improving active travel infrastructure – east-west journeys to the HEZ</i>	<ul style="list-style-type: none"> Improved cycle provision on Holme Lacy Road between railway bridge and eastern end of existing scheme at Coop), including changes to crossings, cycle lanes and footways Improved crossing facilities of Holme Lacy Road near Lower Bullingham Road Improved crossing facilities of Holme Lacy Road near Winston & Hinton Road junctions Holme Lacy Road westbound approach to A49 traffic signals – carriageway narrowed to one lane to facilitate shared use footway / cycleway (subject to third party agreement and partnership funding by HE & HC) Shared use footway/cycleway under railway bridge with associated one way priority working or shuttle traffic signals for motor vehicles A49 / Holme Lacy Road junction – toucan crossings to facilitate safer crossing of Ross Road Improved cycle provision on Walnut Tree Avenue A465 Belmont Road by Walnut Tree Avenue junction - new toucan crossing 	8	Holme Lacy Road – further walking and cycling improvements	<p>Initial design work indicated that it would be difficult to provide appropriate cycle infrastructure on Walnut Tree Avenue for a road with substantial traffic volumes which accorded with design standards within the available highway space. As the traffic reduction option (part of Group J) appeared to be an alternative means of improving the route for active travel the Walnut Tree Avenue cycle provision element was not taken forward.</p> <p>The A465 Belmont Road / Walnut Tree Avenue new toucan crossing element was packaged with the Hunderton Road and Walnut Tree Avenue filtered permeability to form a geographically coherent group of improvements.</p>	<ul style="list-style-type: none"> New shared use footway / cycleway on northern side of Holme Lacy Road between railway bridge and eastern end of existing scheme at Co-op Block paved table tops constructed at junctions to facilitate easier pedestrian and cycle crossings of Holme Lacy Road Holme Lacy Road westbound approach to A49 traffic signals -carriageway narrowed to one lane to facilitate shared use footway / cycleway (subject to third party agreement and partnership funding by HE & HC) Shared use footway/cycleway under railway bridge with associated one way priority working or shuttle traffic signals for motor vehicles A49 / Holme Lacy Road junction – toucan crossings to facilitate safer crossing of Ross Road
G	<i>Improving active travel infrastructure – journeys from city centre to the HEZ</i>	<ul style="list-style-type: none"> Lighting the Connect 2 Greenway 	n/a		Liaison with the HEZ indicated that the implementation of this proposal could be accelerated and funded separately	n/a
H	<i>Calming traffic in residential areas</i>	<ul style="list-style-type: none"> Area-wide 20mph limit on all Herefordshire Council residential roads in South Wye Amending junction designs, focused on the widest bellmouth junctions on the Hunderton Estate west of Great Western Way and north of Belmont Road 	1	20mph residential areas		<ul style="list-style-type: none"> Area-wide 20mph limit on all Herefordshire Council residential roads in South Wye, with 20mph limit signs at entry points and repeater signs Amending junction designs, focused on the widest bellmouth junctions on the Hunderton Estate west of Great Western Way and north of Belmont Road
I	<i>Infrastructure to support bus services</i>	<ul style="list-style-type: none"> Inbound bus lane on the A465 (Hunderton Road to Asda Roundabout) New shared use footway/cycleway on A465 Belmont Road near Belmont Avenue - Upgrade existing crossing to toucan 	2	Belmont Road bus priority measures	No changes	<ul style="list-style-type: none"> Inbound bus lane on the A465 (Hunderton Road to Asda Roundabout) New shared use footway/cycleway on A465 Belmont Road near Belmont Avenue - Upgrade existing crossing to toucan

Original group name and reference letter		Constituent elements	New group name and reference number		Refinement of groups	Constituent elements
J	<i>Reducing traffic flows to assist active travel</i>	<ul style="list-style-type: none"> Filtered permeability (closure to vehicular traffic, except buses and cycles) on sections of Hunderton Road and Walnut Tree Avenue Weight restriction Traffic Regulation Order on Belmont Road 	9	Walnut Tree Avenue / Hunderton Road traffic reduction	The A465 Belmont Road / Walnut Tree Avenue new toucan crossing element was packaged with the Hunderton Road and Walnut Tree Avenue filtered permeability to form a geographically coherent group of improvements.	<ul style="list-style-type: none"> Filtered permeability (closure to vehicular traffic, except buses and cycles) on sections of Hunderton Road and Walnut Tree Avenue Walnut Tree Avenue - raised priority crossings for pedestrians A465 Belmont Road at Walnut Tree Avenue and Hunderton Road junctions - raised table covering both junctions and new toucan crossing of Belmont Road New shared use footway/cycleway on Belmont Road between Hunderton Road and Walnut Tree Avenue
			4	Belmont Road weight restriction	Weight restriction formed into standalone group as the possible impacts would extend over a different geographical area to the Walnut Tree Avenue and Hunderton Road elements	<ul style="list-style-type: none"> Weight restriction Traffic Regulation Order on Belmont Road

Appendix H

SEPTEMBER 2016 PUBLIC
CONSULTATION EXHIBITION
BOARDS OF POSSIBLE ACTIVE
TRAVEL IMPROVEMENTS



What is the South Wye Transport Package?

The South Wye Transport Package (SWTP) aims to promote economic growth within Hereford while tackling specific problems in the South Wye area. The aim is to promote economic development by unlocking the barriers to economic growth, including land at the Hereford Enterprise Zone (HEZ).

SWTP Objectives

Reduce congestion and delay

Enable access to developments such as the HEZ

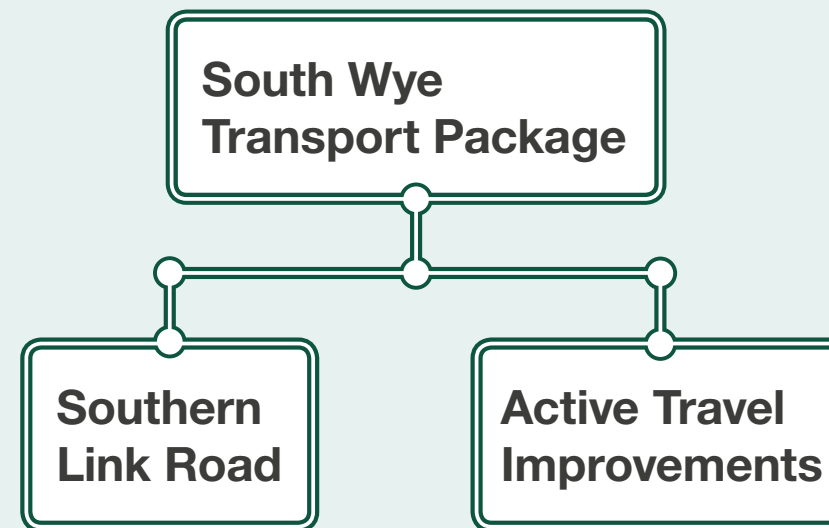
Reduce the growth in emissions

Reduce traffic noise

Reduce accidents

Encourage physical activity

The South Wye Transport Package (SWTP) comprises:



The Southern Link Road (SLR) has recently been granted planning permission and the delivery of the scheme continues.

Why are active travel measures proposed?

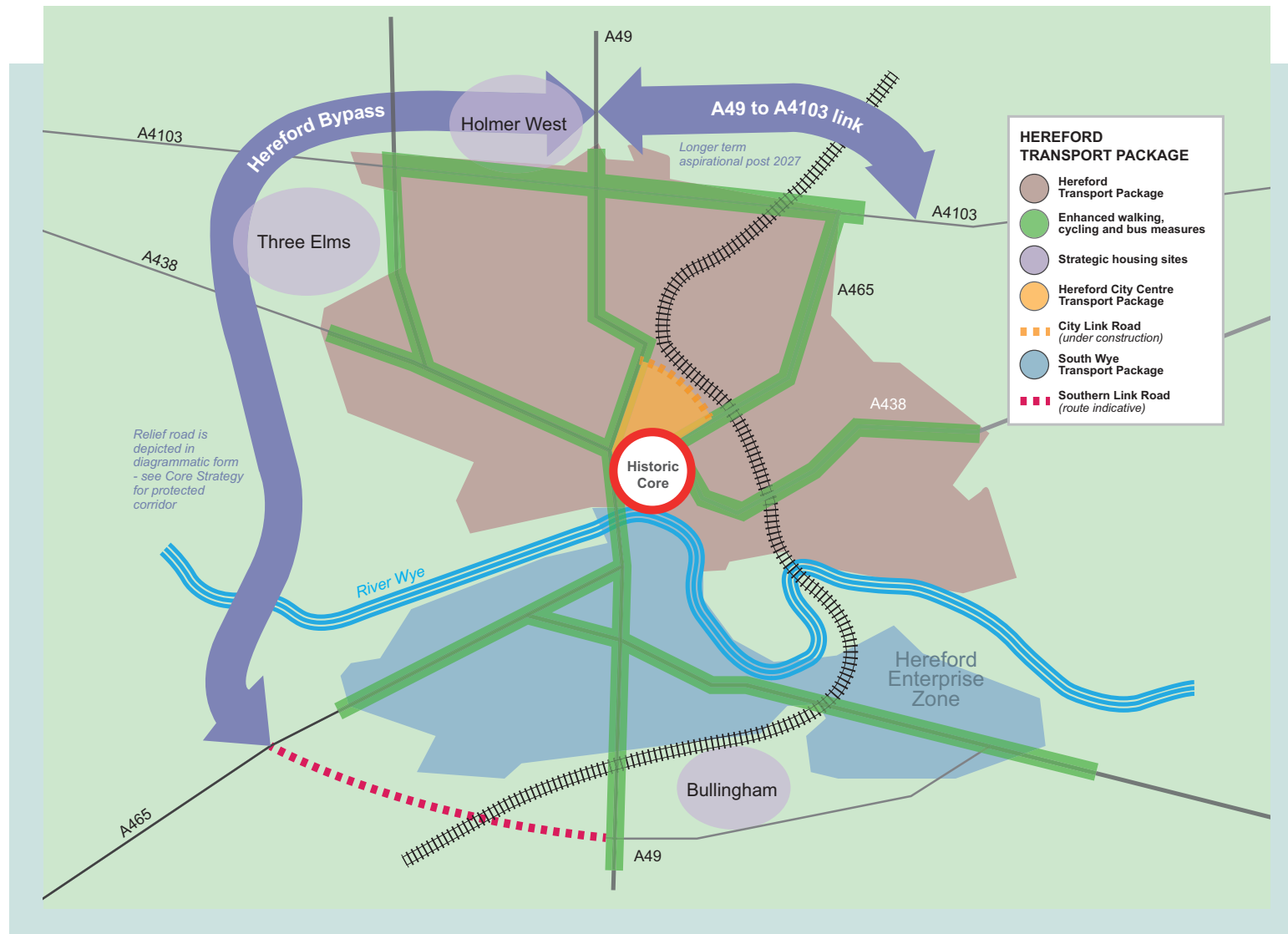
Herefordshire Council is looking at ways to improve active travel (including walking and cycling) in South Wye, Hereford. This consultation is specifically seeking your views on a range of possible active travel improvements.

What is active travel?

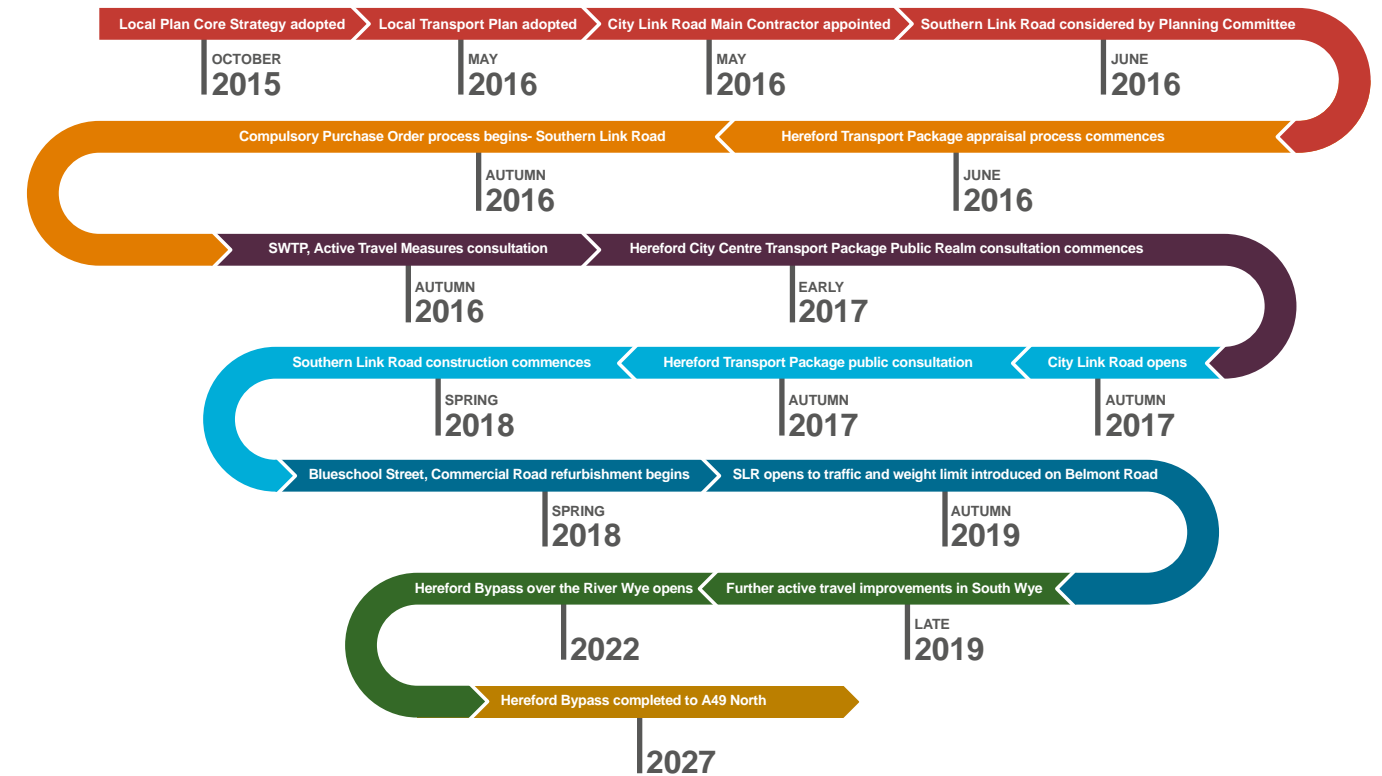
Active travel is about physical activity in the form of walking and cycling, rather than motorised forms of travel, such as the private car.



207



Infrastructure timeline



208

What have we already delivered?

South Wye Transport Package

Hereford Connect2 Bridge & Greenway

New crossing

Traffic free



Commuter route

Goodrich Grove — The Oval cycle lane

New links

Traffic free



Rotherwas Link to Greenway

Commuter route



Traffic free



Greenway link

Holme Lacy Road

New crossing

Safer routes to school



Traffic free

Walnut Tree Avenue —20 Zone

Quieter streets



Belmont cycleway

Family route



Traffic free

A49—Bullingham Lane

New crossing

Safer routes to school



Rural access

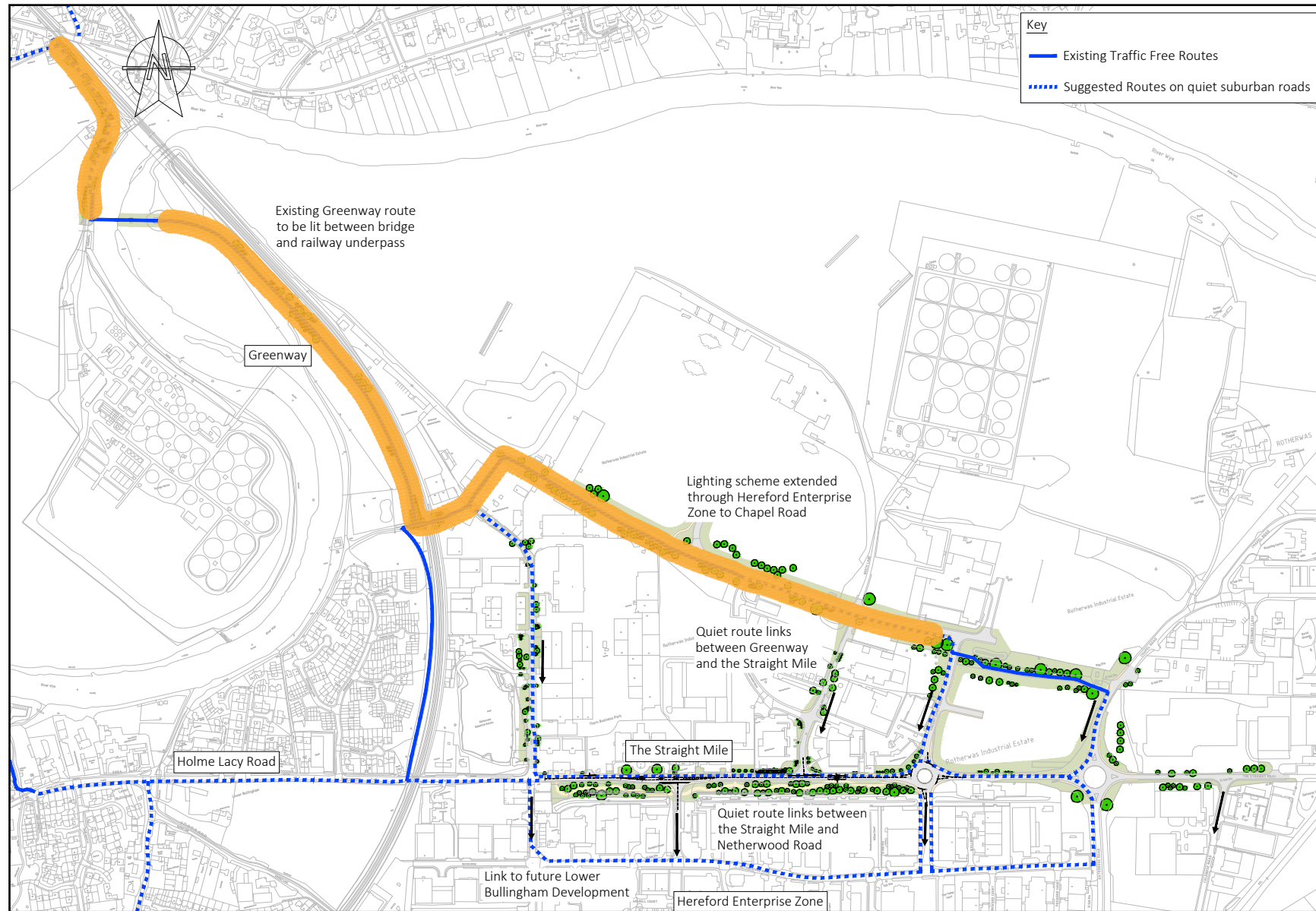


Commuter route

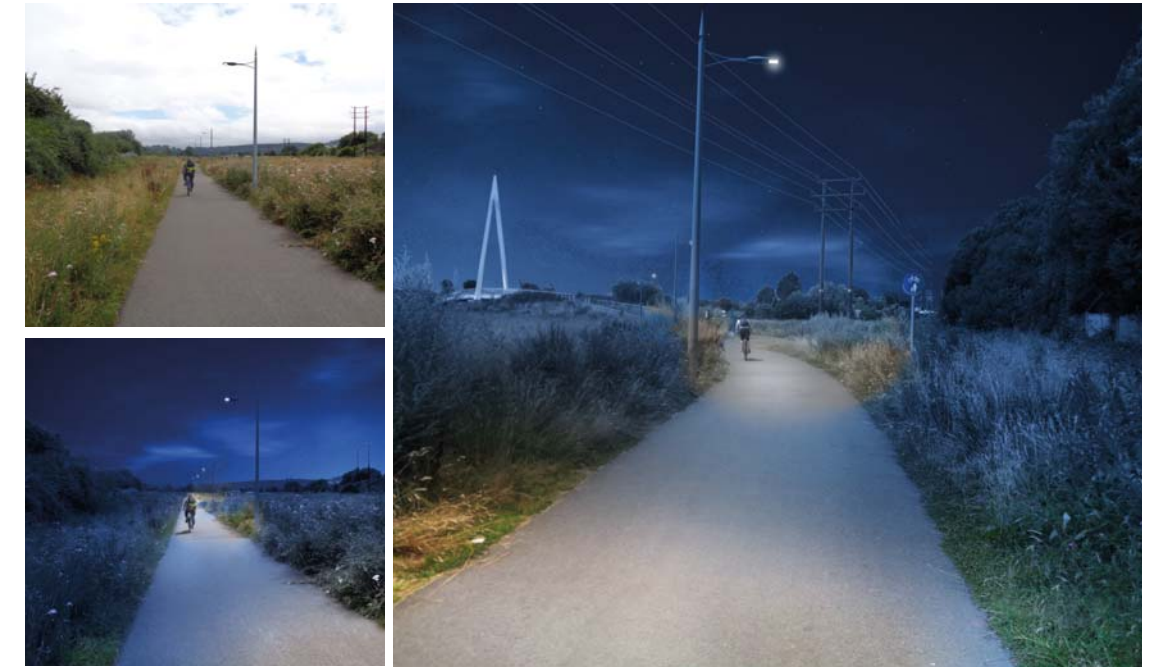
2019

Hereford Greenway lighting and The Straight Mile cycle route

We are providing new lighting on the Hereford Greenway and a new cycle route along The Straight Mile.



Visualisation of lighting scheme along Hereford Greenway

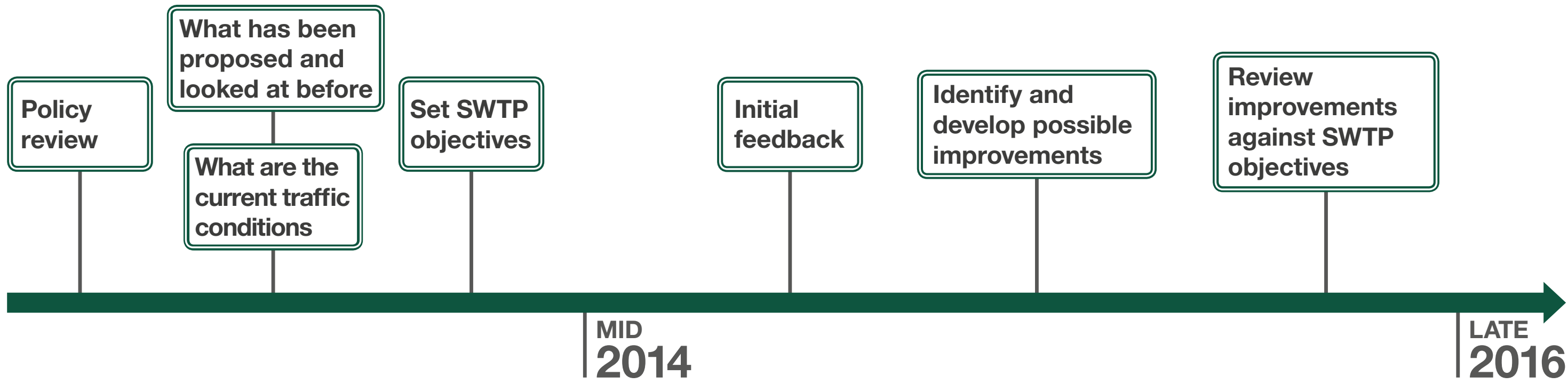


Visualisation looking east. Entrance to Edison's coffee shop is on the left



210

211



INITIAL PUBLIC CONSULTATION IN 2014

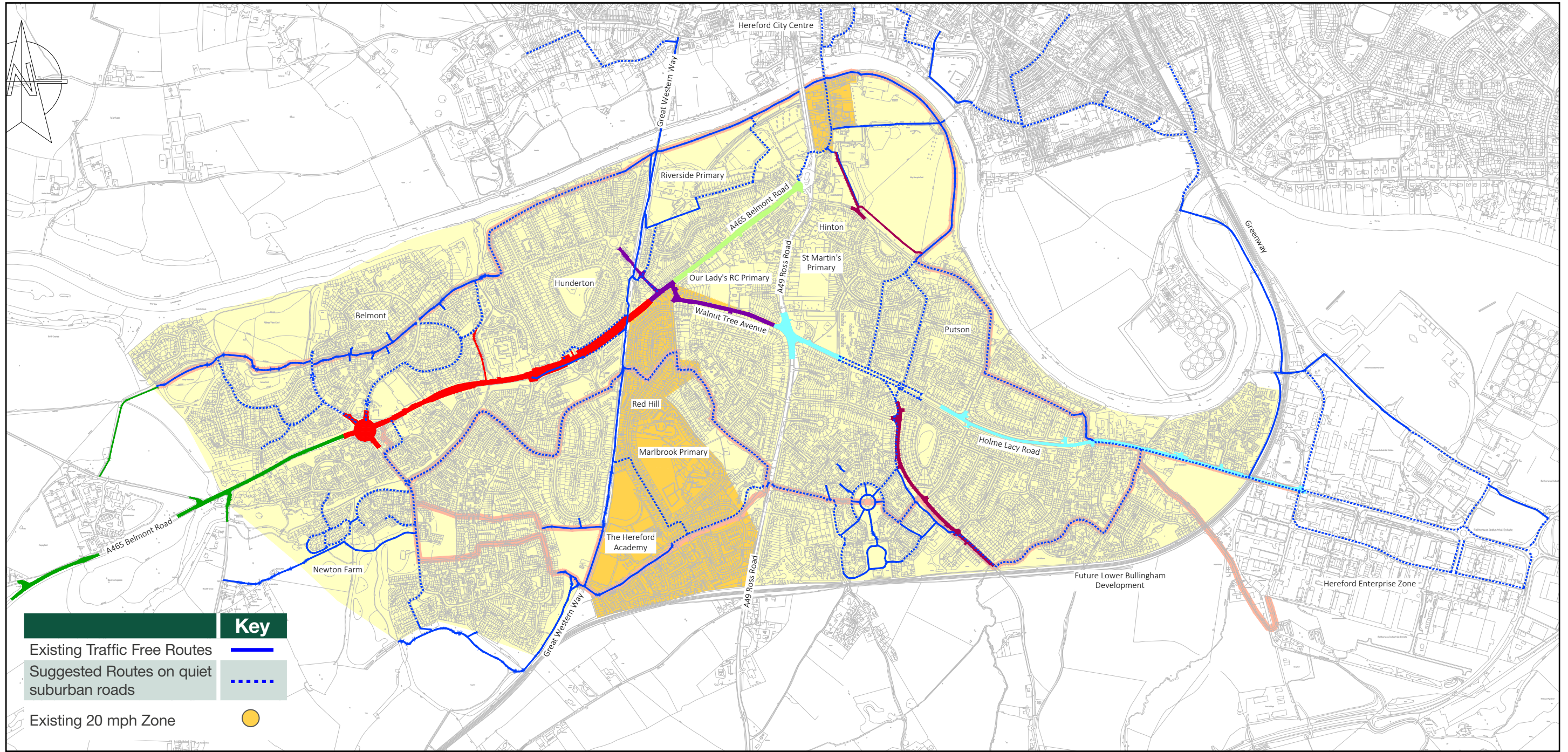
At the 2014 consultation you said:

- Poor walking and cycling is one of the top five transport issues in South Wye
- You support more and improved walking and cycling infrastructure in South Wye

SECOND PUBLIC CONSULTATION IN 2016

At this consultation we want to hear:

- Your level of support for each of the possible improvements, what you like about them, and what could be improved?



Key	
Existing Traffic Free Routes	
Suggested Routes on quiet suburban roads	
Existing 20 mph Zone	

Possible Improvements	Key
20 mph residential areas	
Belmont Road bus priority measures	
Belmont Road walking and cycling improvements	

Possible Improvements	Key
Belmont Road weight restriction	
Belmont Road (West) walking and cycling improvements	
Better walking and cycling routes to Hereford Enterprise Zone	

Possible Improvements	Key
Hoarwithy Road and Hinton Road walking and cycling links	
Holme Lacy Road—further walking and cycling improvements	
Walnut Tree Avenue / Hurderton Road traffic reduction	

Possible improvements and SWTP objectives	Reduce congestion and delay	Enable access to developments such as the HEZ	Reduce the growth in emissions	Reduce traffic noise	Reduce accidents	Encourage physical activity
20 mph residential areas	✓	✓	✓	✓	✓	✓
Belmont Road bus priority measures	✓	✓	✓		✓	✓
Belmont Road walking and cycling improvements	✓	✓	✓	✓	✓	✓
Belmont Road weight restriction	✓		✓	✓	✓	✓
Belmont Road (West) walking and cycling improvements	✓		✓	✓	✓	✓
Better walking and cycling routes to Hereford Enterprise Zone	✓	✓			✓	✓
Hoarwithy Road and Hinton Road walking and cycling links	✓	✓	✓	✓	✓	✓
Holme Lacy Road—further walking and cycling improvements	✓	✓	✓	✓	✓	✓
Walnut Tree Avenue / Hunderton Road traffic reduction	✓	✓	✓	✓	✓	✓

213

20 mph residential areas

A 20 mph area covering all residential streets in South Wye excluding primary routes (A Roads)

Benefits

More walking and cycling friendly streets

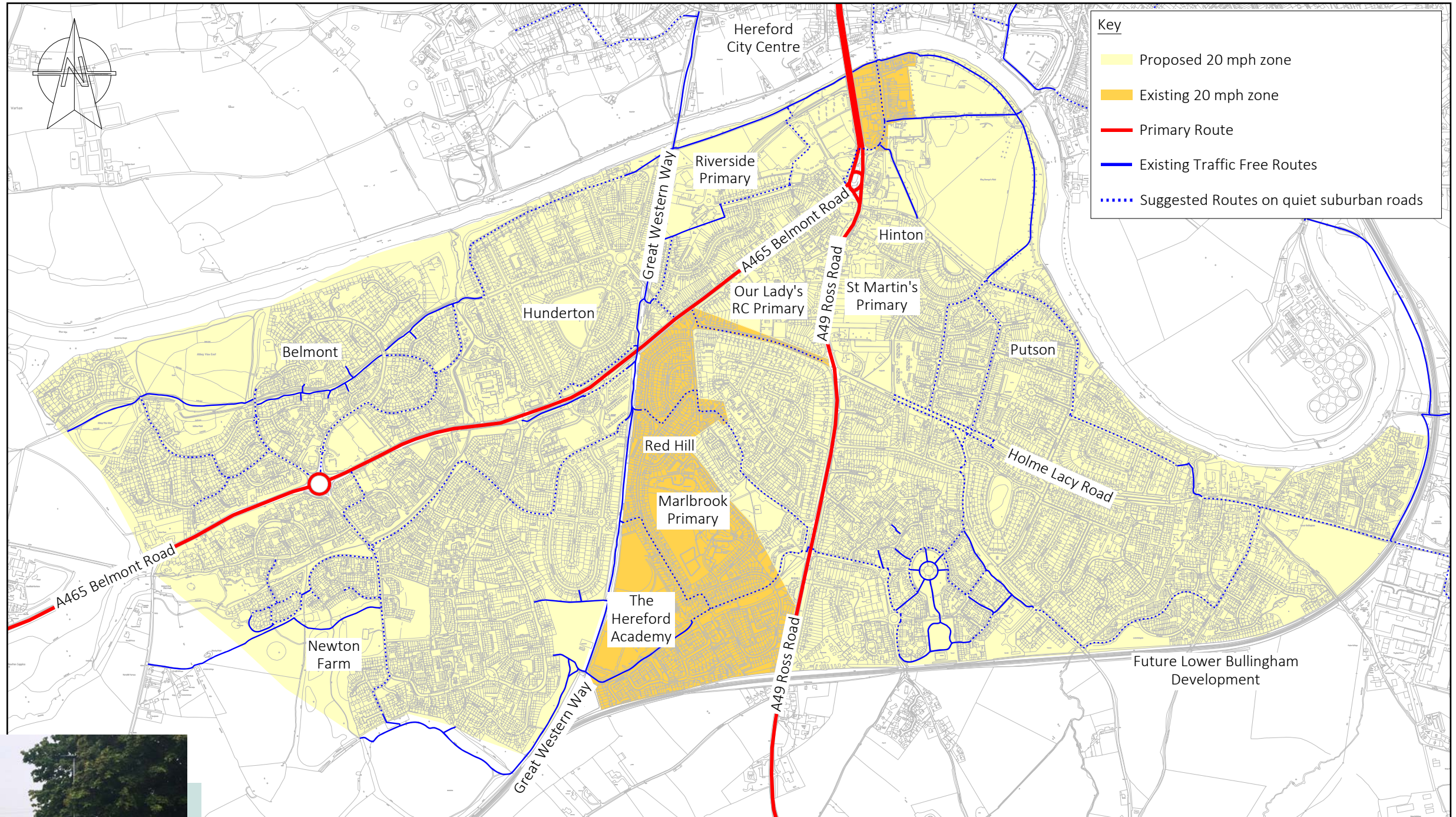
Better connected local communities

Cleaner air quality

Quieter streets

Safer journeys for all road users

Healthier and happier journeys



Artist's impression of 20mph gateway on Belmont Avenue

Belmont Road bus priority measures

An inbound bus lane on Belmont Road (A465) complemented by new and improved cycleway/footways and an improved crossing at Belmont Avenue

Benefits

An inbound bus lane and new cycleway from Hunderton Road to Asda Roundabout

Easier to cross Belmont Road

Safer journeys to the city centre

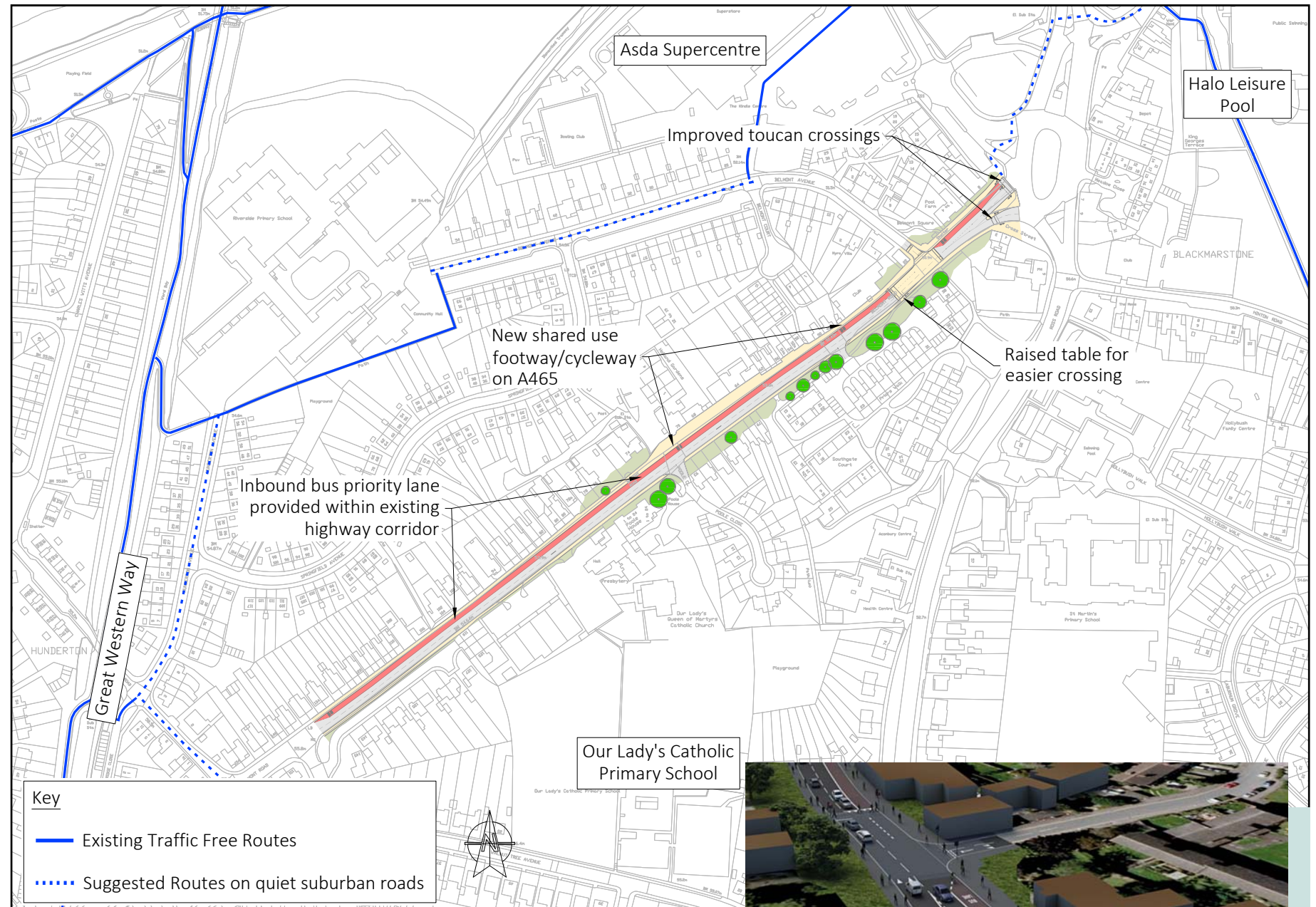
Improved bus journey times to the city centre

Cleaner air quality

Healthier and happier journeys

Encourages inexperienced and returning cyclists

Visualisation looking north-east from Walnut Tree Avenue junction to show possible bus priority measures along the A465



Visualisation of possible bus priority measures and improved crossings along the A465 approaching the Asda Roundabout

Belmont Road walking and cycling improvements

Improving the environment for walking and cycling and connecting communities either side of Belmont Road

Benefits

A new cycleway on Belmont Road from Tesco Roundabout to Walnut Tree Avenue

Easier to cross Belmont Road

Better connected local communities

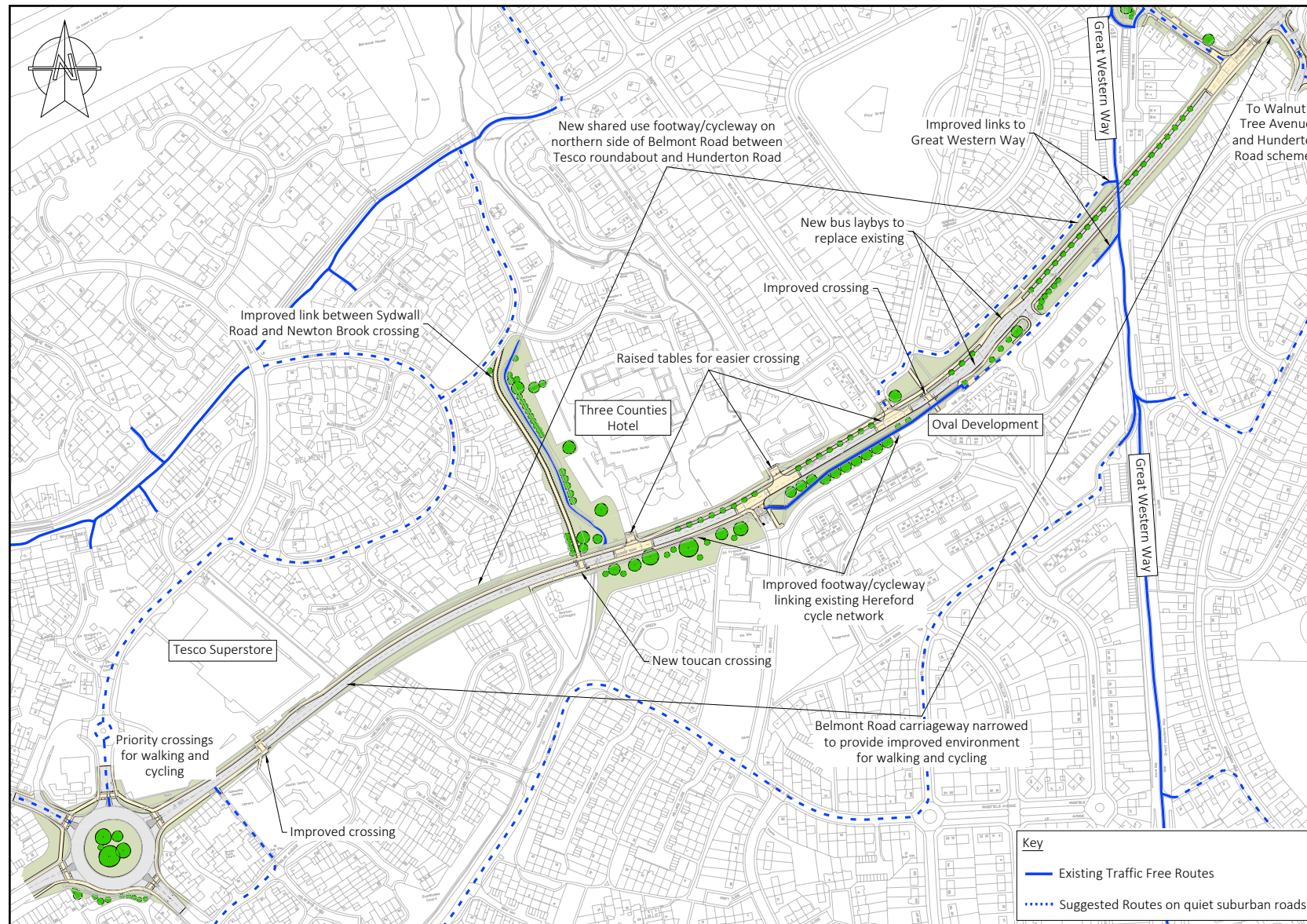
Safer journeys to school

Healthier and happier journeys to school

Improved links to existing walking and cycling routes, such as Great Western Way

Improved tree-lined street environment

Encourages inexperienced and returning cyclists



Visualisation of possible walking and cycling improvements at Tesco Roundabout



Visualisation of possible new toucan crossing on Belmont Road near Newton Brook, with connecting shared use path and improved link to Sydwall Road



Belmont Road weight restriction

Diverting heavy goods vehicles away from communities, improving the environment for walking and cycling. The location of the weight restriction is subject to separate consultation.

Benefits

Improved traffic flow & fewer HGVs on Belmont Road

Cleaner air quality

Quieter streets

Safer journeys for all

Healthier and happier journeys

Belmont Road (West) walking and cycling improvements

Improving the environment for walking and cycling and connecting communities along Belmont Road west of Tesco Roundabout

Benefits

A new cycleway on Belmont Road from Ruckhall Lane to Tesco Roundabout

Better connected local communities via new cyclepath from Ruckhall Lane

Cleaner air quality

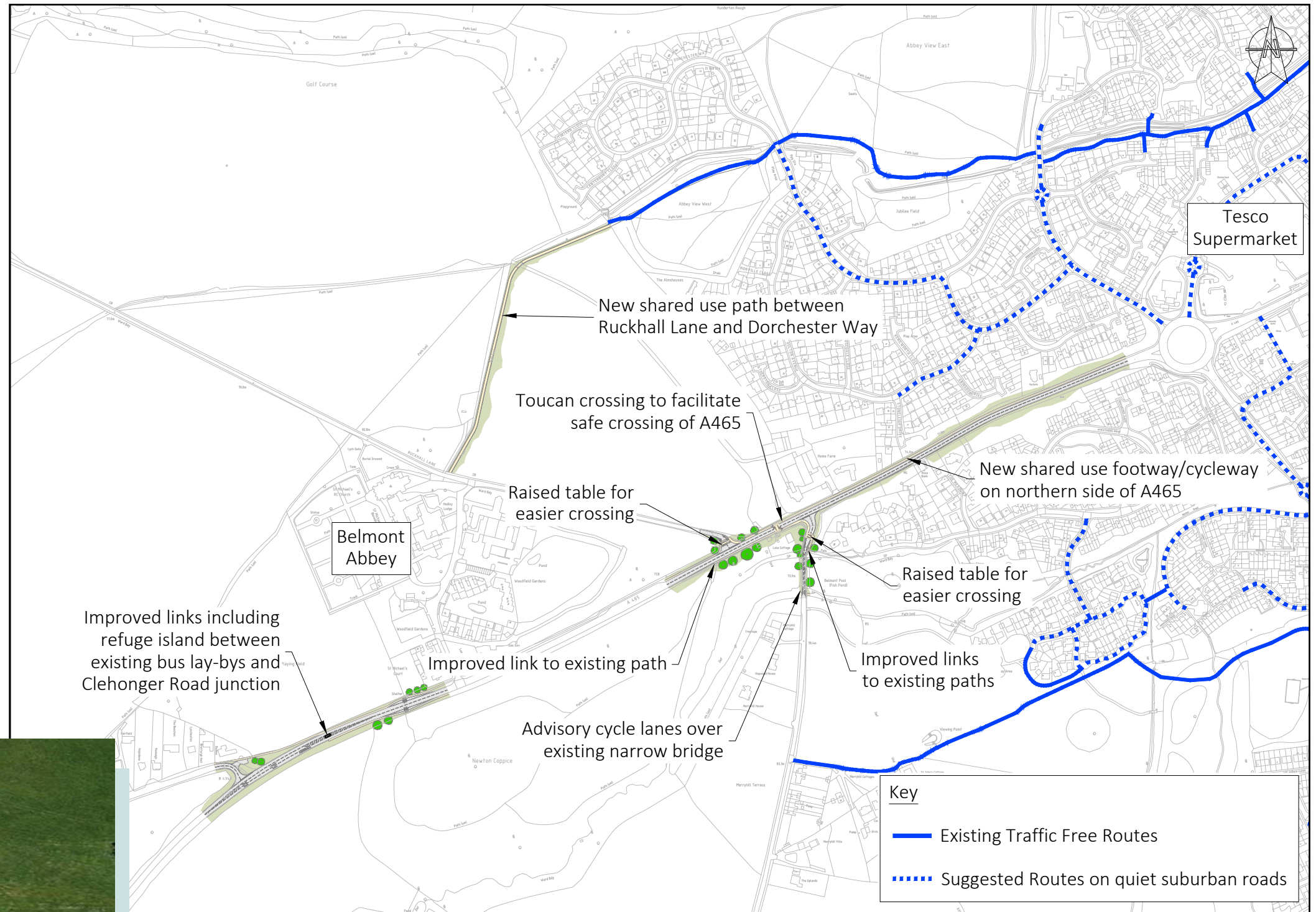
Quieter streets

Easier to cross Belmont Road

Safer journeys for all

Healthier and happier journeys

Encourages inexperienced and returning cyclists



Visualisation looking northwest of possible walking and cycling improvements at western end of Belmont Road. Shows possible Toucan crossing of Belmont Road and improvements at junction with Ruckhall Lane

Better walking and cycling routes to Hereford Enterprise Zone

Improving quieter alternatives to the main roads for walking and cycling, extending from Belmont to Hereford Enterprise Zone

Benefits

Tackling barriers to walking and cycling

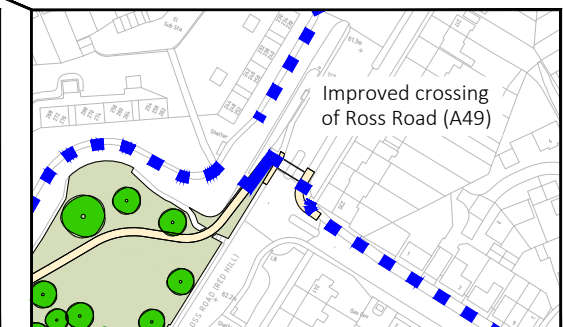
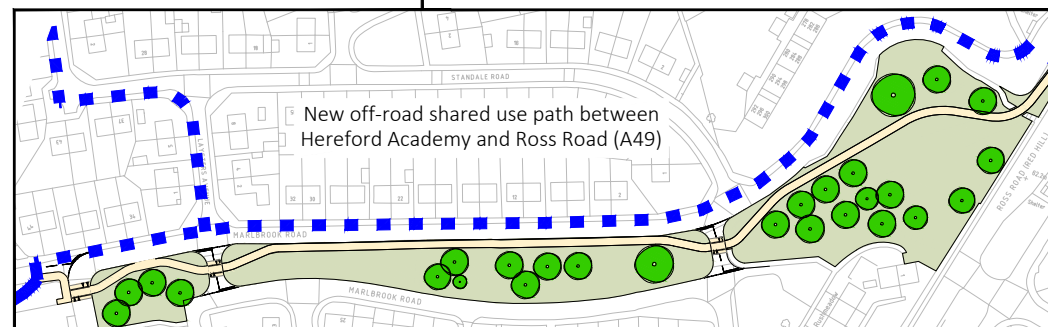
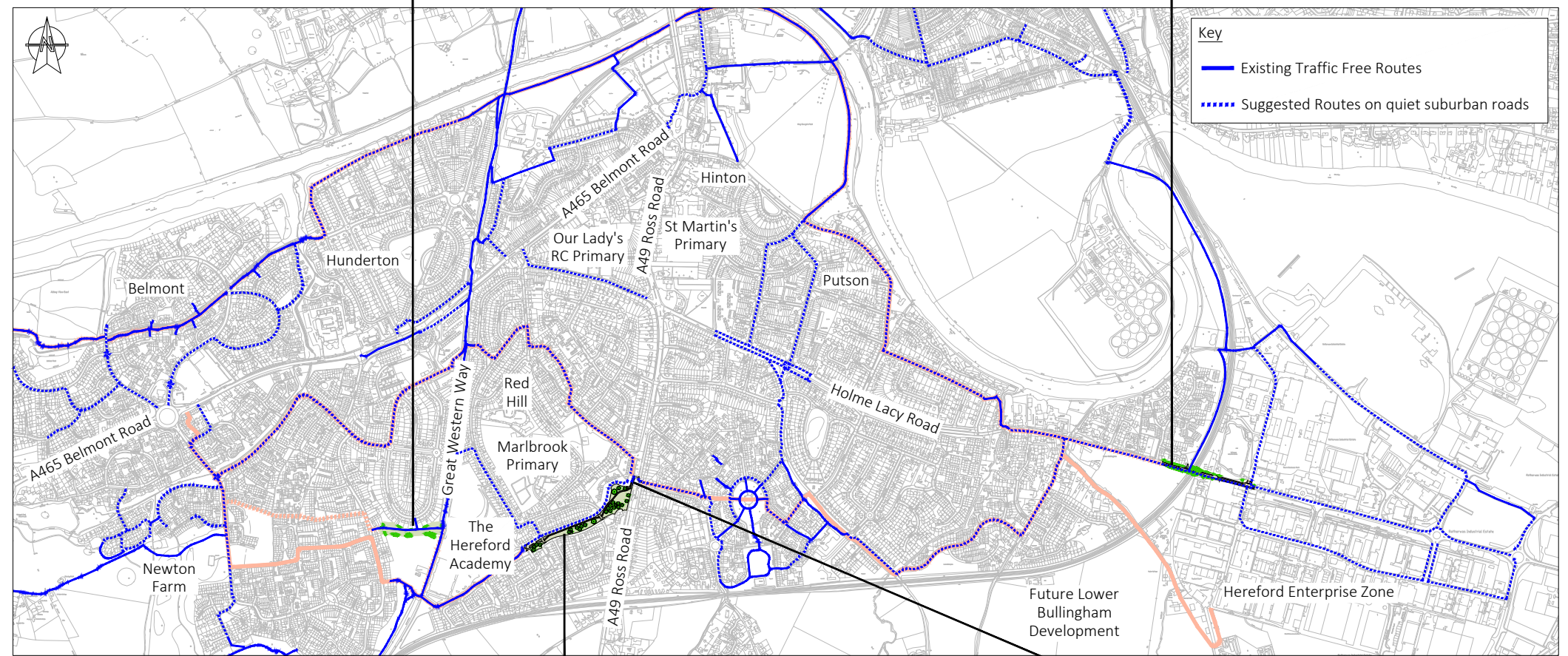
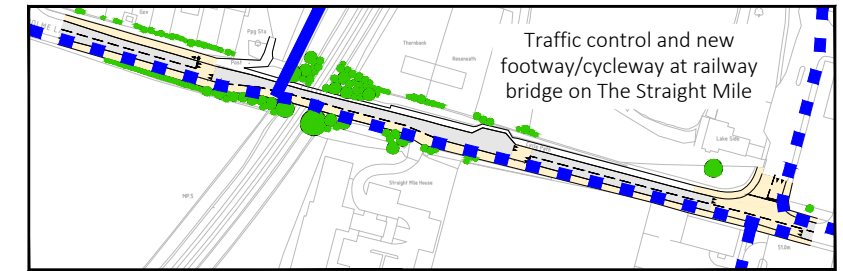
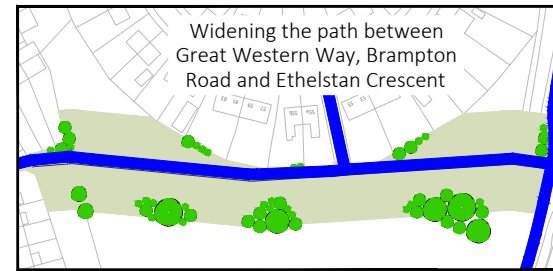
Opening up new links and opportunities for walking and cycling

Encourages inexperienced and returning cyclists

Safer journeys to school and work

Healthier and happier journeys to school and work

Visualisation looking east along Marlbrook Road showing possible off-road shared use path from Hereford Academy to Ross Road (A49)



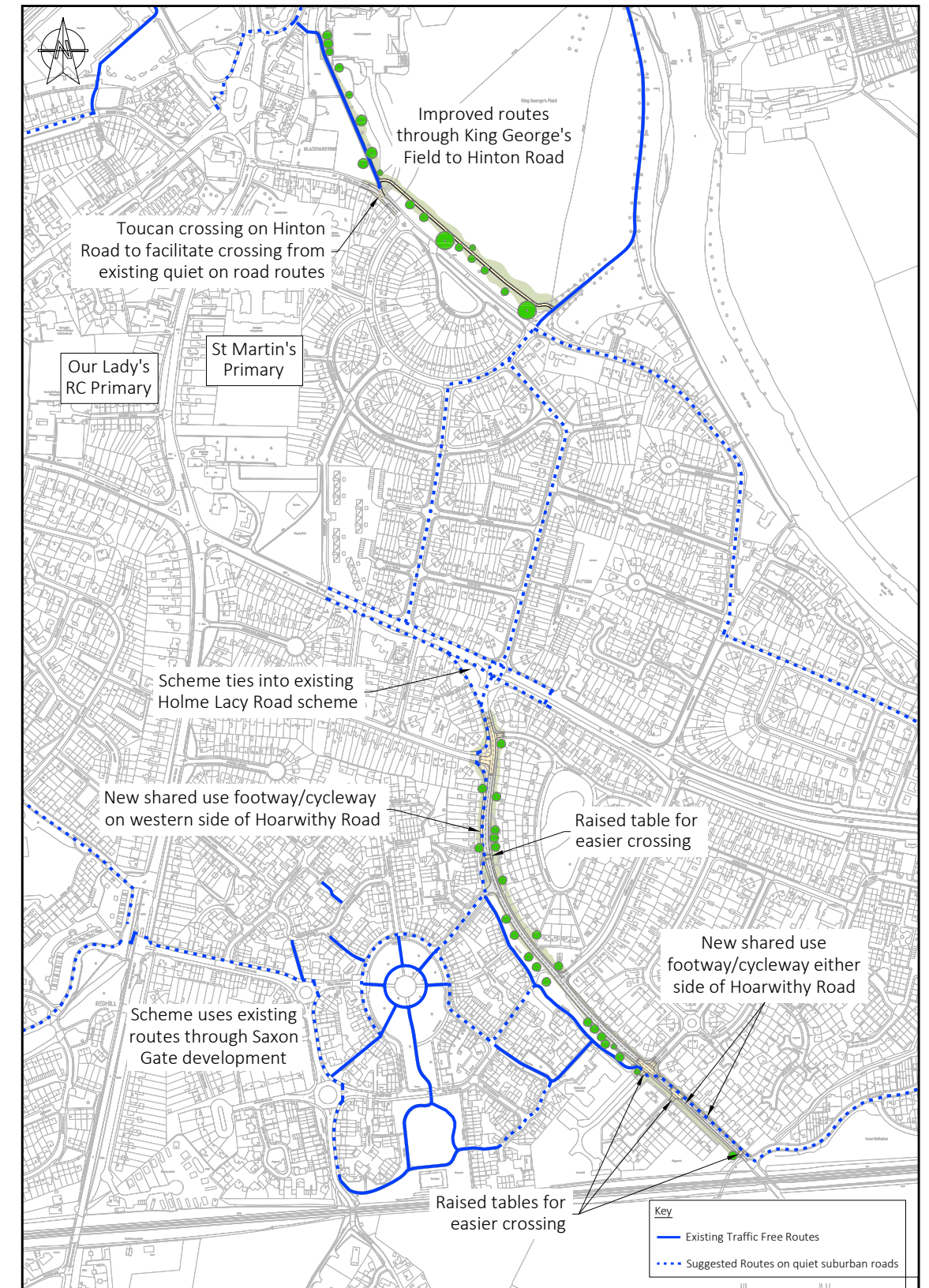
Hoarwithy Road and Hinton Road walking and cycling links

Improving links to Holme Lacy Road from the north and south, connecting communities with the city centre and HEZ

Benefits

- New cycleway on Hoarwithy Road from The Pastures to Holme Lacy Road
- Improved link between Hinton Road and the Leisure Pool and city centre
- Improved connections between the city centre and the HEZ
- Better connected local communities
- Easier to cross Hoarwithy Road and Hinton Road
- Safer journeys to work
- Opening up new links and opportunities for walking and cycling
- Encourages inexperienced and returning cyclists

219 Visualisation of possible shared use footway/cycleway either side of Hoarwithy Road at the Aconbury Avenue / Saxon Hall entrance crossroads, looking north towards existing cycleway at Poppy Walk



Holme Lacy Road – further walking and cycling improvements

Improving the environment for walking and cycling and connecting communities along Holme Lacy Road to the HEZ

Benefits

New cycleway between Walnut Tree Avenue and the HEZ

Priority working under rail bridge

Improved walking and cycling route under rail bridge

Joining up recent improvements on Holme Lacy Road

Improved connections to the HEZ

Better connected local communities

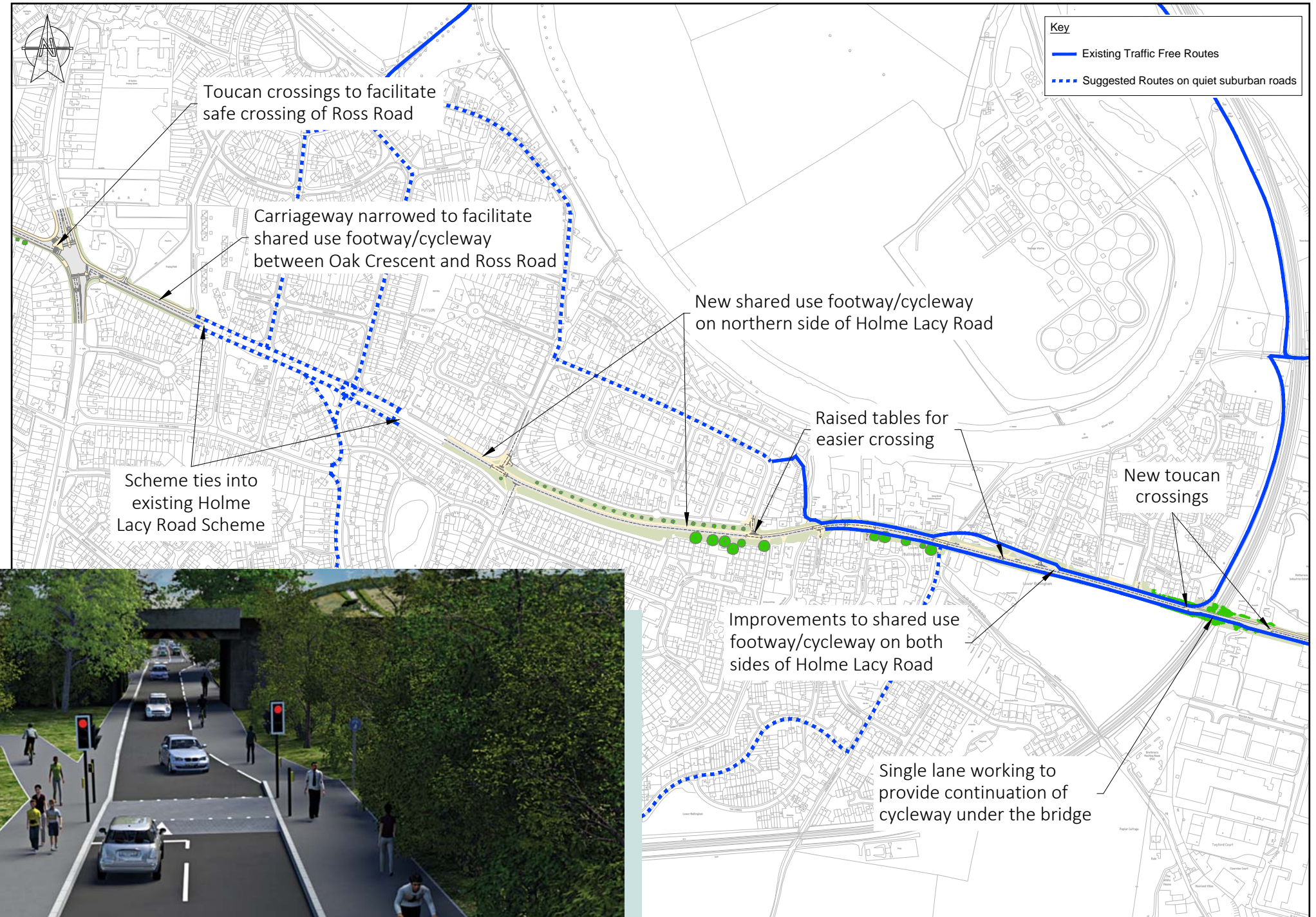
Easier to cross Holme Lacy Road

Safer journeys to work

Healthier and happier journeys to work

Encourages inexperienced and returning cyclists

Opening up new links and opportunities for walking and cycling



Visualisation of possible shared use footway/cycleway under the rail bridge on The Straight Mile, looking towards Hereford Enterprise Zone. Shows toucan crossing and the priority working for motor vehicles under rail bridge

220

Walnut Tree Avenue / Hunderton Road traffic reduction

Removing through traffic and connecting communities either side of the A465 to enable a walking and cycling friendly environment

Benefits

Through traffic removed from Walnut Tree Avenue and Hunderton Road

Better connected local communities

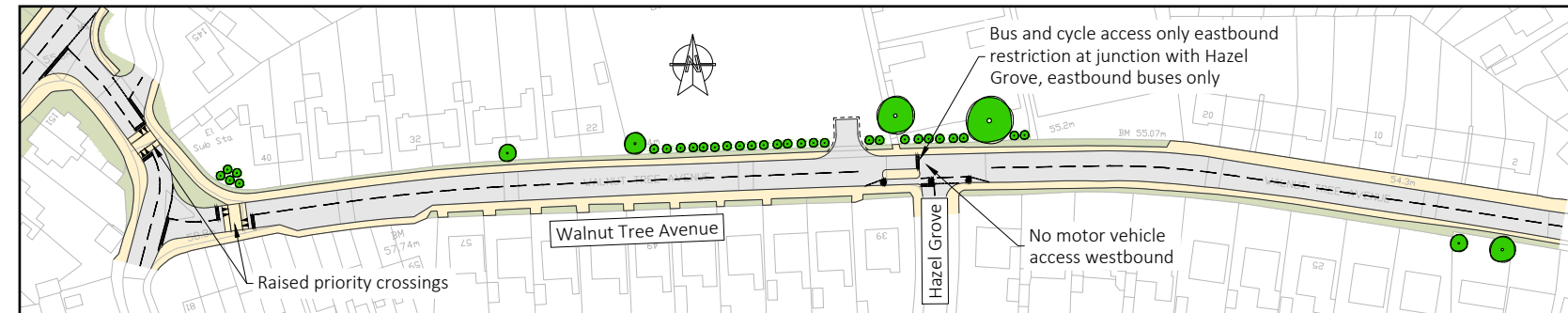
Easier to cross Belmont Road

Safer journeys to school

Healthier and happier journeys to school



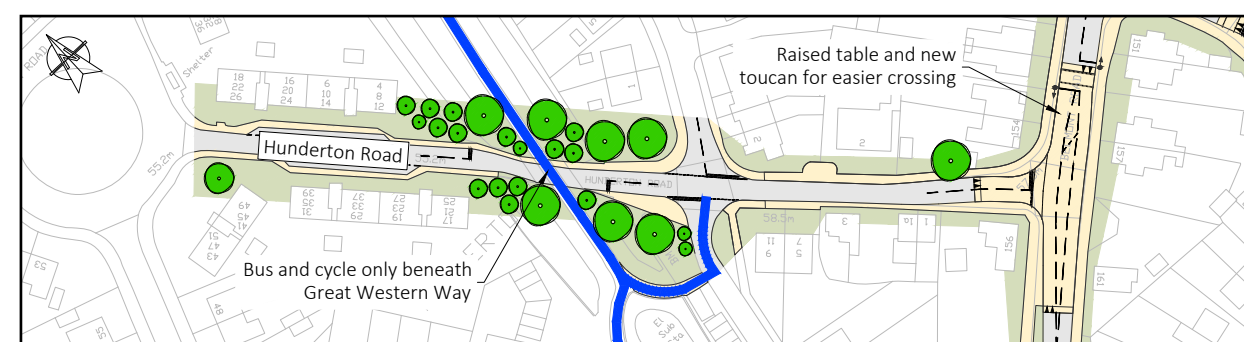
Inset plan – Walnut Tree Avenue



Overview plan



Inset Plan – Hunderton Road



Key
 Existing Traffic Free Routes

Visualisation looking south showing possible walking and cycling improvements at the Belmont Road / Walnut Tree Avenue / Home Lane junctions

Visualisation of Walnut Tree Avenue looking towards Belmont Road showing possible bus and cycle only access at Hazel Grove junction



Have your say

If you would like more information on the improvements presented today or to give your views on what you've seen, you can:

- Speak to a member of the team
- Visit our website at:
www.herefordshire.gov.uk/south-wye-transport-package
- Fill in the questionnaire today or return it in the Freepost envelope provided
- Email us: southwyeTP@balfourbeatty.com
- Write to us at:
FREEPOST: RTHL-BBZH-JATH
(SWTP Active Travel)
Balfour Beatty Living Places
Unit 3, Thorn Business Park
Rotherwas
HEREFORD
HR2 6JT

The closing date for feedback is:
Tuesday 25th October 2016

What happens next?

Late 2016

- Public consultation until 25th October
- Review of consultation feedback
- Council decides improvements to take further

2017 and onwards

- Preliminary design
- Further community consultation
- Detailed design and implementation

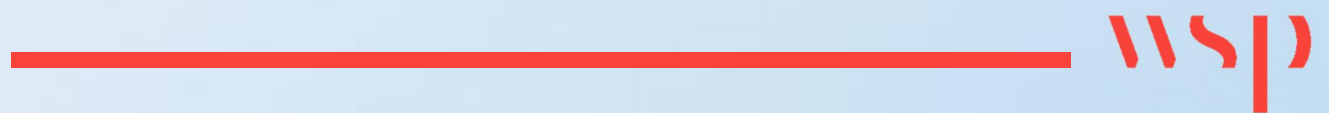
 www.facebook.com/hereford2020

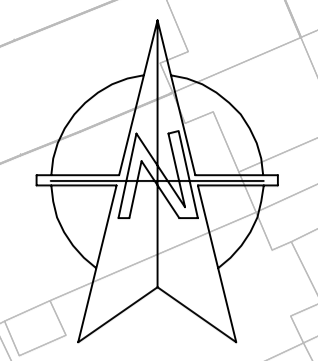
 www.twitter.com/hereford_2020

222

Appendix I

FEASIBILITY DRAWINGS OF ACTIVE
TRAVEL MEASURES



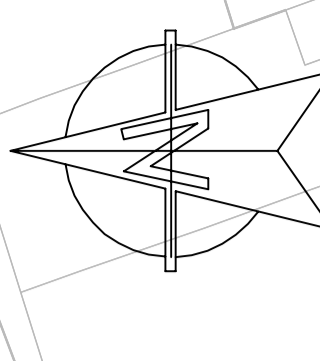
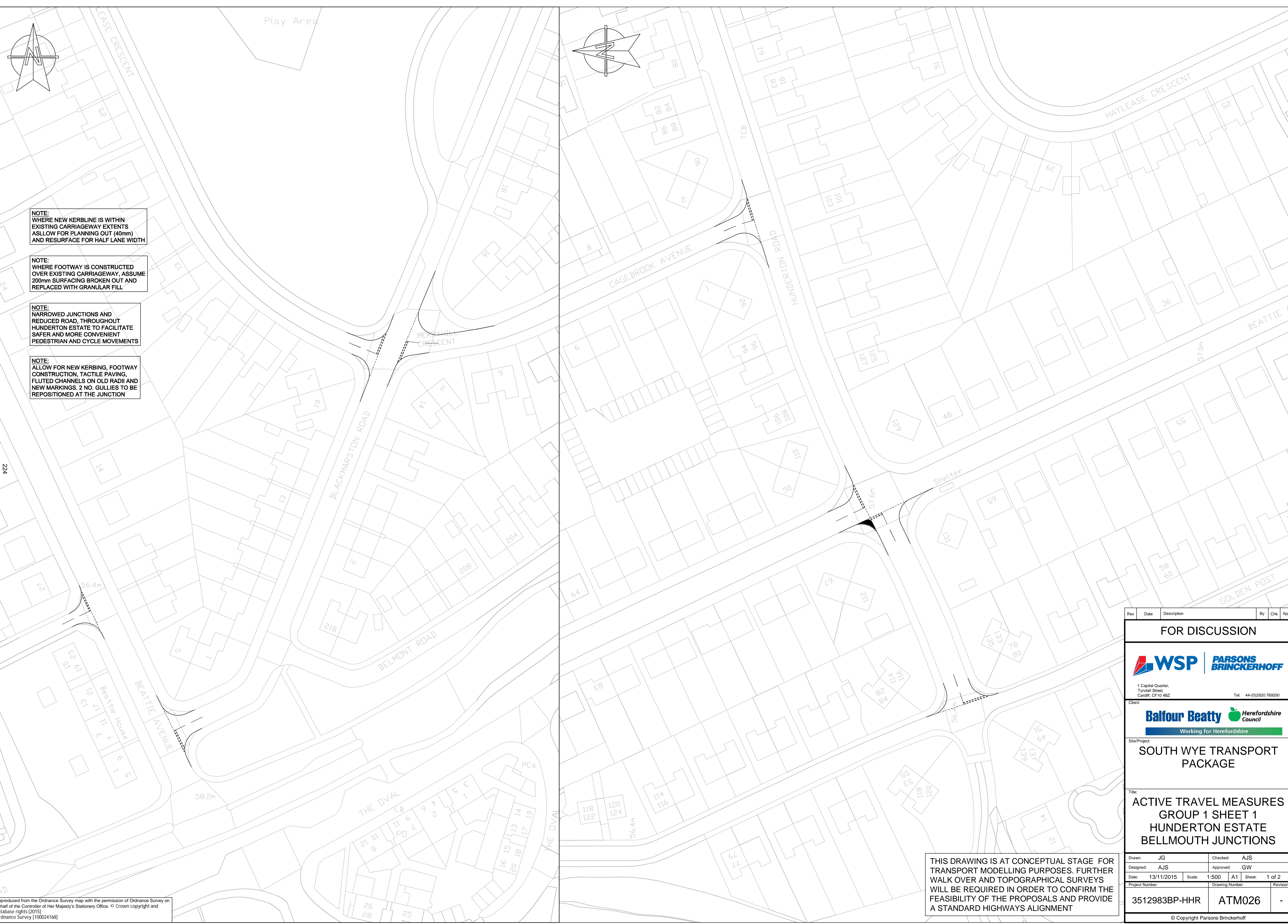


NOTE:
WHERE NEW KERBLINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS AS LOW FOR PLANNING OUT (40mm) AND RESURFACE FOR HALF LANE WIDTH

NOTE:
WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

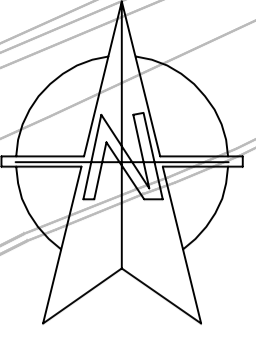
NOTE:
NARROWED JUNCTIONS AND REDUCED ROAD, THROUGHOUT HUNDERTON ESTATE TO FACILITATE SAFER AND MORE CONVENIENT PEDESTRIAN AND CYCLE MOVEMENTS

NOTE:
ALLOW FOR NEW KERBING, FOOTWAY CONSTRUCTION, TACTILE PAVING, FLUTED CHANNELS ON OLD RADII AND NEW MARKINGS. 2 NO. GULLIES TO BE REPOSITIONED AT THE JUNCTION



THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 788200					
Client: Working for Herefordshire					
SOUTH WYE TRANSPORT PACKAGE					
ACTIVE TRAVEL MEASURES GROUP 1 SHEET 1 HUNDERTON ESTATE BELLMOUTH JUNCTIONS					
Drawn:	JG	Checked:	AJS		
Designed:	AJS	Approved:	GW		
Date:	13/11/2015	Scale:	1:500	A1	Sheet: 1 of 2
Project Number:	3512983BP-HHR	Drawing Number:	ATM026	Revision:	
© Copyright Parsons Brinckerhoff					



NOTE:
 WHERE NEW KERBLINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANNING OUT (40mm) AND RESURFACE FOR HALF LANE WIDTH

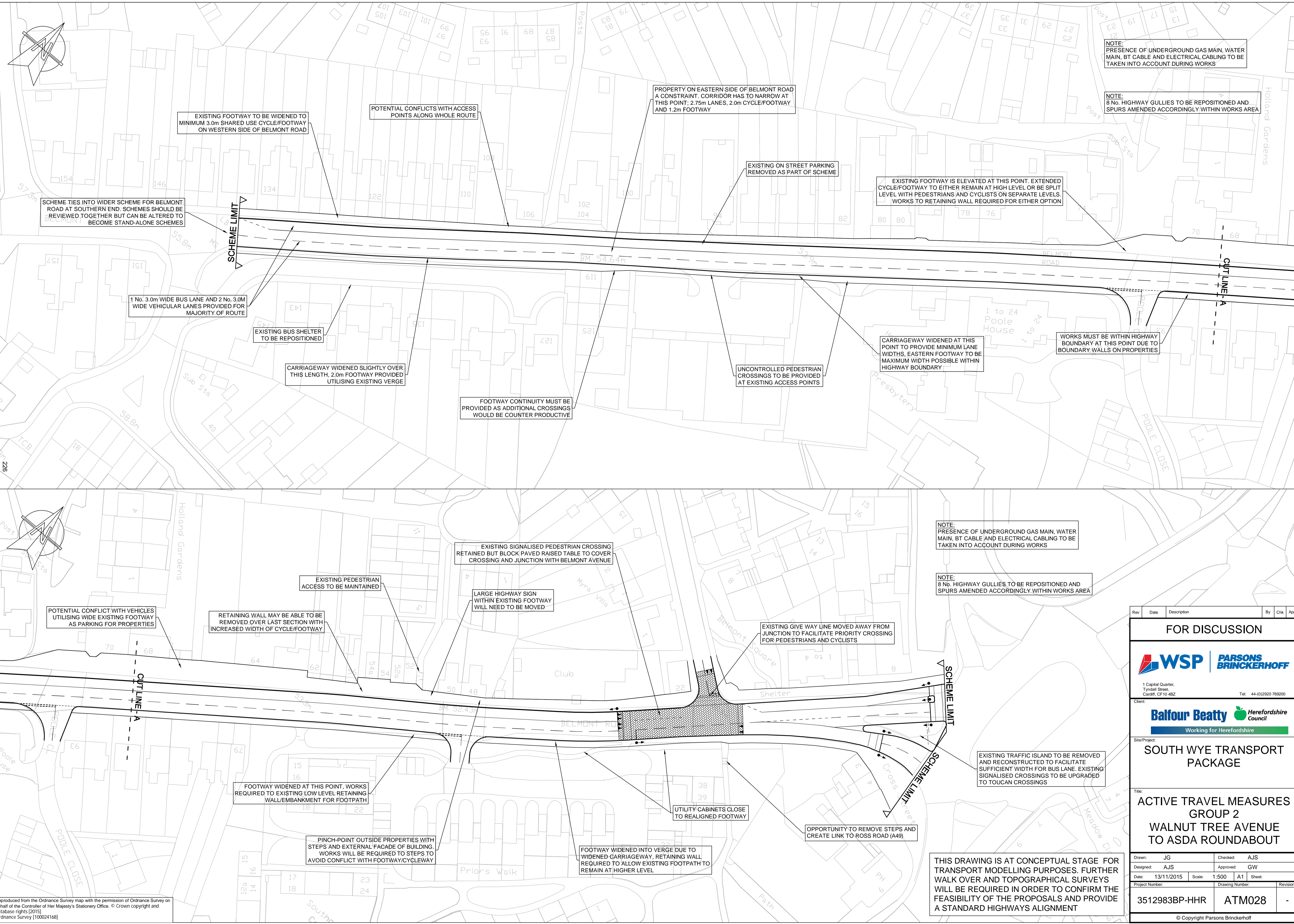
NOTE:
 WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE:
 NARROWED JUNCTIONS AND REDUCED ROAD, THROUGHOUT HUNDERTON ESTATE TO FACILITATE SAFER AND MORE CONVENIENT PEDESTRIAN AND CYCLE MOVEMENTS

NOTE:
 ALLOW FOR NEW KERBING, FOOTWAY CONSTRUCTION, TACTILE PAVING, FLUTTED CHANNELS ON OLD RADII AND NEW MARKINGS. 2 NO. GULLIES TO BE REPOSITIONED AT THE JUNCTION

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 789200					
Working for Herefordshire					
SOUTH WYE TRANSPORT PACKAGE					
ACTIVE TRAVEL MEASURES GROUP 1 SHEET 2 HUNDERTON ESTATE BELLMOUTH JUNCTIONS					
Drawn:	JG	Checked:	AJS		
Designed:	AJS	Approved:	GW		
Date:	13/11/2015	Scale:	1:500	A1	Sheet: 2 of 2
Project Number:	3512983BP-HHR	Drawing Number:	ATM027	Revision:	
© Copyright Parsons Brinckerhoff					



Rev	Date	Description	By	Chk	App

FOR DISCUSSION

WSP | PARSONS BRINCKERHOFF

1 Capital Quarter,
Tyndall Street,
Cardiff, CF10 4BZ
Tel: 44-(0)2920 769200

Client:
Balfour Beatty | Herefordshire Council
Working for Herefordshire

Site/Project:
SOUTH WYE TRANSPORT PACKAGE

Title:
**ACTIVE TRAVEL MEASURES GROUP 2
WALNUT TREE AVENUE TO ASDA ROUNDABOUT**

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 13/11/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM028

© Copyright Parsons Brinckerhoff

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

NOTE:
PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS

NOTE:
NEW BLOCK PAVED RAISED TABLE WITH UNCONTROLLED PEDESTRIAN AND CYCLIST CROSSING TO BE CONSTRUCTED ON EACH ARM, WITH TACTILE PAVING AND SIGNAGE AS NECESSARY

NEW 3.0m WIDE SHARED USE FOOTWAY / CYCLEWAY EXISTING PATH TO BE WIDENED WHERE APPROPRIATE. PATH NARROWS TO APPROX 2.5m ADJACENT TO RETAINING WALL IN TESCO'S CAR PARK.

NOTE:
ALLOW FOR 6 NO. GULLIES TO BE REPOSITIONED AND SPURS AMENDED ACCORDINGLY

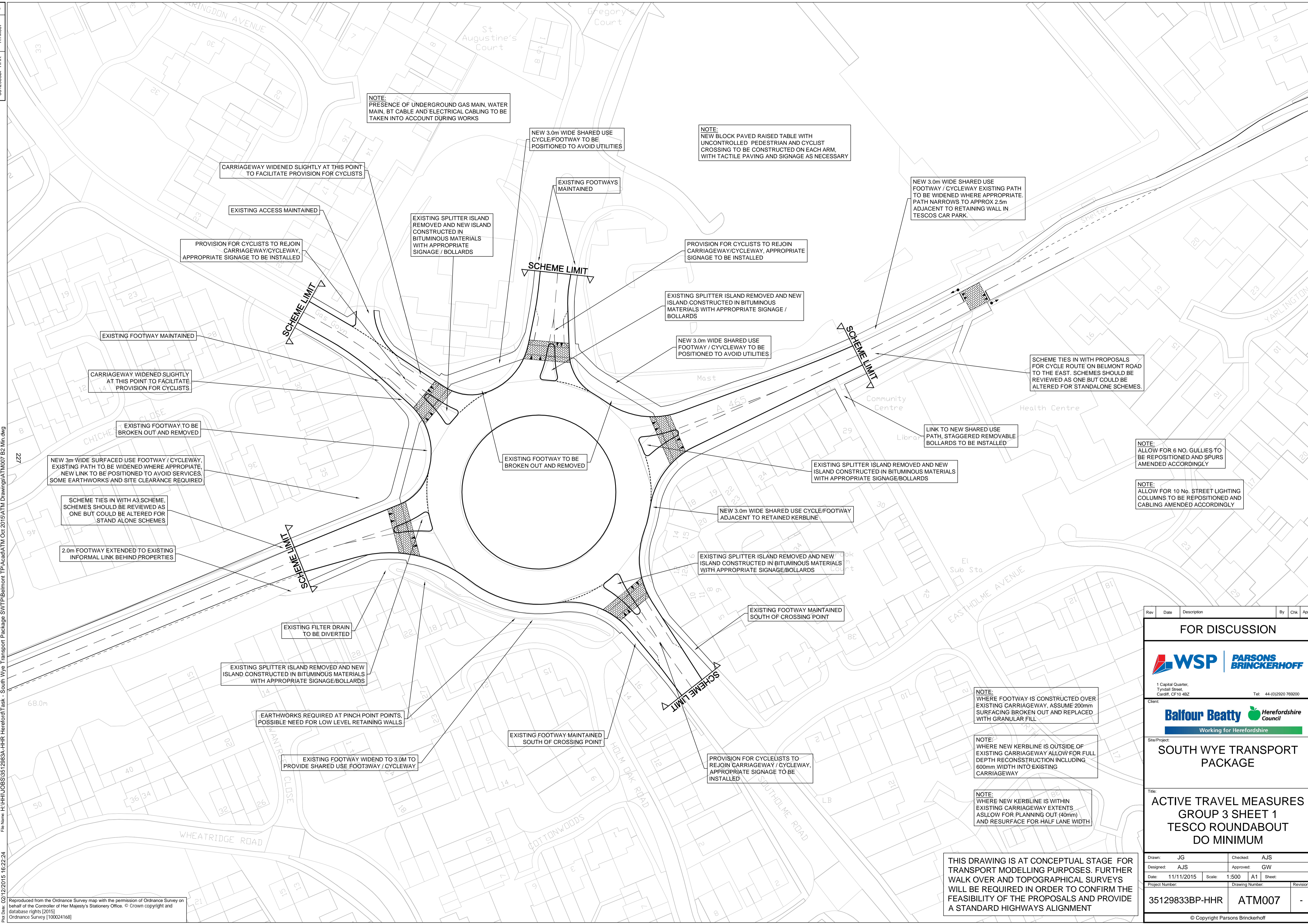
NOTE:
ALLOW FOR 10 NO. STREET LIGHTING COLUMNS TO BE REPOSITIONED AND CABLING AMENDED ACCORDINGLY

NOTE:
WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE:
WHERE NEW KERBLINE IS OUTSIDE OF EXISTING CARRIAGEWAY ALLOW FOR FULL DEPTH RECONSTRUCTION INCLUDING 600mm WIDTH INTO EXISTING CARRIAGEWAY

NOTE:
WHERE NEW KERBLINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ASLOW FOR PLANNING OUT (40mm) AND RESURFACE FOR HALF LANE WIDTH

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT



Rev	Date	Description	By	Chk	App
-----	------	-------------	----	-----	-----

FOR DISCUSSION



1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 789200

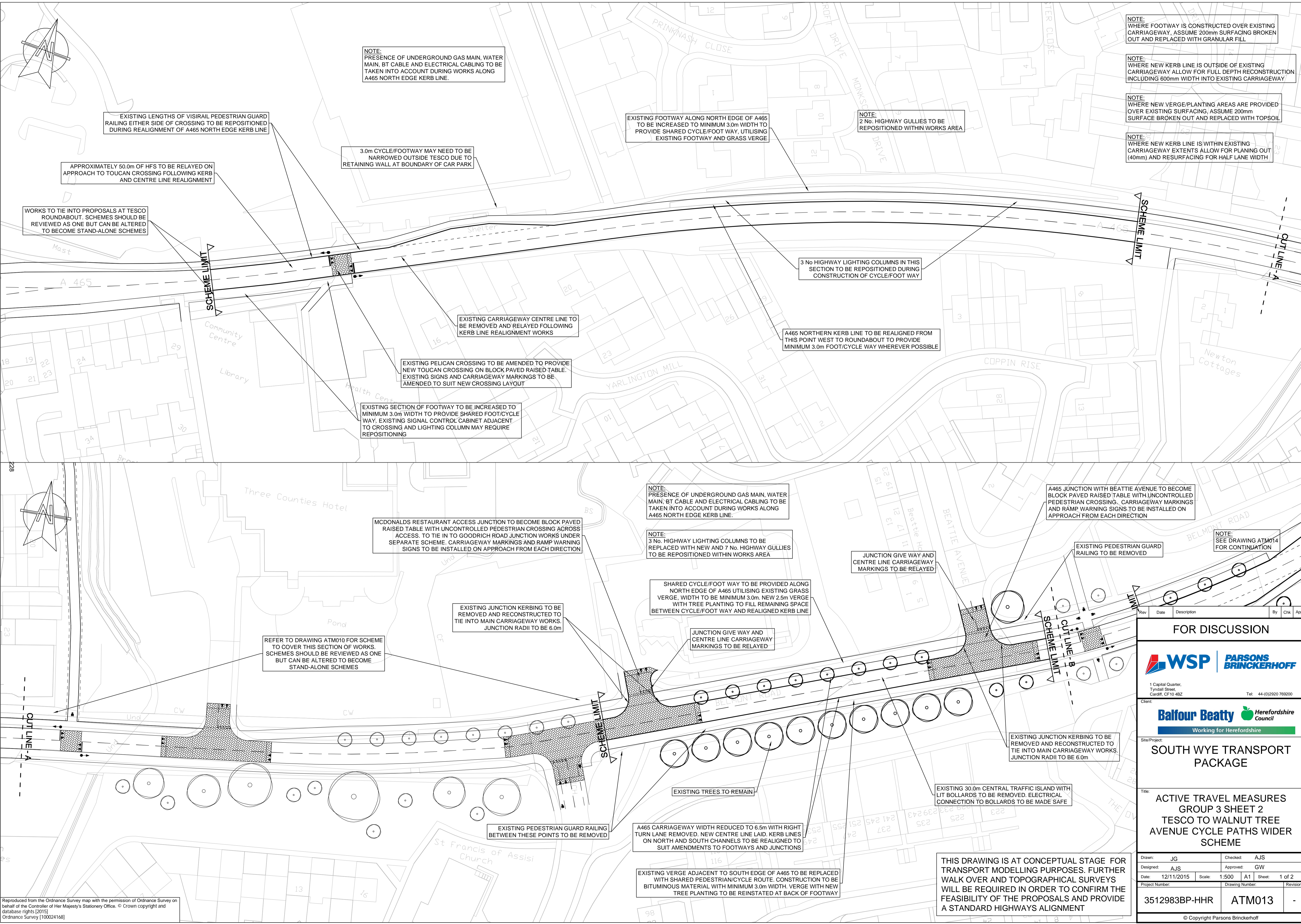


Client:
SOUTH WYE TRANSPORT PACKAGE

Site/Project:
ACTIVE TRAVEL MEASURES GROUP 3 SHEET 1 TESCO ROUNDABOUT DO MINIMUM

Drawn: JG	Checked: AJS	
Designed: AJS	Approved: GW	
Date: 11/11/2015	Scale: 1:500 A1 Sheet:	
Project Number:	Drawing Number:	Revision:

3512983BP-HHR ATM007 -



NOTE: WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE: WHERE NEW KERB LINE IS OUTSIDE OF EXISTING CARRIAGEWAY ALLOW FOR FULL DEPTH RECONSTRUCTION INCLUDING 600mm WIDTH INTO EXISTING CARRIAGEWAY

NOTE: WHERE NEW VERGE/PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACE BROKEN OUT AND REPLACED WITH TOPSOIL

NOTE: WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANING OUT (40mm) AND RESURFACING FOR HALF LANE WIDTH

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS ALONG A465 NORTH EDGE KERB LINE.

NOTE: 2 No. HIGHWAY GULLIES TO BE REPOSITIONED WITHIN WORKS AREA

NOTE: SEE DRAWING ATM014 FOR CONTINUATION

Rev	Date	Description	By	Chk	App

FOR DISCUSSION

WSP | PARSONS BRINCKERHOFF

1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 769200

Client: **Balfour Beatty** Herefordshire Council
Working for Herefordshire

Site/Project: **SOUTH WYE TRANSPORT PACKAGE**

Title: **ACTIVE TRAVEL MEASURES GROUP 3 SHEET 2
TESCO TO WALNUT TREE AVENUE CYCLE PATHS WIDER SCHEME**

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 12/11/2015	Scale: 1:500 A1 Sheet: 1 of 2
Project Number: 3512983BP-HHR	Drawing Number: ATM013

© Copyright Parsons Brinckerhoff

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

EXISTING VERGE ADJACENT TO SOUTH EDGE OF A465 TO BE REPLACED WITH SHARED PEDESTRIAN/CYCLE ROUTE. CONSTRUCTION TO BE BITUMINOUS MATERIAL WITH MINIMUM 3.0m WIDTH. VERGE WITH NEW TREE PLANTING TO BE REINSTATED AT BACK OF FOOTWAY

A465 CARRIAGEWAY WIDTH REDUCED TO 6.5m WITH RIGHT TURN LANE REMOVED. NEW CENTRE LINE LAID. KERB LINES ON NORTH AND SOUTH CHANNELS TO BE REALIGNED TO SUIT AMENDMENTS TO FOOTWAYS AND JUNCTIONS

EXISTING PEDESTRIAN GUARD RAILING BETWEEN THESE POINTS TO BE REMOVED

EXISTING JUNCTION KERBING TO BE REMOVED AND RECONSTRUCTED TO TIE INTO MAIN CARRIAGEWAY WORKS. JUNCTION RADII TO BE 6.0m

EXISTING PEDESTRIAN GUARD RAILING TO BE REMOVED

JUNCTION GIVE WAY AND CENTRE LINE CARRIAGEWAY MARKINGS TO BE RELAYED

SHARED CYCLE/FOOT WAY TO BE PROVIDED ALONG NORTH EDGE OF A465 UTILISING EXISTING GRASS VERGE. WIDTH TO BE MINIMUM 3.0m. NEW 2.5m VERGE WITH TREE PLANTING TO FILL REMAINING SPACE BETWEEN CYCLE/FOOT WAY AND REALIGNED KERB LINE

NOTE: 3 No. HIGHWAY LIGHTING COLUMNS TO BE REPLACED WITH NEW AND 7 No. HIGHWAY GULLIES TO BE REPOSITIONED WITHIN WORKS AREA

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS ALONG A465 NORTH EDGE KERB LINE.

EXISTING JUNCTION KERBING TO BE REMOVED AND RECONSTRUCTED TO TIE INTO MAIN CARRIAGEWAY WORKS. JUNCTION RADII TO BE 6.0m

MCDONALDS RESTAURANT ACCESS JUNCTION TO BECOME BLOCK PAVED RAISED TABLE WITH UNCONTROLLED PEDESTRIAN CROSSING ACROSS ACCESS. TO TIE IN TO GOODRICH ROAD JUNCTION WORKS UNDER SEPARATE SCHEME. CARRIAGEWAY MARKINGS AND RAMP WARNING SIGNS TO BE INSTALLED ON APPROACH FROM EACH DIRECTION

REFER TO DRAWING ATM010 FOR SCHEME TO COVER THIS SECTION OF WORKS. SCHEMES SHOULD BE REVIEWED AS ONE BUT CAN BE ALTERED TO BECOME STAND-ALONE SCHEMES

EXISTING PELICAN CROSSING TO BE AMENDED TO PROVIDE NEW TOUCAN CROSSING ON BLOCK PAVED RAISED TABLE. EXISTING SIGNS AND CARRIAGEWAY MARKINGS TO BE AMENDED TO SUIT NEW CROSSING LAYOUT

EXISTING SECTION OF FOOTWAY TO BE INCREASED TO MINIMUM 3.0m WIDTH TO PROVIDE SHARED FOOT/CYCLE WAY. EXISTING SIGNAL CONTROL CABINET ADJACENT TO CROSSING AND LIGHTING COLUMN MAY REQUIRE REPOSITIONING

EXISTING CARRIAGEWAY CENTRE LINE TO BE REMOVED AND RELAYED FOLLOWING KERB LINE REALIGNMENT WORKS

3 No HIGHWAY LIGHTING COLUMNS IN THIS SECTION TO BE REPOSITIONED DURING CONSTRUCTION OF CYCLE/FOOT WAY

A465 NORTHERN KERB LINE TO BE REALIGNED FROM THIS POINT WEST TO ROUNDABOUT TO PROVIDE MINIMUM 3.0m FOOT/CYCLE WAY WHEREVER POSSIBLE

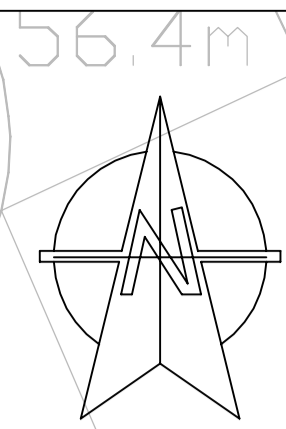
EXISTING FOOTWAY ALONG NORTH EDGE OF A465 TO BE INCREASED TO MINIMUM 3.0m WIDTH TO PROVIDE SHARED CYCLE/FOOT WAY, UTILISING EXISTING FOOTWAY AND GRASS VERGE

3.0m CYCLE/FOOTWAY MAY NEED TO BE NARROWED OUTSIDE TESCO DUE TO RETAINING WALL AT BOUNDARY OF CAR PARK

APPROXIMATELY 50.0m OF HFS TO BE RELAYED ON APPROACH TO TOUCAN CROSSING FOLLOWING KERB AND CENTRE LINE REALIGNMENT

WORKS TO TIE INTO PROPOSALS AT TESCO ROUNDABOUT. SCHEMES SHOULD BE REVIEWED AS ONE BUT CAN BE ALTERED TO BECOME STAND-ALONE SCHEMES

EXISTING LENGTHS OF VISIRAIL PEDESTRIAN GUARD RAILING EITHER SIDE OF CROSSING TO BE REPOSITIONED DURING REALIGNMENT OF A465 NORTH EDGE KERB LINE



NOTE:
WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE:
EXTENT OF EXISTING CARRIAGEWAY REMAINING WITHIN SCHEME LIMIT TO BE PLANED OUT (40mm) AND RESURFACED

NOTE:
WHERE NEW KERBLINE IS OUTSIDE OF EXISTING CARRIAGEWAY ALLOW FOR FULL DEPTH RECONSTRUCTION INCLUDING 600mm WIDTH INTO EXISTING CARRIAGEWAY

NOTE:
WHERE NEW VERGE / PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH TOPSOIL

NEW LINK FOR CYCLISTS TO JOIN ON ROAD NETWORK IN HUNDERTON ESTATE POSITION TO BE DETERMINED BY EXTENTS OF MATURE TREES

EXISTING FOOTWAY LINK TO BE REMOVED

NOTE:
8 NO. GULLIES TO BE REPOSITIONED AND SPURS AMENDED ACCORDINGLY

NOTE:
4 NO. STREET LIGHTING COLUMNS TO BE REMOVED AND CABLING AMENDED ACCORDINGLY TO NEW COLUMNS

NEW TOUCAN CROSSING ON BLOCK PAVED RAISED TABLE TO BE INSTALLED WITH ALL NECESSARY CORRESPONDING SIGNS AND CARRIAGEWAY MARKINGS

2.5m VERGE, TOPSOILED AND SEEDED

PROPOSED SCHEME TO TIE INTO WIDER BELMONT ROAD PROPOSALS

SCHEME LIMIT

SCHEME LIMIT

2.5m FOOTWAY PROVIDED ADJUSTMENT TO REALIGN KERBLINE

NEW LINK FOR CYCLISTS TO JOIN ON ROAD NETWORK SOUTH OF THE OVAL

CARRIAGEWAY WIDTH NARROWED TO 6.5m, NEW HB2 KERBS TO BE INSTALLED. EXISTING CENTRAL ISLAND TO BE REMOVED, EXISTING SERVICES TO BE REMOVED AND/OR PROTECTED WHERE NECESSARY

PROPOSED SCHEME TIES INTO WIDER BELMONT ROAD PROPOSALS

Rev	Date	Description	By	Chk	App

FOR DISCUSSION



1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 769200

Client: **Balfour Beatty** Herefordshire Council
Working for Herefordshire

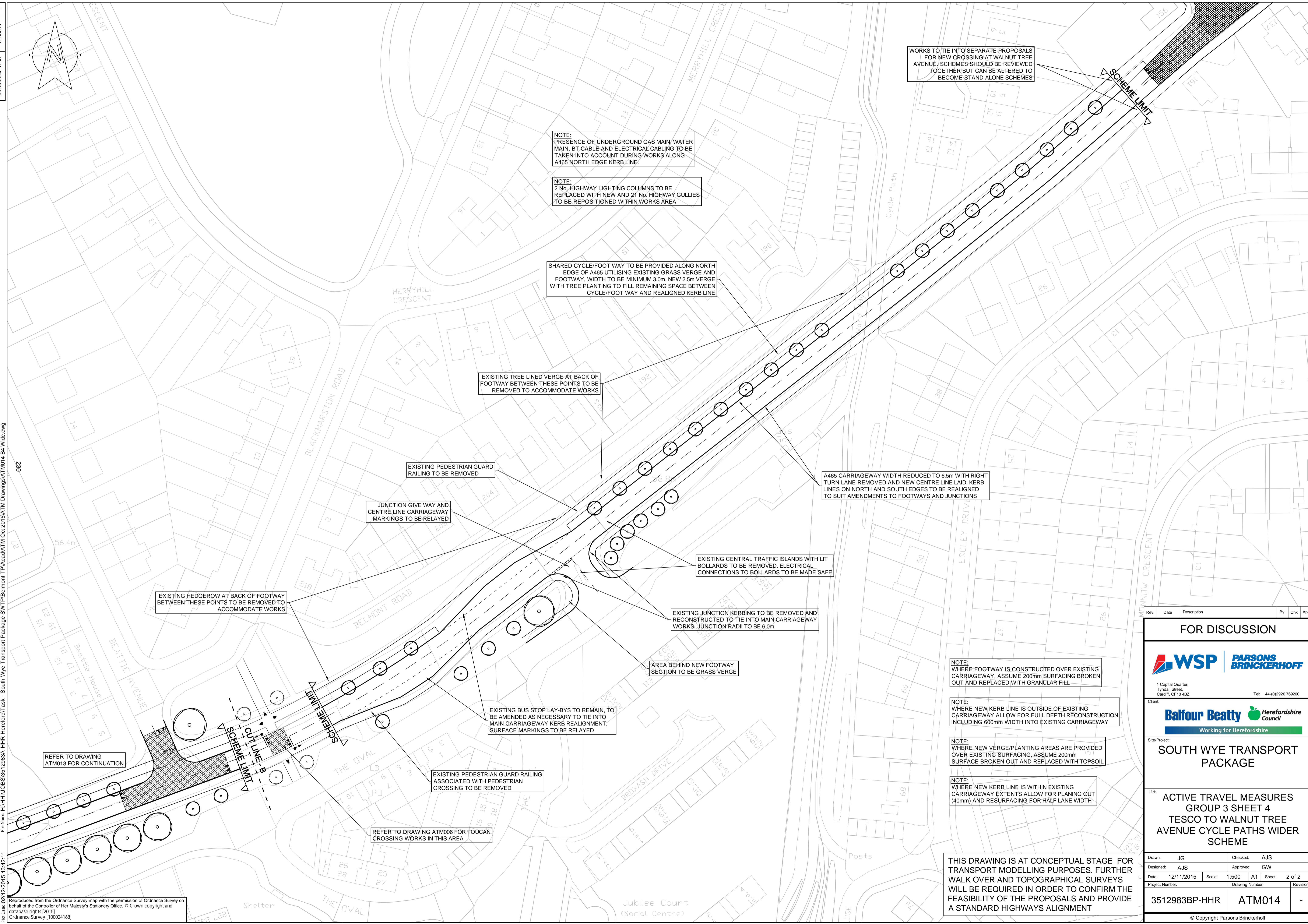
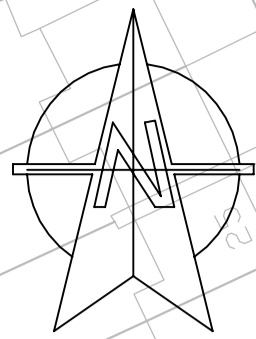
Site/Project: **SOUTH WYE TRANSPORT PACKAGE**

Title: **ACTIVE TRAVEL MEASURES GROUP 3 SHEET 3 THE OVAL CROSSING WIDER SCHEME**

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 12/11/2015	Scale: 1:200 A1 Sheet:
Project Number:	Drawing Number: Revision:

3512983BP-HHR ATM006 -

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT



NOTE:
PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS ALONG A465 NORTH EDGE KERB LINE.

NOTE:
2 No. HIGHWAY LIGHTING COLUMNS TO BE REPLACED WITH NEW AND 21 No. HIGHWAY GULLIES TO BE REPOSITIONED WITHIN WORKS AREA

SHARED CYCLE/FOOT WAY TO BE PROVIDED ALONG NORTH EDGE OF A465 UTILISING EXISTING GRASS VERGE AND FOOTWAY. WIDTH TO BE MINIMUM 3.0m. NEW 2.5m VERGE WITH TREE PLANTING TO FILL REMAINING SPACE BETWEEN CYCLE/FOOT WAY AND REALIGNED KERB LINE

EXISTING TREE LINED VERGE AT BACK OF FOOTWAY BETWEEN THESE POINTS TO BE REMOVED TO ACCOMMODATE WORKS

EXISTING PEDESTRIAN GUARD RAILING TO BE REMOVED

JUNCTION GIVE WAY AND CENTRE LINE CARRIAGEWAY MARKINGS TO BE RELAYED

EXISTING HEDGEROW AT BACK OF FOOTWAY BETWEEN THESE POINTS TO BE REMOVED TO ACCOMMODATE WORKS

A465 CARRIAGEWAY WIDTH REDUCED TO 6.5m WITH RIGHT TURN LANE REMOVED AND NEW CENTRE LINE LAID. KERB LINES ON NORTH AND SOUTH EDGES TO BE REALIGNED TO SUIT AMENDMENTS TO FOOTWAYS AND JUNCTIONS

EXISTING CENTRAL TRAFFIC ISLANDS WITH LIT BOLLARDS TO BE REMOVED. ELECTRICAL CONNECTIONS TO BOLLARDS TO BE MADE SAFE

EXISTING JUNCTION KERBING TO BE REMOVED AND RECONSTRUCTED TO TIE INTO MAIN CARRIAGEWAY WORKS. JUNCTION RADII TO BE 6.0m

AREA BEHIND NEW FOOTWAY SECTION TO BE GRASS VERGE

EXISTING BUS STOP LAY-BYS TO REMAIN, TO BE AMENDED AS NECESSARY TO TIE INTO MAIN CARRIAGEWAY KERB REALIGNMENT. SURFACE MARKINGS TO BE RELAYED

EXISTING PEDESTRIAN GUARD RAILING ASSOCIATED WITH PEDESTRIAN CROSSING TO BE REMOVED

REFER TO DRAWING ATM006 FOR TOUCAN CROSSING WORKS IN THIS AREA

REFER TO DRAWING ATM013 FOR CONTINUATION

WORKS TO TIE INTO SEPARATE PROPOSALS FOR NEW CROSSING AT WALNUT TREE AVENUE. SCHEMES SHOULD BE REVIEWED TOGETHER BUT CAN BE ALTERED TO BECOME STAND ALONE SCHEMES

NOTE:
WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE:
WHERE NEW KERB LINE IS OUTSIDE OF EXISTING CARRIAGEWAY ALLOW FOR FULL DEPTH RECONSTRUCTION INCLUDING 600mm WIDTH INTO EXISTING CARRIAGEWAY

NOTE:
WHERE NEW VERGE/PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACE BROKEN OUT AND REPLACED WITH TOPSOIL

NOTE:
WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANING OUT (40mm) AND RESURFACING FOR HALF LANE WIDTH

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App

FOR DISCUSSION

1 Capital Quarter,
Tyndall Street,
Cardiff, CF10 4BZ
Tel: 44-(0)2920 769200

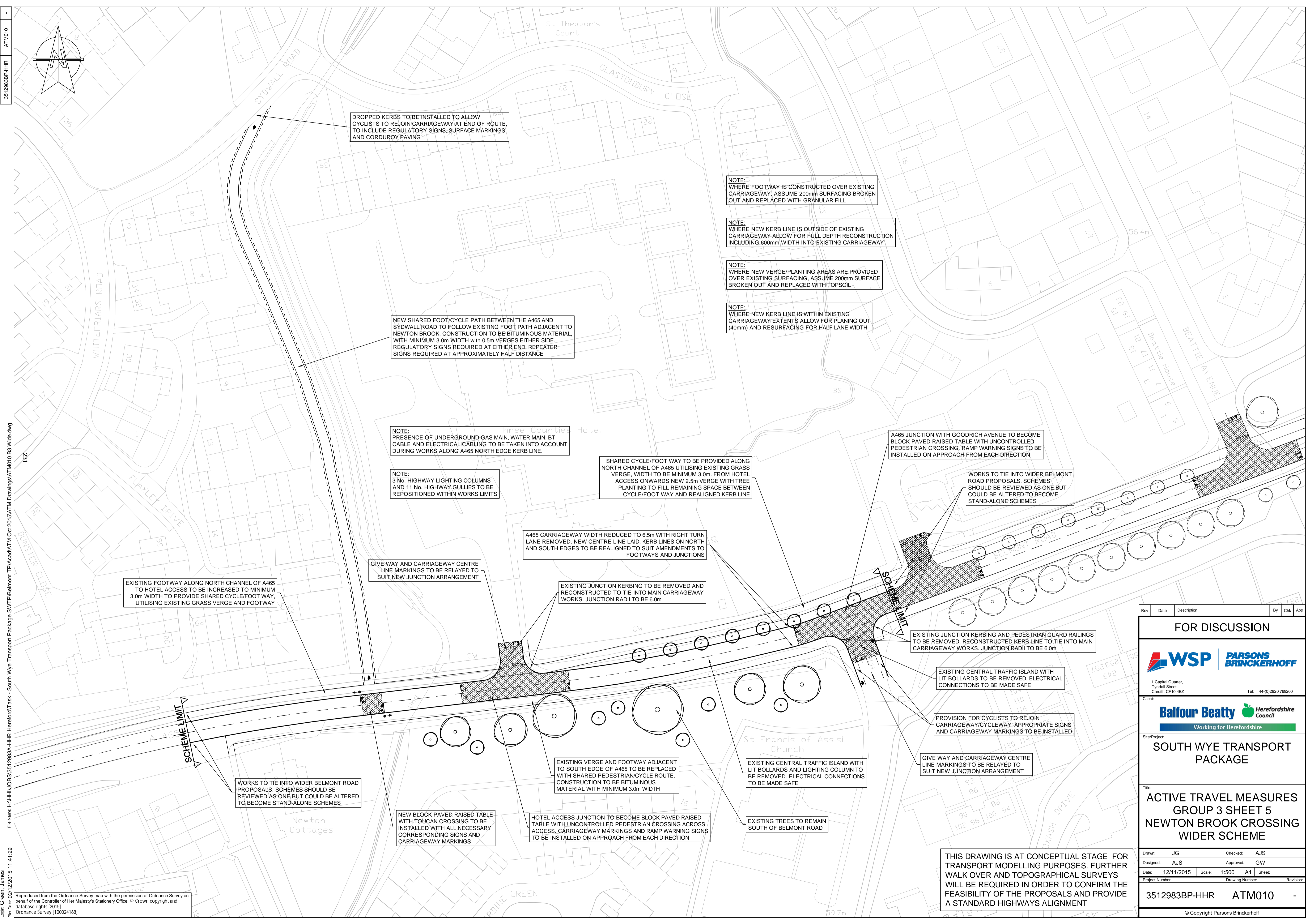
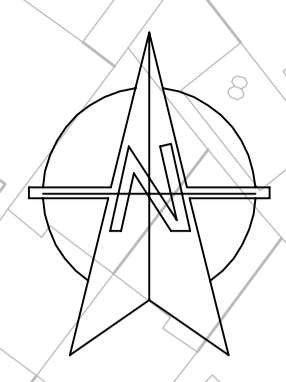
Client:
Balfour Beatty **Herefordshire Council**
Working for Herefordshire

Site/Project:
SOUTH WYE TRANSPORT PACKAGE

Title:
**ACTIVE TRAVEL MEASURES GROUP 3 SHEET 4
TESCO TO WALNUT TREE AVENUE CYCLE PATHS WIDER SCHEME**

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 12/11/2015	Scale: 1:500 A1 Sheet: 2 of 2
Project Number:	Drawing Number:

3512983BP-HHR	ATM014	-
© Copyright Parsons Brinckerhoff		



DROPPED KERBS TO BE INSTALLED TO ALLOW CYCLISTS TO REJOIN CARRIAGEWAY AT END OF ROUTE. TO INCLUDE REGULATORY SIGNS, SURFACE MARKINGS AND CORDUROY PAVING

NEW SHARED FOOT/CYCLE PATH BETWEEN THE A465 AND SYDWALL ROAD TO FOLLOW EXISTING FOOT PATH ADJACENT TO NEWTON BROOK. CONSTRUCTION TO BE BITUMINOUS MATERIAL, WITH MINIMUM 3.0m WIDTH WITH 0.5m VERGES EITHER SIDE. REGULATORY SIGNS REQUIRED AT EITHER END, REPEATER SIGNS REQUIRED AT APPROXIMATELY HALF DISTANCE

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS ALONG A465 NORTH EDGE KERB LINE.

NOTE: 3 No. HIGHWAY LIGHTING COLUMNS AND 11 No. HIGHWAY GULLIES TO BE REPOSITIONED WITHIN WORKS LIMITS

SHARED CYCLE/FOOT WAY TO BE PROVIDED ALONG NORTH CHANNEL OF A465 UTILISING EXISTING GRASS VERGE. WIDTH TO BE MINIMUM 3.0m. FROM HOTEL ACCESS ONWARDS NEW 2.5m VERGE WITH TREE PLANTING TO FILL REMAINING SPACE BETWEEN CYCLE/FOOT WAY AND REALIGNED KERB LINE

A465 CARRIAGEWAY WIDTH REDUCED TO 6.5m WITH RIGHT TURN LANE REMOVED. NEW CENTRE LINE LAID. KERB LINES ON NORTH AND SOUTH EDGES TO BE REALIGNED TO SUIT AMENDMENTS TO FOOTWAYS AND JUNCTIONS

EXISTING FOOTWAY ALONG NORTH CHANNEL OF A465 TO HOTEL ACCESS TO BE INCREASED TO MINIMUM 3.0m WIDTH TO PROVIDE SHARED CYCLE/FOOT WAY, UTILISING EXISTING GRASS VERGE AND FOOTWAY

GIVE WAY AND CARRIAGEWAY CENTRE LINE MARKINGS TO BE RELAYED TO SUIT NEW JUNCTION ARRANGEMENT

EXISTING JUNCTION KERBING TO BE REMOVED AND RECONSTRUCTED TO TIE INTO MAIN CARRIAGEWAY WORKS. JUNCTION RADII TO BE 6.0m

A465 JUNCTION WITH GOODRICH AVENUE TO BECOME BLOCK PAVED RAISED TABLE WITH UNCONTROLLED PEDESTRIAN CROSSING. RAMP WARNING SIGNS TO BE INSTALLED ON APPROACH FROM EACH DIRECTION

WORKS TO TIE INTO WIDER BELMONT ROAD PROPOSALS. SCHEMES SHOULD BE REVIEWED AS ONE BUT COULD BE ALTERED TO BECOME STAND-ALONE SCHEMES

EXISTING JUNCTION KERBING AND PEDESTRIAN GUARD RAILINGS TO BE REMOVED. RECONSTRUCTED KERB LINE TO TIE INTO MAIN CARRIAGEWAY WORKS. JUNCTION RADII TO BE 6.0m

EXISTING CENTRAL TRAFFIC ISLAND WITH LIT BOLLARDS TO BE REMOVED. ELECTRICAL CONNECTIONS TO BE MADE SAFE

PROVISION FOR CYCLISTS TO REJOIN CARRIAGEWAY/CYCLEWAY. APPROPRIATE SIGNS AND CARRIAGEWAY MARKINGS TO BE INSTALLED

GIVE WAY AND CARRIAGEWAY CENTRE LINE MARKINGS TO BE RELAYED TO SUIT NEW JUNCTION ARRANGEMENT

WORKS TO TIE INTO WIDER BELMONT ROAD PROPOSALS. SCHEMES SHOULD BE REVIEWED AS ONE BUT COULD BE ALTERED TO BECOME STAND-ALONE SCHEMES

NEW BLOCK PAVED RAISED TABLE WITH TOUCAN CROSSING TO BE INSTALLED WITH ALL NECESSARY CORRESPONDING SIGNS AND CARRIAGEWAY MARKINGS

HOTEL ACCESS JUNCTION TO BECOME BLOCK PAVED RAISED TABLE WITH UNCONTROLLED PEDESTRIAN CROSSING ACROSS ACCESS. CARRIAGEWAY MARKINGS AND RAMP WARNING SIGNS TO BE INSTALLED ON APPROACH FROM EACH DIRECTION

EXISTING VERGE AND FOOTWAY ADJACENT TO SOUTH EDGE OF A465 TO BE REPLACED WITH SHARED PEDESTRIAN/CYCLE ROUTE. CONSTRUCTION TO BE BITUMINOUS MATERIAL WITH MINIMUM 3.0m WIDTH

EXISTING CENTRAL TRAFFIC ISLAND WITH LIT BOLLARDS AND LIGHTING COLUMN TO BE REMOVED. ELECTRICAL CONNECTIONS TO BE MADE SAFE

EXISTING TREES TO REMAIN SOUTH OF BELMONT ROAD

NOTE: WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

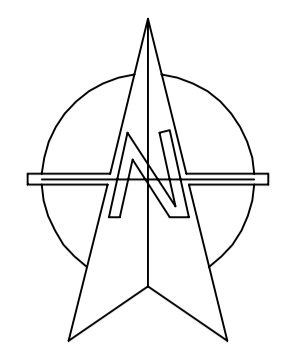
NOTE: WHERE NEW KERB LINE IS OUTSIDE OF EXISTING CARRIAGEWAY ALLOW FOR FULL DEPTH RECONSTRUCTION INCLUDING 600mm WIDTH INTO EXISTING CARRIAGEWAY

NOTE: WHERE NEW VERGE/PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACE BROKEN OUT AND REPLACED WITH TOPSOIL

NOTE: WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANING OUT (40mm) AND RESURFACING FOR HALF LANE WIDTH

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 789200					
SOUTH WYE TRANSPORT PACKAGE					
ACTIVE TRAVEL MEASURES GROUP 3 SHEET 5 NEWTON BROOK CROSSING WIDER SCHEME					
Drawn:	JG	Checked:	AJS		
Designed:	AJS	Approved:	GW		
Date:	12/11/2015	Scale:	1:500	A1	Sheet:
Project Number:	3512983BP-HHR	Drawing Number:	ATM010	Revision:	
© Copyright Parsons Brinckerhoff					



NOTE:
WHERE FOOTWAY IS
CONSTRUCTED OVER EXISTING
CARRIAGEWAY, ASSUME 200mm
SURFACING BROKEN OUT AND
REPLACED WITH GRANULAR FILL

NOTE:
ANY EXISTING FOOTWAY OUTSIDE
OF PROPOSED NEW EXTENTS TO
BE BROKEN UP AND REMOVED

NOTE:
EXTENTS OF CARRIAGEWAY WITHIN
SCHEME LIMITS TO BE PLANNED OUT
(40mm) AND RESURFACED.

NOTE:
14 No. HIGHWAY GULLIES AND
SPURS TO BE RELOCATED IN TOTAL

5 No. WATER MAIN STOP VALVE/FIRE HYDRANT
COVERS AT THIS LOCATION TO BE ADJUSTED TO SUIT
NEW CARRIAGEWAY/FOOTWAY ALIGNMENT

EXISTING SURFACE MARKINGS INCLUDING RIGHT TURN LANE
WITH ASSOCIATED CAT'S EYES TO BE REMOVED. NEW
CARRIAGEWAY CENTRE LINE AND CAT'S EYES TO BE APPLIED

NEW ROAD HUMP WITH TOUCAN CROSSING ON
BLOCK PAVED RAISED TABLE TO BE INSTALLED
WITH ALL NECESSARY CORRESPONDING SIGNAGE
AND CARRIAGEWAY MARKINGS

FOOTWAY ON NORTH SIDE OF A465 TO BE
WIDENED TO 3.0m TO BECOME SHARED
CYCLE/FOOTWAY TO TESCO ROUNDABOUT

EXISTING CARRIAGEWAY TO BE
BROKEN OUT AND REMOVED

CORNER RADIUS REDUCED TO 12.0m WITH NEW HB2
KERB LINE. EXISTING HIGHWAY GULLY AND SPUR TO
BE RELOCATED ACCORDINGLY. DOUBLE CHAMBER
COVER IN CARRIAGEWAY TO BE ADJUSTED

PROVISION FOR CYCLISTS TO REJOIN
CARRIAGEWAY/CYCLEWAY. APPROPRIATE
SIGNAGE TO BE INSTALLED

EXISTING TRAFFIC ISLAND TO BE REMOVED. REDUNDANT
ELECTRICAL CONNECTIONS TO LIT TRAFFIC BOLLARDS
TO BE MADE SAFE. NEW BLOCK PAVED ROAD HUMP WITH
UNCONTROLLED PEDESTRIAN/CYCLE CROSSING TO BE
CONSTRUCTED, INCLUDING TACTILE PAVING

CORNER RADIUS REDUCED TO 13.0m WITH NEW
HB2 KERB LINE. EXISTING HIGHWAY GULLY AND
SPUR TO BE RELOCATED ACCORDINGLY.

FOOTWAY ON SOUTH SIDE OF A465
TO BE WIDENED TO 3.0m FROM
NEW CONTROLLED CROSSING
INTO HAYWOOD LANE

FOOTWAY ON SOUTH SIDE OF A465
TO BE 2.0m CONSTRUCTED
ADJACENT TO RELOCATED
KERBLINE FROM NEW CONTROLLED
CROSSING TO JUNCTION WITH
RUCKHALL LANE.

EXISTING SURFACE MARKINGS INCLUDING
RIGHT TURN LANE WITH ASSOCIATED CAT'S
EYES TO BE REMOVED. NEW CARRIAGEWAY
CENTRE LINE AND CAT'S EYES TO BE APPLIED

GIVE WAY AND CENTRE LINE
MARKINGS TO BE RELAYED TO
SUIT NEW JUNCTION GEOMETRY

FOOTWAY TO TERMINATE AT THIS
POINT. EXISTING FOOTWAY BEYOND
TO BE BROKEN OUT AND REINSTATED
WITH NEW GRASSED VERGE

CARRIAGEWAY WIDTH TO BE REDUCED TO 6.5m.
EXISTING KERB LINES TO BE BROKEN OUT AND
REMOVED. NEW HB2 KERBING TO BE INSTALLED.
EXISTING PROPERTY ACCESSSES ALONG LENGTH
OF WORKS TO BE MAINTAINED. ROAD GULLIES TO
BE REPOSITIONED AS NECESSARY. PRESENCE OF
BT UNDERGROUND CABLE AND GAS MAIN TO BE
TAKEN INTO ACCOUNT DURING WORKS

GIVE WAY AND CENTRE LINE MARKINGS TO BE
RELAYED TO SUIT NEW JUNCTION GEOMETRY

EXISTING TRAFFIC ISLAND TO BE REMOVED,
REDUNDANT ELECTRICAL CONNECTIONS TO
LIT TRAFFIC BOLLARDS TO BE MADE SAFE

EXISTING GRASS VERGE TO BE
EXTENDED TO NEW KERB LINE
AND OLD CARRIAGEWAY BROKEN
UP AND REMOVED.

SCHEME TO TIE IN WITH A3 SCHEME.
SCHEMES SHOULD BE REVIEWED AS
ONE BUT COULD BE ALTERED FOR
STAND ALONE SCHEMES

A465 JUNCTION WITH HAYWOOD LANE TO BE
RECONSTRUCTED WITH 10.0m RADII FORMED
FROM NEW HB2 KERB LINES. HIGHWAY
GULLIES AND SPURS TO BE RELOCATED

EXISTING FOOTWAY TO BE BROKEN UP
AND REMOVED

EXISTING RED HFS WITH 40MPH ROUNDEL
TO BE REFRESHED AND AMENDED TO
SUIT NEW JUNCTION GEOMETRY

2 No. EXISTING ROAD GULLIES AND SPURS TO
BE RELOCATED TO BASE OF TABLE RAMPS

NEW BLOCK PAVED ROAD HUMP WITH
UNCONTROLLED PEDESTRIAN/CYCLE CROSSING
TO BE CONSTRUCTED, INCLUDING TACTILE PAVING

NEW SECTION OF FOOTWAY TO CONNECT PEDESTRIAN
CROSSING TO FOOTPATH. MINOR VEGETATION
CLEARANCE REQUIRED AND ALSO RELOCATION OF
EXISTING 'ROAD NARROWS' SIGN POST & FACE

PROVISION FOR CYCLISTS TO REJOIN
CARRIAGEWAY/CYCLEWAY. APPROPRIATE
SIGNAGE TO BE INSTALLED

NEW CYCLE LANE MARKINGS TO BE APPLIED
ALONG EITHER SIDE OF NARROW SECTION
OF CARRIAGEWAY. CYCLISTS/MOTORISTS
TO USE SECTION IN TURN, ASSOCIATED
SIGNAGE WITH INSTRUCTIONAL
SUPPLEMENTARY PLATES TO BE INSTALLED

PROVISION FOR CYCLISTS TO REJOIN
CARRIAGEWAY/CYCLEWAY. APPROPRIATE
SIGNAGE TO BE INSTALLED

THIS DRAWING IS AT CONCEPTUAL STAGE FOR
TRANSPORT MODELLING PURPOSES. FURTHER
WALK OVER AND TOPOGRAPHICAL SURVEYS
WILL BE REQUIRED IN ORDER TO CONFIRM THE
FEASIBILITY OF THE PROPOSALS AND PROVIDE
A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App

FOR DISCUSSION



1 Capital Quarter,
Tyndall Street,
Cardiff, CF10 4BZ
Tel: 44-(0)2920 769200



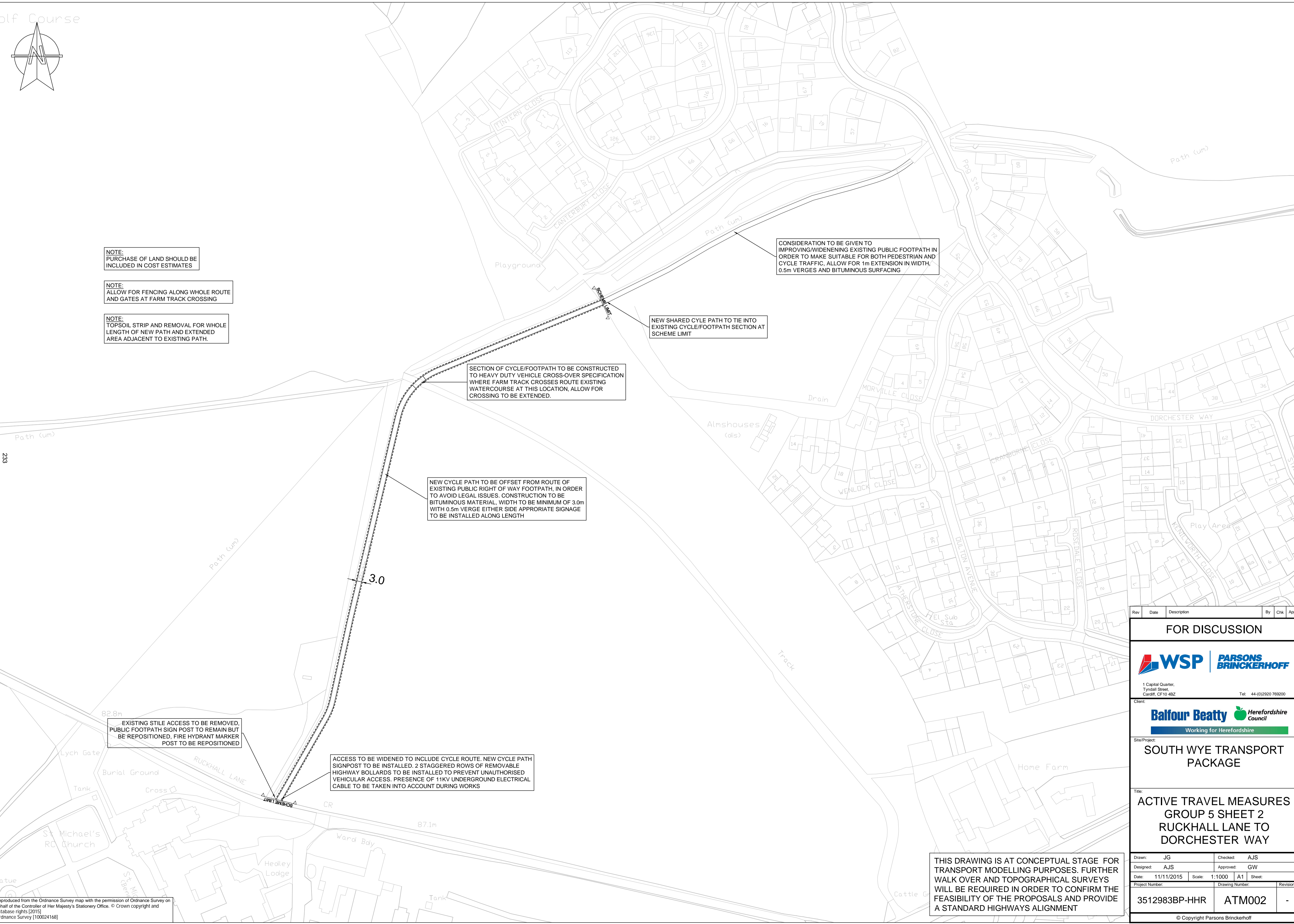
SOUTH WYE TRANSPORT
PACKAGE

ACTIVE TRAVEL MEASURES
GROUP 5 SHEET 1
RUCKHALL LANE TO
HAYWOOD LANE

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 11/11/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM001 -

3512983BP-HHR ATM002
 File Name: H:\H\H\U\OBS\3512983A-HHR Hereford\Task - South Wye Transport Package SWTP\Baltimore TP\Acad\ATM Oct 2015\ATM Drawings\ATM002 A2.dwg
 Logon: Green, James
 Date: 02/12/2015 10:12:58
 Reproduced from the Ordnance Survey map with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright and database rights (2015)
 Ordnance Survey [100024168]



NOTE:
PURCHASE OF LAND SHOULD BE INCLUDED IN COST ESTIMATES

NOTE:
ALLOW FOR FENCING ALONG WHOLE ROUTE AND GATES AT FARM TRACK CROSSING

NOTE:
TOPSOIL STRIP AND REMOVAL FOR WHOLE LENGTH OF NEW PATH AND EXTENDED AREA ADJACENT TO EXISTING PATH.

SECTION OF CYCLE/FOOTPATH TO BE CONSTRUCTED TO HEAVY DUTY VEHICLE CROSS-OVER SPECIFICATION WHERE FARM TRACK CROSSES ROUTE EXISTING WATERCOURSE AT THIS LOCATION, ALLOW FOR CROSSING TO BE EXTENDED.

NEW SHARED CYCLE PATH TO TIE INTO EXISTING CYCLE/FOOTPATH SECTION AT SCHEME LIMIT

CONSIDERATION TO BE GIVEN TO IMPROVING/WIDENING EXISTING PUBLIC FOOTPATH IN ORDER TO MAKE SUITABLE FOR BOTH PEDESTRIAN AND CYCLE TRAFFIC, ALLOW FOR 1m EXTENSION IN WIDTH, 0.5m VERGES AND BITUMINOUS SURFACING

NEW CYCLE PATH TO BE OFFSET FROM ROUTE OF EXISTING PUBLIC RIGHT OF WAY FOOTPATH, IN ORDER TO AVOID LEGAL ISSUES. CONSTRUCTION TO BE BITUMINOUS MATERIAL, WIDTH TO BE MINIMUM OF 3.0m WITH 0.5m VERGE EITHER SIDE APPROPRIATE SIGNAGE TO BE INSTALLED ALONG LENGTH

EXISTING STILE ACCESS TO BE REMOVED, PUBLIC FOOTPATH SIGN POST TO REMAIN BUT BE REPOSITIONED, FIRE HYDRANT MARKER POST TO BE REPOSITIONED

ACCESS TO BE WIDENED TO INCLUDE CYCLE ROUTE, NEW CYCLE PATH SIGNPOST TO BE INSTALLED, 2 STAGGERED ROWS OF REMOVABLE HIGHWAY BOLLARDS TO BE INSTALLED TO PREVENT UNAUTHORISED VEHICULAR ACCESS, PRESENCE OF 11KV UNDERGROUND ELECTRICAL CABLE TO BE TAKEN INTO ACCOUNT DURING WORKS

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App

FOR DISCUSSION

WSP | **PARSONS BRINCKERHOFF**

1 Capital Quarter,
Tyndall Street,
Cardiff, CF10 4BZ
Tel: 44-(0)2920 768200

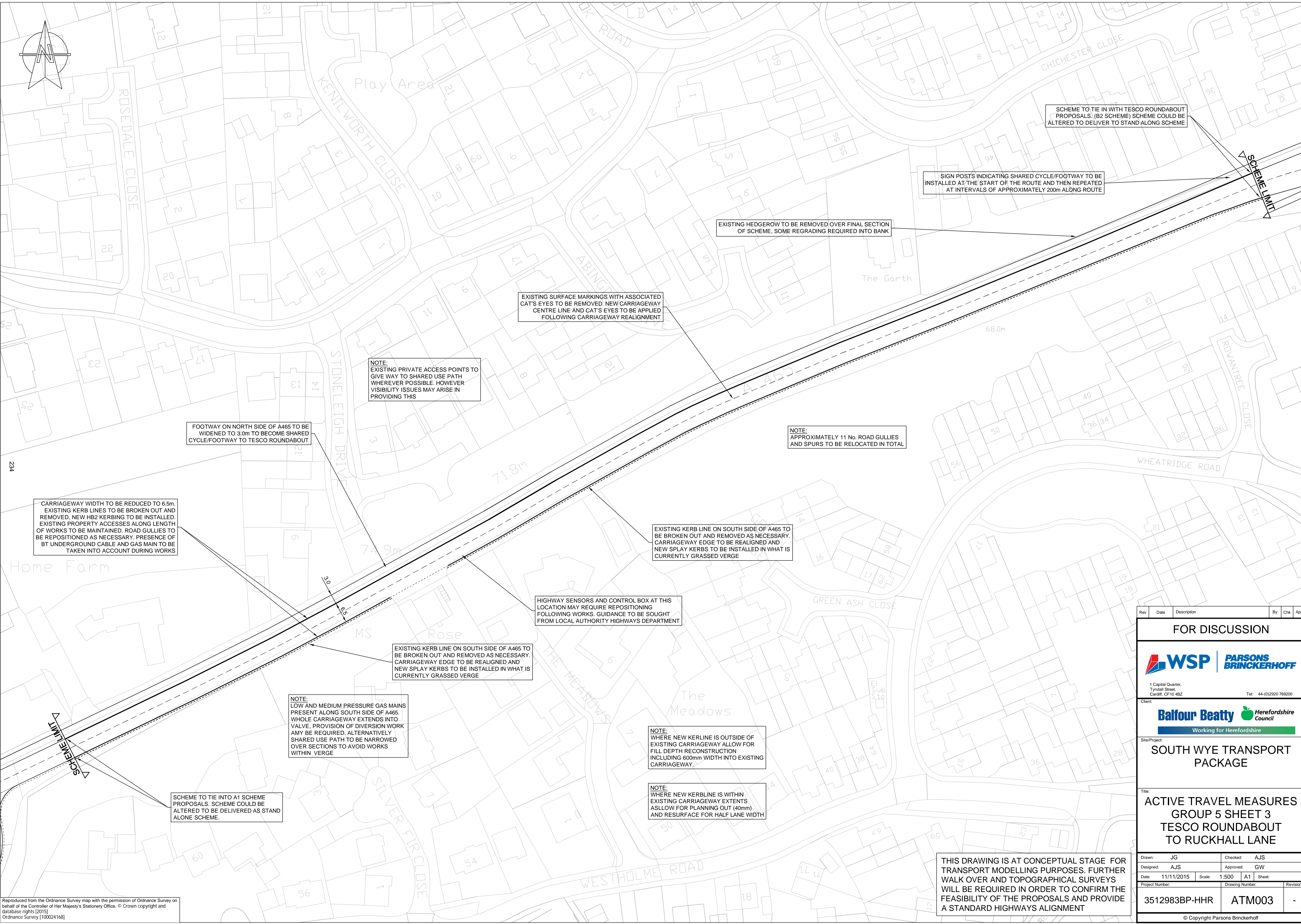
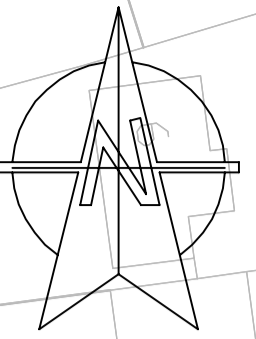
Client:
Balfour Beatty | **Herefordshire Council**
Working for Herefordshire

Site/Project:
SOUTH WYE TRANSPORT PACKAGE

Title:
ACTIVE TRAVEL MEASURES GROUP 5 SHEET 2 RUCKHALL LANE TO DORCHESTER WAY

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 11/11/2015	Scale: 1:1000 A1 Sheet:
Project Number:	Drawing Number:
3512983BP-HHR	ATM002
	-

© Copyright Parsons Brinckerhoff



SCHEME TO TIE IN WITH TESCO ROUNDABOUT PROPOSALS. (B2 SCHEME) SCHEME COULD BE ALTERED TO DELIVER TO STAND ALONG SCHEME

SIGN POSTS INDICATING SHARED CYCLE/FOOTWAY TO BE INSTALLED AT THE START OF THE ROUTE AND THEN REPEATED AT INTERVALS OF APPROXIMATELY 200m ALONG ROUTE

EXISTING HEDGEROW TO BE REMOVED OVER FINAL SECTION OF SCHEME, SOME REGRADING REQUIRED INTO BANK

EXISTING SURFACE MARKINGS WITH ASSOCIATED CAT'S EYES TO BE REMOVED. NEW CARRIAGEWAY CENTRE LINE AND CAT'S EYES TO BE APPLIED FOLLOWING CARRIAGEWAY REALIGNMENT

NOTE: EXISTING PRIVATE ACCESS POINTS TO GIVE WAY TO SHARED USE PATH WHEREVER POSSIBLE, HOWEVER VISIBILITY ISSUES MAY ARISE IN PROVIDING THIS

FOOTWAY ON NORTH SIDE OF A465 TO BE WIDENED TO 3.0m TO BECOME SHARED CYCLE/FOOTWAY TO TESCO ROUNDABOUT

NOTE: APPROXIMATELY 11 NO. ROAD GULLIES AND SPURS TO BE RELOCATED IN TOTAL

CARRIAGEWAY WIDTH TO BE REDUCED TO 6.5m. EXISTING KERB LINES TO BE BROKEN OUT AND REMOVED, NEW HB2 KERBING TO BE INSTALLED. EXISTING PROPERTY ACCESSES ALONG LENGTH OF WORKS TO BE MAINTAINED. ROAD GULLIES TO BE REPOSITIONED AS NECESSARY. PRESENCE OF BT UNDERGROUND CABLE AND GAS MAIN TO BE TAKEN INTO ACCOUNT DURING WORKS

EXISTING KERB LINE ON SOUTH SIDE OF A465 TO BE BROKEN OUT AND REMOVED AS NECESSARY. CARRIAGEWAY EDGE TO BE REALIGNED AND NEW SPLAY KERBS TO BE INSTALLED IN WHAT IS CURRENTLY GRASSED VERGE

HIGHWAY SENSORS AND CONTROL BOX AT THIS LOCATION MAY REQUIRE REPOSITIONING FOLLOWING WORKS. GUIDANCE TO BE SOUGHT FROM LOCAL AUTHORITY HIGHWAYS DEPARTMENT

EXISTING KERB LINE ON SOUTH SIDE OF A465 TO BE BROKEN OUT AND REMOVED AS NECESSARY. CARRIAGEWAY EDGE TO BE REALIGNED AND NEW SPLAY KERBS TO BE INSTALLED IN WHAT IS CURRENTLY GRASSED VERGE

NOTE: LOW AND MEDIUM PRESSURE GAS MAINS PRESENT ALONG SOUTH SIDE OF A465. WHOLE CARRIAGEWAY EXTENDS INTO VALVE, PROVISION OF DIVERSION WORK AMY BE REQUIRED, ALTERNATIVELY SHARED USE PATH TO BE NARROWED OVER SECTIONS TO AVOID WORKS WITHIN VERGE

NOTE: WHERE NEW KERLINE IS OUTSIDE OF EXISTING CARRIAGEWAY ALLOW FOR FILL DEPTH RECONSTRUCTION INCLUDING 600mm WIDTH INTO EXISTING CARRIAGEWAY.

NOTE: WHERE NEW KERBLINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANNING OUT (40mm) AND RESURFACE FOR HALF LANE WIDTH

SCHEME TO TIE INTO A1 SCHEME PROPOSALS. SCHEME COULD BE ALTERED TO BE DELIVERED AS STAND ALONE SCHEME.

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App

FOR DISCUSSION



1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 768200

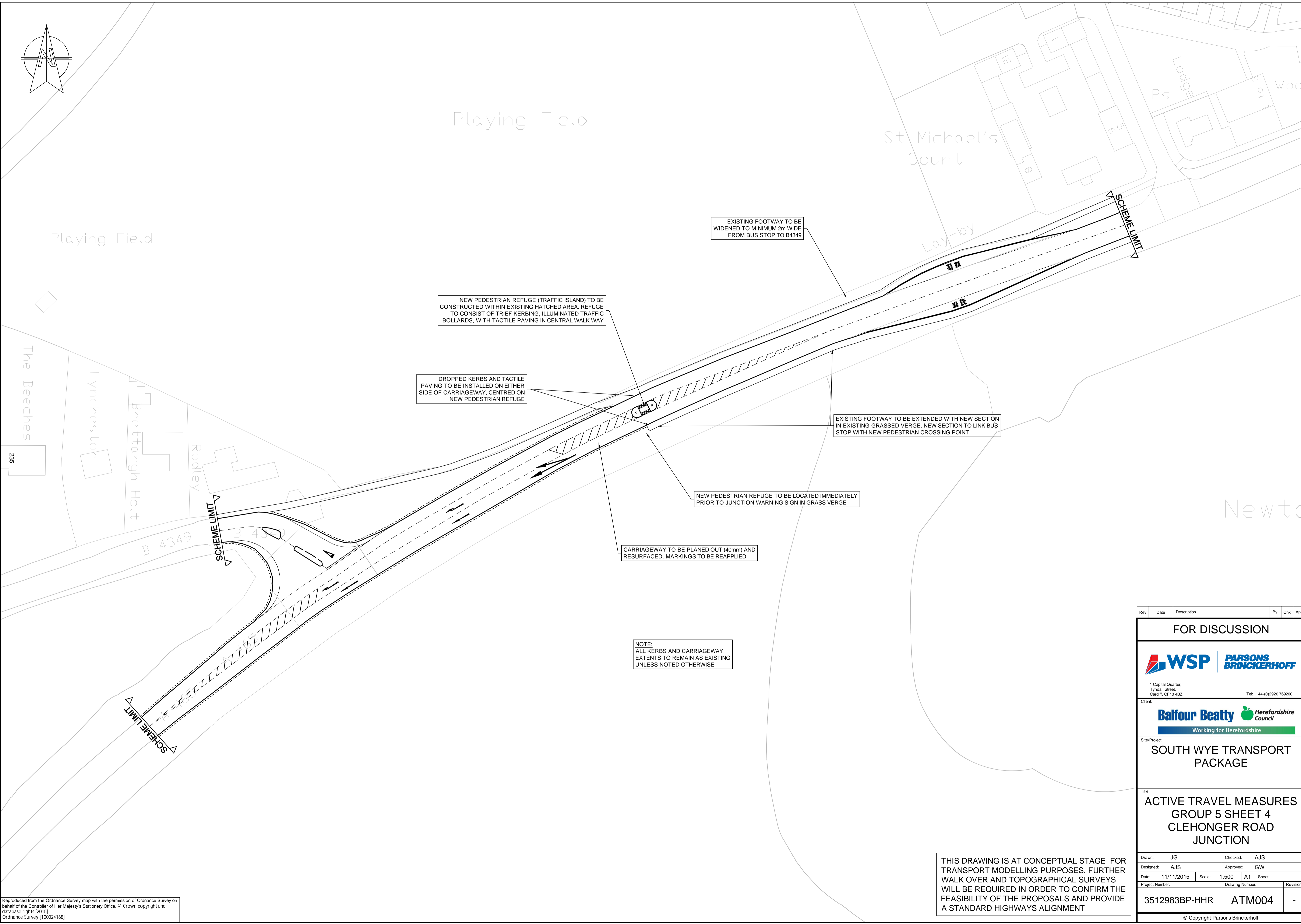
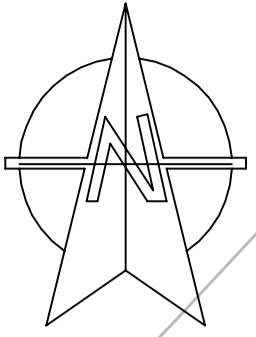


Client: Balfour Beatty Herefordshire Council Working for Herefordshire
Site/Project: SOUTH WYE TRANSPORT PACKAGE

Title: ACTIVE TRAVEL MEASURES GROUP 5 SHEET 3 TESCO ROUNDABOUT TO RUCKHALL LANE

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 11/11/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM003 -



NEW PEDESTRIAN REFUGE (TRAFFIC ISLAND) TO BE CONSTRUCTED WITHIN EXISTING HATCHED AREA. REFUGE TO CONSIST OF TRIEF KERBING, ILLUMINATED TRAFFIC BOLLARDS, WITH TACTILE PAVING IN CENTRAL WALK WAY

DROPPED KERBS AND TACTILE PAVING TO BE INSTALLED ON EITHER SIDE OF CARRIAGEWAY, CENTRED ON NEW PEDESTRIAN REFUGE

EXISTING FOOTWAY TO BE WIDENED TO MINIMUM 2m WIDE FROM BUS STOP TO B4349

EXISTING FOOTWAY TO BE EXTENDED WITH NEW SECTION IN EXISTING GRASSED VERGE. NEW SECTION TO LINK BUS STOP WITH NEW PEDESTRIAN CROSSING POINT

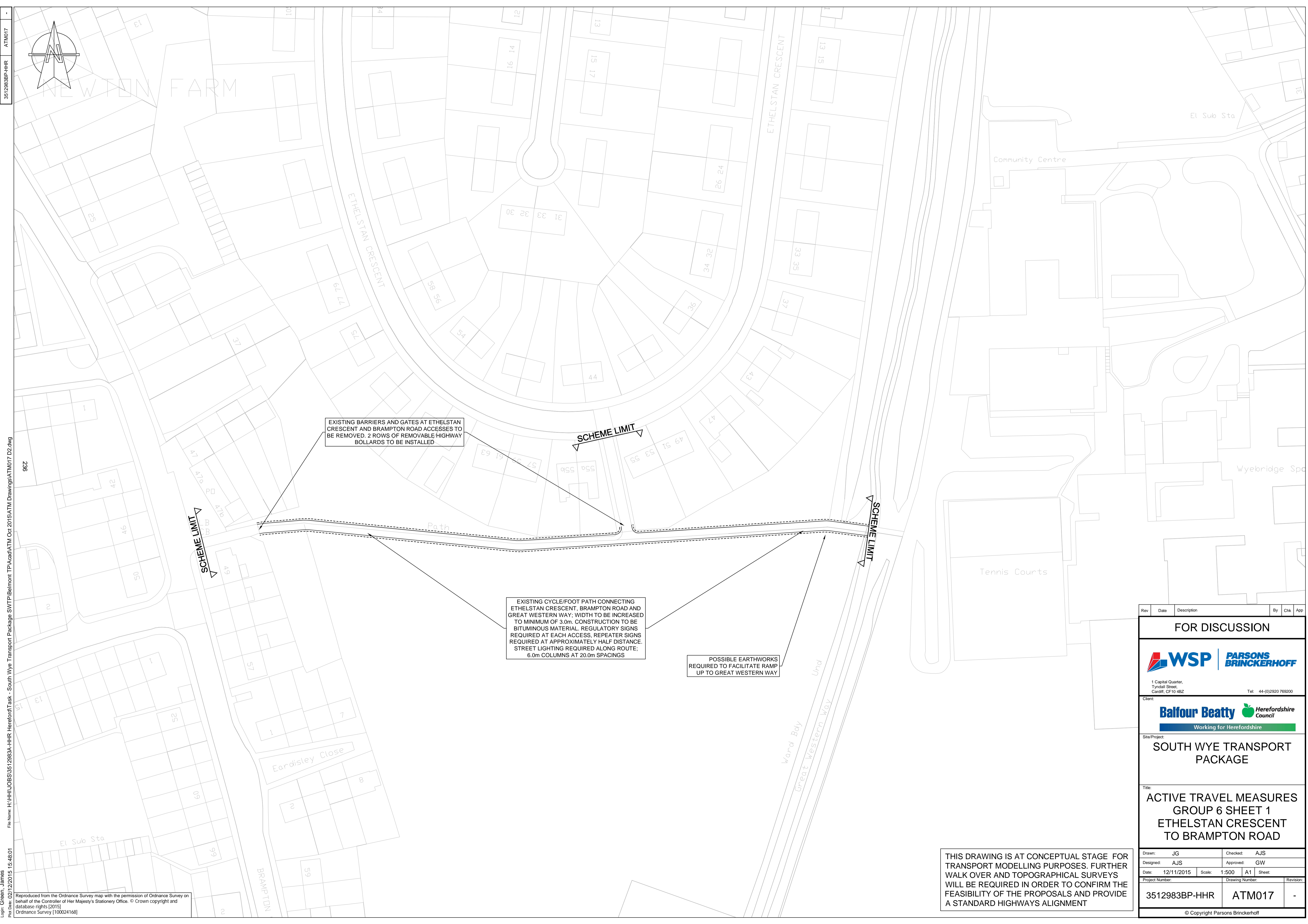
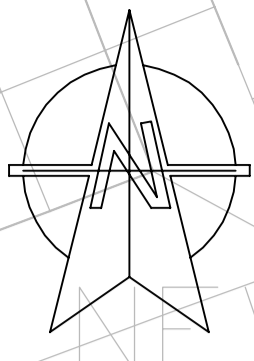
NEW PEDESTRIAN REFUGE TO BE LOCATED IMMEDIATELY PRIOR TO JUNCTION WARNING SIGN IN GRASS VERGE

CARRIAGEWAY TO BE PLANED OUT (40mm) AND RESURFACED. MARKINGS TO BE REAPPLIED

NOTE:
ALL KERBS AND CARRIAGEWAY EXTENTS TO REMAIN AS EXISTING UNLESS NOTED OTHERWISE

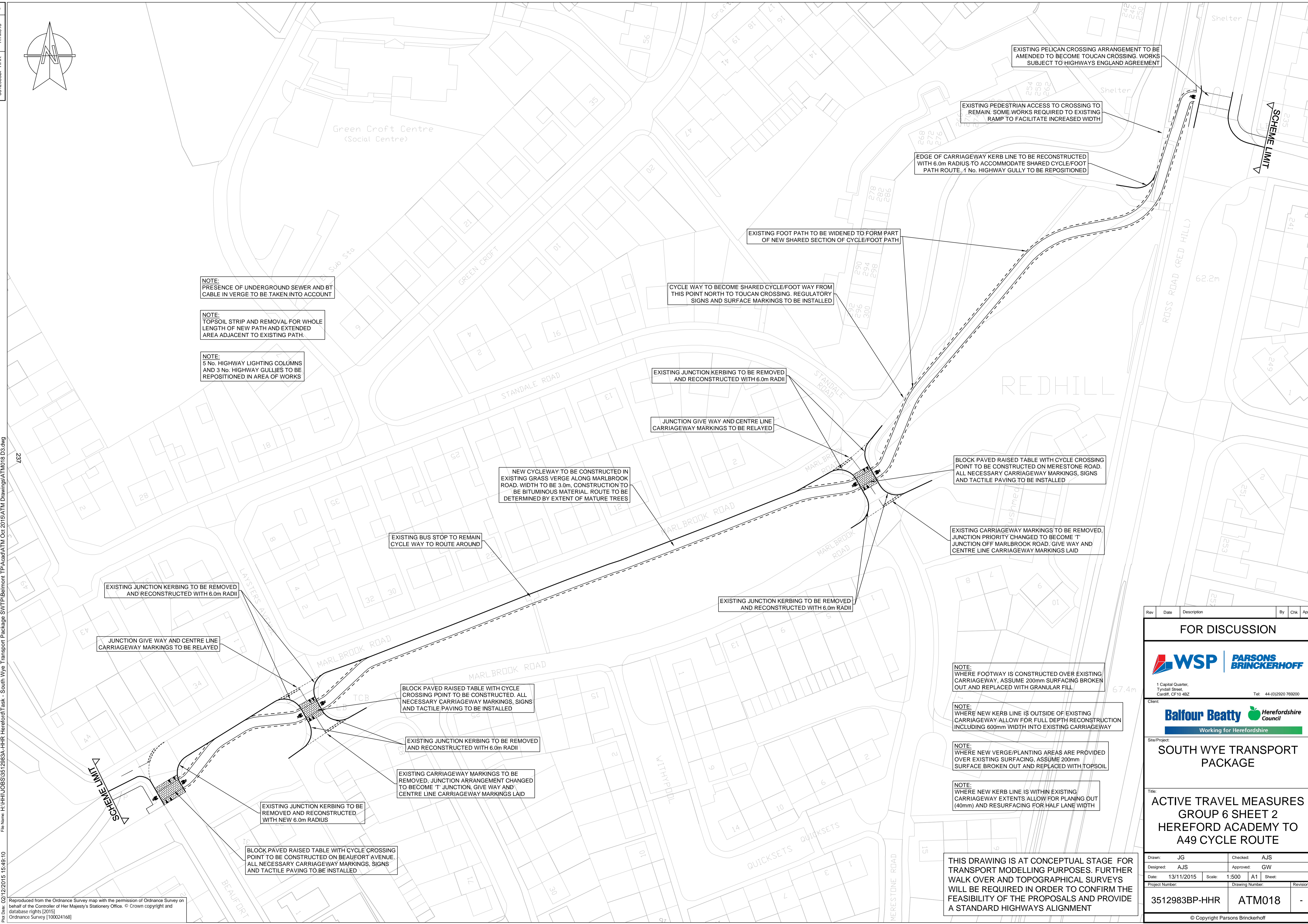
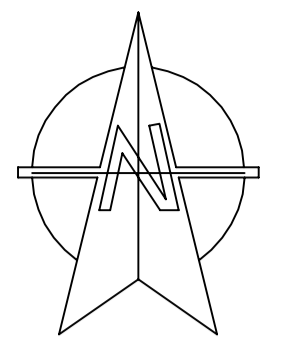
THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 769200					
Client: Working for Herefordshire					
Site/Project: SOUTH WYE TRANSPORT PACKAGE					
Title: ACTIVE TRAVEL MEASURES GROUP 5 SHEET 4 CLEHONGER ROAD JUNCTION					
Drawn: JG		Checked: AJS			
Designed: AJS		Approved: GW			
Date: 11/11/2015	Scale: 1:500	A1	Sheet:		
Project Number:		Drawing Number:		Revision:	
3512983BP-HHR		ATM004		-	
© Copyright Parsons Brinckerhoff					



Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 769200					
Client: Working for Herefordshire					
SOUTH WYE TRANSPORT PACKAGE					
ACTIVE TRAVEL MEASURES GROUP 6 SHEET 1 ETHELSTAN CRESCENT TO BRAMPTON ROAD					
Drawn:	JG	Checked:	AJS		
Designed:	AJS	Approved:	GW		
Date:	12/11/2015	Scale:	1:500	A1	Sheet:
Project Number:	3512983BP-HHR	Drawing Number:	ATM017	Revision:	
© Copyright Parsons Brinckerhoff					

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT



Rev	Date	Description	By	Chk	App

FOR DISCUSSION

WSP | PARSONS BRINCKERHOFF

1 Capital Quarter,
 Tyndall Street,
 Cardiff, CF10 4BZ
 Tel: 44-(0)2920 768200

Client:
Balfour Beatty | Herefordshire Council
 Working for Herefordshire

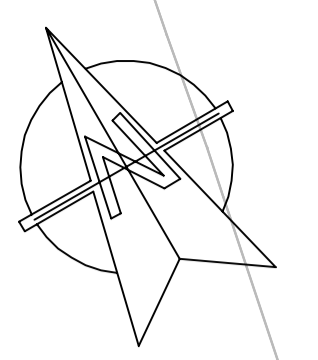
Site/Project:
SOUTH WYE TRANSPORT PACKAGE

Title:
**ACTIVE TRAVEL MEASURES GROUP 6 SHEET 2
 HEREFORD ACADEMY TO A49 CYCLE ROUTE**

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 13/11/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM018

© Copyright Parsons Brinckerhoff



2 STAGGERED ROWS OF REMOVABLE HIGHWAY BOLLARDS TO BE INSTALLED AT SHARED CYCLE/FOOT PATH ACCESS. CORRESPONDING SIGNS, SURFACE MARKINGS AND CORDUROY PAVING TO BE INSTALLED

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, AND ELECTRICAL CABLE ON ROUTE OF EXISTING CYCLE/FOOT PATH TO BE TAKEN INTO ACCOUNT DURING WORKS

EXISTING SEGREGATED CYCLE/FOOT PATH TO BE WIDENED TO MINIMUM 3.0m WIDTH, TO BE DESEGREGATED (CENTRAL SOLID WHITE LINE REMOVED) WITH CORRESPONDING REGULATORY SIGNS INSTALLED

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, AND BT CABLE TO BE TAKEN INTO ACCOUNT DURING WORKS TO PEDESTRIAN CROSSING

NOTE: TOPSOIL STRIP AND REMOVAL FOR WHOLE LENGTH OF NEW PATH AND EXTENDED AREA ADJACENT TO EXISTING PATH.

2 STAGGERED ROWS OF REMOVABLE HIGHWAY BOLLARDS TO BE INSTALLED AT CYCLE/FOOT PATH ACCESS. CYCLE ROUTE SIGNS AND SURFACE MARKINGS TO BE INSTALLED. EXISTING CORDUROY PAVING ARRANGEMENT TO BE EXTENDED TO COVER ENTIRE WIDTH OF ACCESS

NEW OFF ROAD CYCLE WAY TO BE CONSTRUCTED THROUGH KING GEORGE'S FIELD. WIDTH TO BE 3.0m. CONSTRUCTION TO BE BITUMINOUS MATERIAL

2 STAGGERED ROWS OF REMOVABLE HIGHWAY BOLLARDS TO BE INSTALLED AT CYCLE PATH ACCESS. CYCLE ROUT SIGNS, SURFACE MARKINGS AND CORDUROY PAVING TO BE INSTALLED

CARRIAGEWAY WIDTH AT NEW TOUCAN CROSSING TO BE REDUCED TO 4.0m. KERB LINES ON BOTH SIDES OF HINTON ROAD TO BE REMOVED AND REALIGNED TO FORM NARROWING FOR ONE WAY SHUTTLE WORKING

1 No. HIGHWAY GULLY AND CHAMBER COVER TO BE REPOSITIONED AND RAISE DURING KERB REALIGNMENT WORKS

EXISTING ZEBRA CROSSING OVER PAVED ROAD HUMPS TO BE AMENDED TO SIGNAL CONTROLLED TOUCAN CROSSING. ASSOCIATED SURFACE MARKINGS AND SIGNALING EQUIPMENT TO BE INSTALLED. EXISTING ZIG-ZAG SURFACE MARKINGS AND BELISHA BEACONS TO BE REMOVED

NOTE: WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE: WHERE NEW KERB LINE IS OUTSIDE OF EXISTING CARRIAGEWAY ALLOW FOR FULL DEPTH RECONSTRUCTION INCLUDING 600mm WIDTH INTO EXISTING CARRIAGEWAY

NOTE: WHERE NEW VERGE/PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACE BROKEN OUT AND REPLACED WITH TOPSOIL

NOTE: WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANING OUT (40mm) AND RESURFACING FOR HALF LANE WIDTH

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App

FOR DISCUSSION

WSP | **PARSONS BRINCKERHOFF**

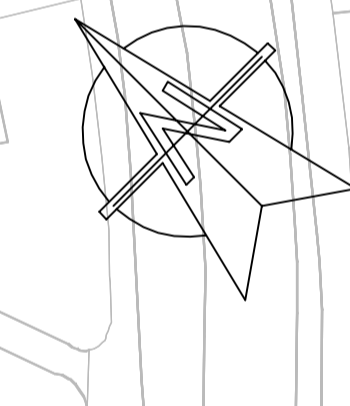
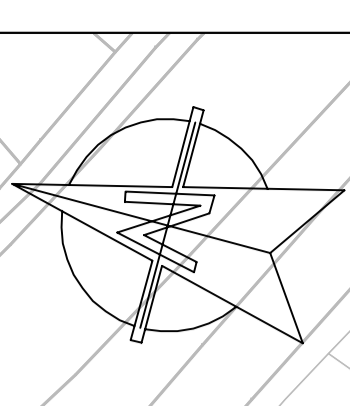
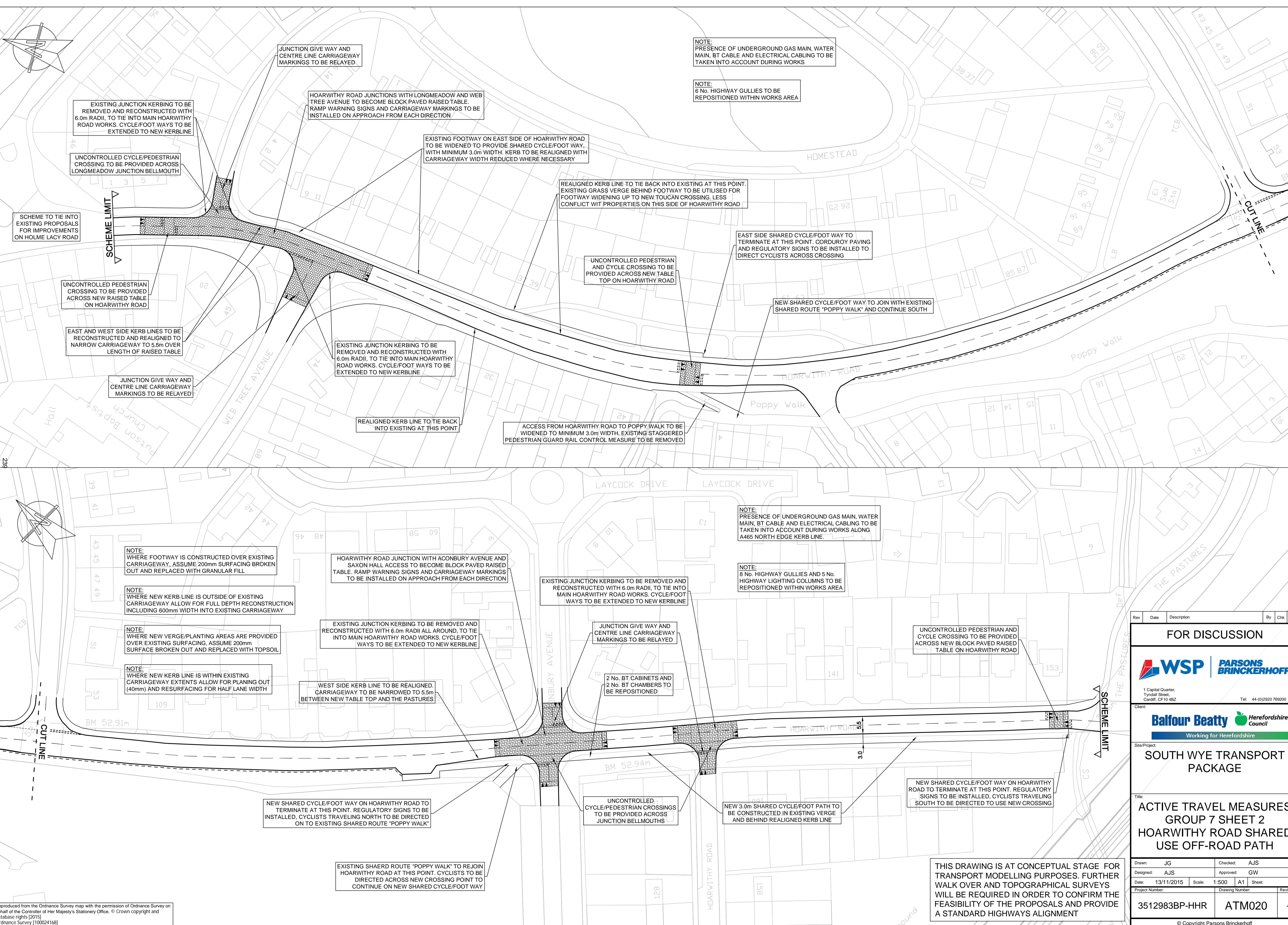
1 Capital Quarter,
 Tyndall Street,
 Cardiff, CF10 4BZ
 Tel: 44-(0)2920 768200

Client: **Balfour Beatty** | **Herefordshire Council**
 Working for Herefordshire

Site/Project: **SOUTH WYE TRANSPORT PACKAGE**

Title: **ACTIVE TRAVEL MEASURES GROUP 7 SHEET 1 BISHOP'S MEADOW AND HINTON ROAD CYCLE ROUTE**

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 13/11/2015	Scale: 1:500 A1 Sheet:
Project Number: 3512983BP-HHR	Drawing Number: ATM019
	Revision: -



Rev	Date	Description	By	Chk	App

FOR DISCUSSION

WSP | **PARSONS BRINCKERHOFF**

1 Capital Quarter,
Tyndall Street,
Cardiff, CF10 4BZ
Tel: 44-(0)2920 789200

Client:
Balfour Beatty | **Herefordshire Council**
Working for Herefordshire

Site/Project:
SOUTH WYE TRANSPORT PACKAGE

Title:
ACTIVE TRAVEL MEASURES GROUP 7 SHEET 2 HOARWITHY ROAD SHARED USE OFF-ROAD PATH

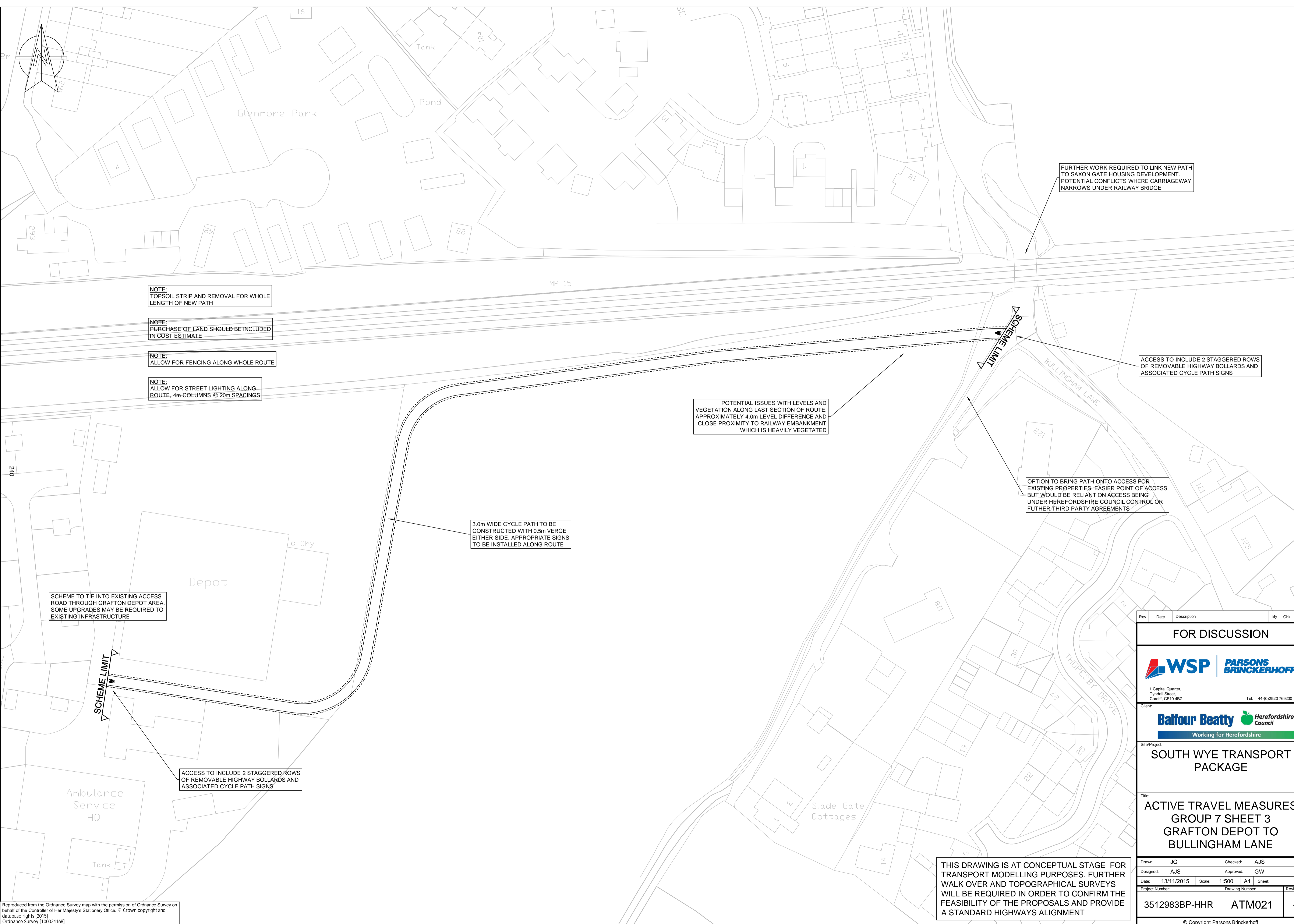
Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 13/11/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM020 -

© Copyright Parsons Brinckerhoff

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

3512983BP-HHR ATM021
2m
3512983BP-HHR ATM021
240
File Name: H:\H\H\U\OBS\3512983BP-HHR HerefordTask - South Wye Transport Package SVT\FP\Belmont TP\Acad\ATM Oct 2015\ATM Drawings\ATM021 EA.dwg
Login: Green, James
Print Date: 02/12/2015 15:50:38
Reproduced from the Ordnance Survey map with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright and database rights [2015]
Ordnance Survey [100024168]



NOTE:
TOPSOIL STRIP AND REMOVAL FOR WHOLE LENGTH OF NEW PATH

NOTE:
PURCHASE OF LAND SHOULD BE INCLUDED IN COST ESTIMATE

NOTE:
ALLOW FOR FENCING ALONG WHOLE ROUTE

NOTE:
ALLOW FOR STREET LIGHTING ALONG ROUTE, 4m COLUMNS @ 20m SPACINGS

POTENTIAL ISSUES WITH LEVELS AND VEGETATION ALONG LAST SECTION OF ROUTE. APPROXIMATELY 4.0m LEVEL DIFFERENCE AND CLOSE PROXIMITY TO RAILWAY EMBANKMENT WHICH IS HEAVILY VEGETATED

3.0m WIDE CYCLE PATH TO BE CONSTRUCTED WITH 0.5m VERGE EITHER SIDE. APPROPRIATE SIGNS TO BE INSTALLED ALONG ROUTE

SCHEME TO TIE INTO EXISTING ACCESS ROAD THROUGH GRAFTON DEPOT AREA. SOME UPGRADES MAY BE REQUIRED TO EXISTING INFRASTRUCTURE

ACCESS TO INCLUDE 2 STAGGERED ROWS OF REMOVABLE HIGHWAY BOLLARDS AND ASSOCIATED CYCLE PATH SIGNS

FURTHER WORK REQUIRED TO LINK NEW PATH TO SAXON GATE HOUSING DEVELOPMENT. POTENTIAL CONFLICTS WHERE CARRIAGEWAY NARROWS UNDER RAILWAY BRIDGE

ACCESS TO INCLUDE 2 STAGGERED ROWS OF REMOVABLE HIGHWAY BOLLARDS AND ASSOCIATED CYCLE PATH SIGNS

OPTION TO BRING PATH ONTO ACCESS FOR EXISTING PROPERTIES. EASIER POINT OF ACCESS BUT WOULD BE RELIANT ON ACCESS BEING UNDER HEREFORDSHIRE COUNCIL CONTROL OR FUTHER THIRD PARTY AGREEMENTS

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
-----	------	-------------	----	-----	-----

FOR DISCUSSION



1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ
Tel: 44-(0)2920 768200



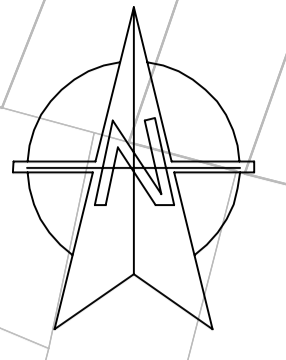
SOUTH WYE TRANSPORT PACKAGE

ACTIVE TRAVEL MEASURES GROUP 7 SHEET 3 GRAFTON DEPOT TO BULLINGHAM LANE

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 13/11/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number: Revision:

3512983BP-HHR ATM021 -

© Copyright Parsons Brinckerhoff



SCHEME TIES IN WITH J3 SCHEME (WALNUT TREE AVENUE CLOSURE TO THROUGH TRAFFIC), SCHEMES SHOULD BE REVIEWED AS ONE BUT COULD BE ALTERED FOR STAND ALONE SCHEMES

NOTE: WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANNING OUT (40mm) AND RESURFACE FOR HALF LANE WIDTH

NOTE: WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

SCHEME LIMIT

SCHEME LIMIT

SCHEME LIMIT

SCHEME LIMIT

CARRIAGEWAY WIDTH REDUCED TO ACCOMMODATE WIDER CENTRAL TRAFFIC ISLAND. RIGHT TURN ONLY LANE REMOVED, NEW RIGHT HAND LANE TO BE DESIGNATED RIGHT TURN/STRAIGHT ON

EXISTING CENTRAL TRAFFIC ISLAND WIDTH TO BE INCREASED TO 4.0m AT JUNCTION END, THEN REDUCING DOWN TO ORIGINAL WIDTH

NOTE: FURTHER ADJUSTMENTS TO CENTRAL ISLAND AND TOUCAN CROSSING ARE LIKELY BEFORE DESIGN IS FINALISED

EXISTING PEDESTRIAN CROSSING TO BE AMENDED TO BECOME TOUCAN CROSSING. ALL NECESSARY SIGNS, CARRIAGEWAY MARKINGS AND TACTILE PAVING TO BE PROVIDED

EXISTING FOOTWAY WIDENED TO MINIMUM 3.0m TO FORM SHARED USE CYCLE/FOOTWAY

OAK AVENUE JUNCTION RADII TO BE 6.0m

EXISTING FOOTWAY WIDENED TO MINIMUM 3.0m TO FORM SHARED USE FOOTWAY/CYCLEWAY BETWEEN

CARRIAGEWAY WIDTH REDUCED TO ACCOMMODATE NEW SHARED CYCLE/FOOTWAY ON NORTHERN SIDE OF HOLME LACY ROAD. STRAIGHT ON/LEFT TURN LANE REDUCED IN LENGTH FOR NORTH BOUND TRAFFIC

OAK AVENUE JUNCTION RADII TO BE 6.0m

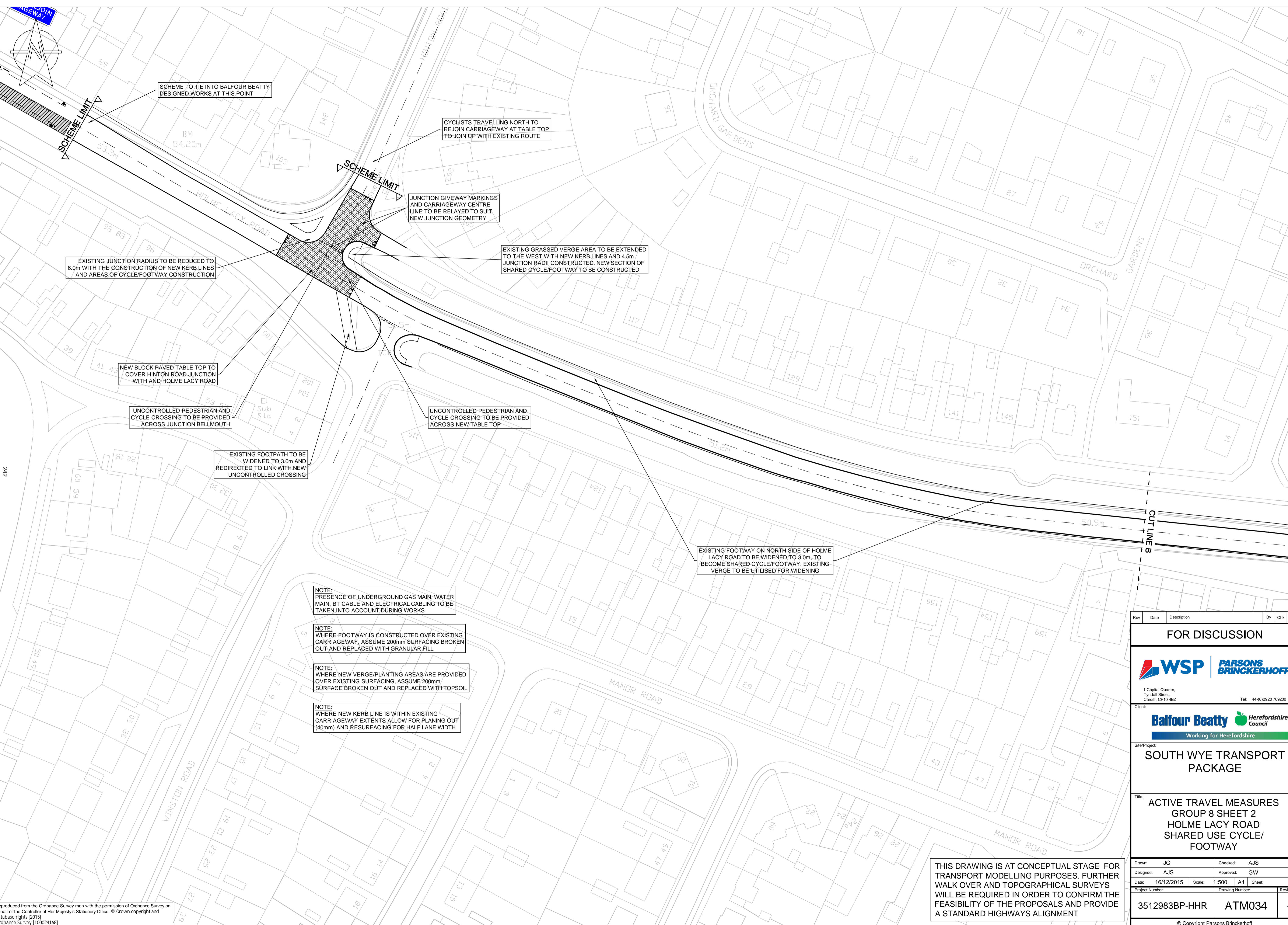
SCHEME TO TIE INTO BALFOUR BEATTY DESIGNED SCHEME AT THIS POINT

NOTE: FURTHER ADJUSTMENTS TO INTERFACE BETWEEN BALFOUR BEATTY DESIGN AND WSP PARSONS BRINCKERHOFF DESIGN MAY BE NECESSARY IN ORDER TO MAINTAIN CONTINUITY

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Client: Balfour Beatty Herefordshire Council Working for Herefordshire					
SOUTH WYE TRANSPORT PACKAGE					
ACTIVE TRAVEL MEASURES GROUP 8 SHEET 1					
HOLME LACY ROAD SHARED USE CYCLE/ FOOTWAY					
Drawn:	JG	Checked:	AJS		
Designed:	AJS	Approved:	GW		
Date:	11/12/2015	Scale:	1:500	A1	Sheet:
Project Number:	3512983BP-HHR	Drawing Number:	ATM031	Revision:	
© Copyright Parsons Brinckerhoff					

3512983BP-HHR ATM034
 File Name: H:\H\H\U\OBS\3512983A-HHR HerefordTask - South Wye Transport Package SVT\FP\Belmont TP\Acad\ATM Oct 2015\ATM Drawings\ATM032 Holme Lacy Road.dwg
 242
 Log: Green, James
 Date: 04/01/2016 18:08:15
 Reproduced from the Ordnance Survey map with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown copyright and database rights [2015]
 Ordnance Survey [100024168]



SCHEME TO TIE INTO BALFOUR BEATTY DESIGNED WORKS AT THIS POINT

CYCLISTS TRAVELLING NORTH TO REJOIN CARRIAGEWAY AT TABLE TOP TO JOIN UP WITH EXISTING ROUTE

JUNCTION GIVEWAY MARKINGS AND CARRIAGEWAY CENTRE LINE TO BE RELAYED TO SUIT NEW JUNCTION GEOMETRY

EXISTING JUNCTION RADIUS TO BE REDUCED TO 6.0m WITH THE CONSTRUCTION OF NEW KERB LINES AND AREAS OF CYCLE/FOOTWAY CONSTRUCTION

EXISTING GRASSED VERGE AREA TO BE EXTENDED TO THE WEST WITH NEW KERB LINES AND 4.5m JUNCTION RADIUS CONSTRUCTED. NEW SECTION OF SHARED CYCLE/FOOTWAY TO BE CONSTRUCTED

NEW BLOCK PAVED TABLE TOP TO COVER HINTON ROAD JUNCTION WITH AND HOLME LACY ROAD

UNCONTROLLED PEDESTRIAN AND CYCLE CROSSING TO BE PROVIDED ACROSS JUNCTION BELMOUTH

UNCONTROLLED PEDESTRIAN AND CYCLE CROSSING TO BE PROVIDED ACROSS NEW TABLE TOP

EXISTING FOOTPATH TO BE WIDENED TO 3.0m AND REDIRECTED TO LINK WITH NEW UNCONTROLLED CROSSING

EXISTING FOOTWAY ON NORTH SIDE OF HOLME LACY ROAD TO BE WIDENED TO 3.0m, TO BECOME SHARED CYCLE/FOOTWAY. EXISTING VERGE TO BE UTILISED FOR WIDENING

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS

NOTE: WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE: WHERE NEW VERGE/PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACE BROKEN OUT AND REPLACED WITH TOPSOIL

NOTE: WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANING OUT (40mm) AND RESURFACING FOR HALF LANE WIDTH

Rev	Date	Description	By	Chk	App

FOR DISCUSSION



1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 768200



SOUTH WYE TRANSPORT PACKAGE

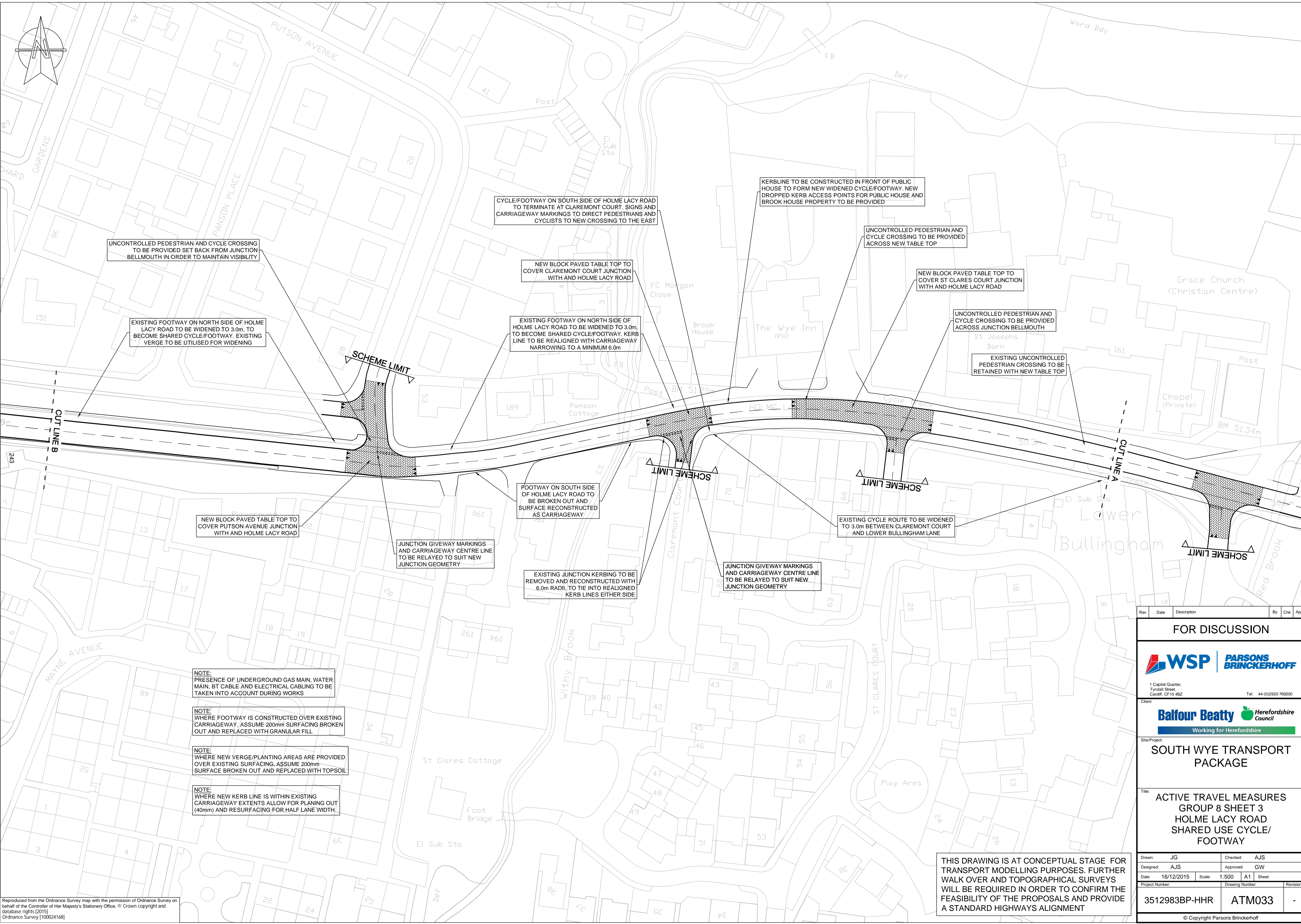
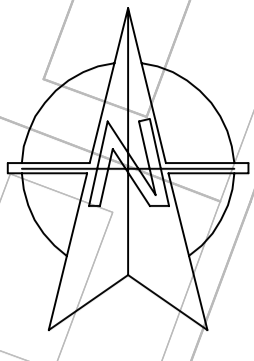
ACTIVE TRAVEL MEASURES GROUP 8 SHEET 2
 HOLME LACY ROAD SHARED USE CYCLE/FOOTWAY

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 16/12/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM034 -

© Copyright Parsons Brinckerhoff

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT



UNCONTROLLED PEDESTRIAN AND CYCLE CROSSING TO BE PROVIDED SET BACK FROM JUNCTION BELLMOUTH IN ORDER TO MAINTAIN VISIBILITY

EXISTING FOOTWAY ON NORTH SIDE OF HOLME LACY ROAD TO BE WIDENED TO 3.0m, TO BECOME SHARED CYCLE/FOOTWAY. EXISTING VERGE TO BE UTILISED FOR WIDENING

CYCLE/FOOTWAY ON SOUTH SIDE OF HOLME LACY ROAD TO TERMINATE AT CLAREMONT COURT. SIGNS AND CARRIAGEWAY MARKINGS TO DIRECT PEDESTRIANS AND CYCLISTS TO NEW CROSSING TO THE EAST

NEW BLOCK PAVED TABLE TOP TO COVER CLAREMONT COURT JUNCTION WITH AND HOLME LACY ROAD

EXISTING FOOTWAY ON NORTH SIDE OF HOLME LACY ROAD TO BE WIDENED TO 3.0m, TO BECOME SHARED CYCLE/FOOTWAY. KERB LINE TO BE REALIGNED WITH CARRIAGEWAY NARROWING TO A MINIMUM 6.0m

KERBLINE TO BE CONSTRUCTED IN FRONT OF PUBLIC HOUSE TO FORM NEW WIDENED CYCLE/FOOTWAY. NEW DROPPED KERB ACCESS POINTS FOR PUBLIC HOUSE AND BROOK HOUSE PROPERTY TO BE PROVIDED

UNCONTROLLED PEDESTRIAN AND CYCLE CROSSING TO BE PROVIDED ACROSS NEW TABLE TOP

NEW BLOCK PAVED TABLE TOP TO COVER ST CLARES COURT JUNCTION WITH AND HOLME LACY ROAD

UNCONTROLLED PEDESTRIAN AND CYCLE CROSSING TO BE PROVIDED ACROSS JUNCTION BELLMOUTH

EXISTING UNCONTROLLED PEDESTRIAN CROSSING TO BE RETAINED WITH NEW TABLE TOP

NEW BLOCK PAVED TABLE TOP TO COVER PUTSON AVENUE JUNCTION WITH AND HOLME LACY ROAD

JUNCTION GIVWAY MARKINGS AND CARRIAGEWAY CENTRE LINE TO BE RELAYED TO SUIT NEW JUNCTION GEOMETRY

FOOTWAY ON SOUTH SIDE OF HOLME LACY ROAD TO BE BROKEN OUT AND SURFACE RECONSTRUCTED AS CARRIAGEWAY

EXISTING JUNCTION KERBLING TO BE REMOVED AND RECONSTRUCTED WITH 6.0m RADII, TO TIE INTO REALIGNED KERB LINES EITHER SIDE

JUNCTION GIVWAY MARKINGS AND CARRIAGEWAY CENTRE LINE TO BE RELAYED TO SUIT NEW JUNCTION GEOMETRY

EXISTING CYCLE ROUTE TO BE WIDENED TO 3.0m BETWEEN CLAREMONT COURT AND LOWER BULLINGHAM LANE

NOTE:
 PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS

NOTE:
 WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE:
 WHERE NEW VERGE/PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACE BROKEN OUT AND REPLACED WITH TOPSOIL

NOTE:
 WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANING OUT (40mm) AND RESURFACING FOR HALF LANE WIDTH

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App

FOR DISCUSSION



1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 789200



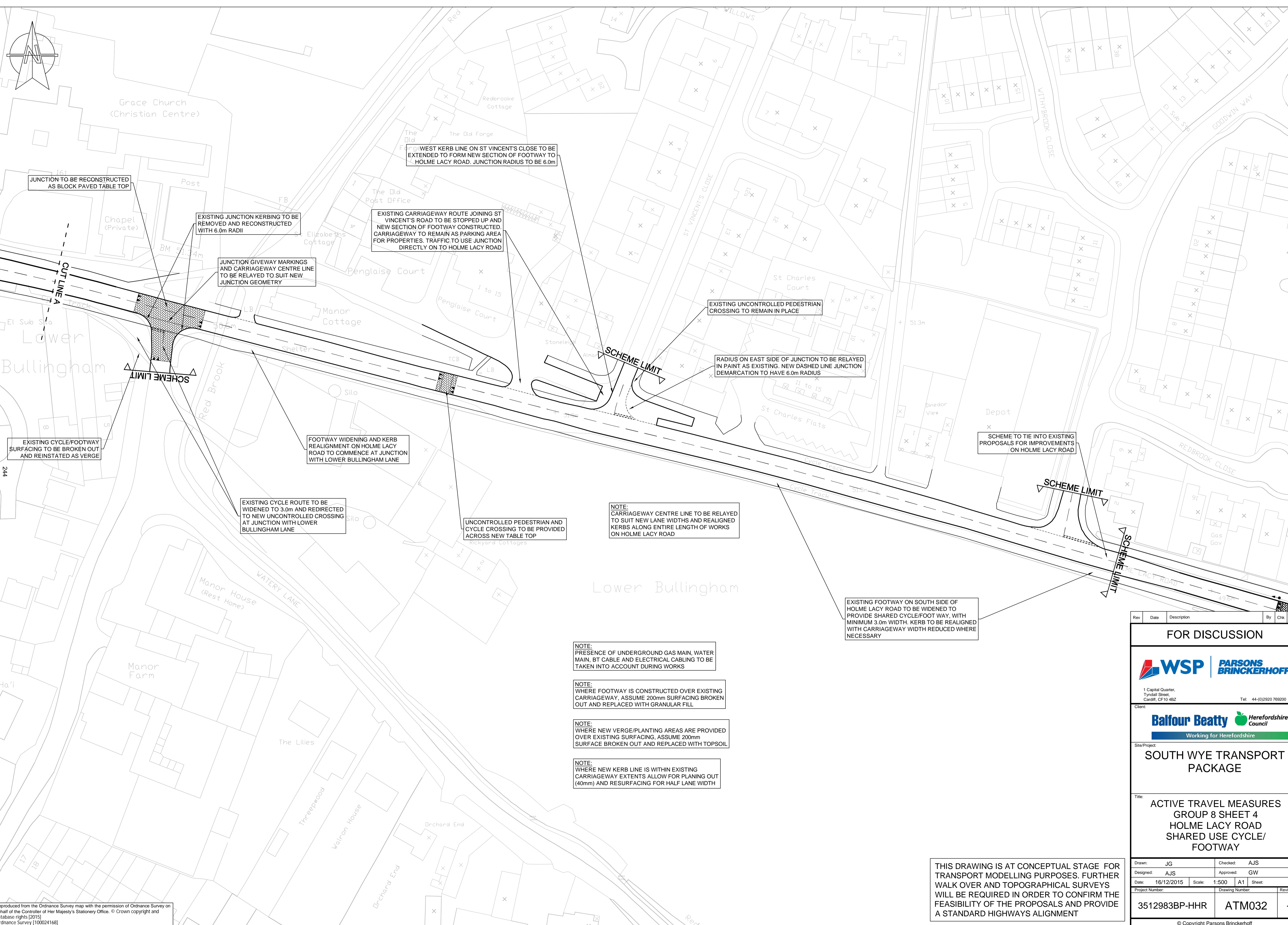
SOUTH WYE TRANSPORT PACKAGE

ACTIVE TRAVEL MEASURES GROUP 8 SHEET 3 HOLME LACY ROAD SHARED USE CYCLE/FOOTWAY

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 16/12/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM033 -
 © Copyright Parsons Brinckerhoff

3512983BP-HHR ATM032
 File Name: H:\H\H\U\OBS\3512983A-HHR Hereford\Task - South Wye Transport Package SWTP\Balmont TP\Acad\ATM Oct 2015\ATM Drawings\ATM032 Holme Lacy Road.dwg
 244
 Log: Green, James
 Date: 04/01/2016 18:05:55
 Reproduced from the Ordnance Survey map with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright and database rights [2015]
 Ordnance Survey [100024168]



JUNCTION TO BE RECONSTRUCTED AS BLOCK PAVED TABLE TOP

EXISTING JUNCTION KERBING TO BE REMOVED AND RECONSTRUCTED WITH 6.0m RADII

JUNCTION GIVEWAY MARKINGS AND CARRIAGEWAY CENTRE LINE TO BE RELAYED TO SUIT NEW JUNCTION GEOMETRY

EXISTING CARRIAGEWAY ROUTE JOINING ST VINCENT'S ROAD TO BE STOPPED UP AND NEW SECTION OF FOOTWAY CONSTRUCTED. CARRIAGEWAY TO REMAIN AS PARKING AREA FOR PROPERTIES. TRAFFIC TO USE JUNCTION DIRECTLY ON TO HOLME LACY ROAD

WEST KERB LINE ON ST VINCENT'S CLOSE TO BE EXTENDED TO FORM NEW SECTION OF FOOTWAY TO HOLME LACY ROAD. JUNCTION RADIUS TO BE 6.0m

EXISTING UNCONTROLLED PEDESTRIAN CROSSING TO REMAIN IN PLACE

RADIUS ON EAST SIDE OF JUNCTION TO BE RELAYED IN PAINT AS EXISTING. NEW DASHED LINE JUNCTION DEMARCATION TO HAVE 6.0m RADIUS

SCHEME TO TIE INTO EXISTING PROPOSALS FOR IMPROVEMENTS ON HOLME LACY ROAD

EXISTING CYCLE/FOOTWAY SURFACING TO BE BROKEN OUT AND REINSTATED AS VERGE

FOOTWAY WIDENING AND KERB REALIGNMENT ON HOLME LACY ROAD TO COMMENCE AT JUNCTION WITH LOWER BULLINGHAM LANE

EXISTING CYCLE ROUTE TO BE WIDENED TO 3.0m AND REDIRECTED TO NEW UNCONTROLLED CROSSING AT JUNCTION WITH LOWER BULLINGHAM LANE

UNCONTROLLED PEDESTRIAN AND CYCLE CROSSING TO BE PROVIDED ACROSS NEW TABLE TOP

NOTE: CARRIAGEWAY CENTRE LINE TO BE RELAYED TO SUIT NEW LANE WIDTHS AND REALIGNED KERBS ALONG ENTIRE LENGTH OF WORKS ON HOLME LACY ROAD

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS

NOTE: WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE: WHERE NEW VERGE/PLANTING AREAS ARE PROVIDED OVER EXISTING SURFACING, ASSUME 200mm SURFACE BROKEN OUT AND REPLACED WITH TOPSOIL

NOTE: WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS ALLOW FOR PLANING OUT (40mm) AND RESURFACING FOR HALF LANE WIDTH

EXISTING FOOTWAY ON SOUTH SIDE OF HOLME LACY ROAD TO BE WIDENED TO PROVIDE SHARED CYCLE/FOOT WAY, WITH MINIMUM 3.0m WIDTH. KERB TO BE REALIGNED WITH CARRIAGEWAY WIDTH REDUCED WHERE NECESSARY

Rev	Date	Description	By	Chk	App

FOR DISCUSSION



1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ
 Tel: 44-(0)2920 768200

Client: **Balfour Beatty** Herefordshire Council
 Working for Herefordshire

Site/Project: **SOUTH WYE TRANSPORT PACKAGE**

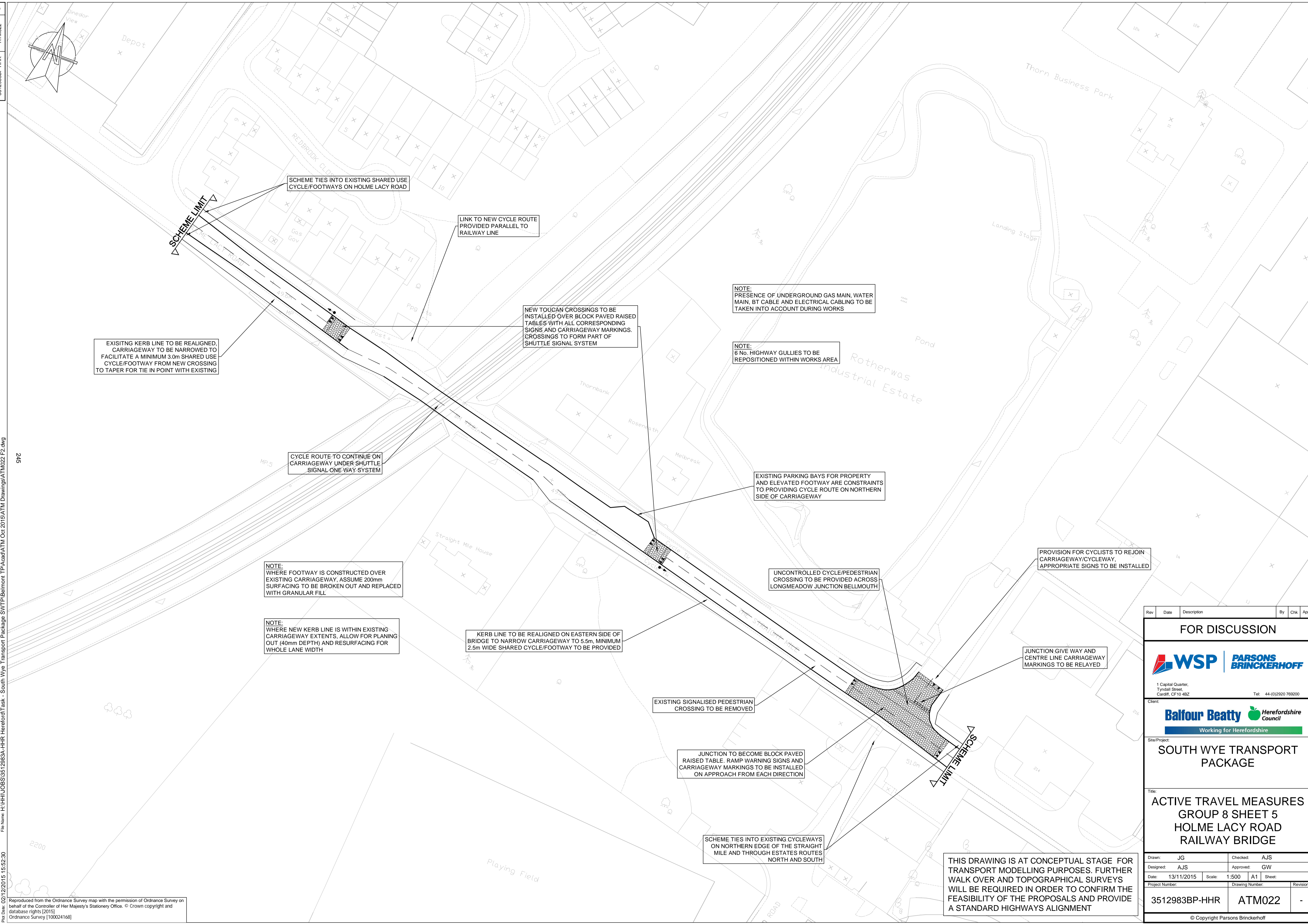
Title: **ACTIVE TRAVEL MEASURES GROUP 8 SHEET 4 HOLME LACY ROAD SHARED USE CYCLE/FOOTWAY**

Drawn: JG	Checked: AJS
Designed: AJS	Approved: GW
Date: 16/12/2015	Scale: 1:500 A1 Sheet:
Project Number:	Drawing Number:

3512983BP-HHR ATM032 -

© Copyright Parsons Brinckerhoff

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT



EXISTING KERB LINE TO BE REALIGNED. CARRIAGEWAY TO BE NARROWED TO FACILITATE A MINIMUM 3.0m SHARED USE CYCLE/FOOTWAY FROM NEW CROSSING TO TAPER FOR TIE IN POINT WITH EXISTING

SCHEME TIES INTO EXISTING SHARED USE CYCLE/FOOTWAYS ON HOLME LACY ROAD

LINK TO NEW CYCLE ROUTE PROVIDED PARALLEL TO RAILWAY LINE

NEW TOUCAN CROSSINGS TO BE INSTALLED OVER BLOCK PAVED RAISED TABLES WITH ALL CORRESPONDING SIGNS AND CARRIAGEWAY MARKINGS. CROSSINGS TO FORM PART OF SHUTTLE SIGNAL SYSTEM

NOTE: PRESENCE OF UNDERGROUND GAS MAIN, WATER MAIN, BT CABLE AND ELECTRICAL CABLING TO BE TAKEN INTO ACCOUNT DURING WORKS

NOTE: 6 No. HIGHWAY GULLIES TO BE REPOSITIONED WITHIN WORKS AREA

CYCLE ROUTE TO CONTINUE ON CARRIAGEWAY UNDER SHUTTLE SIGNAL ONE WAY SYSTEM

EXISTING PARKING BAYS FOR PROPERTY AND ELEVATED FOOTWAY ARE CONSTRAINTS TO PROVIDING CYCLE ROUTE ON NORTHERN SIDE OF CARRIAGEWAY

NOTE: WHERE FOOTWAY IS CONSTRUCTED OVER EXISTING CARRIAGEWAY, ASSUME 200mm SURFACING TO BE BROKEN OUT AND REPLACED WITH GRANULAR FILL

NOTE: WHERE NEW KERB LINE IS WITHIN EXISTING CARRIAGEWAY EXTENTS, ALLOW FOR PLANING OUT (40mm DEPTH) AND RESURFACING FOR WHOLE LANE WIDTH

KERB LINE TO BE REALIGNED ON EASTERN SIDE OF BRIDGE TO NARROW CARRIAGEWAY TO 5.5m. MINIMUM 2.5m WIDE SHARED CYCLE/FOOTWAY TO BE PROVIDED

UNCONTROLLED CYCLE/PEDESTRIAN CROSSING TO BE PROVIDED ACROSS LONGMEADOW JUNCTION BELLMOUTH

PROVISION FOR CYCLISTS TO REJOIN CARRIAGEWAY/CYCLEWAY, APPROPRIATE SIGNS TO BE INSTALLED

EXISTING SIGNALISED PEDESTRIAN CROSSING TO BE REMOVED

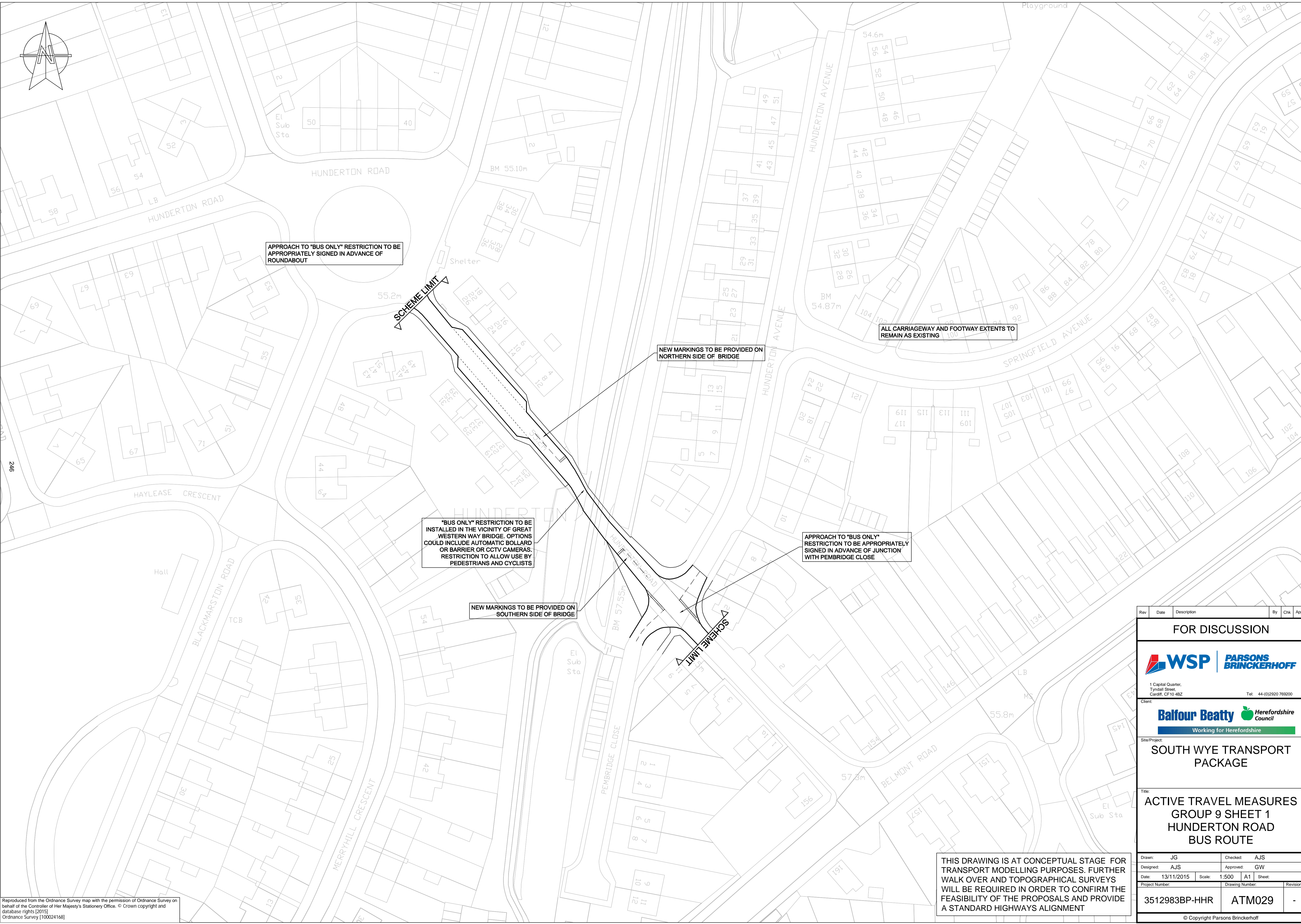
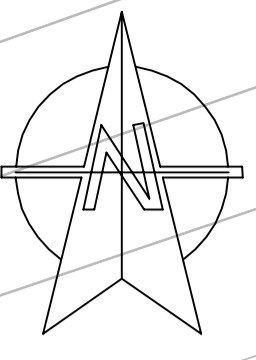
JUNCTION TO BECOME BLOCK PAVED RAISED TABLE. RAMP WARNING SIGNS AND CARRIAGEWAY MARKINGS TO BE INSTALLED ON APPROACH FROM EACH DIRECTION

JUNCTION GIVE WAY AND CENTRE LINE CARRIAGEWAY MARKINGS TO BE RELAYED

SCHEME TIES INTO EXISTING CYCLEWAYS ON NORTHERN EDGE OF THE STRAIGHT MILE AND THROUGH ESTATES ROUTES NORTH AND SOUTH

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 788200					
Client: Working for Herefordshire					
SOUTH WYE TRANSPORT PACKAGE					
ACTIVE TRAVEL MEASURES GROUP 8 SHEET 5 HOLME LACY ROAD RAILWAY BRIDGE					
Drawn:	JG	Checked:	AJS		
Designed:	AJS	Approved:	GW		
Date:	13/11/2015	Scale:	1:500	A1	Sheet:
Project Number:	3512983BP-HHR	Drawing Number:	ATM022	Revision:	
© Copyright Parsons Brinckerhoff					



APPROACH TO "BUS ONLY" RESTRICTION TO BE APPROPRIATELY SIGNED IN ADVANCE OF ROUNDABOUT

SCHEME LIMIT

NEW MARKINGS TO BE PROVIDED ON NORTHERN SIDE OF BRIDGE

ALL CARRIAGEWAY AND FOOTWAY EXTENTS TO REMAIN AS EXISTING

"BUS ONLY" RESTRICTION TO BE INSTALLED IN THE VICINITY OF GREAT WESTERN WAY BRIDGE. OPTIONS COULD INCLUDE AUTOMATIC BOLLARD OR BARRIER OR CCTV CAMERAS. RESTRICTION TO ALLOW USE BY PEDESTRIANS AND CYCLISTS

APPROACH TO "BUS ONLY" RESTRICTION TO BE APPROPRIATELY SIGNED IN ADVANCE OF JUNCTION WITH PEMBRIDGE CLOSE

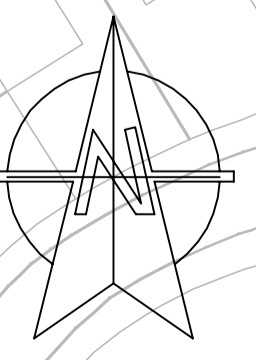
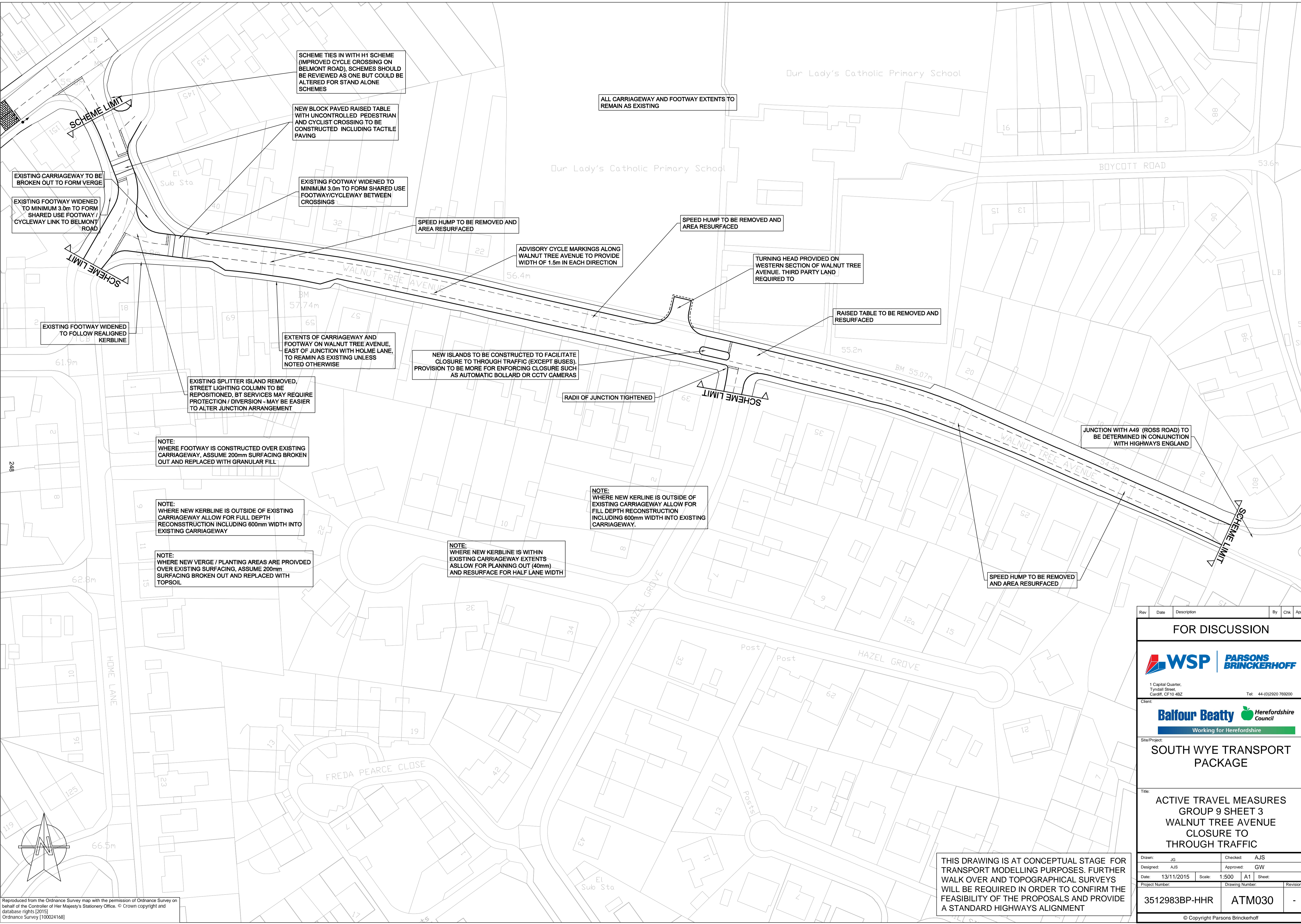
NEW MARKINGS TO BE PROVIDED ON SOUTHERN SIDE OF BRIDGE

SCHEME LIMIT

THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 788200					
Client: Working for Herefordshire					
Site/Project: SOUTH WYE TRANSPORT PACKAGE					
Title: ACTIVE TRAVEL MEASURES GROUP 9 SHEET 1 HUNDERTON ROAD BUS ROUTE					
Drawn: JG	Checked: AJS				
Designed: AJS	Approved: GW				
Date: 13/11/2015	Scale: 1:500	A1	Sheet:		
Project Number:	Drawing Number:	Revision:			
3512983BP-HHR	ATM029	-			
© Copyright Parsons Brinckerhoff					

3512983BP-HHR ATM030
 File Name: H:\H1\H1\UOSS\3512983A-HHR HerefordTask - South Wye Transport Package SWTP\Belmont TP\Acad\T1M Oct 2015\T1M Drawings\ATM030 J3.dwg
 Logon: Green, James
 Plot Date: 02/12/2015 15:43:44
 Reproduced from the Ordnance Survey map with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright and database rights [2015]
 Ordnance Survey [100024168]



THIS DRAWING IS AT CONCEPTUAL STAGE FOR TRANSPORT MODELLING PURPOSES. FURTHER WALK OVER AND TOPOGRAPHICAL SURVEYS WILL BE REQUIRED IN ORDER TO CONFIRM THE FEASIBILITY OF THE PROPOSALS AND PROVIDE A STANDARD HIGHWAYS ALIGNMENT

Rev	Date	Description	By	Chk	App
FOR DISCUSSION					
1 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ Tel: 44-(0)2920 768200					
Client: 					
Site/Project: SOUTH WYE TRANSPORT PACKAGE					
Title: ACTIVE TRAVEL MEASURES GROUP 9 SHEET 3 WALNUT TREE AVENUE CLOSURE TO THROUGH TRAFFIC					
Drawn: JG			Checked: AJS		
Designed: AJS			Approved: GW		
Date: 13/11/2015		Scale: 1:500		A1 Sheet:	
Project Number:		Drawing Number:		Revision:	
3512983BP-HHR			ATM030		
© Copyright Parsons Brinckerhoff					

Appendix J

COMPARATIVE STUDY



TECHNICAL NOTE

DATE	12 January 2018	CONFIDENTIALITY	Internal
SUBJECT	Comparative study into the relationship between category of active travel infrastructure and additional active travel trips		
PROJECT	AUTHOR	CHECKED	APPROVED
Project no. 70020236	JR	JP	JC

1. INTRODUCTION

1.1. Methodology

A literature review has been undertaken to understand the relationship between specific interventions to cater for sustainable travel, and any associated transfer of trips to these travel modes. A range of existing research literature was reviewed in relation to infrastructure for active travel (walking and cycling), bus lanes and 20mph limits. The full list of sources reviewed is set out in section 6. Literature has been reviewed thematically, rather than by literature source.

2. ACTIVE TRAVEL INFRASTRUCTURE

2.1. Improved on-highway active travel infrastructure – specific UK examples

Published data on the change in numbers of journeys, mode share or transfer from other modes has proved difficult to identify. Examples where before and after data has been reported is set out in Table 1 below.

Table 1 – Change in travel behaviour associated with improvements to on-highway active travel infrastructure

Scheme location	Results	Source
Brighton – Lewes Road	14% increase from 2,085 to 2,383 daily cyclists, as measured by manual count surveys between 7am and 7pm	Brighton & Hove City Council 2013
Hull – reallocation of roadspace	Of the six sites monitored, one experienced an increase in cycling of 138%, three of between 20% and 30%, and two were had unchanged levels	DfT 2005
London - Cycle Superhighways	54% increase in cycle journeys on Victoria Embankment (East-West Cycle Superhighway) 55% increase in cycle journeys on Blackfriars Bridge (North-South Cycle Superhighway) 70% increase in cycle journeys on Vauxhall Bridge (Cycle Superhighway CS5)	TfL 2016
	105% increase in peak period cycle trips on Cycle Superhighways CS3 and CS7 two years after opening 40% increase in peak period cycle trips on Cycle Superhighways CS2 and CS8 one year after opening	TfL 2012

2.2. Off-highway traffic-free active travel infrastructure – specific UK examples

TfL monitored use of 6 of its newly-constructed Greenways, high-quality off-road routes for cycling and walking. The surveyed sites experienced an 18% increase in the number of users during the programme. 55% of those surveyed said they are walking more than a year ago and 59% said they intend to walk more in the next year. In similarity 21% said they are cycling more than a year ago and 31% intend to cycle more in the coming year (TfL 2014).

A study of 469 Cambridge commuters over time identified that people living closer to the guided busway (which has wide, continuous cycleway adjacent to it) were more likely to increase the time they spent cycling on the commute than those living further away from the busway/cycleway. Furthermore, the greatest effect on physical activity was reported in those commuters who were least active before the opening of the busway (Centre for Diet & Activity Research 2015).

2.3. Improving footways

Published data on the change in numbers of pedestrian journeys, mode share or transfer from other modes resulting from improved infrastructure has proved difficult to identify. The Mixed-Use Priority Routes project on Newland Avenue in Hull included footway widening from 1.1m to 1.6m at a pinch point under a railway bridge. Pedestrian flows increased by 59% to 1,700 per day (Young & Jones 2010). Elsewhere, pedestrian numbers 'rose slightly' after the implementation of the wider footways and improved crossings on Lyndhurst High Street (DfT 2005).

2.4. Infrastructure in general

There is much research to demonstrate the general link between improved infrastructure and increased active travel journeys.

Melia 2015 asserts that the main solution to overcome people's fear or dislike of mixing with motorised traffic that would persuade them to give it a try would be continuous separate cycle routes protecting them from traffic. Over half of the respondents surveyed from the Cycling Demonstration Towns agreed that they would cycle more if improvements were made to their local network (Sustrans et al 2009). The International Cycling Infrastructure Best Practice Study for Transport for London (Phil Jones Associates & Urban Movement 2014) found that 'The cities with the highest cycling levels, and those that have successfully grown cycling levels over relatively short periods, generally afford cycling good physical protection or effective spatial separation from motor traffic, unless traffic speeds and volumes are low.'

When non-cyclists and occasional-cyclists were asked what would help reduce the fear of traffic, the top answer was to separate traffic-free cycle routes. To attract new cyclists, routes must feel safe and comfortable to ride on (Melia 2015). This includes making crossings of route intersections feel safe for all that use them, which even Copenhagen has a goal to achieve (City of Copenhagen 2013). The World Health Organisation (WHO) assumes 50% of new users of infrastructure are cycling directly as a result of the infrastructure (Sustrans et al 2009a).

Providing routes separated from motorised traffic is estimated to lead to a rise of 3-5% in the modal share of bicycles (City of Copenhagen 2011). There are clear indications that modal shift to cycling has resulted from good infrastructure. Bike counts in Philadelphia in 2014 confirmed that higher quality infrastructure improves both the number of cyclists and their behaviour. Bicycle Coalition of Greater Philadelphia (BCGP) found that all cyclists are attracted to high-quality infrastructure. BCGP counts show streets with bike lanes with a protective buffer from traffic carry 78% more cyclists than streets with standard lanes (132 vs. 74 bikes per hour), and 131% more cyclists (132 vs. 57) than streets with no bike lane (BCGP 2014). This gives a good indication that providing good quality cycle infrastructure results in an increase in cycling.

2.5. Combination of soft and hard measures (Cycling Demonstration Towns)

The aim of the Cycling Demonstration Town project in 2005 was to invest in measures to stimulate increased levels of cycling through a combination of physical infrastructure, promotion and other smart measures. The outcome of the project was reported on in 2009 (Sustrans et al 2009). The towns receiving funding included Aylesbury, Brighton and

Hove, Darlington, Derby, Exeter, and Lancaster with Morecambe. Only three of these places (Aylesbury, Darlington and Exeter), were comparable in size and characteristics to Hereford (limited river crossings and major roads dissecting the urban area), shown in Appendix A.

The reported average increase in cycling of 27% in the Cycling Demonstration Towns (with data from automatic cycle counters) was in line with growth achieved in London over the same period since 2005, and equated to an average annual growth rate of 6.2%. This was similar to the top of the range average for European cities (Sloman et al, 2009).

All of the Cycling Demonstration Towns showed an increase in adult and children cycling as a mode of travel, with the proportion of pupils travelling to school by bike increasing by 174%. Around half of the increase in cycling appears to have been the result of a reduction in car and bus mode share, with the rest of the increase being the result of modal shift from walking.

This increase in cycling levels was attributed to a range of factors; changes to infrastructure such as new facilities at schools, signage, cycle parking, and improvement in leisure routes, but also PTP, school travel plans, workplace engagement programmes, cycle events and cycle training.

One of the key results highlighted by the Cycle Demonstration Towns is the importance of high quality cycle provision, such as:

- § A well-defined and well-promoted dense network of routes can stimulate notable growth in cycling activity in the area it serves;
- § High quality, well connected routes carry considerable volumes of cycle traffic; extending the connectivity of a route can stimulate growth in cycling across the day, even on a heavily used route;
- § Infrastructure linking a wider network through overcoming a barrier to cycling can be a focal point for cycling activity in a town; and
- § Well monitored connecting infrastructure can provide a very useful basis for estimating total cycling activity (Sustrans et al 2009).

The DfT suggest the greatest take-up of cycling and walking results from a combination of 'hard' (infrastructure) measures, complemented by promotional and campaign (soft) measures (DfT 2009a) . Similarly the City of Copenhagen (2011) states that there is no single method leading to increased cycle modal share; a broad array of initiatives must be put into place: both physical and non-physical, both expensive and inexpensive.

2.6. Other factors influencing cycle use

TfL found that surveys identified seven major factors which discourage people from cycling: (i) danger, (ii) effort, (iii) poor cycling environment, (iv) weather, (v) cycle theft, (vi) lack of information and skills and (vii) culture/attitude/credibility. Of these, the first three were most frequently mentioned (Gallagher & Parkin 2014).

Similarly Urban Movement & Phil Jones Associates 2014 'found a range of conditions to be common in most cities with mature cycling cultures, recent significant growth in cycling, or a commitment to growing cycling. Together, these conditions comprise what could be considered an ideal basis for growing cycling.' These conditions included political and technical pro-cycling support, long-term commitment, investing in cycling being part of an integrated approach to decreasing car mode share, clarity about the intended cycling network, respectful driving culture, avoiding compromise designs and clear and widely-used design guidance (Urban Movement & Phil Jones Associates 2014).

Some of these selected other factors are considered further below.

Politics

Politics is considered critical to achieving increased cycling. Melia 2015 quotes TfL's director of Strategy and Planning who stated 'There is a helpful mix of politics, provision and attitude... the first mayor of London had a very explicit agenda to encourage and enable people to use their car less... the second mayor has sought to differentiate himself in being more balanced between modes, but has not engaged in a major programme of road building. There has been a clear political commitment to supporting sustainable travel, in Boris's case, particularly, the bike. Secondly, the

physical and transport choice environment makes it easier for people who could afford a car not to do so...' (Melia 2015 : 178)

Evidence from the Cycling Demonstration Towns suggests a political determination to increase cycling levels, coupled with carefully considered strategy and modest investment may be expected to cause an increase cycling levels between 10% and 50%.

In a similar vein, government support was identified in research by the Dutch Ministry of Traffic & Water Management as a major reason why Dutch cycling levels recovered in the 1970s after years of decline (Gallagher & Parkin 2014).

Levels of Investment

Spending greater amounts per head per year on cycle infrastructure is associated per se with increased cycling levels and is used as a rough gauge to indicate what expenditure is required to substantially increase cycling. The Dutch invest £24 per head per year, considerably more than England's average spend of £2 per head and Scotland's £4 spend per head (All Party Parliamentary Cycling Group, 2013). London's ambition is to spend £12.50 per head, and even this is still half the per capita Dutch expenditure.

A sustained and well-designed programme of investment in cycling at about the level of £10 per head of the population per year, as seen in the Cycle Demonstration Towns, was sufficient to achieve and increase in cycling (DfT 2009). This is the recommended minimum level promoted by the All Party Parliamentary Cycling Group (2013). Per capita investment varied between the individual project towns, with Darlington spending the most at £14 per head (Sloman et al, 2010 : 19).

Journey speed

Over half (56%) of Copenhagen cyclists say that the main reason they choose the bicycle is because it is the fastest way to get around. A 10% reduction in travel times for bicycles gives 1-2% more bicycle trips (City of Copenhagen, 2011).

Soft measures (promotion and information)

There are many examples where soft measures have led to an increase in active travel. One example is Sutton in Greater London developed a £5 million behaviour change campaign entitled 'Smarter Travel Sutton'. Methods included information dissemination, PTP, business and school travel planning, and pocket maps of walking, cycling and public transport routes. By the end of year two, there was encouraging evidence of its impacts, including cycling levels up by 50% above the outer London trend since the first year, and a rise in bus use by 13%. This highlights that it is not just infrastructure that allows a modal shift (DfT 2009a).

Traffic Restraint Methods

Three European towns, Lyon, Freiburg and Groningen in France, Germany and the Netherlands, were studied as examples of good transport practice and research has indicated that each of them had placed restrictions on motor traffic in some way (Melia 2015). This ranged from pedestrianisation of main areas, residents' parking schemes, removal of on-street parking, and restricting speeds of traffic. However, such interventions were coupled with sustainable travel schemes such as giving cyclists right of way, increasing cycle parking at the stations, city-wide bike hire schemes, and some infrastructure improvements.

3. BUS LANES

DfT 2001 reported that, in Edinburgh, bus priority corridors known as Greenways have contributed to an increase of 3% in bus use over a two year period. It also stated that modelling indicates that implementing extensive bus lanes could reduce travel by car by up to 6%. Reduction in car travel was however estimated using stated preference modelling of current car users, rather than direct measurement.

The Greater Bristol Bus Network aimed to improve the bus passenger experience and reduce emissions with a combination of new buses, new shelters, new real-time information displays, priority signals and bus priority lanes

(West of England Authorities 2014). The measures resulted in increased patronage on all corridors where it was introduced. First Bus (the dominant operator in the city) reported an increase in patronage of 17.6% between 2008/09 and 2013/14 on its services on the GBBN routes. However, as all measures were introduced concurrently, it is not possible to predict how much was attributable to bus lanes alone.

The reallocation of one of two lanes of the Lewes Road dual carriageway in Brighton as a bus lane was associated with a 7% increase in passengers using buses on the corridor from 2012 to 2013/14. A similar percentage increase in passengers boarding buses was recorded at stops in the wider Lewes Road area. This compares to a 4% increase citywide. Meanwhile, general traffic on Lewes Road reduced by 13% (Brighton & Hove City Council 2013).

The government best practice document entitled *Bus Priority: The Way Ahead* (DfT, 2004) highlighted a number of case studies for UK cities. The document cites Oxford as an example of a city where bus priority measures have led to modal shift from car to bus and an 80% increase in bus patronage between 1985 and 1998. However, a mixture of interventions may have contributed to modal shift in this case, not just implementation of bus lanes, as bus priority measures coincided with the introduction of park & ride and pedestrianisation in Oxford city centre during this period.

Enoch 2003 concluded that properly implemented bus lanes have succeeded in persuading car users to switch modes to bus where the journey time resulting from the intervention is consistently, and significantly, less than that of the car. A series of bus priority measures were introduced. However, these coincided with the introduction of other measures (newer vehicles, more frequent services), so it is difficult to be entirely certain as to the impact bus lanes on their own would have had. Patronage has increased on all of the routes where bus priority measures were put in place. After three years patronage on inbound peak-time (07:00-09:15) bus services had increased from 138,500 in 1999 to 191,500 (38% increase) by 2002. Cordon counts suggest that the modal share of bus increased from 36.8% to 40.5% overall, while it increased by 232% on one route. Count data show that 60-65% of new bus users switched from travelling by car.

4. 20MPH LIMITS

Two research studies into the impact of 20mph zones were found which investigated the associated change in walking and cycling trips – one for Bristol City Council (2012) and one for Edinburgh City Council (2013).

In relation to walking a proportion of those surveyed in Bristol stated they walk more since the new speed limits were introduced (8% in inner south zone and 18% in inner east zone). In the inner south area, pedestrian activity increased by 1% on a weekday and 12% on the weekend. In the inner east area, pedestrian activity increased by between 10% (rain affected survey days) and 15% on a weekday and between 21% (rain affected) and 36% on the weekend. In relation to crossing the road, there was very little change in the proportion of respondents who thought it was unsafe to cross the road in Bristol inner south and inner east pilot zones. Respondents in Edinburgh indicated a small rise in the number of schoolchildren reported to be walking to school from 63% to 65%. Whilst the Bristol study found indications that overall levels of walking and cycling activity across the pilot areas have increased both at weekends and on weekdays, it was not possible to confidently state that these changes were due solely to the introduction of the new lower speed limit.

In relation to cycling, a rise in schoolchildren cycling to school was reported in Edinburgh, from 4% to 12% of respondents. The Bristol inner south area saw a total increase in weekday cycling levels of 4% and weekend cycling by 12%. The inner east area saw a total increase in weekday cycling levels of between 8% (rain affected) and 23% and weekend cycling by between 22% (rain affected) and 37%.

5. CONCLUSION OF LITERATURE REVIEW

Evidence is available to demonstrate the positive relationship between providing good quality active travel infrastructure and 20mph zones and increased levels of walking and cycling. Similarly evidence demonstrates the relationship between implementing bus lanes and rising bus patronage. The association is presented is usually shown

¹ Figures for 2013 are based on usage up to November 2013 and projected to the end of the year

in data as % increase in numbers of journeys by the mode in question and more occasionally as a change in mode share.

Schemes taken together as a package are likely to give rise to a greater degree of change than any scheme in isolation and this makes it difficult to identify the change in travel behaviour attributable to any one type of intervention or any specific element in a package of measures. In similarity identifying a universally applicable average change in travel is challenging as no two places or schemes are the same and the change in behaviour is therefore likely to vary.

Consideration must also be given to reporting bias, whereby the case studies reported are those which demonstrate the most desirable results or the highest degree of change and other examples, with less impact, are not fully reported. Likewise some reports do not make it clear the degree to which changes to bus patronage or walking and cycling levels were common to the area as a whole, or restricted to the area in which the scheme was implemented.

Evidence also indicates the importance of a wide range of supporting factors which strengthen the change to active travel journeys, and cycling in particular. They include political support, long-term commitment, avoiding compromise designs, coherence of overall routes, speed of journey, investing in cycling measures being part of an integrated approach to decreasing car mode share, information and skills and a respectful driving culture.

6. TRANSLATING RESEARCH INTO ASSUMPTIONS

Table 2 overleaf uses the conclusions of the research data above and sets out a proposed approach for forecasting the change in travel behaviour anticipated to arise with the introduction of new active travel infrastructure in South Hereford.

Table 2 – Assumptions on level of additional active travel trips likely to be generated by active travel infrastructure

Category of active travel infrastructure		Improvement groups with category of active travel infrastructure	Min & Max mode shift / vehicle trip reduction (based on literature review)	Level of additional active trips likely to be generated	Justification for approach
High-quality on-highway cycling infrastructure (segregated from motor vehicles) – e.g. cycle superhighways		2, 3, 5, 6, 7, 8	3-5% change in modal share	Higher levels of additional active travel demand	Middle position assumed to exclude schemes with the very highest or lowest impact. 3-5% is based on Copenhagen; whilst baseline active travels are high this is likely to dampen levels of increase there
			0%, 14%, 25%, 30%, 54%, 55%, 70% 138% increase in cycle journeys as measured on specific routes 40% and 105% increase in cycle journeys in peak periods 27% change in town-wide cycle use over duration of project (where combined with soft measures)		Assume a middle position to exclude schemes with the very highest or lowest impact
High quality off-highway active travel infrastructure – e.g. greenways		3, 5, 6, 7	18% increase in users on specific routes 27% change in town-wide cycle use (where combined with soft measures)	Higher levels of additional active travel demand	Use data form Greenways as proxy
Streetscape improvements		3	No specific evidence found in literature review	Medium levels of additional active travel demand	Streetscape improvements considered likely to lead to benefit walking trips comparatively more than cycling trips. Level of change will depend on the level of transformative change and length of route improved
Other major active infrastructure changes	New/upgraded A road crossings	2, 3, 4, 5, 6, 7, 8, 9	No specific evidence found in literature review	Higher levels of additional active travel demand	Overcoming severance or substantially reducing perceived danger or volumes of traffic considered likely to have significant impact on trips, with greater impact on cycling than on walking trips
	Priority working to make room for active travel	8			
	Traffic reduction measures via TRO	9			
Minor active travel infrastructure changes	Removal of barriers	5	No evidence found in literature review	Lower levels of additional active travel demand	Minor infrastructure considered to only have minor impact of numbers of active travel trips
	Upgrading footways etc.	1, 3, 5, 7, 8, 9			
	Kerb build-outs	1, 3, 5, 6, 7, 8, 9			
20mph limits		1	1-15% increase in pedestrian activity 2 percentage points increase in walking to school 8 percentage points increase in cycling to school 4-23% increase in cycling activity	Lower levels of additional active travel demand	Assume middle position to exclude schemes with the very highest or lowest impact
30mph limits			No evidence found in literature review	Lower levels of additional active travel demand	Assume minimal / no change in trips unless complementary provision of infrastructure along affected section of road
Weight restriction		4	No evidence found in literature review	Lower levels of additional active travel demand	Assume minimal / no change in trips unless complementary provision of infrastructure along affected section of road
Bus Lanes		2	3 – 38% increase in bus use in specific case studies	Medium levels of additional active travel demand	Many of the case studies relate to bus lanes introduced over very long corridors or combined with other interventions

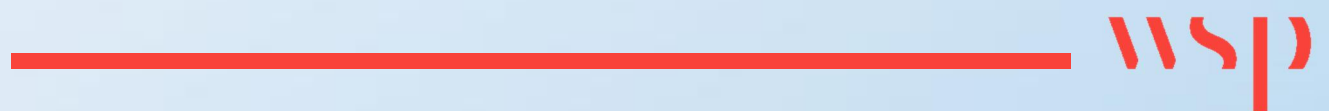
7. SOURCES

- All Party Parliamentary Cycling Group 2013. *Get Britain Cycling; Summary and Recommendations*, London: All Party Parliamentary Cycling Group <https://allpartycycling.files.wordpress.com/2013/04/get-britain-cycling1.pdf>
- Bicycle Coalition of Greater Philadelphia 2014. *Bike PHL Facts*, Philadelphia, USA: Bicycle Coalition of Greater Philadelphia. <http://bicyclecoalition.org/wp-content/uploads/2014/08/Bike-PHL-Facts-report1web.pdf>
- Brett and Menzies, 2014 *Cambridgeshire Guided busway, UK – an analysis of usage* <http://www.icevirtuallibrary.com.ezproxy.uwe.ac.uk/doi/pdf/10.1680/tran.12.00091>
- Brighton & Hove City Council 2013 Lewes Road Scheme Post-Construction Monitoring Report November 2013 <https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/Lewes%20Road%20-%20November%202013%20Monitoring%20Report.pdf>
- Bristol City Council 2012 *20mph speed limit pilot areas monitoring report* <http://www.bristol20mph.co.uk/wp-content/uploads/2016/06/20mph-Monitoring-Report-pilot-areas-2012.pdf>
- Centre for Diet & Activity Research 2015 *Cambridgeshire 'guided busway' encouraging people to be more active on the commute* Press release November 12 2015 <http://www.cedar.iph.cam.ac.uk/blog/cambridgeshire-guided-busway-encouraging-people-to-be-more-active-on-the-commute/>
- City of Copenhagen, 2011. *Good, Better, Best. The City of Copenhagen's bicycle strategy 2011-2025*, Copenhagen : The City of Copenhagen Technical and Environmental Administration Traffic Department <http://www.cycling-embassy.dk/2012/01/20/good-better-best-the-city-of-copenhagens-bicycle-strategy-2011-2025/>
- City of Copenhagen, 2013. *City of cyclists - Copenhagen bicycle life*, Copenhagen: City of Copenhagen Technical and Environmental Administration, Traffic Department http://kk.sites.itera.dk/apps/kk_pub2/pdf/1135_OlhinEvp0h.pdf
- DfT 2001 *Traffic Advisory Leaflet 6/01 Bus priority* <http://www.ukroads.org/webfiles/tal06-01.pdf>
- DfT 2004 *Bus Priority: The Way Ahead* <http://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/pgr/regional/buses/bpf/busprioritythewayahead12/rioritythewayaheadpdfversion.pdf>
- DfT 2005 *Walking and cycling – success studies* <http://webarchive.nationalarchives.gov.uk/20100402174045/http://dft.gov.uk/pgr/sustainable/walking/success/>
- DfT 2009a. *Delivering Sustainable low carbon travel: An essential guide for local authorities*, London: Department for Transport. <http://webarchive.nationalarchives.gov.uk/20110601225637/http://www.dft.gov.uk/pgr/sustainable/guidelocalauth/pdf/lowcarbontravel.pdf>
- Edinburgh City Council 2012 South Central Edinburgh 20mph Limit Pilot Evaluation- Transport & Environment Committee Report, Tuesday, 27 August 2013 http://www.edinburgh.gov.uk/meetings/meeting/3067/transport_and_environment_committee
- Enoch, M. P. 2003 *Getting the bus to work: why quality bus corridors work in Dublin* https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/3414/1/enoch_tec_dublin_quality_bus_corridors.pdf

- Gallagher & Parkin 2014 *Planning for Cycling* Chartered Institution of Highways & Transportation <http://www.ciht.org.uk/download.cfm/docid/A462E2ED-886F-491E-BDCAD6B7B4DB7E6E>
- Hensher, D., Mulley, C. & Yahya, N. (2009) *Passenger experience with quality-enhanced bus services: Tyne & Wear 'Superoute' services* <http://link.springer.com/article/10.1007/s11116-009-9240-x>
- Juice FM 107.2 2015 *Hove Cycle Lane Praised By Experts* <http://www.juicebrighton.com/news/local-news/hove-cycle-lane-praised-by-experts/>
Accessed on 13 November 2015
- London Assembly Transport Committee 2010 *Pedal power: the cycle hire scheme and cycle Superhighways November 2010* <https://www.london.gov.uk/sites/default/files/FINAL%20REPORT.pdf>
- Melia, S., 2015 *Urban Transport without the hot air*, Cambridge: UIT Cambridge Ltd.
- Sloman L, Cavill N, Cope A, Muller L, Kennedy A , 2009 *Analysis and synthesis of evidence on the effects of investment in six Cycling Demonstration Towns*, November 2009 Department for Transport and Cycling England.
http://campusmedia.eurist.info/images/a/a7/Cycling_England_Analysis_and_Synthesis_on_Effects_of_Investment_Nov_2009.pdf
- Sustrans, Bolton University & ITS, 2009 *Cycling Demonstration Towns Monitoring Report 2006 - 2009*, UK: Sustrans.
<http://webarchive.nationalarchives.gov.uk/20110407094607/http://www.dft.gov.uk/cyclingengland/site/wp-content/uploads/2009/12/cdts-monitoring-project-report-2006-09.pdf>
- Sustrans, DfT, Cavill Associates, London Southbank University, 2009a *Cycling demonstration towns - an economic evaluation*, UK: Sustrans [temporarily withdrawn online]
- Urban Movement & Phil Jones Associates 2014 *International Cycling Infrastructure Best Practice Study* December 2014 <http://content.tfl.gov.uk/international-cycling-infrastructure-best-practice-study.pdf>
- Transport for London 2012 *Barclays Cycle Superhighways – CycleCities – London Borough of Merton presentation 7th December 2012* <http://www.cyclecities.eu/data-en/file/Cycle%20Superhighways%20-%20TfL.pdf>
- Transport for London 2016 *Update on the implementation of the Quietways and Cycle Superhighways programmes* <http://content.tfl.gov.uk/pic-161130-07-cycle-quietways.pdf>
- Young, A. & Jones, P. 2010 (eds) *Manual for Streets 2 – Wider Application of the Principles* <https://www.gov.uk/government/publications/manual-for-streets-2>
- West of England Authorities 2014 *The Greater Bristol Bus Network: Showcase Routes: Summary (June 2014)* <http://travelwest.info/wp-content/uploads/2015/03/gbbsn-summary-of-monitoring-report.pdf>

Appendix K

APPRAISAL SUMMARY TABLES OF
ACTIVE TRAVEL MEASURES



Appraisal Summary Table		Improvement Group 1		Date completed:	31/01/2018	Contact:	
Name of scheme:		20mph residential areas				Name	JP
Description of scheme:		Elements - Area-wide 20mph limit on all Herefordshire Council residential roads in South Wye, with 20mph limit signs at entry points and repeater signs - Amending junction designs, focused on the widest bellmouth junctions on the Hunderton Estate west of Great Western Way and north of Belmont Road				Organisation	WSP
						Role	Promoter/Official
Impacts		Summary of key impacts			Assessment Significance		
Economy	Journey time savings for business users and transport providers	Neutral		0	3		
	Reliability Impacts on Business users (decongestion)	Moderate beneficial impact - performs well across some but not all of the four chosen assessment criteria.		2			
	Regeneration and Wider Economic Impacts	Slight impact - less well-related to areas of areas of regeneration, employment or housing growth.		1			
Environment	*Traffic Noise	Moderate beneficial impact - reduction in vehicle trips.		2	6		
	*Air Quality	Moderate beneficial impact - reduction in vehicle trips.		2			
	*Greenhouse gases	Moderate beneficial impact - reduction in vehicle trips.		2			
	Landscape	Neutral		0			
	Townscape	Neutral		0			
	Historic Environment	Neutral		0			
	Biodiversity	Neutral		0			
Water Environment	Neutral		0				
Society	Reliability and connectivity impacts for non-business users	Moderate beneficial impact - performs well across some but not all of the four chosen assessment criteria.		2	12		
	*Physical activity	Moderate beneficial impact - strongly meets two of the assessment criteria but only weakly meets the third.		2			
	Journey quality	Slight beneficial impact - reduced vehicle speeds and shorter crossing distances for pedestrians at junctions.		1			
	*Accidents	Slight beneficial impact - average speeds of motor vehicles would reduce.		1			
	Security	Neutral		0			
	Accessibility to services	Slight beneficial impact - minor improvements to routes to bus stops.		1			
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.		3			
	Severance	Moderate beneficial impact - pedestrians will be able to cross roads more easily with junction redesigns and 20mph zones.		2			
Public Accounts	Option and non-use values	Neutral		0	2		
	Cost to Broad Transport Budget	Moderate value for money - £1.09m		2			
	Indirect Tax Revenues	N/A		0			

Appraisal Summary Table		Improvement Group 2		Date completed:	31/01/2018	Contact:	
Name of scheme:		Belmont Road bus priority measures				Name	JP
Description of scheme:		Elements - Inbound bus lane on the A465 (Hunderton Road to Asda Roundabout) - New shared use footway/cycleway on A465 - Belmont Road near Belmont Avenue - Upgrade existing crossing to toucan				Organisation	WSP
						Role	Promoter/Official
Impacts		Summary of key impacts		Assessment Significance			
Economy	Journey time savings for business users and transport providers	Large beneficial impact - especially cyclists, who are enabled the use of direct routes which would otherwise be avoided by the majority of existing or potential cyclists.	3	9			
	Reliability Impacts on Business users (decongestion)	Large beneficial impact - performs well across the majority of the four chosen assessment criteria, as well as there being benefits associated with bus priority.	3				
	Regeneration and Wider Economic Impacts	Large scale impact - improvement of connections in parts of South Wye that are undergoing transformative housing regeneration, including connections across the heavily trafficked Belmont Road. Bus accessibility into the city centre from these regenerated areas will also improve.	3				
Environment	*Traffic Noise	Moderate beneficial impact - reduction in vehicle trips.	2	6			
	*Air Quality	Moderate beneficial impact - reduction in vehicle trips.	2				
	*Greenhouse gases	Moderate beneficial impact - reduction in vehicle trips.	2				
	Landscape	Neutral	0				
	Townscape	Neutral	0				
	Historic Environment	Neutral	0				
	Biodiversity	Neutral	0				
Water Environment	Neutral	0					
Society	Reliability and connectivity impacts for non-business users	Large beneficial impact - provides direct connections between key origins and destinations.	3	17			
	*Physical activity	Moderate beneficial impact - strongly meets two of the assessment criteria but only weakly meets the third.	2				
	Journey quality	Large beneficial impact - provision of segregated cycling facilities where none exist at present and improvement to bus users' perception of their journey arising from the provision of the bus lane.	3				
	*Accidents	Moderate beneficial impact - new active travel routes segregated from traffic but beneficial impact not large as lower increase in active travellers.	2				
	Security	Neutral	0				
	Accessibility to services	Large beneficial impact - bus lane provision enhances accessibility to the city centre from	3				
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.	3				
	Severance	Slight beneficial impact - upgrading of crossing facilities.	1				
Option and non-use values	Neutral	0					
Public Accounts	Cost to Broad Transport Budget	Moderate value for money - £1.60m	2	2			
	Indirect Tax Revenues	N/A	0				

Appraisal Summary Table		Improvement Group 3		Date completed:	31/01/2018	Contact:	
Name of scheme:		Belmont Road walking and cycling improvements				Name	JP
Description of scheme:		Elements - Cycle infrastructure along section of Belmont Road from Tesco to Walnut Tree Avenue - Improvement of existing pelican crossing of Belmont Road by The Oval - Improved north-south crossings for pedestrians and cyclists at Tesco Roundabout and improved approach route from Eastholme Avenue - Upgrade Newton Brook path to shared use footway/cycleway, provide toucan crossing on Belmont Road and create new connecting shared use footway/cycleway to Goodrich Grove south of A465 - Streetscape improvements including avenue tree planting and narrowing of the Belmont Road carriageway - Improved links to Great Western Way				Organisation	WSP
						Role	Promoter/Official
Impacts		Summary of key impacts			Assessment Significance		
Economy	Journey time savings for business users and transport providers	Large beneficial impact - especially cyclists, who are enabled the use of direct routes which would otherwise be avoided by the majority of existing or potential cyclists.	3	9			
	Reliability Impacts on Business users (decongestion)	Large beneficial impact - performs well across the majority of the four chosen assessment criteria.	3				
	Regeneration and Wider Economic Impacts	Large scale impact - improvement of connections in parts of South Wye that are undergoing transformative housing regeneration, including connections across the heavily trafficked Belmont Road.	3				
Environment	*Traffic Noise	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3	14			
	*Air Quality	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3				
	*Greenhouse gases	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3				
	Landscape	Large beneficial impact - substantial tree planting proposed as part of the boulevard and conversion of existing carriageway space into green space.	3				
	Townscape						
	Historic Environment	Neutral	0				
	Biodiversity	Slight beneficial impact - substantial tree planting proposed.	1				
Water Environment	Slight beneficial impact - increase in permeable ground area and new planting.	1					
Society	Reliability and connectivity impacts for non-business users	Large beneficial impact - provides direct connections between key origins and destinations.	3	21			
	*Physical activity	Large beneficial impact - performs well across the majority of the three assessment criteria.	3				
	Journey quality	Large beneficial impact - provision of infrastructure segregated from vehicle traffic, additional crossings of Belmont Road plus shorter crossing distances of side roads.	3				
	*Accidents	Large beneficial impact - new cycling routes segregated from motor traffic in locations where the greatest number of new active travel journeys are likely to be generated, and also on routes with a history of pedestrian and cyclist casualties.	3				
	Security	Neutral	0				
	Accessibility to services	Large beneficial impact - proposals improve accessibility to bus stops on foot or by cycling.	3				
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.	3				
	Severance	Large beneficial impact - proposal includes a new controlled crossing for pedestrians and cyclists, and designs to enable easier crossing of side streets.	3				
Option and non-use values	Neutral	0					
Public Accounts	Cost to Broad Transport Budget	Lower value for money - £3.15m	1	1			
	Indirect Tax Revenues	N/A	0				

Appraisal Summary Table		Improvement Group 4		Date completed:	31/01/2018	Contact:	
Name of scheme:		Belmont Road weight restriction				Name	JP
Description of scheme:		Elements - Weight restriction Traffic Regulation Order on Belmont Road				Organisation	WSP
						Role	Promoter/Official
Impacts		Summary of key impacts		Assessment Significance			
Economy	Journey time savings for business users and transport providers	Slight beneficial impact - in isolation, this measure is not enough to address concerns about road danger for those considering walking and cycling along Belmont Road.	1	5			
	Reliability Impacts on Business users (decongestion)	Slight beneficial impact - in isolation the improvement is considered likely to have only a minor impact on vehicle trips and active travel uptake.	1				
	Regeneration and Wider Economic Impacts	Large scale impact - improvement of connections in parts of South Wye that are undergoing transformative housing regeneration, including connections across the heavily trafficked Belmont Road.	3				
Environment	*Traffic Noise	Slight beneficial impact - reduction in vehicle trips.	1	3			
	*Air Quality	Slight beneficial impact - reduction in vehicle trips.	1				
	*Greenhouse gases	Slight beneficial impact - reduction in vehicle trips.	1				
	Landscape	Neutral	0				
	Townscape	Neutral	0				
	Historic Environment	Neutral	0				
	Biodiversity	Neutral	0				
Water Environment	Neutral	0					
Society	Reliability and connectivity impacts for non-business users	Slight beneficial impact - minor improvements to connectivity, especially over the local area, and between origins and destinations of lower strategic importance.	1	10			
	*Physical activity	Slight beneficial impact - generates a low number of additional active travel trips.	1				
	Journey quality	Slight beneficial impact - a reduction in the number of heavy vehicle which active travellers would share the road with.	1				
	*Accidents	Slight beneficial impact - no segregated routes are to be provided for cyclists but would reduce the number of heavy vehicles.	1				
	Security	Neutral	0				
	Accessibility to services	Slight beneficial impact - minor improvements to routes to bus stops.	1				
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.	3				
	Severance	Moderate beneficial impact - the proportion of heavy traffic will reduce.	2				
Option and non-use values	Neutral	0					
Public Accounts	Cost to Broad Transport Budget	Higher value for money - £0.03m	3	3			
	Indirect Tax Revenues	N/A	0				

Appraisal Summary Table		Improvement Group 5		Date completed:	31/01/2018	Contact:	
Name of scheme:		Belmont Road (West) walking and cycling improvements				Name	JP
Description of scheme:		Elements - New shared use footway/ cycleway on northern side of A465 - Completion of shared use footway/ cycleway between Ruckhall Lane & Dorchester Way (west of Canterbury Close) - Toucan crossing on A465 between Ruckhall Lane and Haywood Lane - Extend 30mph limit on A465 west from Tesco to Haywood Lane - Pedestrian refuge on A465 east of Clehonger Road turn - Advisory cycle lanes over narrow bridge at Belmont Pool - Improved links to existing paths near Belmont Pool - Raised tables on Haywood Lane and Ruckhall Lane to facilitate easier pedestrian crossing				Organisation	WSP
						Role	Promoter/Official
Impacts		Summary of key impacts			Assessment Significance		
Economy	Journey time savings for business users and transport providers	Large beneficial impact - especially cyclists, who are enabled the use of direct routes which would otherwise be avoided by the majority of existing or potential cyclists.	3	6			
	Reliability Impacts on Business users (decongestion)	Moderate beneficial impact - performs well across some but not all of the four chosen assessment criteria.	2				
	Regeneration and Wider Economic Impacts	Slight impact - less well-related to areas of areas of regeneration, employment or housing growth.	1				
Environment	*Traffic Noise	Moderate beneficial impact - reduction in vehicle trips.	2	2			
	*Air Quality	Moderate beneficial impact - reduction in vehicle trips.	2				
	*Greenhouse gases	Moderate beneficial impact - reduction in vehicle trips.	2				
	Landscape	Slight adverse impact - new active travel infrastructure will cross undeveloped land.	-1				
	Townscape						
	Historic Environment	Slight adverse impact - the schemes could impact on Belmont Abbey, Home Farm and the Almshouses.	-1				
	Biodiversity	Slight adverse impact - removal of small areas of grass.	-1				
Water Environment	Slight adverse impact - new impermeable surfacing associated with new shared use footway/cycleway.	-1					
Society	Reliability and connectivity impacts for non-business users	Moderate beneficial impacts - more direct routes provided for a smaller cohort of residents.	2	15			
	*Physical activity	Moderate beneficial impact - strongly meets two of the assessment criteria but only weakly meets the third.	2				
	Journey quality	Large beneficial impact - provision of infrastructure segregated from vehicle traffic.	3				
	*Accidents	Moderate beneficial impact - new active travel routes segregated from traffic but beneficial impact not large as lower increase in active travellers.	2				
	Security	Neutral	0				
	Accessibility to services	Large beneficial impact - proposals improve accessibility to bus stops on foot or by cycling.	3				
	Personal Affordability	Slight beneficial impact - less well related to Herefordshire's most income deprived and low car ownership areas.	1				
	Severance	Moderate beneficial impact - proposals include new signal crossings on heavily trafficked roads.	2				
	Option and non-use values	Neutral	0				
Public Accounts	Cost to Broad Transport Budget	Lower value for money - £1.87m	1	1			
	Indirect Tax Revenues	N/A	0				

Appraisal Summary Table		Improvement Group 6		Date completed:	31/01/2018	Contact:	
Name of scheme:		Better walking and cycling routes to Hereford Enterprise Zone				Name JP	
Description of scheme:		Elements - New off-road shared use footway/cycleway between Hereford Academy and Ross Road adjacent to Marlbrook Road - Improve shared use footway/cycleway access to Great Western Way from Ethelstan Crescent and Brampton Road - Shared use footway/cycleway under railway bridge with associated one way priority working or shuttle traffic signals - Improved crossing of Ross Road (subject to third party agreement with Highways England) - Lighting, signing and vegetation clearance on Watery Lane and Lower Bullingham Lane - On-road markings - Route signage and removal of barriers and posts				Organisation WSP	
						Role Promoter/Official	
Impacts		Summary of key impacts		Assessment Significance			
Economy	Journey time savings for business users and transport providers	Slight beneficial impact - a smaller number of active travellers whose behaviour (and journey routes) will be expected to change.	1	6			
	Reliability Impacts on Business users (decongestion)	Moderate beneficial impact - performs well across some but not all of the four chosen assessment criteria.	2				
	Regeneration and Wider Economic Impacts	Large scale impact - improvements to walking and cycling routes to and from the HEZ, which is a key employment area for the city.	3				
Environment	*Traffic Noise	Moderate beneficial impact - reduction in vehicle trips.	2	4			
	*Air Quality	Moderate beneficial impact - reduction in vehicle trips.	2				
	*Greenhouse gases	Moderate beneficial impact - reduction in vehicle trips.	2				
	Landscape	Neutral	0				
	Townscape	Neutral	0				
	Historic Environment	Neutral	0				
	Biodiversity	Slight adverse impact - removal of small areas of grass.	-1				
Water Environment	Slight adverse impact - new impermeable surfacing associated with new shared use footway/cycleway.	-1					
Society	Reliability and connectivity impacts for non-business users	Moderate beneficial impacts - more direct routes provided for a smaller cohort of residents.	2	15			
	*Physical activity	Moderate beneficial impact - strongly meets two of the assessment criteria but only weakly meets the third.	2				
	Journey quality	Large beneficial impact - provision of infrastructure segregated from vehicle traffic.	3				
	*Accidents	Moderate beneficial impact - new active travel routes segregated from traffic but beneficial impact not large as lower increase in active travellers.	2				
	Security	Neutral	0				
	Accessibility to services	Slight beneficial impact - minor improvements to routes to bus stops.	1				
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.	3				
	Severance	Moderate beneficial impact - proposals include new signal crossings on heavily trafficked roads.	2				
Option and non-use values	Neutral	0					
Public Accounts	Cost to Broad Transport Budget	Moderate value for money - £1.31m	2	2			
	Indirect Tax Revenues	N/A	0				

Appraisal Summary Table		Improvement Group 7		Date completed:	31/01/2018	Contact:	
Name of scheme:		Hoarwithy Road and Hinton Road walking and cycling links				Name JP	
Description of scheme:		Elements Improved routes across Bishop's Meadow from swimming pool to Hinton Road - Convert Hinton Road zebra crossing to toucan crossing - Better footway/cycleway connection from Bishop's Meadow with/onto Hinton Road - Improvements to cycle infrastructure on Hoarwithy Road between Saxon Gate & Holme Lacy Road - Shared use footway/cycleway between Grafton Depot park and choose site and Bullingham Lane - Raised table on Hoarwithy Road near Orchard Avenue to facilitate easier pedestrian crossings				Organisation WSP	
						Role Promoter/Official	
Impacts		Summary of key impacts		Assessment Significance			
Economy	Journey time savings for business users and transport providers	Slight beneficial impact - a smaller number of active travellers whose behaviour (and journey routes) will be expected to change.	1	6			
	Reliability Impacts on Business users (decongestion)	Moderate beneficial impact - performs well across some but not all of the four chosen assessment criteria.	2				
	Regeneration and Wider Economic Impacts	Large scale impact - proposals relate to a key route from the Lower Bullingham urban expansion site to the city centre.	3				
Environment	*Traffic Noise	Moderate beneficial impact - reduction in vehicle trips.	2	3			
	*Air Quality	Moderate beneficial impact - reduction in vehicle trips.	2				
	*Greenhouse gases	Moderate beneficial impact - reduction in vehicle trips.	2				
	Landscape	Slight adverse impact - new active travel infrastructure will cross undeveloped land.	-1				
	Townscape	Neutral	0				
	Historic Environment	Neutral	0				
	Biodiversity	Slight adverse impact - removal of small areas of grass.	-1				
Water Environment	Slight adverse impact - new impermeable surfacing associated with new shared use footway/cycleway.	-1					
Society	Reliability and connectivity impacts for non-business users	Moderate beneficial impact - performs well across some but not all of the four chosen assessment criteria.	2	13			
	*Physical activity	Moderate beneficial impact - strongly meets two of the assessment criteria but only weakly meets the third.	2				
	Journey quality	Large beneficial impact - provision of infrastructure segregated from vehicle traffic.	3				
	*Accidents	Moderate beneficial impact - new active travel routes segregated from traffic but beneficial impact not large as lower increase in active travellers.	2				
	Security	Neutral	0				
	Accessibility to services	Slight beneficial impact - minor improvements to routes to bus stops.	1				
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.	3				
	Severance	Neutral	0				
Option and non-use values	Neutral	0					
Public Accounts	Cost to Broad Transport Budget	Moderate value for money - £1.28m	2	2			
	Indirect Tax Revenues	N/A	0				

Appraisal Summary Table		Improvement Group 8		Date completed:	31/01/2018	Contact:	
Name of scheme:		Holme Lacy Road – further walking and cycling improvements				Name	JP
Description of scheme:		Elements - New shared use footway / cycleway on northern side of Holme Lacy Road between railway bridge and eastern end of existing scheme at Co-op - Block paved table tops constructed at junctions to facilitate easier pedestrian and cycle crossings of Holme Lacy Road - Shared use footway/ cycleway under railway bridge with associated one way priority working or shuttle traffic signals for motor vehicles - Holme Lacy Road westbound approach to A49 traffic signals - carriageway narrowed to one lane to facilitate shared use footway / cycleway (subject to third party agreement and partnership funding by HE & HC) - A49 / Holme Lacy Road junction – toucan crossings to facilitate safer crossing of Ross Road				Organisation	WSP
						Role	Promoter/Official
Impacts		Summary of key impacts		Assessment Significance			
Economy	Journey time savings for business users and transport providers	Large beneficial impact - especially cyclists, who are enabled the use of direct routes which would otherwise be avoided by the majority of existing or potential cyclists.	3	9			
	Reliability Impacts on Business users (decongestion)	Large beneficial impact - performs well across the majority of the four chosen assessment criteria.	3				
	Regeneration and Wider Economic Impacts	Large scale impact - proposals relate to a key route from the Lower Bullingham urban expansion site to the city centre.	3				
Environment	*Traffic Noise	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3	9			
	*Air Quality	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3				
	*Greenhouse gases	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3				
	Landscape	Neutral	0				
	Townscape	Neutral	0				
	Historic Environment	Neutral	0				
	Biodiversity	Neutral	0				
Water Environment	Neutral	0					
Society	Reliability and connectivity impacts for non-business users	Large beneficial impact - provides direct connections between key origins and destinations.	3	21			
	*Physical activity	Large beneficial impact - performs well across the majority of the three assessment criteria.	3				
	Journey quality	Large beneficial impact - provision of infrastructure segregated from vehicle traffic.	3				
	*Accidents	Large beneficial impact - new cycling routes segregated from motor traffic in locations where the greatest number of new active travel journeys are likely to be generated, and also on routes with a history of pedestrian and cyclist casualties.	3				
	Security	Neutral	0				
	Accessibility to services	Large beneficial impact - proposals improve accessibility to bus stops on foot or by cycling.	3				
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.	3				
	Severance	Large beneficial impact - proposal includes a new controlled crossing for pedestrians and cyclists, and designs to enable easier crossing of side streets.	3				
Option and non-use values	Neutral	0					
Public Accounts	Cost to Broad Transport Budget	Moderate value for money - £2.27m	2	2			
	Indirect Tax Revenues	N/A	0				

Appraisal Summary Table		Improvement Group 9		Date completed:	31/01/2018	Contact:		
Name of scheme:		Walnut Tree Avenue / Hunderton Road traffic reduction				Name		JP
Description of scheme:		Elements - Filtered permeability on section of Hunderton Road and Walnut Tree Avenue (closure to vehicular traffic, except buses and cycles) - Walnut Tree Avenue - raised priority crossings for pedestrians - A465 Belmont Road at Walnut Tree Avenue and Hunderton Road junctions – raised table covering both junctions and new toucan crossing of Belmont Road - New shared use footway/cycleway on Belmont Road between Hunderton Road and Walnut Tree Avenue				Organisation		WSP
						Role		Promoter/Official
Impacts		Summary of key impacts			Assessment Significance			
Economy	Journey time savings for business users and transport providers	Large beneficial impact - especially cyclists, who are enabled the use of direct routes which would otherwise be avoided by the majority of existing or potential cyclists.	3	8				
	Reliability Impacts on Business users (decongestion)	Moderate beneficial impact - performs well across the majority of the four chosen assessment criteria. The large beneficial impacts (in terms of the relative number of car trips transferring to walking and cycling with the improvements in place), are however likely to be counterbalanced by a degree of additional congestion as vehicles are required to re-route away from Walnut Tree Avenue and Hunderton Road when the improvements are in place.	2					
	Regeneration and Wider Economic Impacts	Large scale impact - proposals relate to a key route from the Lower Bullingham urban expansion site to the city centre.	3					
Environment	*Traffic Noise	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3	9				
	*Air Quality	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3					
	*Greenhouse gases	Large beneficial impact - reduction in vehicle trips, especially as vehicles re-route onto the SLR / Rotherwas Access Road.	3					
	Landscape	Neutral	0					
	Townscape	Neutral	0					
	Historic Environment	Neutral	0					
	Biodiversity	Neutral	0					
Water Environment	Neutral	0						
Society	Reliability and connectivity impacts for non-business users	Large beneficial impact - provides direct connections between key origins and destinations.	3	20				
	*Physical activity	Large beneficial impact - performs well across the majority of the three assessment criteria.	3					
	Journey quality	Large beneficial impact - general vehicular traffic would be re-rerouted away from Walnut Tree Avenue and Hunderton Road. For motor vehicle users who can no longer use these roads, the SLR could now be used as a less stressful alternative route.	3					
	*Accidents	Large beneficial impact - reduction in volume of motorised traffic on key active travel routes.	3					
	Security	Neutral	0					
	Accessibility to services	Moderate beneficial impact - walking and cycling routes to bus stops are enhanced and the improvements are likely to improve bus accessibility.	2					
	Personal Affordability	Large beneficial impact - strong relationship and close proximity to areas with the highest levels of income deprivation and lowest levels of car availability in Herefordshire.	3					
	Severance	Large beneficial impact - substantial reduction in traffic volumes are predicted on key active travel routes.	3					
Option and non-use values	Neutral	0						
Public Accounts	Cost to Broad Transport Budget	Higher value for money - £1.07m	3	3				
	Indirect Tax Revenues	N/A	0					



Kings Orchard
1 Queen Street
Bristol
BS2 0HQ

wsp.com

Decision maker:	Cabinet member infrastructure
Decision date:	Friday, 8 March 2019
Title of report:	South Wye Transport Package - Active Travel Measures
Report by:	Head of Infrastructure Delivery

Classification

Open

Decision type

Key

This is a key decision because it is likely to result in the council incurring expenditure which is, or the making of savings which are, significant having regard to the council's budget for the service or function concerned. A threshold of £500,000 is regarded as significant.

This is a key decision because it is likely to be significant having regard to: the strategic nature of the decision; and / or whether the outcome will have an impact, for better or worse, on the amenity of the community or quality of service provided by the authority to a significant number of people living or working in the locality (two or more wards) affected.

Notice has been served in accordance with Part 3, Section 9 (Publicity in Connection with Key Decisions) of the Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012.

Wards affected

Belmont Rural; Central; Dinedor Hill; Greyfriars; Hinton & Hunderton; Newton Farm; Redhill; Saxon Gate; Stoney Street; Wormside;

Purpose and summary

A number of active travel options have been considered and consulted on in 2014 and 2016. A robust appraisal process outlined in this report has been adopted to determine the schemes which should be included in the scheme business case. If these schemes are not progressed the objectives of the SWTP will not be met.

The South Wye Transport Package comprises the Southern Link Road and a complementary package of active travel measures. The South Wye Transport Package Options Refinement Report

contained in Appendix 1 of this report describes the selection of this preferred package and outlines how a range of active travel measures has been considered, consulted upon publicly and refined according to feedback and technical appraisal of how well each of the schemes performed against package objectives. The report proposes which active travel elements should be included in business case for the scheme to ensure a robust case for funding can be made and confirms that other active travel measures will be considered for future delivery as other funding sources become available.

Recommendation(s)

That:

- (a) the preferred package of active travel measures as outlined in the current Options Refinement Report (in Appendix 1) be considered and approved by the cabinet member for infrastructure for inclusion in the South Wye Transport Package full business case within a budget of £5.041m;**
- (b) subject to confirmation of the statutory orders for the Southern Link Road, authority is delegated to the director of economy and place following consultation with the Section 151 officer to submit the final full business case to the Department for Transport to draw down Growth Fund grant funding for the delivery of the South Wye Transport Package, comprising the Southern Link Road and the active travel measures approved under recommendation (a);**
- (c) active travel measures not included in the appended Options Refinement Report preferred package be considered for future delivery as other funding sources become available through the annual plan process for the Public Realm.**

Alternative options

1. A number of active travel options have been considered and consulted on in 2014 and 2016. A robust appraisal process outlined in this report has been adopted to determine the schemes which should be included in the scheme business case. If schemes are not progressed the objectives of the SWTP will not be met.

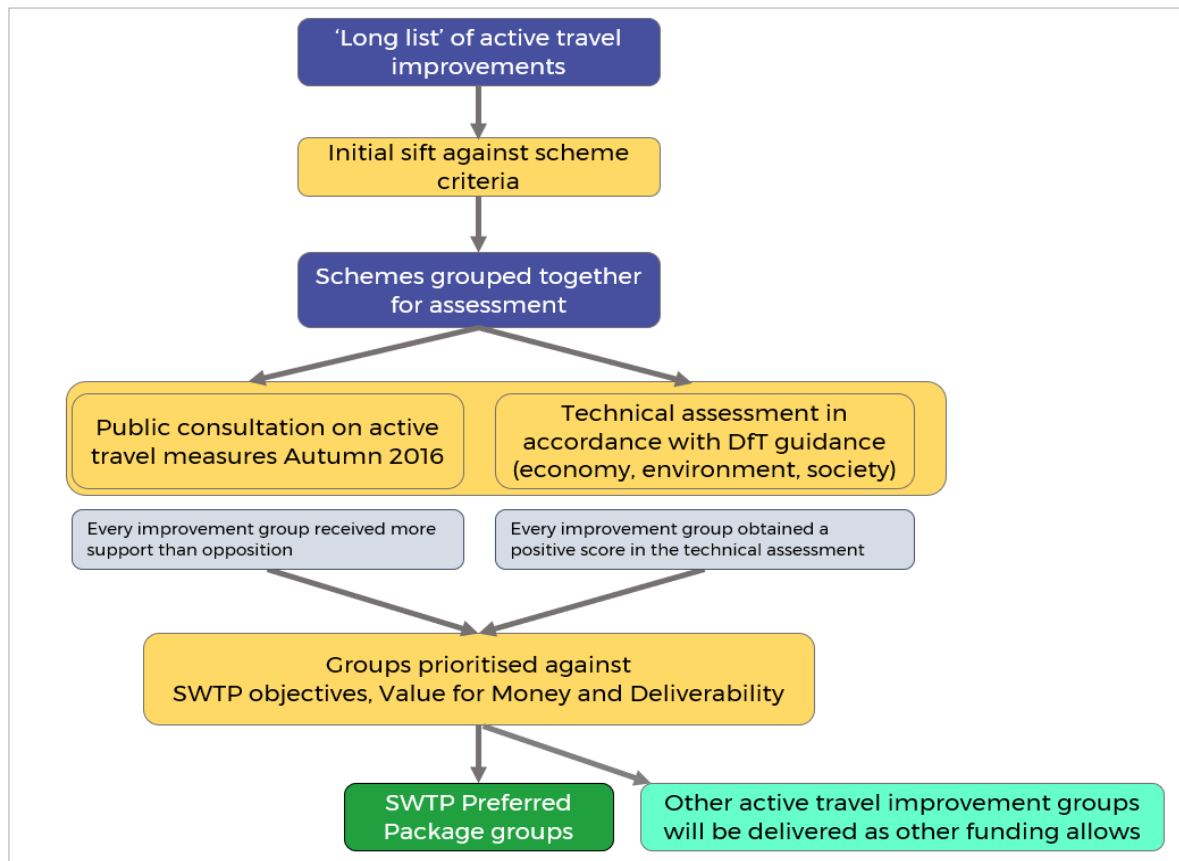
Key considerations

2. The aim of the South Wye Transport Package (SWTP) is to promote economic growth in Hereford while tackling specific problems in the South Wye area.
3. The SWTP will reduce congestion, enable access to the Hereford Enterprise Zone (HEZ), reduce growth in emissions and traffic noise, reduce accidents and encourage physical activity.
4. In December 2014 cabinet considered a report which set out a range of possible active travel schemes which could form the SWTP along with the new Southern Link Road (SLR). The report set out the results of consultation in 2014 and 2016 which confirmed strong support for active travel measures.
5. As a result of this support cabinet authorised further analysis and detailed design to confirm a preferred package for approval by the cabinet member for infrastructure.

6. The South Wye Transport Package Option Refinement Report sets out the selection of the SWTP package and outlines the process used to assess each of the possible active travel improvements to determine which should be included in the business case for the project along with the SLR.
7. As set out in the December 2014 cabinet report the following improvements have been considered:
 - a. 20 mph residential areas
 - b. Belmont Road bus priority measures
 - c. Belmont Road walking and cycling improvements
 - d. Belmont Road weight restriction
 - e. Belmont Road (West) walking and cycling improvements
 - f. Better walking and cycling routes to Hereford Enterprise Zone
 - g. Hoarwithy Road and Hinton Road walking and cycling links
 - h. Holme Lacy Road – further walking and cycling improvements
 - i. Walnut Tree Avenue / Hunderton Road traffic reduction
8. Given the level of support for all improvements cabinet delegated authority to undertake further analysis and technical work. This technical work is summarised in the Option Refinement Report in Appendix 1. This report sets out the selection of the SWTP package and assesses how each of the active travel projects considered contributes to the objectives of the SWTP, value for money and deliverability and refines the long list of projects to those which will best deliver benefits alongside the SLR to form the SWTP.
9. This Option Refinement Report (ORR) has been prepared to document the refinement of the preferred option for the SWTP. It forms part of the technical work being carried out to support the transport business case submission for funding approval, constituting the first element of *Option Development - Stage 2* of the Transport Appraisal Process, as set out in Department for Transport guidance. The use of an ORR to document this process was specifically agreed with the Department for Transport. The document demonstrates that the preferred SWTP is a package combining a Southern Link Road (SLR) with active travel measures.
10. The ORR provides the evidence which demonstrates the selection of SC2 as the preferred route for the SLR which was the subject of other governance reports so this is not covered in detail in this report.
11. This cabinet report will focus on the assessment of possible active travel measures to form the SWTP along with the SLR in the business case.
12. The ORR also sets out that possible active travel measures were identified from the analysis of problems in the south wye area, site visits, adopted policies and plans, and through discussion with authority officers. In line with Step 6 of the Option Development process, an initial sift was undertaken to exclude measures which did not meet the guidance criteria. This meant that only active travel schemes which could be funded by capital expenditure were taken forward.
13. Remaining active travel schemes were grouped for the purposes of assessment, with nine improvement groups taken forward for technical assessment. These nine improvement groups are set out in the ORR. A further three variants were assessed to ensure that

improvements could combine to create a coherent preferred package. The outcome of the 2016 public consultation on active travel schemes was also considered as part of the assessment.

14. Every improvement group obtained a positive score in the technical assessment and more support than opposition in the public consultation. A methodology was devised to enable the improvements to be prioritised, using three assessment criteria – alignment with South Wye area objectives, value for money and an assessment of the issues which may arise in delivering the scheme. A double weighting was accorded to the objectives score in view of the importance of implementing schemes which strongly achieve the objectives.
15. Applying this methodology identified active travel improvement groups **3A (Belmont Road walking and cycling improvements, including Toucan crossing near Walnut Tree Avenue)**, **6 (Better walking and cycling routes to Hereford Enterprise Zone)** and **8A (Holme Lacy Road further walking and cycling improvements)** received the highest overall scores. These are the schemes which would have the highest priority.
16. The total cost of the three groups of improvements was estimated to be £7.02m. This figure is a preliminary cost estimate which will be refined as the scheme detail is developed.
17. The process outlined in paragraphs 12 – 17 is summarised in the following diagram:



18. The preferred package of active travel improvements to be included in the SWTP business case with the SLR are summarised below:
 - Group 3A (Belmont Road walking and cycling improvements, including Toucan crossing near Walnut Tree Avenue and associated works) would transform the look, feel and use of a substantial section of Belmont Road, which has a key role in enabling more journeys to be made by active travel modes to access the HEZ, the

city centre and local facilities. This would provide connections to the key existing quality off-road route (Great Western Way) and extend the availability of quality off-road active travel infrastructure. The improved or new crossings along the length of the road would make it easier to cross and connect communities on either side of the road;

- Group 6A (Better walking and cycling routes to Hereford Enterprise Zone, without a shared use footway/cycleway under the railway bridge) would create a signed and waymarked 'quietway' cycle route from Newton Farm to the HEZ mainly using side roads. This would provide an alternative route to access employment areas, local facilities and schools; and
 - Group 8 (Holme Lacy Road – further walking and cycling improvements, with a shared use footway/cycleway under the railway bridge) would make east-west walking and cycling links easier, quieter and safer, linking homes to the employment areas at the HEZ.
19. The ORR sets out that these schemes will be effective in fulfilling the objectives of the SWTP because:
- Together they are considered to maximise the benefits of investments across the area;
 - They would constitute value for money;
 - The walking and cycling infrastructure would improve access to the HEZ, city centre and other local destinations, which will encourage uptake of these modes;
 - The walking and cycling infrastructure and reduced speed limits would contribute to a reduction in the severity and incidence of road collisions and would improve the perception of safety of active travel modes;
 - The uptake of walking and cycling would contribute to a reduction in traffic noise and reduce air pollutants associated with vehicle traffic and improve public health; and
 - They support many actions in the Living Streets Groundwork for the Hereford Walking Strategy document.
20. It is recommended that these schemes are included with the SLR as the SWTP in the business case to be submitted to DfT and that other schemes identified and supported in public consultations in 2014 and 2016 are considered for delivery when other funding opportunities become available through the Annual Plan process for Public Realm.

Community impact

21. The economic objectives of the South Wye Transport Package contribute to the council's corporate plan. The scheme seeks to contribute to the economic growth of the city and county as part of the overall economic vision.
22. The package of active travel measures has been refined following public consultations in 2014 and 2016. Consultation feedback has informed the development of the preferred package and will inform detailed design and delivery of the active travel schemes which will form the SWTP with the SLR.

Equality duty

- 23 Under section 149 of the Equality Act 2010, the 'general duty' on public authorities is set out as follows:

A public authority must, in the exercise of its functions, have due regard to the need to -

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
 - (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
24. The Equality team have been consulted on this report; it is considered that there is no negative impact on the Protected Characteristics identified in the Equality Act 2010.
25. Consultation about the SWTP active travel measures has been wide ranging and sought to establish the needs of city users and residents including vulnerable users to inform the scheme design and delivery.
26. Respondents described themselves as male (50%), female (46%) with 4% preferring not to say. 12% of respondents described themselves as having a disability. Responses were not identified by gender or disability.

Resource implications

27. The estimated cost for the South Wye Transport package is set out in the Strategic Outline Business Case for the project as follows:

Package Element	Capital Cost £
A465 public realm scheme to reduce severance and encourage use of active modes	3,000,000
A465/A49 Southern link (including risk adjustment at 50%)	29,729,000
Cycling and walking schemes in Belmont	1,000,000
Cycling and walking schemes in Bullingham	1,000,000

28. On the basis of this there is an approved capital budget of £35m for the SWTP project; £27m of growth fund capital money has been secured for the SWTP with a local contribution of £8m from the council's transport budgets or other sources that may become available as the project progresses.
29. The ORR sets out an indicative cost for the three schemes to be included in the SWTP business case as £7.02m. These costs were based on indicative scheme designs and were appropriate for the purposes of comparison of all the active travel measures consulted upon. The detail of these three schemes has now been further developed and cost estimates

updated. The current estimated cost of these schemes is £5.041m. This will be set out in detail in the final full business case which will be submitted to DfT later this year.

30. Spend to the end of 2017/2018 on the SWTP project totals £4,977,931.67. Funding of £3,843,609.71 has been received to date from the Marches LEP growth fund. Drawdown of the remainder of the £27m grant will commence following the sign-off of the full business case by DfT. The council has funded £1,134,321.96 of capital costs to the end 2017/2018.
31. The remaining capital budget of £30,022,068.33 for the SWTP will be funded by £23,156,390.29 from the Marches LEP Growth Deal fund and £6, 865,678.04 from council budgets or any other successful external grant.
32. Spend in 2018/2019 is currently forecast as £1.995m. This will be funded from the council's local transport plan grant in advance of drawing down Marches LEP funding following sign off of the final full business case.
33. Spend in 2019/2020 is currently forecast as £11.564m. This forecast assumes confirmation of orders and award of contract following sign off of the final full business case by DfT. Spend in advance of the final full business case being signed off by DfT will be funded from the Local Transport Plan budget.

Legal implications

34. This is an Executive function under the Council's Constitution Part 3 Section 3 and is a key decision because it is likely to be significant having regard to the strategic nature of the decision; and/ or whether the outcome will have an impact, for better or worse, on the amenity of the community or quality of service provided by the authority to a significant number of people living or working in the locality (two or more wards in Herefordshire) affected. It is also likely to result in the council incurring expenditure which is, or the making or savings which are, significant having regard to the Council's budget for the service or function concerned. The leader has delegated this key decision to the Cabinet Member Infrastructure as it relates to their portfolio
35. The compulsory purchase order (CPO) was made on 5 March 2018 pursuant to the Acquisition of Land Act 1981 for the Southern Link Road (SLR) along with the side roads order pursuant to the Highways Act 1980, and following statutory objections to the CPO an inquiry was held in November 2018 by an Inspector on behalf of the Secretary of State. The outcome of whether the CPO will be confirmed with or without modifications, or if at all, is due to be released by the Secretary of State imminently.
36. As part of the CPO a range of active travel schemes which could form the SWTP have been proposed and consulted on along with the new SLR and this report lays out the selection of ATM for the SWTP package

Risk management

37. A detailed risk register has been developed for the scheme. Individual risks are identified as well as proposed mitigating actions, an owner and any cost associated agreed. Risk workshops are held on a regular basis to discuss and manage any risk if they occur.

Consultees

38. Throughout the development of the SWTP consultation on the scheme has taken place. This most recent consultation took place in autumn 2016 and feedback to this consultation was set out in the consultation report considered by cabinet in December 2017. Local members Cllr Summers, Cllr Chappell and Cllr McEvelly provided feedback at this time and this was set out in the decision report considered by cabinet in December 2017.
39. Further consultation will take place as the detailed design of these scheme progresses and Ward members input will form part of the development of active travel schemes in a ward.
40. All political groups were consulted about this report – no responses were received.

Appendices

Appendix A – SWTP Active Travel Measures – Option Refinement Report

Background papers

None

Meeting:	Cabinet
Meeting date:	27 July 2018
Title of report:	HEREFORD TRANSPORT PACKAGE (HTP)
Report by:	Cabinet member infrastructure

Classification

Open

Decision type

Key

This is a key decision because it is likely to result in the council incurring expenditure which is significant having regard to the council's budget for the service and because it is likely to be significant in terms of its effect on communities living or working in an area comprising one or more wards in the county.

Wards affected

Countywide

(with potential particular impact on Wormside, Stoney Street, Belmont Rural, Credenhill, Whitecross, Kings Acre, Queenswood and Holmer wards)

Purpose and summary

To consider: feedback to the HTP Phase 2 consultation, assessment of the shortlist of possible bypass route corridor options, the recommended preferred bypass route corridor, the development of associated walking, cycling, bus and public realm (active travel) improvements and to confirm the scope of the Phase 3 consultation.

There are a significant number of technical reports appended to this Cabinet report. There is a diagram in paragraph 25 of this report which summarises this suite of documents and explains how they relate to each other. The documents are as reported to General Scrutiny Committee on 18 July 2018. The following typographical errors have been corrected:

- Paragraph 5.7.1 of the Route Selection Report. The final sentence has been corrected to read "...slightly more intrusive..." rather than "..... slightly less intrusive.....".
- In paragraph 4.2.7 (Table 7) of the Equality Impact Assessment Report in Appendix 7 the female population of Herefordshire has been corrected to 93,174.
- In paragraph 8.2.3 of the Preferred Route Report in Appendix 5, the compass point has been corrected.
- In Figure 4 of the Route Selection Report in Appendix 4 the compass point has been corrected.

On 18 January 2018, Cabinet approved a shortlist of seven bypass route corridors for the Hereford bypass and authorised that a phase 2 consultation be carried out on the approved shortlist of seven possible bypass route corridors and possible active travel measures to gather feedback to inform the selection of a preferred route and to enable a preferred package of active travel measures to be further developed.

The Hereford bypass, as part of the Hereford Transport Package, is a key infrastructure project that is necessary to drive the economic growth of Hereford and the region. It is identified as a priority within the council's Economic Vision, Local Plan Core Strategy (LPCS) and Local Transport Plan (LTP) and also within the Marches Strategic Economic Plan and Midlands Connect regional transport strategy.

The Hereford Transport Package will:

- Enable the delivery of future housing, employment and educational development by maintaining acceptable peak hour journey times across the city
- Enable the delivery of future housing, employment and educational development by providing attractive alternatives to the private car for journeys within the city
- Enable the improvement of regional connectivity by achieving acceptable peak hour journey times on the A49 through the city
- Ensure the transport network within Hereford is resilient enough to provide consistent journey times throughout the day
- Encourage healthy lifestyles by encouraging more people to walk and cycle
- Reduce the impacts of transport on air quality and noise within the city
- Protect the quality of the urban realm to enhance pedestrian connectivity in the city
- Improve road safety within the city.

The phase 2 consultation on the Hereford Transport Package took place in February & March 2018 and the outcome of this consultation is summarised in this report and a detailed public consultation report (P2CR) is included in Appendix 1. Over 4300 responses were received during the consultation and the results show a majority support for the objectives identified for the Hereford Transport Package and also for the inclusion of a bypass. Not all respondents expressed a preference for a particular route for the bypass and hence the results do not show a clear overall preference for any of the seven route options. In addition, the results show strong support for the inclusion of active travel measures as part of the package.

It is recognised that proposals for a bypass have the potential to have a significant impact upon local residents and land owners directly affected by proposals. The consultation

process sought to ensure those residents and landowners that were affected by the seven route corridors were fully informed of the process and potential implications. As the development of the scheme progresses, the Council will continue to engage with those who may be most affected to ensure they are treated fairly and have all the information they need.

Consultation feedback has been scrutinised in detail alongside a comprehensive technical assessment of the shortlist of possible bypass route corridors. The assessment work is summarised in this cabinet report. In addition, detailed technical reports are appended which set out the work undertaken and the conclusions. The Preferred Route Report (Appendix 5) draws together all the technical work undertaken and concludes with the recommendation that the Red Route be considered for selection as the preferred route for the bypass.

In addition to considering the route for a bypass, the technical work has also considered the development of the active travel measures which would be delivered with the bypass to form the Hereford Transport Package. This is detailed in the Active Travel Measures Report which is also appended to this cabinet report in Appendix 6.

Cabinet is asked to consider these reports and approve the further development of the bypass and active travel improvements. It is recommended that the Red Route be selected for further development and be subject to further consultation later this year. This Phase 3 consultation will enable stakeholders to comment on the detail of a bypass scheme based on the Red Route corridor and complementary active travel measures which would make up the package. The results of this consultation would then inform a future cabinet decision to confirm the bypass scheme and associated package measures and to authorise submission of a planning application for the scheme.

Recommendation(s)

That:

- (a) having regard to the feedback to the HTP Phase 2 consultation report, the Stage 2 Scheme Assessment Report, the Stage 2 Environmental Assessment Report, the Route Selection Report and the Preferred Route Report, the red route (as identified in Appendix 5) be approved as the preferred route for further scheme development for the Hereford bypass;**
- (b) subject to approval of recommendation (a) above, a further round (phase 3) of consultation on the detailed proposals for a scheme based on the red route corridor and complementary active travel measures be undertaken to gather stakeholder feedback to assist with informing a future decision by Cabinet to confirm the route for the bypass and recommended active travel measures which will together form the Hereford Transport Package, prior to submission for planning and other necessary permissions;**
- (c) the director for economy, communities and corporate be authorised to take all necessary steps to progress detailed design and, consultation including commissioning external professional advisers as required to inform future decisions on the Hereford Transport Package to a maximum cost of £2.45m; and**
- (d) the proposed responses (at paragraphs 58 to 61) to the recommendations of General Scrutiny Committee be approved.**

Alternative options

1. One option would be to select one of the other route corridors as the basis for developing the bypass scheme. This is not recommended because to do so would not be supported by the technical evidence presented in the appended reports and could therefore be subject to challenge.
2. A second option would be to not select a route corridor at this stage and seek further assessment of the options or a sub set of the options. This is not recommended as the assessment carried out to date is considered robust to inform the selection of a single route corridor for scheme development. Deferring a decision on the preferred corridor for further assessment would add significant delay to the programme for taking forward the scheme, prolong the uncertainty for residents and landowners affected by the short list of routes and incur significant additional costs.
3. An option for proceeding with the Hereford growth proposals without the provision of a bypass was considered and discounted during the Core Strategy process. Not progressing this work will mean the HTP objectives and core strategy growth targets cannot be achieved.

Key considerations

4. The Hereford bypass, as part of the Hereford Transport Package is a key infrastructure project that is necessary to drive the economic growth of Hereford and the region. It is identified as a priority within the council's approved corporate plan, Economic Vision, Local Plan Core Strategy (LPCS) and Local Transport Plan (LTP) and also within the Marches Strategic Economic Plan and Midlands Connect regional transport strategy.
5. The Hereford Transport Package will
 - Enable the delivery of future housing, employment and educational development by maintaining acceptable peak hour journey times across the city
 - Enable the delivery of future housing, employment and educational development by providing attractive alternatives to the private car for journeys within the city
 - Enable the improvement of regional connectivity by achieving acceptable peak hour journey times on the A49 through the city
 - Ensure the transport network within Hereford is resilient enough to provide consistent journey times throughout the day
 - Encourage healthy lifestyles by encouraging more people to walk and cycle
 - Reduce the impacts of transport on air and noise within the city
 - Protect the quality of the urban realm to enhance pedestrian connectivity in the city
 - Improve road safety within the city.
6. On 18 January 2018 Cabinet approved a shortlist of seven possible bypass route corridors for the Hereford bypass and authorised that phase 2 consultation on the approved shortlist of possible bypass route corridors and active travel measures be undertaken. The consultation was to gather feedback to inform the selection of a preferred bypass route corridor and to enable the preferred package of active travel measures to be further developed.

Phase 2 Consultation Report (P2CR) – Appendix 1

7. Appendix 1 contains full details of the Phase 2 consultation. Feedback, analysis and demographics are summarised below. Where appropriate, cross-references to specific sections and figures is included. This report and the Route Selection Report (RSR – Appendix 4) between them inform the Preferred Route Report (PRR – Appendix 5).
8. The Phase 2 consultation period was a six-week period, from 6 February 2018 to 20 March 2018.
9. During the consultation period exhibitions were held at a number of venues across the city. A total of 1317 people were recorded as having attended the events in the first week of the consultation with a significant number of people also visiting subsequent public events. Staffed consultation events gave attendees the opportunity to discuss the project with council staff and staff from BBLP and their consultants WSP. Following these events the exhibition was available from 16 February 2018 until the end of the consultation on 20 March 2018 and staff were available each day to answer questions and collect feedback. All consultation information and materials were available on the following website throughout the consultation period. At the invitation of parish councils the project team also attended public meetings at Breinton and Belmont.
10. The main channel for feedback was the consultation survey. The questionnaire included 18 questions, 9 of them related to the seven proposed bypass routes and the walking, cycling and public realm improvements. The remaining questions related to the consultation and attendees.
11. A total of 4,351 questionnaires were either fully or partially completed during this period – 3,354 questionnaires were completed online and 997 printed copies of the questionnaire were returned of which 30 were Easy Read versions of the questionnaire.
12. Following the end of the consultation period all feedback was saved and coded to enable analysis of all responses received including analysis of the demographics of respondents.
13. The following is a summary of the responses to the questions about the bypass and active travel measures.
14. **Question 1: Do you agree with the Hereford Transport Package (HTP) objectives to address transport problems in Hereford and enable growth?**
4202 respondents (97%) responded to this question. 2872 of these respondents (68%) said they agreed with the HTP objectives of addressing Hereford's transport problems and enabling growth. (Appendix 1, Figure 17)
15. **Question 2: Do you agree that a bypass should form part of the package?**
3033 respondents (70%) responded to this question. 1789 of these respondents (59%) said they agreed that a bypass should form part of the package. (Appendix 1, Figure 20)

16. Question 3: Which bypass route would you prefer?

In this question, survey respondents were asked to rank their preferred routes from 1 – 7. Only 1747 respondents (40%) responded to this question. 1747 respondents (40%) chose at least one route. A total of 876 (20%) chose to rank all routes and 416 (10%) only ranked one route. 2604 respondents (60%) did not indicate a preferred route.

The total score for all routes when scores from 7 (preferred route) to 1 (least preferred route) are applied to each route when a preference is stated can be seen in Appendix 1, Figure 24 and the frequency of each route being chosen as a respondents first choice when a preference is indicated can be seen in Appendix 1, Figure 25..

17. Question 4: Do you agree that a package should include possible walking, cycling, bus and public realm measures described in the consultation materials?

2799 respondents (64%) responded to this question. 2427 of these respondents (87%) said yes they agree that that a package should include possible walking, cycling, bus and public realm measures. (Appendix 1, Figure 27).

18. Question 5: Are there other walking, cycling, bus and public realm improvements or locations that you think we should be considering?

1407 respondents (32%) responded to this question. Common themes from the responses provided include requests for bus and cycling improvements (other than those shown in the consultation materials), park and ride improvements, other pedestrian improvements and school travel improvements. (*Appendix 1, Figure 28*).

19. Question 6: Do you have any other comment about the current proposals included in the Hereford Transport Package?

1407 respondents (32%) responded to this question. Common themes from the responses provided relate to traffic flows, bypass location (east or west), housing developments / growth and associated traffic impacts, bypass build process and need for the scheme. (*Appendix 1, Figure 30*).

20. Questions 8, 9 and 10 allowed respondents to tell us how often they travelled around Hereford, how they most commonly travelled and their most common reason for travelling. Analysis of responses to these questions indicate that the highest percentage of respondents (72%) to question 8 travel around Hereford daily; the highest percentage of respondents (85%) to question 9 travel by car and the most common reason for travel (67%) was for shopping by car. Further analysis of the response to this question can be seen in the consultation report in Appendix 1.

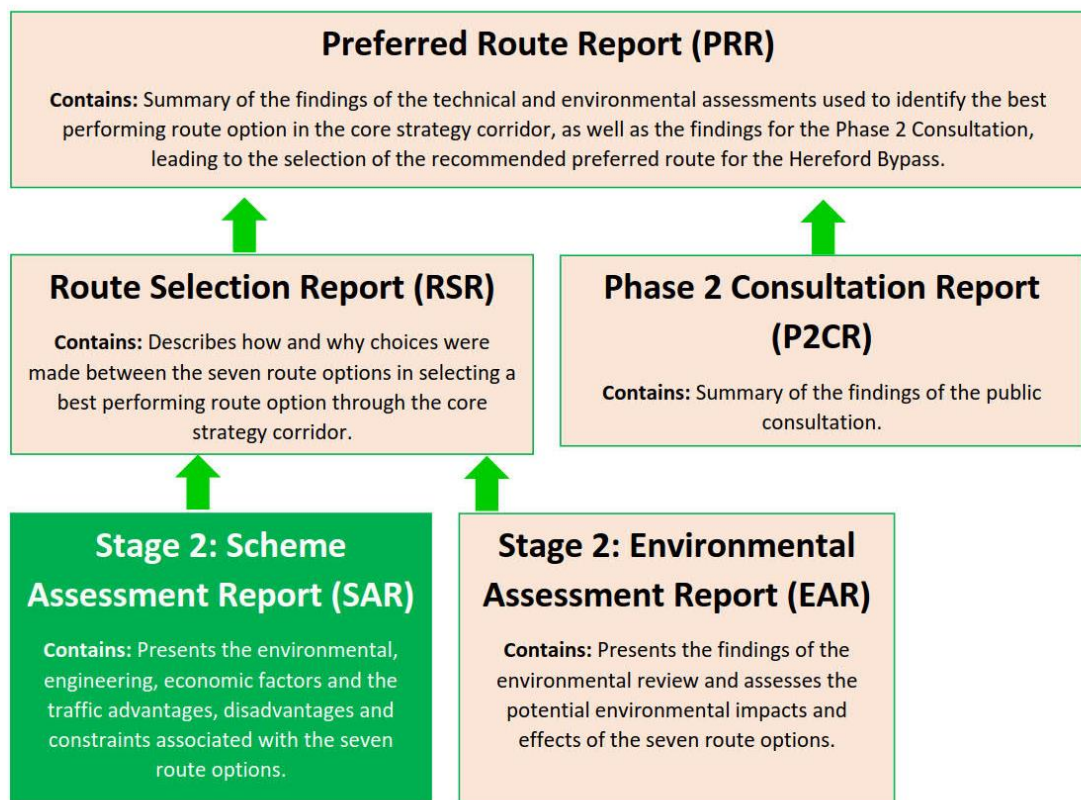
21. Written responses from 22 individuals were received during the consultation period and the details of the issues raised can be seen in the consultation report in Appendix 1. Personal details have been omitted to comply with data protection legislation.

22. 109 organisations responded to the HTP consultation using the consultation questionnaire and their feedback forms part of the feedback analysis in paragraph 10 to paragraph 17. A further 27 written responses were received from organisations in response to the consultation. Copies of these responses are included in full in the consultation report in Appendix 1.

23. This consultation reached a wide range of landowners, businesses and community members with 4351 responses. 1317 members of the public attended the first week of the consultation events with many more attending later events and attending the library exhibition right through the consultation period. The consultation website had 4474 unique visits at this time. Postcode mapping confirms that responses have been received from across the city. 1062 questionnaire respondents attended a public exhibition whilst others chose to view exhibition materials on line. The number of disabled respondents or respondents with limited mobility is in line with data for Hereford from the 2011 census.
24. In summary, the majority of respondents support the HTP objectives, the inclusion of a bypass and that a package should include walking, cycling, bus and public realm measures. Not all respondents expressed a preference for a particular route for the bypass and hence the results do not show a clear overall preference for any of the seven route options.

Bypass Route Selection:

25. The bypass route selection process is informed by a number of reports. The scheme assessment report (SAR) documents the factors to be taken into account in choosing between options and the environmental, engineering, economic and traffic advantages, disadvantages and constraints associated with individual bypass route corridors. Along with the Environmental Assessment Report (EAR), Route Selection Report (RSR) and the Phase 2 Consultation Report (P2CR) the findings of this report will inform the Preferred Route Report (PRR) which sets out the route recommended for selection as the preferred route for the bypass for further scheme development. The suite of documents is summarised below:



Stage 2 Scheme Assessment Report (SAR) – Appendix 2

26. The SAR documents the factors to be taken into account in the technical selection of a preferred route from the shortlist of possible bypass corridors approved by cabinet. It sets out the environmental, engineering, economic and traffic impacts and constraints associated with each possible bypass route.
27. The SAR has been prepared in accordance with national standards Design Manual for Roads and Bridges (DMRB) TD37/93 and incorporates the principles of the Web Transport Analysis Guidance (WebTAG). The report follows TD37/93 advice with full engineering content.
28. For the purposes of route corridor comparison, a similar design standard has been assumed for each. This is appropriate for the purpose of comparing possible bypass route corridors to select a preferred route. The design standard of the selected preferred route will be confirmed when further modelling work is completed and will be set out in Phase 3 consultation. The report summarises the differing issues associated with each bypass route corridor and all seven have been considered feasible for further assessment.

Stage 2 Environmental Assessment Report (EAR) – Appendix 3

29. The EAR (included in Appendix 3 of this cabinet report) presents the findings of an environmental review and assessment of the potential environmental impacts and effects of the shortlist of seven possible bypass route corridors. The EAR has been completed in accordance with the Design Manual for Roads and Bridges (DMRB) Volume 11, for all environmental factors set out in the Infrastructure Planning (EIA) Regulations 2017. The Stage 2 EAR has been prepared to enable a preferred route for the bypass to be selected which will be subject to a more detailed assessment including a statutory Environmental Impact Assessment and subsequent Environmental Statement. The EAR and the Scheme Assessment Report (SAR) - Appendix 2 inform the Route Selection Report (RSR) - Appendix 4.
30. The assessments in this report are based on the design work that has been undertaken to refine the seven shortlisted options identified in the Corridor Assessment Framework report, as well as further qualitative and quantitative environmental assessments that have been undertaken, including modelling and surveys.
31. The environmental assessment methodology used for this assessment is in accordance with DMRB Volume 11: Environmental Assessment and Interim Advice Note 125/15: Supplementary guidance for users of DMRB Volume 11 'Environmental Assessment' and confirms that as the DMRB is intended for the assessment of trunk roads, and motorways, it is the most relevant and applicable set of guidance for the assessment of this highway project. Environmental factors assessed include:

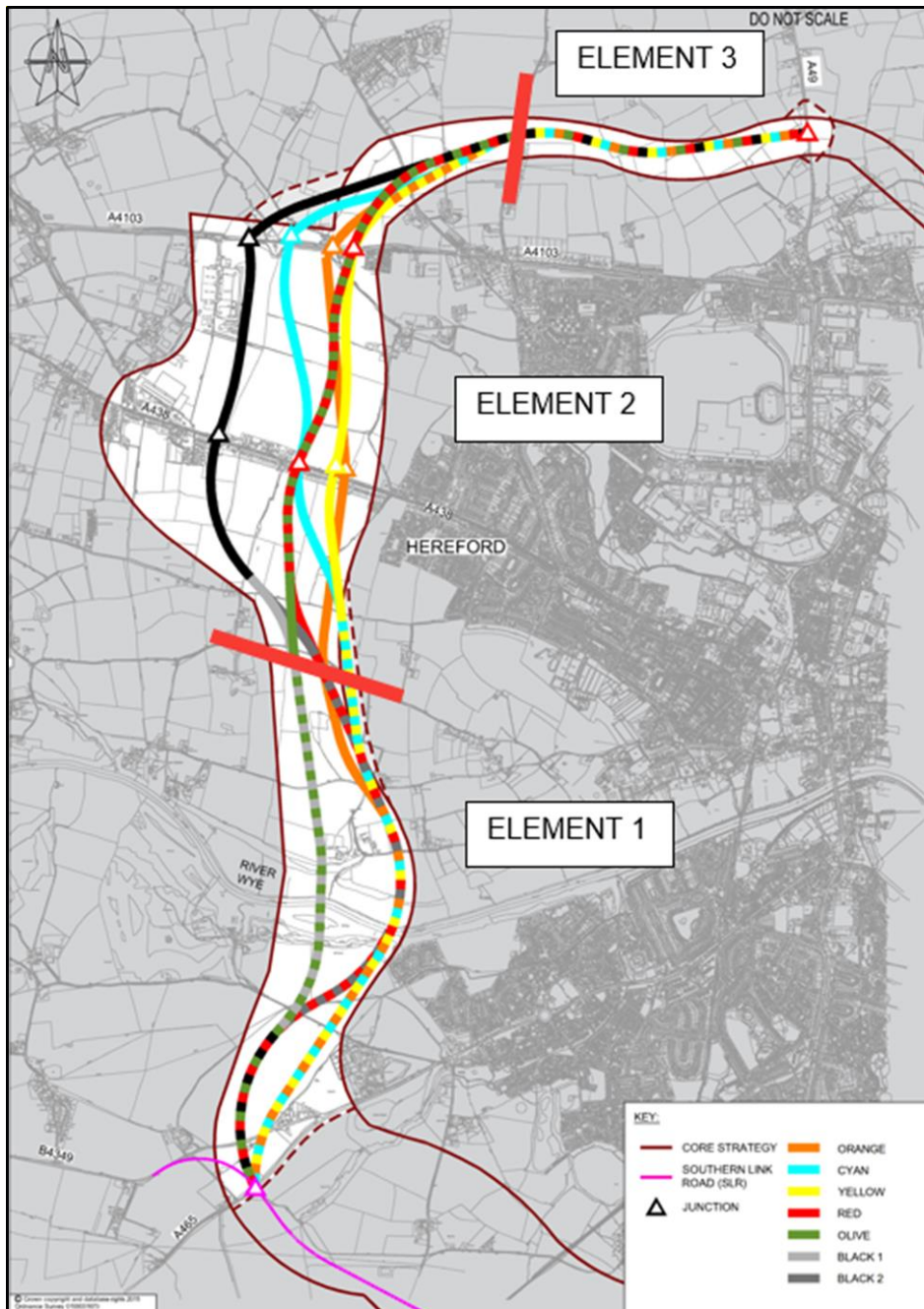
- Air Quality;
- Noise and Vibration;
- Landscape;
- Cultural Heritage;
- Ecology
- Water and Drainage;
- Geology and Soils;

Materials
People and Communities;
Climate Change; and
Combined effects and Cumulative Effects of this scheme with other schemes.

32. The potential impact of each possible bypass route during construction and operational phases have been considered. This information is used to inform the route selection process presented in the Route Selection Report (RSR).
33. As detailed design of the selected route progresses, by incorporating mitigation into the final design of the preferred route, any significant effects caused by the scheme are anticipated to decline in significance over time. There are a number of further assessments which will be carried out within and in support of the Stage 3 Environmental Statement (ES), included in the EAR, with the aim of reducing significant adverse effects. Furthermore as the design proceeds, the aim is to maximise beneficial environmental effects, in particular those which are expected to arise from the provision and future management of the scheme. The scheme is being designed to deliver overall a biodiversity net gain in accordance with good practice.

Route Selection Report (RSR) – Appendix 4

34. The purpose of the Route Selection Report (RSR) is to document and provide an understanding of the technical assessment process and methodology used in determining the best performing of the seven shortlisted bypass route corridors under consideration. (For the purposes of clarity, these are simply referred to as “corridors” in paragraphs 35 to 43 below). The RSR with the Phase 2 Consultation Report – Appendix 1 informs the Preferred Route Report - Appendix 5
35. The RSR describes the structured comparison assessment process undertaken for each of the shortlisted corridors. Each of the seven corridors has been divided into elements and sub-elements that provide a detailed comparison within the specific conditions relating to the sub-element area. The results were combined to establish the overall best performing route using information from the SAR and EAR.
36. The methodology for considering the Preferred Route is informed by national guidance ‘Choice between Options for Trunk Road Schemes (TA 30/82)’, in particular the ‘pair-wise’ comparison method. This process is appropriate as there are a number of possible bypass corridors and using the pairwise comparison involves cutting the problem down to a more manageable size by comparing the options, two at a time, eliminating the least favoured in turn. The advantage of this method is that the problem is sub-divided into a discrete number of smaller problems. It enables the reasons for decisions to be traced without ambiguity.
37. In accordance with this prescribed process, seven bypass route corridors have been split into three Elements (or sections) which allow the impacts to be carefully scrutinised and assessed.
38. The three elements (see below and Appendix 4, Figure 3) are as follows:
 - Element 1 - A465 to Hill Road (Upper Breinton Road – U73022)
 - Element 2 – Hill Road (Upper Breinton Road – U73022) to Canon Pyon Road
 - Element 3 – Canon Pyon Road to existing A49



39. The RSR provides a detailed description of each element and a description of the possible bypass corridors in each element. The issues that need to be considered when choosing between possible route corridors are presented and the relevant policy framework which is relevant to the considerations is explained.
40. Each element is split where appropriate into smaller section to make the comparison of corridors more manageable. The report provides a detailed summary of the pairwise comparison for element and the result of this comparison process within each section is confirmed.

Further information on the subject of this report is available from
 Mairead Lane, Tel: 01432 260944, email: mlane@herefordshire.gov.uk

41. The Pair wise comparison process has been used in a structured manner, and entirely in accordance with guidance to assess elements of each of the seven possible bypass corridors in the Core Strategy corridor.
42. The comparison identified a preferred route within each element as follows:
 - Element 1 – Red / Black
 - Element 2 – Red / Olive
 - Element 3 – All
43. Across all elements therefore Red is the best performing route and therefore the RSR recommends that the Red Route is taken forward as the preferred route for the bypass.

Preferred Route Report (PRR) – Appendix 5

44. The Preferred Route Report (PRR) presents consideration of the findings of the HTP technical and environment assessment work as well as the HTP Phase 2 Public Consultation (P2CR) feedback.
45. The PRR details the process for the selection of the preferred route for the bypass and has considered the following;
 - Policy background and requirements
 - Assessment process including:
 - Technical
 - Engineering
 - Environmental
 - Route Selection Process
 - Public consultation
 - Preferred Route Assessment and Recommendation
46. The PRR confirms that on the basis of this combined analysis the Red Route bypass corridor should be taken forward as the Preferred Route for the Hereford Bypass and cabinet is asked to consider and approve this preferred route for further development and consultation.
47. The process to identify a preferred route was undertaken in accordance with national guidance and design standards, planning policy and legislation. It was undertaken by experienced technical, environmental and planning teams within WSP and BBLP.

48. The map below shows the recommended preferred route:



Preferred Route (Appendix 5, Figure 2)

Active Travel Measures: Walking, cycling, bus and public realm improvements - Appendix 6

49. The public consultation results demonstrate strong support for the inclusion of active travel measures within the HTP. As such, the active travel measures (walking, cycling, bus and public realm improvements) which, with the bypass, will form the Hereford Transport Package, have been developed alongside the route selection assessment work.
50. The Active Travel Measures Report (ATMR) in - Appendix 6 outlines the work done to date in developing these walking, cycling, bus and public space improvements. It also sets out the next steps for further developing and refining the active travel projects.
51. A range of possible active travel measure improvements have been considered in the ATMR and are summarised below:

Active travel improvement options

Improvement themes	Improvements to be considered
Better use of public space	<ul style="list-style-type: none"> ■ Shared use walking and cycling paths ■ New bus lanes or on-road cycle lanes ■ Wider footways ■ Improved street environment (e.g. tree lined boulevards and removal of street clutter) ■ Wider cycle lanes ■ Improvements to bus stops (e.g. real time information)
Junction improvements for pedestrians, cyclists and bus users	<ul style="list-style-type: none"> ■ Safe crossings at all junction arms (e.g. wider waiting areas) ■ New / upgraded crossings for pedestrians and cyclists (e.g. signalling crossings and single stage crossings) ■ More cycle friendly junction designs (e.g. advanced stop lines, advanced traffic signals or right turn lanes) ■ Bus priority improvements at junctions
Crossing improvements along and across main roads	<ul style="list-style-type: none"> ■ Walking and/or cycling priority over side streets (e.g. raised footway to reduce vehicle speeds) ■ New/upgraded crossings for pedestrians and cyclists (e.g. signalling crossings, bigger waiting areas and removing guard rails)
Improved existing traffic free paths	<ul style="list-style-type: none"> ■ Better lighting, surfacing and signage ■ Wider paths ■ Improved ramps and path accesses ■ New and improved connections to the city's main roads
New traffic free paths	<ul style="list-style-type: none"> ■ New green corridors for walking and cycling ■ Connections with Holmer West and Three Elms urban expansion areas ■ "Park and Choose" sites

(Appendix 6, Table 2).

52. To further develop the active travel improvements key movement corridors have been identified.
53. The report also sets out (Appendix 6, Table 3) the development of traffic management improvements as follows;

Development of traffic management improvements.

Traffic management option	Purpose	Key risks/opportunities
HGV restrictions within central Hereford	To reduce HGV traffic through the city centre, particularly through the AQMA	Maintaining local deliveries and supporting businesses Enforcement capabilities
20mph speed limit on all streets north of the River Wye	To reduce traffic speeds to improve pedestrian/cycle comfort and safety.	Enforcement capabilities
Intelligent Transport Systems	To manage traffic demand through Hereford through intelligent transport systems Technology advancements	

54. These proposals will be developed with further consultation to confirm the preferred package of measures.
55. The report also sets out that walking and cycling provision will be delivered alongside the bypass route. The provision may include dedicated walking and cycling facilities within the limits of the bypass or in areas outside/parallel to the bypass alignment. It will also consider and provide for where the bypass interacts with the existing highway and Public Right of Way network.
56. These proposals will be developed with further consultation to confirm the preferred package of measures.

Pre-decision Call In

57. General Scrutiny Committee determined to call in the proposed decision for pre-decision scrutiny and considered the proposed Cabinet decision at a meeting on 18 July. The committee resolved that: “Based on cabinet recommendation (a) – the committee feels able to support the proposed red route based on the current evidence presented, subject to the above recommendations”. The committee made four additional recommendations to the executive. These are detailed below with the proposed response to those recommendations.
58. *Recommendation a):* Natural England and Highways England are requested that they make a consultation response on the route selection, if they wish.
Proposed response: Accepted. Both Natural England and Highways England were invited to provide a response to the consultation and sent reminders of the opportunity to do so. We will continue to engage with both organisations and ask that they provide a response during the phase three consultation.
59. *Recommendation b):* The landlord and the operators of Hereford Community Farm asked if they be prepared to write a statement as to the impact of the preferred route on the deliverability of their service.
Proposed response: Accepted. This will be done as part of the phase three consultation and any submission will inform the equality impact assessment.
60. *Recommendation c):* Presentations delivered to scrutiny be made publicly available with the cabinet member papers.
Proposed response: Accepted. The presentation is published as a supplement to this agenda.
61. *Recommendation d):* Ensure that all reports presented to cabinet are formally signed off by BBLP, to provide assurance.
Proposed response: Accepted. The quality control sheets have all been signed appropriately. These are not published because they contain signatures, but are available for inspection.

Conclusion and Next Steps

62. The Phase 2 Consultation Report – Appendix 1, describes the results and analysis of the consultations on the Hereford Transport Package (HTP) to date. The Scheme Assessment Report – Appendix 2, and Environmental Assessment Report – Appendix 3, set out the impacts of the proposed Hereford bypass scheme. The Route Selection Report – Appendix 4 sets out all the appropriate technical factors to consider in the assessment of possible route corridors for the bypass scheme. The Preferred Route Report - Appendix 5 confirms that on the basis of this combined analysis the Red Route bypass corridor should be taken forward as the Preferred Route for the Hereford Bypass and the Active Travel Measures Report - Appendix 6, describes how active travel measures will be identified as part of the HTP. The cabinet is recommended to consider these reports and approve this preferred route corridor and associated active travel measures for further development and consultation.
63. This further development and consultation work will include further detailed design, environmental surveys and traffic modelling to support the development of a scheme design for Phase 3 consultation and business case development to support funding applications. Following consideration of phase 3 consultation feedback a further cabinet decision will confirm next steps to secure permissions and consents for the project.
64. The scheme is identified within the Capital Programme and funding is available to take forward this development and consultation. Work will continue with Government departments and agencies to secure funding contributions towards this development work and the future construction of the scheme. Failure to confirm early government funding will impact on funding requirement from the council and could impact on programme.

Community impact

65. The bypass is a significant transport infrastructure element of the Hereford transport strategy, linked to the promotion of social progress (by supporting housing needs), economic prosperity (by supporting new jobs, area regeneration, and business), and environmental quality (lessening the harmful impacts of traffic growth, providing an alternative route for the movement of Heavy Goods Vehicles (HGVs), and freeing up space for buses, pedestrians and cyclists). The delivery as part of a Hereford Transport Package will enable active travel measures to be implemented to deliver benefits to communities within the city.
66. The bypass will enable the delivery of new homes and communities. The development of these housing areas will include associated community sustainable transport infrastructure.
67. The re-routing of traffic, particularly HGVs, from the Hereford city centre, will benefit those living and working near the A49. However, there will be adverse effects on residents living near the proposed route. Given that the land within the bypass corridor is largely rural and suburban, there are likely to be adverse noise impacts and increases in the level of air pollution. The technical work will develop options to mitigate adverse impacts on residential amenity in line with Core Strategy policy (HD3 Hereford Movement).

68. It is recognised that proposals for a bypass have the potential to have a significant impact upon local residents and land owners directly affected by proposals. The consultation process sought to ensure those residents, businesses and landowners that were affected by the seven route corridors were fully informed of the process and potential implications. As the development of the scheme progresses, the Council will continue to engage with those who will be most affected to ensure they are treated fairly and have all the information they need.

Equality duty

69. Under section 149 of the Equality Act 2010, the 'general duty' on public authorities is set out as follows:

A public authority must, in the exercise of its functions, have due regard to the need to

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

70. As part of the consultation processes, an equality impact assessment screening has been undertaken to better understand the needs of those who may be impacted by the HTP proposals. This has identified that key elements of the Scheme which could disproportionately affect vulnerable groups are as follows:

Scheme development and design considerations:

- Amendments to public transport facilities, such as bus stops;
- Impacts on physical accessibility to rural and community facilities, due to increases in PRoW length and permanent closure of certain routes as well as potential changes to footpath gradients; and
- Impact on the Hereford Community Farm. Disruption caused by proximity to the Bypass or direct land take may affect its current capacity to offer therapeutic services and also its viability as a business.

Construction considerations:

- Pedestrian or community severance due to construction activities;
- Temporary changes and diversions to the road or footpath;
- Temporary changes to public transport facilities;
- Noise, dust, light and environmental impacts associated with the scheme route options have the potential to impact on health and wellbeing of the local populations; and
- The area has several trip attractions/local services that are likely to be impacted by the Scheme. Access to these attractions and local services could be affected during construction.

71. Based on the potential impacts that have been outlined above, the Screening has identified that a full Equality Impact Assessment (EqIA) should be carried out as part

of the ongoing assessment of the preferred route focussing specifically on gender, age; disability, and pregnancy & maternity. This will help in gathering further evidence to enable sound equality decision making. All other groups with protected characteristics have been screened out of an EqIA as they are not considered to experience differential impacts at this stage.

72. There is potential for benefits for groups with protected characteristics in the development of the Hereford Bypass including improved traffic flow and journey times and increased safety and security. It is important that these benefits continue to be developed and promoted with these most vulnerable users in mind so as to ensure and advance equality of opportunity.
73. As part of Phase 2, a need was identified to produce literature and information in an 'Easy Read' format. This was done as quickly as possible, and additional time allowed for those using these documents to respond.
74. 246 questionnaire respondents stated that they considered themselves to have a disability. This would include those who responded by Easy Read.
75. 121 respondents (54% of those who provided an answer to this question) agreed that the HTP objectives would address the transport problems in Hereford and enable growth. This is compared to the 68% of all respondents, and therefore indicates a lower level of agreement. Comments provided alongside responses to this question suggested negativity about the ability to meet the HTP's objectives as well as the route options being consulted upon.
76. 125 respondents (53% of those who provided an answer to this question) agreed that a bypass should form part of the HTP. This is slightly lower than the 59% across all respondents who were in support of the proposal. Comments suggested that respondents felt that the bypass would not help in meeting objectives while there was also concern regarding the environmental impact. There was also negativity regarding the route options. Another common theme identified was that the bypass would be effective in meeting the objectives.
77. Orange was the most popular route option in this case, followed by Olive and Black 1. Black 2, despite being ranked second in the overall analysis, was selected as first choice by the fewest respondents in this case.
78. 195 respondents (90% of those who provided an answer to this question) agreed that walking, cycling, bus and public realm measures should form part of the HTP. This is at similar level to the 87% who were in support overall
79. In order to identify and engage with hard to reach groups, HC continues to engage its Corporate Information, Customer and Equality Manager and follow its Equality Policy (2017-2019) which can be found on HC's website. All consultation materials and events will continue to be fully accessible, and consultation documents can be made available in different formats and languages upon request. This will be made explicit in brochures and leaflets.

80. 'About You' demographic questions will continue to be included in Phase three of this consultation, enabling the Council to monitor the effectiveness of consulting with the whole community.
81. In taking forward the route options for the bypass and the associated package of measures and in consultation with local communities, the council will pay due regard to the public sector equality duty under the Equality Act 2010.

Legal Implications

82. This is an executive function under the Council's Constitution Part 3 Section 3 and it is a key decision being one which is likely to be significant having regard to the strategic nature of the decision and/or whether the outcome will have an impact for better or worse, on the amenity of the community or quality of service provided by the authority to a significant number of people living or working in the locality (two or more wards in Herefordshire) affected.
83. As referred to in the previous cabinet report (18 January 2018) the policy context for delivery of this scheme is through the Core Strategy and Local Transport Plan, and the Council as the highways authority can promote and deliver the scheme.
84. Any consultation on preferred route/s are to be completed in accordance with the statutory pre-application procedure provisions in the Planning Act 2008 and should be "robust", in order to ensure that the council is acting reasonably. To date the Council have undertaken a robust appraisal on the routes, following guidance and the national standard on both Phase 1 and Phase 2 consultations.
85. Phase 3 consultation on the preferred route will also follow the statutory regime and the choice of route is based on a systematic selection method of considering the outcome of the Phase 2 consultation, and having followed guidance and the national standard as demonstrated in the appended reports. The results of the next stage of scheme development and Phase 3 consultation will enable the Council to review the assumptions made at Stage 2 and assess carefully to determine if they are feasible and will meet the aims of the scheme as originally set, prior to confirming the scheme to be taken forward.
86. In consideration of any decision to be made, Cabinet need to have due regard to the European Convention on Human Rights more particularly Article 8 which stipulates the need to take into account the right to respect for family and private life. The likely interference with human rights should therefore be weighed up in the balance of factors leading to the decision to select a route.

Resource implications

87. Estimated costs for a bypass have been developed on a consistent basis across all route corridors. This is to ensure a fair comparison for route selection purposes based on an assumed standard for the road at this stage of development. Once a route is chosen work will be done to confirm the design and standard for the scheme prior to confirming the cost estimate for the scheme to be delivered. At this point a further independent review of cost estimates will be undertaken prior to a decision to proceed.
88. The current estimated cost of each of the possible bypass route corridors is summarised in the SAR contained in Appendix 2 of this cabinet report. Costs are

presented in Section 4.9 of that report for each bypass route corridor in Table 3 of the report. Estimates comprise bypass construction costs, land acquisition and compensation payments, statutory undertaker's costs and professional fees. These costs are based on current year prices with an appropriate amount of optimism bias applied to reflect that the estimates are produced based on a preliminary design for each route. When a route is selected, detailed design of the route will progress and cost estimates will be updated. Inflation and optimism allowances will be updated in accordance with government guidance as the business case for the scheme is developed for funding application purposes.

Corridor	Estimated Total Cost (£) – Current year Prices (2018)
Corridor 1 – Orange	151m
Corridor 2 - -Cyan	153m
Corridor 3 – Yellow	150m
Corridor 4 – Red	153m
Corridor 5 – Olive	149m
Corridor 6 – Black 1	160m
Corridor 7 - Black 2	166m

89. Each cost estimate is based on a detailed spreadsheet of quantities taken from the current level of design model. These cost estimates have been built up using rates appropriate to the size and nature of the scheme from national price book SPONS Civil Engineering and Highway Price Book 2018. Estimates also include overhead and profit, preliminaries, statutory undertakers estimated costs land costs and professional fee costs. An allowance of optimism Bias of 32% is included in the costs presented given the preliminary stage of design in accordance with WebTAG guidance. This allowance within the estimate is in accordance with government guidance and ensures that preliminary cost estimates include possible future cost uplifts based on similar project experience.
90. The cost estimates presented in the SAR and summarised above are an update on the previous estimated costs presented in the Strategic Outline Business Case (SOBC) for the project. These SOBC costs were undertaken prior to any route assessment work and were consistent with the level of project detail at that time. They were estimated at the time of production of the SOBC in 2014 prices. The current estimated costs for the bypass have been estimated at current year (2018) prices. Taking inflation into account since 2014 the estimated cost of the bypass remain broadly comparable with those identified in the SOBC. The recommended red route as the preferred route for the bypass is at the lower end of estimated route costs.

Package Element	Estimated Total Cost (£) – Current year Prices (2014)	Estimated Total Cost (£) – Current year Prices (2018)
Western Relief Road (excluding Southern Link & with Risk adjusted)	£136,270,000	£153,000,000 (subject to selection of red route as preferred bypass route)
Public realm, active mode and traffic management scheme for existing route of A49	£10,000,000	To be updated as active travel measures are further developed
Public realm, active mode and traffic management scheme for radial A routes within urban area	£10,000,000	To be updated as active travel measures are further developed
Urban traffic control system including local management centre	£5,000,000	To be updated as active travel measures are further developed
20 mph schemes for residential areas	£2,000,000	To be updated as active travel measures are further developed
City wide active travel mode projects	£2,000,000	To be updated as active travel measures are further developed

91. Estimated costs for the active travel projects that would form the HTP with the bypass were estimated within the SOBC as £29m based on some assumed improvements detailed within the report and summarised in the table above.
92. Since then we have developed proposals for ATMs and consulted on a range of possible improvements. The detail of this is set out the ATM report which is contained within Appendix 6 of this cabinet report. Further assessment and consultation will enable a package of measures to be selected that would form the HTP with the bypass. The package of measures will be different from those included in the SOBC so costs will differ. This would be the subject of a further report to cabinet and cost estimates will be presented within that report to confirm overall cost and value for money of the HTP project and would be considered by cabinet at that time.
93. As of 31 May 2018 spend from 2015 totals £4.037m. £3.992m has been spend on professional fees associated with the work to develop a long list of possible bypass route corridors, assessment work to select a shortlist from this and the work (which is the subject of this report) to assess the shortlist to recommend a preferred route corridor including the consultations undertaken to inform this process. The remaining £45K is cost associated with various payments ranging from land compensation payments associated with survey work and consultation consumables costs.

94. There is an approved capital programme allocation of £2.960m in 2018 / 2019 for the detailed design and consultation of the preferred route and package. Following selection of a preferred route, these funds will be drawn down to undertake detailed design, phase 3 consultation and development of reports required to support the planning process.
95. Funding to progress the scheme further in 2019/20 and beyond will be the subject of applications for funding and will need to be considered in the annual review of the capital programme. The budget for further stages of this project development will be the subject of a further reports.
96. Funding for the construction costs of the HTP will be subject to ongoing bids to appropriate Government funding streams. As reported in January 2018, contributions to the development of the scheme have already been received from Highways England and Midlands Connect. The Council was also recently been accepted into the Housing Infrastructure Fund forward funding programme which will support the development of the detailed business case and subject to acceptance of the business case could make a significant contribution to the cost of delivering the scheme. Failure to confirm early government funding will impact on funding requirement from the council and could impact on programme. Should the scheme not be constructed the development costs would need to be funded from revenue sources.

Risk management

97. If the council does not carry out a robust appraisal process of the alignment alternatives, the route recommended for selection as the preferred route for the bypass may not be the correct choice. To ensure that the best performing route corridor is recommended this risk will be managed through the commissioning of engineering, transport planning, and environmental professional services challenged and reviewed by an adequately resourced project team within the council and its delivery partner Balfour Beatty Living Places with appropriate reviews during the delivery of the project. The route appraisal will be carried out and documented in accordance with DfT Transport Analysis Guidance (WebTAG). Compliance with this guidance will be monitored at key stages in the project.
98. The need for significant investment in transport infrastructure is recognised by the council, the LEP, and Highways England. It is possible that the current economic climate and the reliance on various funding sources to deliver the road may affect the timing and deliverability of the bypass. The risks associated with uncertainty of funding will be managed through applications for government funding, consideration of phased delivery of the road, the development of a robust business case, and ongoing regional partnership work through both the LEP and Midland Connect to secure funds from central government.

Consultees

99. Detail of Phase 2 consultation is set out in this cabinet report above and in greater detail in the consultation report in Appendix 1. Local members and parish councils were briefed both about the shortlist of possible bypass route corridors in advance of Phase 2 consultation and to explain the process for the selection of a preferred route and local members were also briefed in advance of the consideration of this cabinet report.

100. The Hereford BID, Chamber of Commerce and Business Board expressed support for the HTP and cited the economic benefits that it would bring to the city of Hereford and how it would help unlock growth in the local economy and the ambitions of the city. NMITE, Weston's and Stagecoach provided a response to the consultation setting out their support as in their view the bypass would improve regional connectivity and provide a suitable alternative route which will relieve congestion for by reducing traffic through town, resulting in improved journey times and significant improvements in air quality.
101. CPRE Herefordshire, Hereford Green Party, Historic England and the National Trust set out concerns that the proposed bypass could have environmental and heritage impacts and would not deliver the benefits claimed. These comments will be considered further as the project is progressed. The Church Commissioners noted in their response to the consultation that there is an opportunity for the bypass to contribute to reducing flows along Yazor Brook.
102. The Herefordshire Tertiary Education Trust responded to express their support for the bypass in the context of it facilitating the construction of new homes.
103. There was a significant level of support for Walking, Cycling, Bus and Public Realm Improvements and the benefits the new connections could bring. Ensuring existing public rights of way were not severed by the new road and junctions was also highlighted. The need to 'maximise benefits to public transport and non-motorised users within the city was also praised. Other organisations were keen to see more emphasis on walking, cycling, bus and public realm improvements.
104. Further consultations will take place as the project progresses. Phase 3 consultation will take place late 2018 on the preferred alignment and package of measures subject to cabinet decision. There will be ongoing consultation with people directly affected by the scheme, local communities and groups, parish councils and local members.
105. There is ongoing engagement with statutory consultees. This includes: consultation with Highways England on transport modelling, developing the business case and establishing the required design standards; consultation with Historic England discussing options to avoid adverse impacts on heritage assets, including the setting of listed buildings; consultation with Natural England to agree the approach to the Habitats Regulation Screening Assessment and Environmental Impact Assessment; and the Environment Agency to discuss matters in relation to watercourses and flood risk, particularly design requirements for the River Wye.
106. All political groups and local members were consulted about this report. There has been no direct feedback from local members or political groups to officers.

Appendices

Appendix 1: HTP Phase 2 Consultation Report

Appendix 2: HTP Stage 2 Scheme Assessment Report

Appendix 3: HTP Stage 2 Environmental Assessment Report

Appendix 4: HTP Route Selection Report

Appendix 5: HTP Preferred Route Report

Appendix 6: HTP Active Travel Measures Report

Appendix 7: HTP Equality Impact Assessment

Background papers

None



Herefordshire Council

HEREFORD TRANSPORT PACKAGE

Active Travel Measures at Option Development
Stage



Herefordshire **Council**

HEREFORD TRANSPORT PACKAGE

Active Travel Measures at Option Development Stage

PROJECT NO. 70024065

OUR REF. NO. 70024065-WSP-XX-RP-HE-00007_V1

DATE: JUNE 2018

WSP
1 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ
Phone: +44 2920 769 200

WSP.com

QUALITY CONTROL

Issue/revision	VO	V1	V2	V3
Remarks	Final Draft for Client Approval	For Client Acceptance		
Date	15.06.2018	25.06.2018		
Prepared by	Rhian Sheady	Rhian Sheady		
Signature				
Checked by	Rob Jones	Rob Jones		
Signature				
Authorised by		Gary Littler		
Signature				
BBLP Approval		David Neal		
BBLP Signature				
Report number	70024065-WSP-XX-RP-HE-00007_V1	70024065-WSP-XX-RP-HE-00007_V1		

CONTENTS

	EXECUTIVE SUMMARY	1
1	INTRODUCTION	4
1.1	PURPOSE OF REPORT	4
1.2	OVERVIEW	4
2	WORK TO DATE	5
2.1	OVERVIEW	5
2.2	PHASE 1 CONSULTATION	5
2.3	HTP OBJECTIVES	6
2.4	WEBTAG PROCESS	8
2.5	PHASE 2 CONSULTATION	10
2.6	DEVELOPER PROPOSALS	12
2.7	IDENTIFICATION AND DEVELOPMENT OF MOVEMENT CORRIDORS	19
2.8	DEVELOPMENT OF TRAFFIC MANAGEMENT	47
2.9	INTERACTIONS WITH BYPASS	47
3	NEXT STEPS	50
3.1	OVERVIEW	50
3.2	ASSESS BENEFITS OF THE MOVEMENT CORRIDOR IMPROVEMENTS	51
3.3	PHASE 3 CONSULTATION	52
3.4	COST LEVELS AND DELIVERABILITY	52
3.5	PRIORITISE IMPROVEMENTS	52
3.6	DECISION FOR BUSINESS CASE	53
3.7	PRELIMINARY DESIGN AND COSTING	53
3.8	OUTLINE BUSINESS CASE	53

TABLES

Table 1 Priorities for improvements.	6
Table 2 Active travel improvement options.	10
Table 3 Development of traffic management improvements.	47

FIGURES

Figure 1 HTP objectives and how they define the active travel improvements.	6
Figure 2 Process of identifying Preferred Package for HTP.	8
Figure 3 Respondents support for the improvement options (Question 4).	11
Figure 4 Frequency of support for 'other' active travel improvements (Question 5).	11
Figure 5 Key housing developments in Hereford.	12
Figure 6 Holmer West SUE indicative masterplan.	14
Figure 7 Transport measures associated with the Holmer West SUE.	15
Figure 8 Three Elms SUE illustrative masterplan.	16
Figure 9 Transport measures associated with the Three Elms SUE.	17
Figure 10 Location of movement corridors.	20
Figure 11 College Road movement corridor.	23
Figure 12 A465 Aylestone Hill movement corridor.	25
Figure 13 A438 Ledbury Road movement corridor.	27
Figure 14 Greenway movement corridor.	29
Figure 15 A49 Victoria Street movement corridor.	31
Figure 16 A49 Edgar Street movement corridor.	33
Figure 17 Great Western Way movement corridor.	36
Figure 18 A438 Whitecross Road movement corridor.	38
Figure 19 Three Elms Road / Hurdman Walk movement corridor.	41
Figure 20 Grandstand Road movement corridor.	43
Figure 21 A49 Holmer Road movement corridor.	45
Figure 22 – Areas for consideration of walking, cycling and horse riding	48
Figure 23 Next steps for developing the active travel improvements within Hereford.	50
Figure 24 Demonstration of how assessment areas relate to HTP objectives.	51

APPENDICES

Appendix A - WCHAR Scoping Note

EXECUTIVE SUMMARY

Encouraging the greater use of active travel modes as alternatives to the car, particularly for short trips within the city, is a key part of the Local Transport Plan strategy and is reflected in the objectives of the Hereford Transport Package.

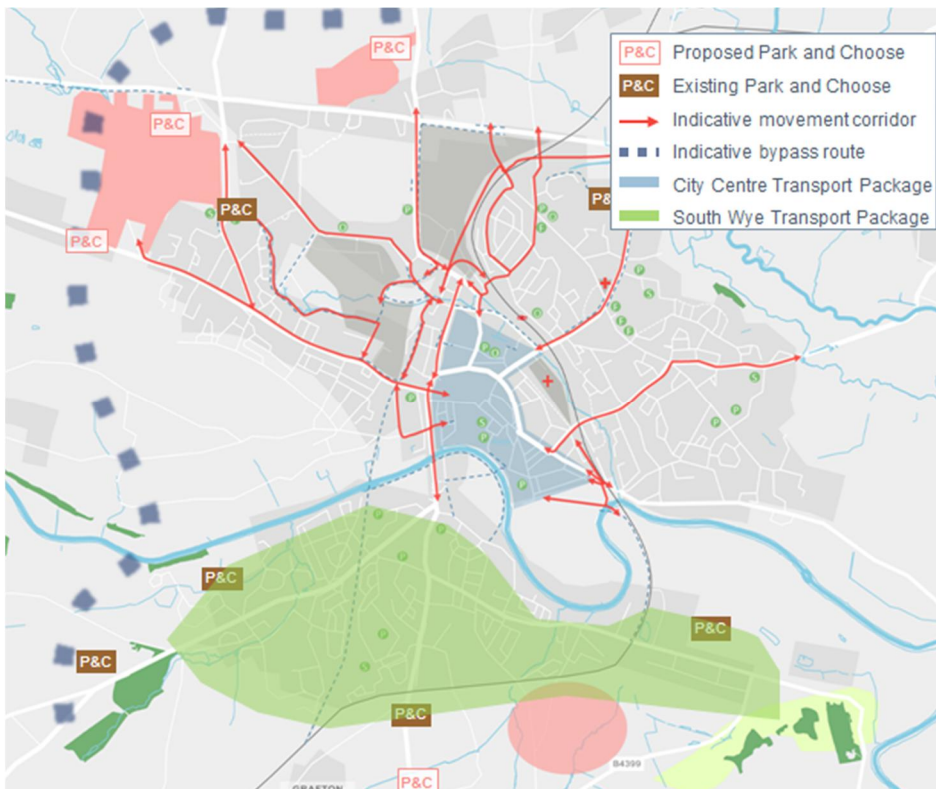
This report outlines the work to date in developing the walking, cycling, bus and public space improvements for the Hereford Transport Package (HTP), referred to as active travel improvements. It also sets out the next steps for further developing and refining the active travel improvements and developing the business case.

The work to date is presented in the form of 11 movement corridors and traffic management improvements within Hereford. These have been developed on the basis of the WebTAG Transport Appraisal Process; from an understanding of current and future conditions, identification of associated issues, the development of objectives and the identification and sifting of options. This process identified a preferred package for HTP of active travel improvement options and traffic management to support the bypass. The work has been informed by contributions from 2 phases of public consultation.

The WebTAG process identified the following five active travel improvement options:

- Better use of public space
- Junction improvements for pedestrians, cyclists and bus users
- Crossing improvements along and across main roads
- Improved existing traffic free paths
- New traffic free paths

The improvements to consider for each of the 11 movement corridors are based on the options above. The location of the movement corridors is summarised in the figure below.



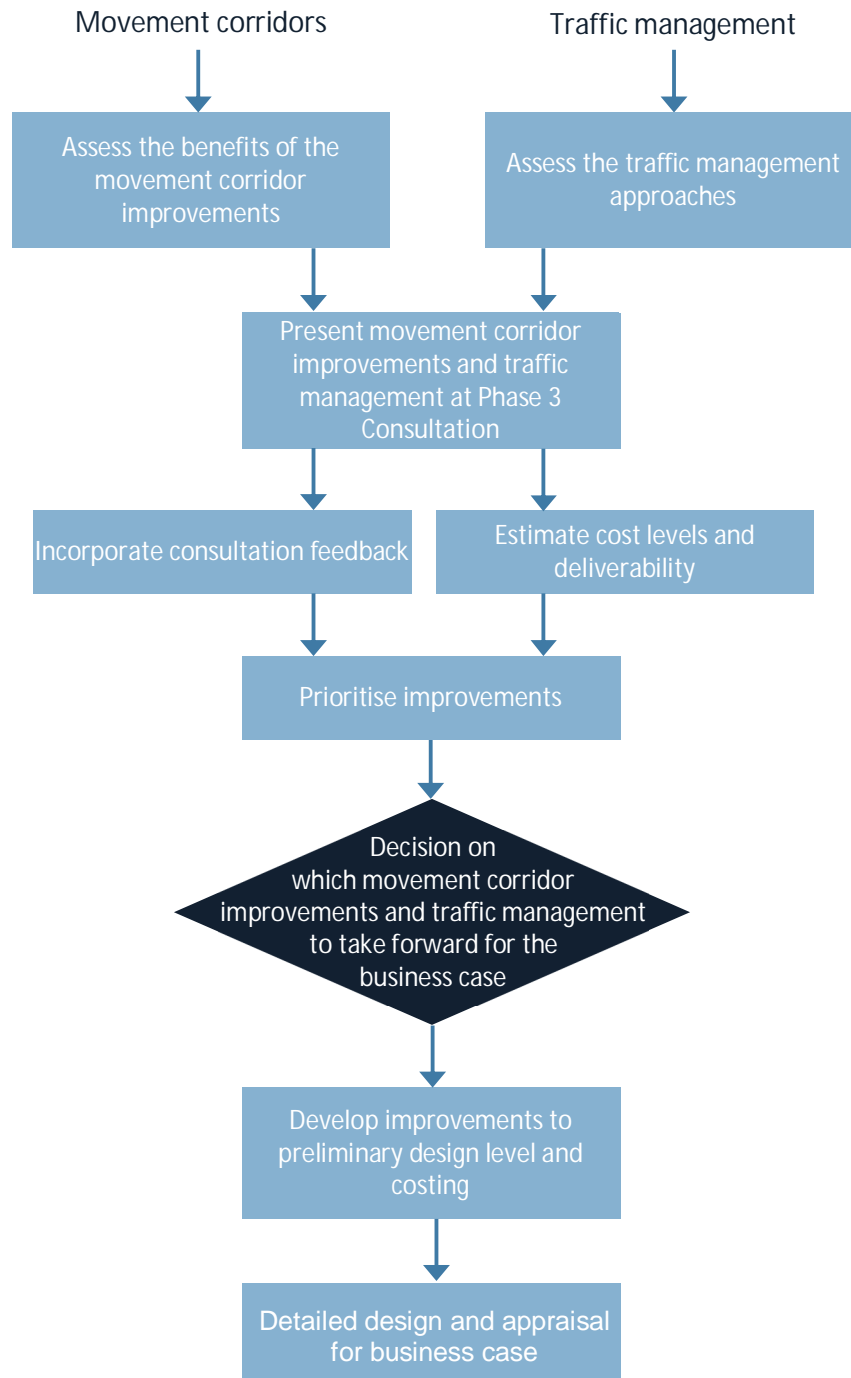
Each of the 11 movement corridors has been developed to outline the following:

- Their key function and role in the package
- The key corridor considerations
- The improvements to be considered
- The key risks and opportunities

The report sets out the development of traffic management improvements, outlining the purpose and key risks / opportunities associated with HGV restrictions within Central Hereford, 20mph speed limits on residential streets, and Intelligent Transport Systems.

Work to date has focused on the built-up area of Hereford. Walking, cycling and horse-riding measures associated with the bypass are to be developed through the Walking, Cycling and Horse-Riding Assessment and Review (WCHAR) process once the route has been determined. The bypass measures will be developed to interact with the active travel movement corridors and Strategic Urban Expansions. The bypass will create new junctions with the A465 Belmont Road A483 King's Acre Road, A4103 Roman Road and A49 north of Hereford. The design of these junctions will take account of the need to ensure maximum connectivity for walking and cycling. The WCHAR process also provides opportunities for the bypass corridor to develop new active travel routes between existing and new communities, employment areas and other trip generators.

The next steps section of the report provides a summary of the tasks and approach for developing the active travel improvements within Hereford, as outlined on the following page. The steps involve developing the improvements from their current conceptual level through the WebTAG based appraisal and design process in support of the Outline Business Case.



1 INTRODUCTION

1.1 PURPOSE OF REPORT

- 1.1.1. Encouraging the greater use of active travel modes as alternatives to the car, particularly for short trips within the city, is a key part of the Local Transport Plan strategy and is reflected in the overall aims of the Hereford Transport Package.
- 1.1.2. The purpose of this report is to:
- Outline the process and progress to date in developing the walking, cycling, bus and public space improvements for the Hereford Transport Package (HTP) within Hereford, referred to as active travel improvements; and
 - Outline the next steps for further developing and refining the active travel improvements and developing the business case.
- 1.1.3. This report concerns active travel improvements within Hereford. For the HTP, the phrase 'active travel' is used to refer to walking, cycling and public transport modes. To ensure a joined up approach, it considers where the relevant movement corridors will interact with the bypass. It also considers the active travel improvements associated with the Three Elms and Holmer West strategic urban expansion areas.
- 1.1.4. The process for identifying the walking, cycling and horse-riding measures associated with the bypass will be undertaken according to the Walking, Cycling and Horse-riding Assessment and Review (WCHAR) guidance. At this stage we have given early consideration to opportunities for possible on-line and off-line improvements to walking, cycling and horse rider networks associated with development of the bypass.

1.2 OVERVIEW

- 1.2.1. The report is structured as follows:
- **Chapter 2** outlines the progress to date in developing the active travel improvements for the HTP, resulting in the identification of 11 movement corridors and traffic management improvements;
 - **Chapter 2** also sets out the walking, cycling and horse rider locations and measures to be considered as part of the bypass scheme development through the WCHAR process; and
 - **Chapter 3** outlines the next steps for developing the movement corridors and traffic management to inform the outline business case.

A scoping note explaining the WCHAR process and what this means for HTP is provided in Appendix A.

2 WORK TO DATE

2.1 OVERVIEW

2.1.1. This chapter outlines the process and progress to date in developing the active travel improvements for the HTP. The chapter is structured as follows:

- **Section 2.2:** Phase 1 Consultation
- **Section 2.3:** HTP Objectives
- **Section 2.4:** Option Assessment Report
- **Section 2.5:** Phase 2 Consultation
- **Section 2.6:** Developer Proposals
- **Section 2.7:** Identification and Development of Movement Corridors
- **Section 2.8:** Development of Traffic Management
- **Section 2.9:** Interactions with Bypass

2.2 PHASE 1 CONSULTATION

2.2.1. Phase 1 of the consultation introduced the HTP and consulted on the transport related problems in Hereford. The consultation set out that the package will comprise a bypass supported by active travel improvements within Hereford.

2.2.2. The consultation was held for a 7 week period from the 4th April to 22nd May 2017. A consultation questionnaire was developed enabling the public to provide feedback on the HTP and was made available to complete via hard copies provided at the exhibition, via an iPad at the exhibition or on the consultation website.

2.2.3. The Hereford Transport Package Phase 1 Consultation Report (August 2017)¹ provides details of the consultation, the questionnaire responses, methodology and analysis. A brief summary is provided below of the questionnaire responses directly related to the active travel improvements.

2.2.4. Question 47 of the questionnaire asked *'what do you think are the current transport problems in Hereford?'* Respondents were given the opportunity to rank the top 5 current transport problems in Hereford from a list of 12 options.

2.2.5. The biggest perceived problems and the percentage of maximum possible score were as follows:

- 1) Traffic congestion – 79%
- 2) Volume of heavy goods vehicles – 39%
- 3) Long delays at signal junctions – 32%
- 4) Poor public transport links to rural areas – 32%
- 5) Poor cycling/walking infrastructure – 30%

2.2.6. Question 48 of the questionnaire asked *'what do you think puts some people off walking, cycling or using the bus for short trips?'*

2.2.7. There were 562 respondents (84%) to question 48 that covered a range of topics. The five most common reasons suggested were:

- Quality of public transport – 301 responses
- Lack of walking and cycling infrastructure – 181 responses
- Safety – 130 responses
- Laziness – 57 responses
- Poorly maintained infrastructure – 54 responses

¹ https://www.herefordshire.gov.uk/downloads/file/13345/htp_phase_1_consultation_report_-_august_2017

- 2.2.8. Question 50 asked which of the following types of improvement do you think are your priorities? On a scale of 1 to 5 (1 being very important and 5 being not important at all), how important are the following factors to you?
- 2.2.9. The improvements identified in the questionnaire and the weighted scores are shown in Table 1. The responses show that there is good support for improvements to walking, cycling, bus and public space.

Table 1 Priorities for improvements.

Type of improvements	Weighted Score
Safer and better cycling routes (for example, the creation of dedicated cycle lanes, cycle friendly junctions, reduced speed limits and traffic-free routes)	1688 (69%)
Safer and better walking routes (for example, the provision of wider footways, improved pedestrian crossing facilities, reduced speed limits and traffic-free routes)	1659 (67%)
More reliable and quicker bus journeys (for example, bus priority on key routes into and out of the city)	1587 (65%)
More reliable and quicker journeys by car (for example more traffic lanes and measures that prioritise cars)	1541 (63%)
More attractive public space (for example, boulevard-style streets, shared space and the planting of trees to create green corridors)	1493 (61%)

2.3 HTP OBJECTIVES

- 2.3.1. The HTP objectives were established through consideration of local, regional and government policies and strategies and analysis of the current and future situation and problems. Findings from the Phase 1 consultation also informed the process of refining the HTP objectives. Figure 1 sets out the objectives for HTP.

Figure 1 HTP objectives and how they define the active travel improvements.



- 2.3.2. The following bullets set out how the active travel improvements would contribute towards the HTP objectives:
- Improvements which reduce delay or enhance journey quality for walking, cycling and bus users would directly benefit objective 1, 2, 5 and in some cases objective 7 and 8.
 - Improvements which improve connectivity to address severance would directly benefit objective 1, 2 and 5 and particularly objective 8.
 - Improvements which improve safety would directly benefit objective 2, 5, 7 and 8.
 - Improvements which make walking and cycling more attractive would directly benefit objective 2 and 5 and in some cases objective 7 and 8.
 - The improvements would have indirect benefits on the other HTP objectives particularly those encouraging more walking and cycling to replace short distance car journeys. For example a mode shift away from car use for local journeys will help to reduce the transport impacts on air quality and noise (objective 6), and improve network resilience (objective 4) associated with more reliable journey times on the A49.

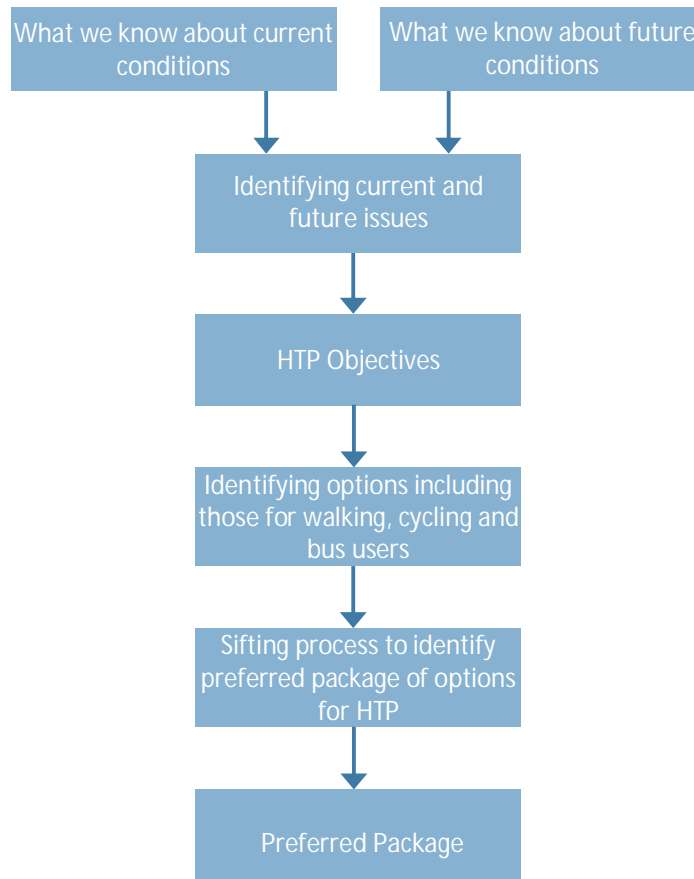
2.4 WEBTAG PROCESS

2.4.1. The development of the HTP has followed the Transport Analysis Guidance WebTAG by Department for Transport. WebTAG provides guidance on the conduct of transport studies including advise on how to:

- Set objectives and identify problems;
- Develop potential solutions; and
- Conduct an appraisal which meets the Department for Transport’s requirements.

2.4.2. Stage 1 Option Development of WebTAG sets out the process to allow options to be identified and sifted and is summarised in Figure 2.

Figure 2 Process of identifying Preferred Package for HTP.



2.4.3. Figure 2 summarises the Transport Appraisal Process for identifying the Preferred Package for HTP. The Phase 1 HTP consultation responses alongside previous consultation responses in Hereford and Herefordshire were used to inform all stages of this process.

2.4.4. The assessment process to identify a preferred package (as described in Section 2.4) has been conducted using the following WebTAG tools:

- Early Assessment Sifting Tool (EAST)
- Option Assessment Framework (OAF)

- 2.4.5. The EAST assessed the options against appraisal criteria within the five business cases described as follows:
- **Strategic Case:** Determines whether or not a project or proposal is needed, either now or in the future.
 - **Economic Case:** Assesses whether projects or proposals offer value for money to the public.
 - **Management Case:** Ensures that the project is deliverable.
 - **Financial Case:** Provides evidence on the affordability of the proposal.
 - **Commercial Case:** Provides evidence of the viability of a project or proposal and the procurement strategy that will be used to engage that the market is set out and appraised.
- 2.4.6. The OAF assessed the options against using appraisal criteria within the following headings:
- Strategic fit
 - Value for money
 - Financial case
 - Delivery case
 - Commercial case
- 2.4.7. Through the EAST and OAF, the Preferred Package for the HTP consists of the following options:
- A bypass
 - Traffic management
 - Intelligent Transport Systems (i.e. the use of information technology and telecommunications to enable users to be better informed and make safer, more coordinated or more efficient use of transport networks)
 - HGV restrictions within central Hereford
 - 20mph speed limit on all streets north of the River Wye (except A roads)
 - Active travel improvements
 - Better use of public space
 - Junction improvements for pedestrians, cyclists and bus users
 - Crossing improvements along and across main roads
 - Improved existing traffic free paths
 - New traffic free paths
- 2.4.8. Table 2 sets out the active travel improvement options in more detail.

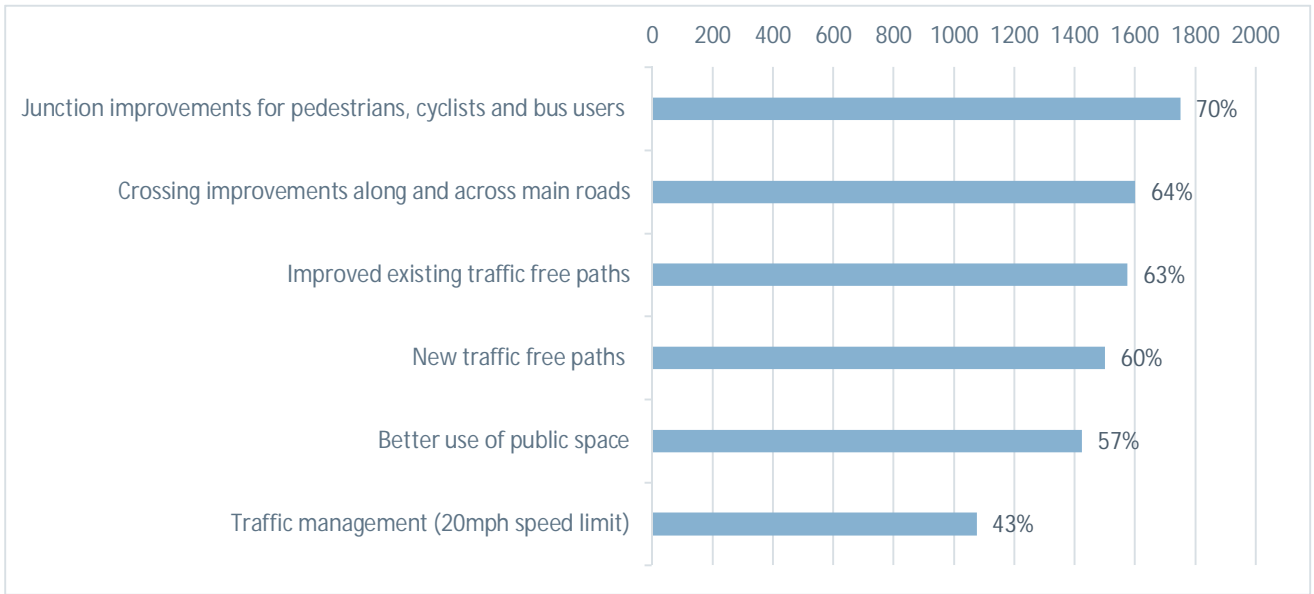
Table 2 Active travel improvement options.

Improvement options	Improvements to be considered
Better use of public space	<ul style="list-style-type: none"> ▪ Shared use walking and cycling paths ▪ New bus lanes or on-road cycle lanes ▪ Wider footways ▪ Improved street environment (e.g. tree lined boulevards and removal of street clutter) ▪ Wider cycle lanes ▪ Improvements to bus stops (e.g. real time information)
Junction improvements for pedestrians, cyclists and bus users	<ul style="list-style-type: none"> ▪ Safe crossings at all junction arms (e.g. wider waiting areas) ▪ New / upgraded crossings for pedestrians and cyclists (e.g. signalling crossings and single stage crossings) ▪ More cycle friendly junction designs (e.g. advanced stop lines, advanced traffic signals or right turn lanes) ▪ Bus priority improvements at junctions
Crossing improvements along and across main roads	<ul style="list-style-type: none"> ▪ Walking and/or cycling priority over side streets (e.g. raised footway to reduce vehicle speeds) ▪ New/upgraded crossings for pedestrians and cyclists (e.g. signalling crossings, bigger waiting areas and removing guard rails)
Improved existing traffic free paths	<ul style="list-style-type: none"> ▪ Better lighting, surfacing and signage ▪ Wider paths ▪ Improved ramps and path accesses ▪ New and improved connections to the city's main roads
New traffic free paths	<ul style="list-style-type: none"> ▪ New green corridors for walking and cycling ▪ Connections with Holmer West and Three Elms urban expansion areas ▪ "Park and Choose" sites

2.5 PHASE 2 CONSULTATION

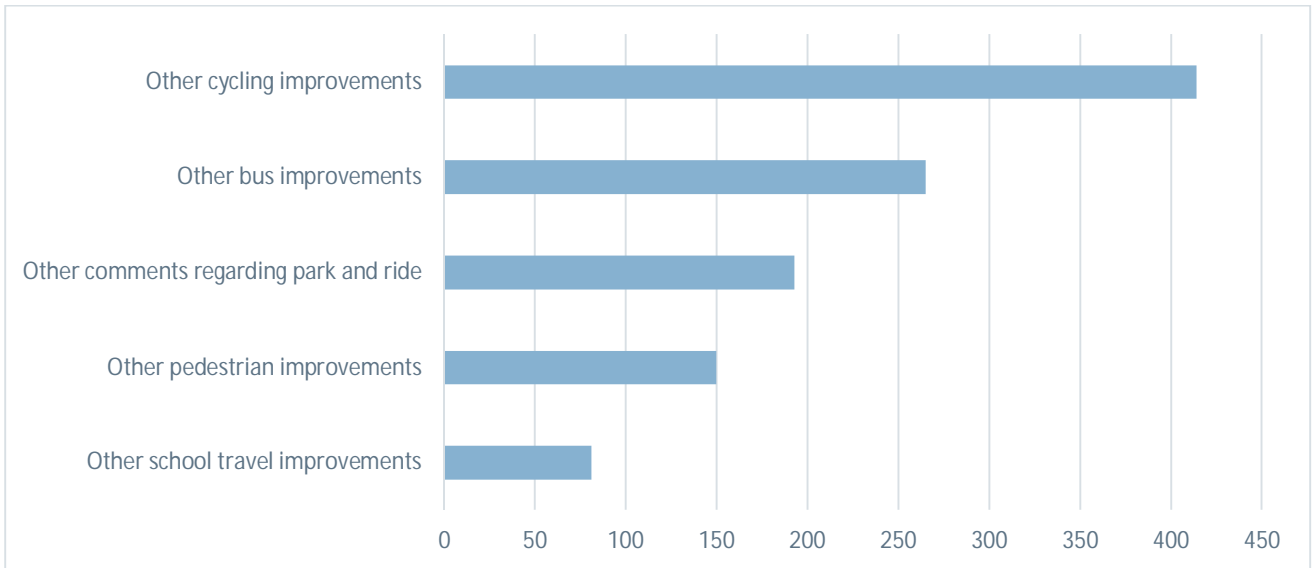
- 2.5.1. The second consultation for HTP presented the potential bypass routes, active travel improvements and traffic management.
- 2.5.2. The consultation was held for a six week period between 6th February and 20th March 2018.
- 2.5.3. The public were invited to provide feedback on the consultation via a Public Consultation Questionnaire. The questionnaire was available to complete via hard copies provided at the exhibition and on the consultation website. The Hereford Transport Package Phase 1 Consultation Report (June 2018) provides details of the consultation, the questionnaire responses, methodology and analysis. A brief summary of the questionnaire responses directly related to the active travel improvements is provided below.
- 2.5.4. Question 4 and 5 of the questionnaire concerned the active travel improvements of the HTP.
- 2.5.5. Question 4 of the questionnaire asked respondents to tick the improvement options which they support. Figure 3 summarises the responses to this question.

Figure 3 Respondents support for the improvement options (Question 4).



- 2.5.6. Question 4 also provided opportunity for respondents to comment on the improvement options. The analysis of common options revealed the most popular, was ‘general improvement to walking, cycling, bus and public realm’.
- 2.5.7. Question 5 asked respondents whether there were any other walking, cycling, bus or public space improvements or locations that should be considered.
- 2.5.8. A summary of the responses to question 5 is shown in Figure 4, which shows there is good support for active travel improvements, particularly cycle improvements.

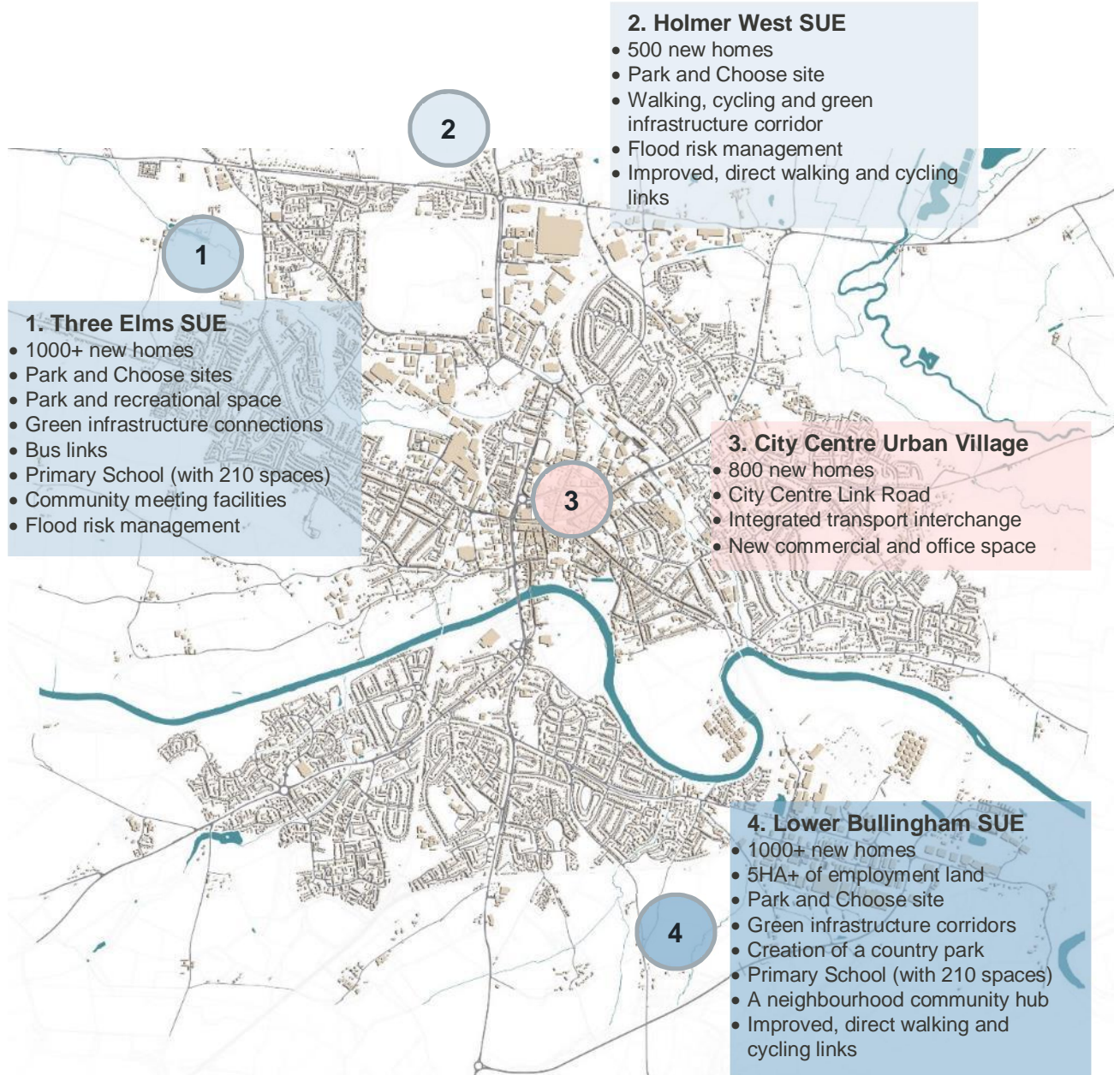
Figure 4 Frequency of support for ‘other’ active travel improvements (Question 5).



2.6 DEVELOPER PROPOSALS

2.6.1. Figure 5 outlines the key housing developments in Hereford which are set out in Herefordshire Council Core Strategy including the three Sustainable Urban Extensions (SUEs) in Hereford.

Figure 5 Key housing developments in Hereford.



2.6.2. Development of the HTP considers the additional travel demand resulting from the future housing and any proposals to improve the transport network.

- 2.6.3. Figure 6 shows the indicative masterplan for the Holmer West SUE and Figure 7 shows the transport measures associated with the development. Planning documents associated with this development are available on the Herefordshire Council planning portal² (planning application reference P150478/O).
- 2.6.4. Figure 8 shows the illustrative masterplan for the Three Elms SUE and Figure 9 shows the transport measures associated with the development. Planning documents associated with the development are available on the Herefordshire Council planning portal³ (planning application reference P162920/F).
- 2.6.5. The developer proposals have been taken into consideration when developing the active travel movement corridors as shown in Section 2.7.

²https://www.herefordshire.gov.uk/info/200142/planning_services/planning_application_search/details?id=150478&search=150478

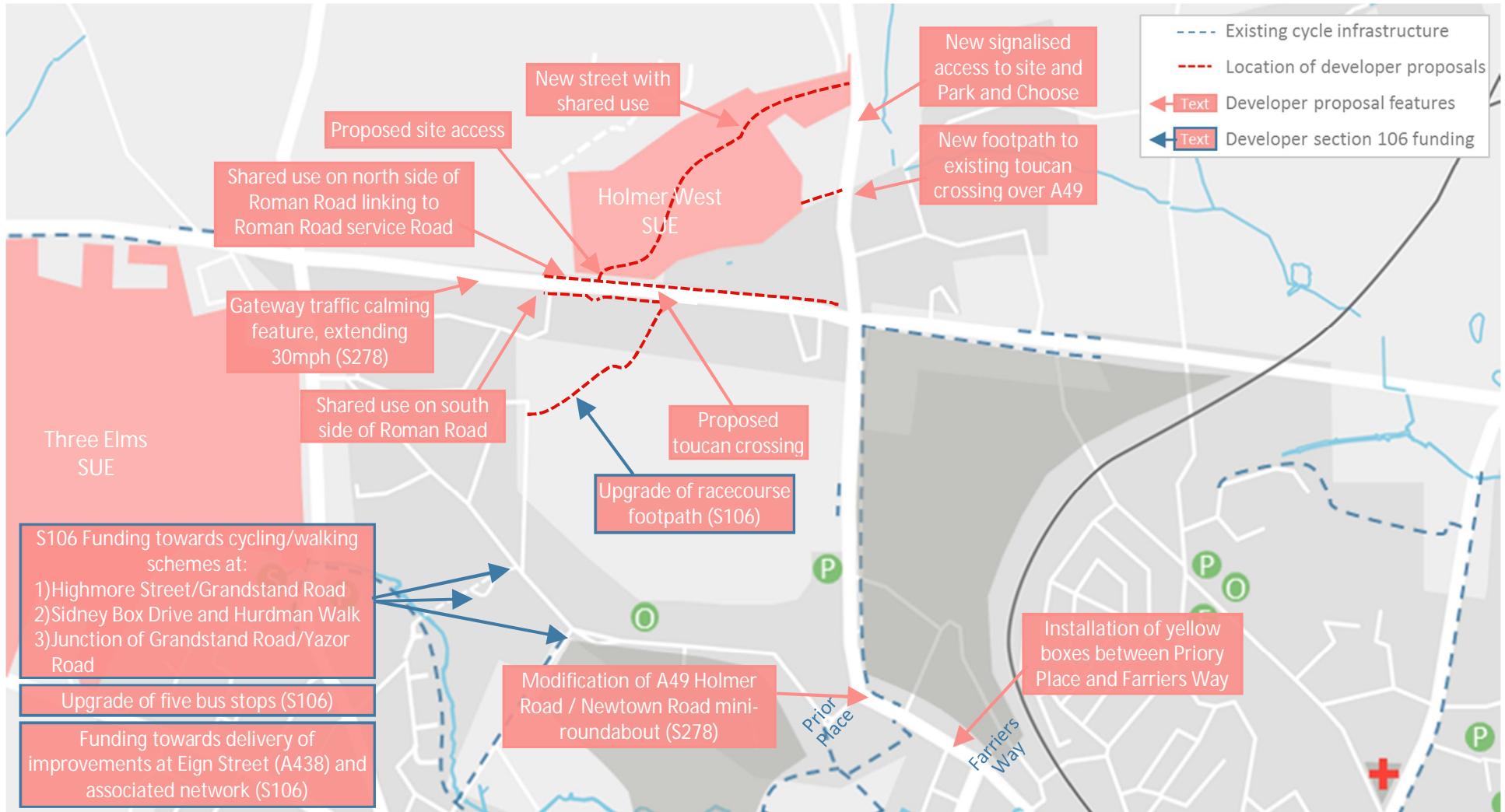
³https://www.herefordshire.gov.uk/info/200142/planning_services/planning_application_search/details?id=162920&search=162920

Figure 6 Holmer West SUE indicative masterplan.



326

Figure 7 Transport measures associated with the Holmer West SUE.



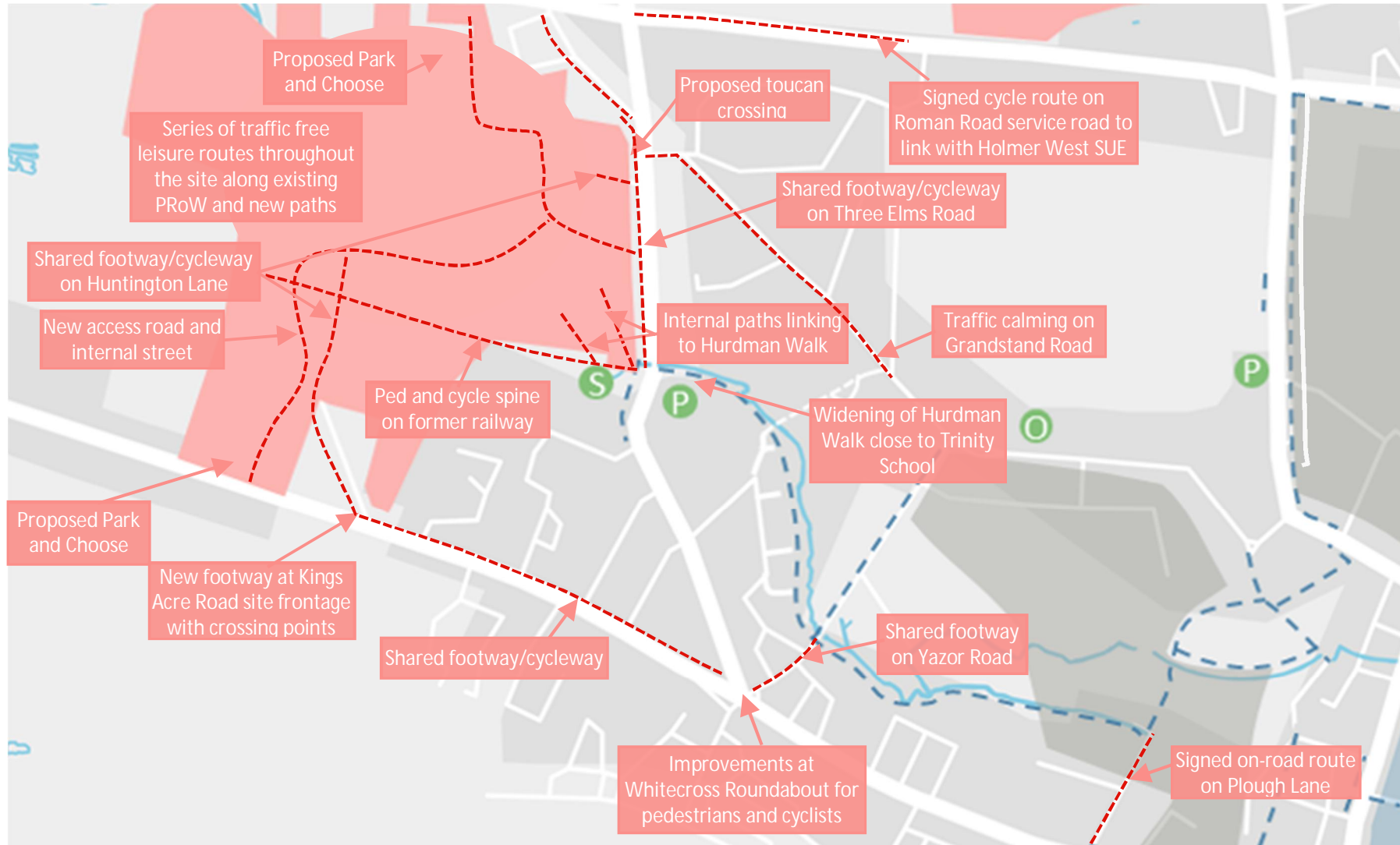
327

Figure 8 Three Elms SUE illustrative masterplan.



328

Figure 9 Transport measures associated with the Three Elms SUE.

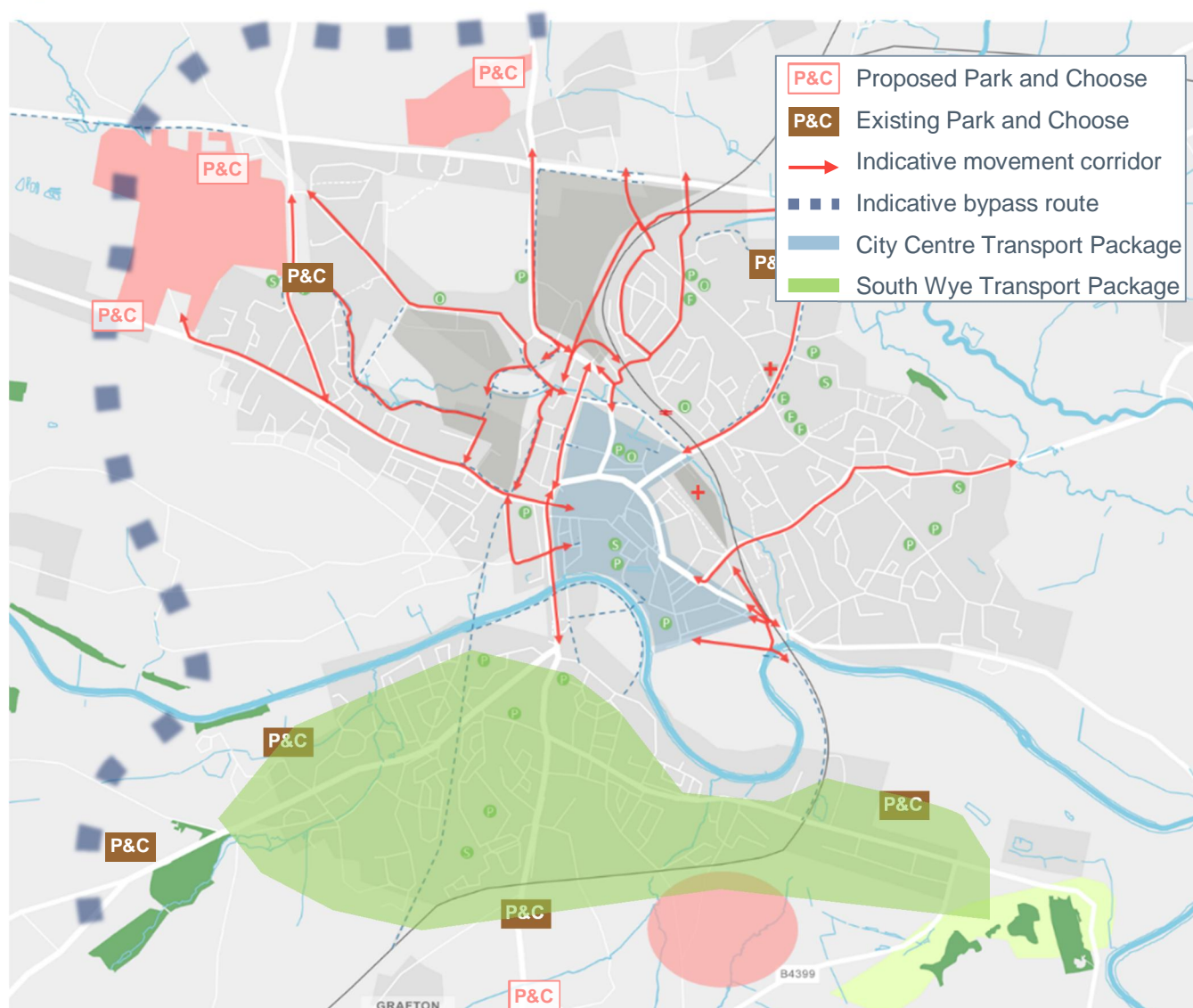


329

2.7 IDENTIFICATION AND DEVELOPMENT OF MOVEMENT CORRIDORS OVERVIEW

- 2.7.1. To further develop the active travel improvements, 11 movement corridors have been identified. Identification of the movement corridors has been informed by the responses to the Phase 2 consultation and an understanding of the current and future situation in Hereford.
- 2.7.2. Traffic management improvements have been developed separately and these are discussed in Section 2.8. The movement corridors focus on the following five active travel improvement options:
- Better use of public space
 - Junction improvements for pedestrians, cyclists and bus users
 - Crossing improvements along and across main roads
 - Improved existing traffic free paths
 - New traffic free paths
- 2.7.3. An overview of the movement corridors is shown in Figure 10. Figure 10 also shows the geographical scope of the City Centre Transport Package and the South Wye Transport Package. The geographical scope of the HTP and the active travel improvements excludes these areas.
- 2.7.4. The WCHAR process and associated reports will cover the walking, cycling and horse-riding measures associated with the bypass corridor. Section 2.9 of this report sets out where the bypass is expected to interact with existing walking, cycling and horse riding routes. It also illustrates potential on and off-line opportunities to be addressed in the wider scheme development.

Figure 10 Location of movement corridors.



2.7.5. The coverage of the movement corridors is shown in Figure 10 and summarised as follows:

- College Road movement corridor
- A465 Aylestone Hill movement corridor
- A438 Ledbury Road movement corridor
- Greenway movement corridor
- A49 Victoria Street movement corridor
- A49 Edgar Street movement corridor
- Great Western Way movement corridor
- A438 Whitecross movement corridor
- Three Elms Road / Hurdman Walk movement corridor
- Grandstand Road movement corridor
- A49 Holmer Road movement corridor

2.7.6. There is some overlap of corridors where movement patterns and needs cross or merge. As shown in Figure 10 the movement corridors focus on improving connections to key destinations for the HTP, i.e. the city centre, Widemarsh employment, Holmer employment and towards the Hereford Enterprise Zone (HEZ).

2.7.7. The following sections set out the movement corridors in more detail, providing the following:

- An overview of the context and function of the movement corridor;
- Diagram showing the location of the movement corridor and connections to and from the movement corridor which will be considered;
- The key corridor considerations (i.e. what issues need to be addressed and what other proposals need to be considered);
- The improvements to consider; and
- The key risks and opportunities.

COLLEGE ROAD MOVEMENT CORRIDOR

Overview

- 2.7.8. The college road movement corridor considers movements between north Hereford and the city centre / the Great Western Way, as shown in Figure 11.
- 2.7.9. This movement corridor has been selected to address the severance caused by the railway line and to improve the safety of pedestrian and cycle movements across it.
- 2.7.10. There are links to the colleges to the east along Venns Lane toward the Aylestone Hill movement corridor.
- 2.7.11. This movement corridor considers improvements along the line of the former Herefordshire and Gloucestershire canal section through north-east Hereford and the former railway line near Newtown Road. These would connect the Great Western Way to the railway station area. There are currently limited pedestrian or cyclist facilities along parts of the canal where it has been restored at Aylestone Park. However, the line of the canal is protected from direct development other than that required for the restoration of the canal and provision of the towpath as a walking and cycling route. Where the former canal used a tunnel (between College Road and under Old School Lane), land for an over ground route has been reserved for the walking and cycling route.
- 2.7.12. This movement corridor connects with the following movement corridors:
- A49 Edgar Street movement corridor
 - A49 Holmer Road movement corridor
 - Great Western Way movement corridor

Figure 11 College Road movement corridor.



Key Corridor Considerations

2.7.13. The improvements for this movement corridor need to:

- Reduce severance impacts caused by the railway line north of the city centre
- Improve connectivity between the city centre and Holmer employment over the railway line
- Tie into any proposals from other movement corridors which coincide with this corridor
- Tie into on-going works surrounding City Link Road and Station Approach

Improvements to Consider

2.7.14. The improvements to consider for this movement corridor include:

- New footways on Burcott Road (between railway bridge and Farriers Way)
- Pedestrian and cycle priority over side streets/accesses
- Advisory cycle lane on Burcott Road and railway bridge/s
- Signal controlled one-way working over railway bridge/s
- Shared use / segregated cycleway on College Road
- Redesign of Newtown Road / Widemarsh Street roundabout and Newtown Road / A49 Edgar Street (Pizza Hut) roundabout to make more compact and upgrade crossings
- New pedestrian cycle bridge/s over railway bridge(s)
- New path on former railway line with connections to existing network
- Proposed shared use route along the line of the former Herefordshire and Gloucestershire Canal

Risks and Opportunities

2.7.15. The key risks and opportunities which have currently been identified for this movement corridor are:

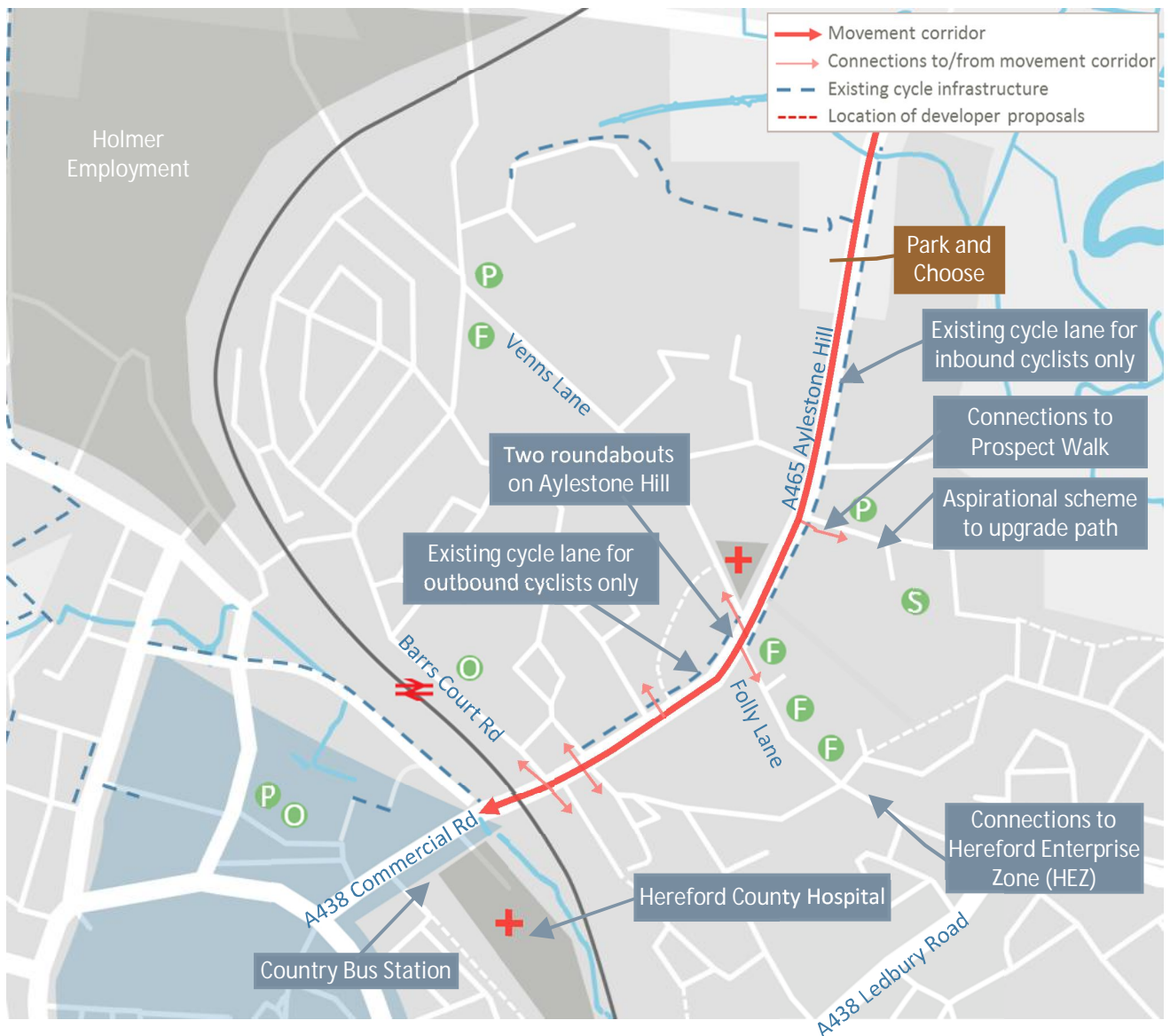
- Risk: Potentially high cost for upgrading path along canal – depending on condition of path and tunnel
- Risk: Running shared use path alongside live rail lines
- Risk: Environmental feasibility
- Risk: High cost and traffic impact in signalling railway bridge/s and redesigning Newton Road roundabout
- Opportunity: Delivery not dependent on bypass
- Opportunity: To coincide with Network Rail potential aspirations to replace Burcott Road railway bridge
- Opportunity: Collaboration with the group restoring the canal
- Opportunity: S106 contributions from developments alongside the canal

A465 AYLESTONE HILL MOVEMENT CORRIDOR

Overview

- 2.7.16. This movement corridor concerns movements along the A465 Aylestone Hill. Aylestone Hill serves as an arterial route connecting residential areas of north-east Hereford to the city centre, as shown in Figure 12.
- 2.7.17. There is a Park & Choose site at Aylestone Park and colleges and a secondary school are at the top of the hill. There is also potential to provide connections to Prospect Walk which is a walking and cycling link between Aylestone and Bishops secondary schools.
- 2.7.18. The corridor has been selected to improve connectivity and safety along the A465 and improve connections across the A465 for cyclists and pedestrians. Improvements to this movement corridor would benefit trips to the education establishments adjacent to Aylestone Hill.

Figure 12 A465 Aylestone Hill movement corridor.



Key Corridor Considerations

2.7.19. The improvements for this movement corridor need to:

- Improve connectivity and safety for cyclists and pedestrians between north-east Hereford and city centre / hospital / colleges / schools via the A465
- Improve connectivity and safety for cyclists and pedestrians across the A465
- Tie into on-going works surrounding City Link Road and Station Approach
- Tie into connections to Prospect Walk

Improvements to Consider

2.7.20. The improvements to consider for this movement corridor include:

- Widen existing cycle lanes / footways
- New shared use / segregated cycleway
- New / upgraded crossing provision over A465 and Venns Lane / Folly Lane double roundabout
- Pedestrian and cycle priority over side streets
- Removal of right turn lanes to accommodate bus priority / cycle lanes / wider footways

Risks and Opportunities

2.7.21. The key risks and opportunities which have currently been identified for this movement corridor are:

- Risk: Traffic impacts associated with improvements which involve reallocation of road space on A465
- Opportunity: Delivery not dependent on bypass
- Opportunity: Potential to utilise S106 from possible development north-east of Aylestone Hill
- Opportunity: Potential synergies with aspirational scheme to upgrade Prospect Walk

A438 LEDBURY ROAD MOVEMENT CORRIDOR

Overview

- 2.7.22. This movement corridor concerns movements along the A438 Ledbury Road which serves as an arterial route connecting residential areas of north-east Hereford and the city centre, as shown in Figure 13. The corridor has been selected to improve connectivity and safety along the A438 and improve connections across the A438 for cyclists and pedestrians.
- 2.7.23. This movement corridor connects with the Greenway movement corridor.

Figure 13 A438 Ledbury Road movement corridor.



Key Corridor Considerations

- 2.7.24. The improvements for this movement corridor need to:
 - Improve connectivity and safety for cyclists and pedestrians between north-east Hereford and the city centre/colleges/schools/hospital via A438
 - Tie into planned works on St Owen's Street
 - Tie into connections to Prospect Walk
 - Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.25. Improvements to consider for this movement corridor include:

- Widen footways
- New shared use/segregated cycleway / cycle lane
- New/upgraded crossings over A438
- Pedestrian and cycle priority over side streets and Tesco Express filling station
- Upgrade crossing provision at Hafod Road / A438 roundabout and redesign to compact roundabout
- New crossing facilities over A438 at junction with Central Avenue and Portfield Street
- Redesign of 5-arm signalised junction with Folly Lane

Risks and Opportunities

2.7.26. The key risks and opportunities which have currently been identified for this movement corridor are:

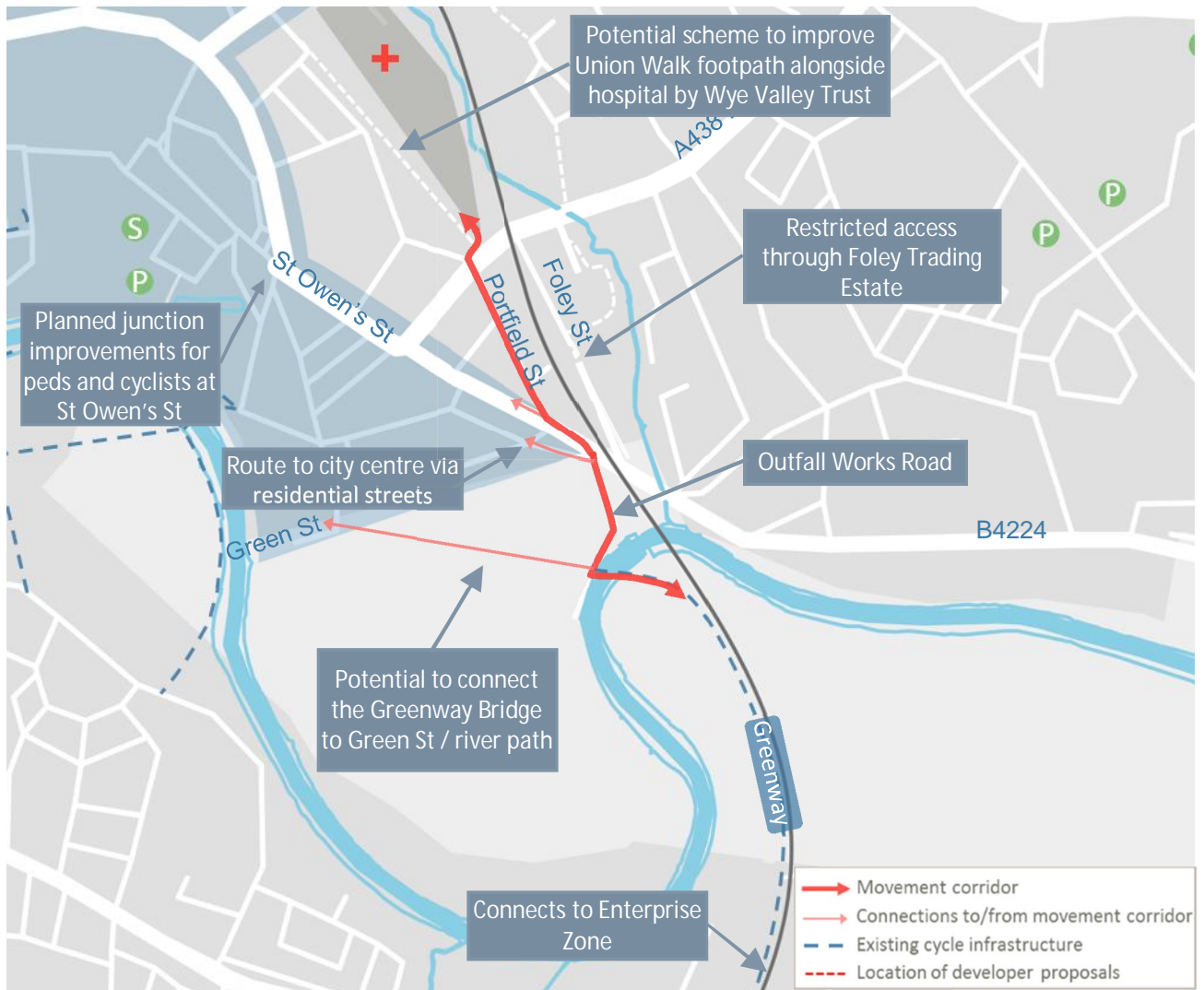
- Risk: Traffic impacts associated with improvements which involve reallocation of road space on A438
- Opportunity: Delivery not dependent on bypass

GREENWAY MOVEMENT CORRIDOR

Overview

- 2.7.27. The purpose of the Greenway movement corridor is to improve connections between the Greenway and the city centre/hospital and future university as shown in Figure 14. The Greenway currently provides a traffic free pedestrian and cycle route to Hereford Enterprise Zone with connections to the city centre via Crozen Lane or the B4224. Improvements just north of the A438 which connect the Greenway to the hospital would also benefit the A438 Ledbury Road movement corridor.
- 2.7.28. This movement corridor connects with the A438 Ledbury Road movement corridor.

Figure 14 Greenway movement corridor.



Key Corridor Considerations

- 2.7.29. The improvements for this movement corridor need to:
 - Improve safety and route quality for cyclists and pedestrians between Greenway and city centre / hospital / future university
 - Tie into on-going works on St Owen's Street
 - Tie into any proposals from other movement corridors which coincide with this corridor
 - To tie into aspirational scheme by Wye Valley Trust to upgrade Union Walk footpath alongside hospital

Improvements to Consider

2.7.30. Improvements to consider for this movement corridor include:

- Footway on Outfall Work Road at junction with B4224
- Widen footways under railway bridge
- Shared use cycleway/cycle lane under railway bridge
- Signal controlled one-way working under railway bridge
- Ped/cycle provision through Foley Trading Estate
- New shared use path connecting from the Greenway Bridge to Green Street/river path

Risks and Opportunities

2.7.31. The key risks and opportunities which have currently been identified for this movement corridor are:

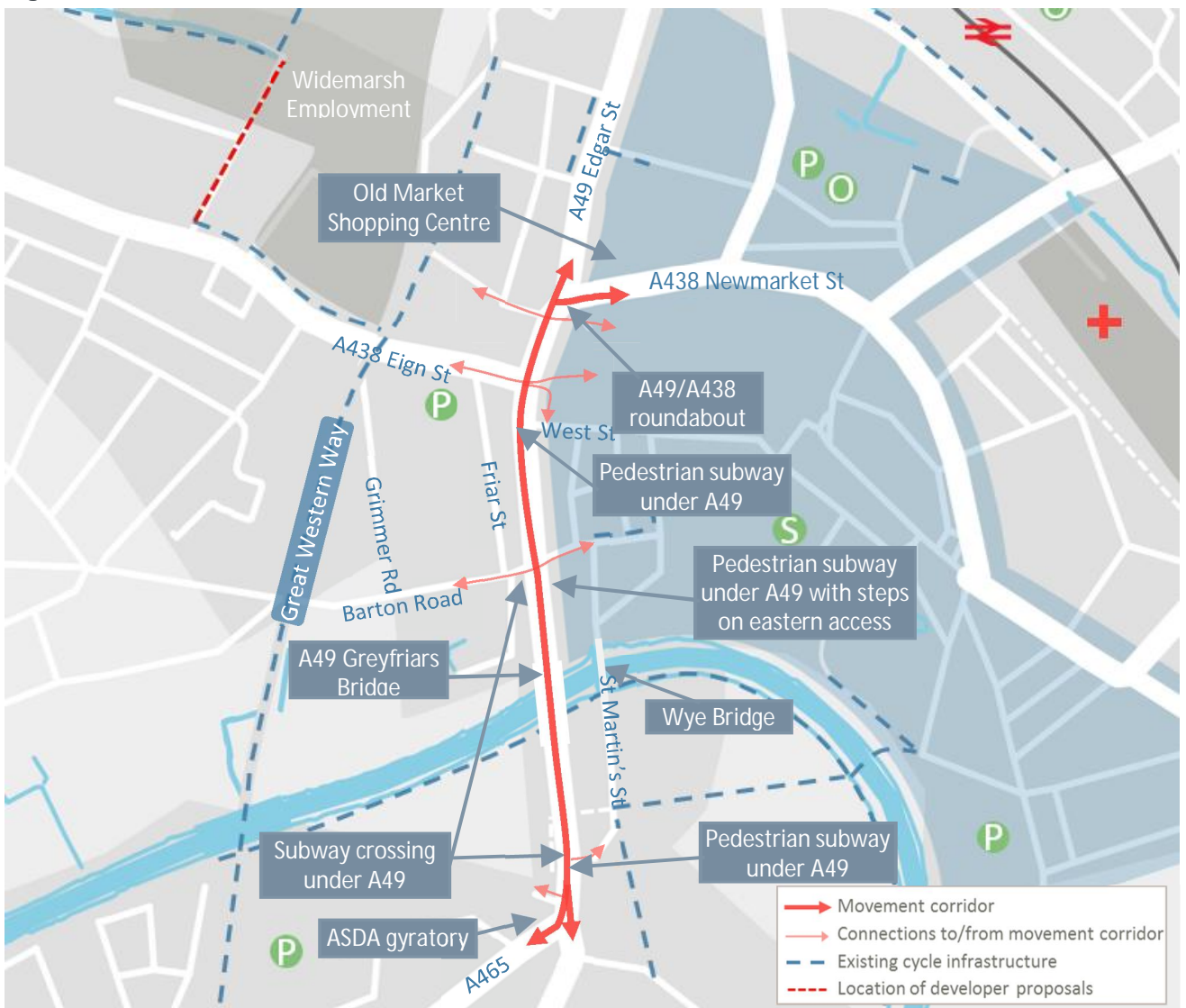
- Risk: Land ownership uncertainties for new path to city centre
- Risk: Continuity of route given land ownership of private road through Foley Trading Estate
- Risk: Traffic impact associated with signalising under bridge improvement
- Opportunity: Delivery not dependent on bypass

A49 VICTORIA STREET MOVEMENT CORRIDOR

Overview

- 2.7.32. The A49 Victoria Street movement corridor concerns the length of the A49 between ASDA gyratory and the A49 / A438 roundabout as shown in Figure 15.
- 2.7.33. The corridor has been selected to improve connectivity and safety along and across the A49 Victoria Street for cyclists and pedestrians.
- 2.7.34. Improvements for crossing the A49 would likely benefit the following movement corridors which connect the north-west of Hereford with the city centre across the A49:
 - Great Western Way movement corridor
 - A438 Whitecross Road movement corridor
 - Three Elms Road / Hurdman Walk movement corridor

Figure 15 A49 Victoria Street movement corridor.



Key Corridor Considerations

2.7.35. The improvements for this movement corridor need to:

- Improve connectivity, safety and comfort along and across A49 Victoria St
- Reduce severance caused by the A49
- Consider improvements from South Wye Transport Package and Hereford City Centre Transport Package
- Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.36. The Improvements to consider for this movement corridor include:

- Reduction of vehicle lanes for new cycle lane/bus lane/boulevard on A49
- Widen footways
- Signalise crossing facilities at A49/Barton Road junction
- Cycle priority at A49/Barton Road e.g. advanced green signal for cycles
- New crossing/continuous footway over West Street
- Redesign of ASDA gyratory, A438 Eign Street/A49 junction and A49/A438 roundabout to improve accessibility for pedestrians and cyclists and bus priority
- Provide new crossing over A49 at Eign Street and/or Portland Street
- Shared use path on eastern side of A49 between West Street and Newmarket Street

Risks and Opportunities

2.7.37. The key risks and opportunities which have currently been identified for this movement corridor are:

- Risk: Potential improvements on Portland Street may be limited by highway boundary
- Risk: High costs and traffic impacts associated with redesign of ASDA gyratory and signal changes at Barton Road junction
- Opportunity: Potential ability to influence route choice for cross city movements

A49 EDGAR STREET MOVEMENT CORRIDOR

Overview

- 2.7.38. The A49 Edgar Street movement corridor concerns the length of the A49 between the A49 / A438 roundabout and Newtown Road / Edgar Street roundabout as shown in Figure 16.
- 2.7.39. The corridor has been selected to improve safety and journey quality along and across the A49 Edgar Street for cyclists and pedestrians.
- 2.7.40. This corridor ties in to the A49 Holmer Road corridor and College Road corridor to the north and A49 Victoria Street corridor to the south. Improvements for crossing the A49 would likely benefit the following movement corridors which connect the north-west of Hereford with the city centre across the A49:
 - Great Western Way movement corridor
 - A438 Whitecross Road movement corridor
 - Three Elms Road / Hurdman Walk movement corridor

Figure 16 A49 Edgar Street movement corridor.



Key Corridor Considerations

2.7.41. The improvements for this movement corridor need to:

- Improve connectivity, safety and journey quality along and across the A49
- Improve connectivity to Great Western Way
- Tie in with City Link Road scheme
- Support pedestrian movements to the bus station
- Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.42. Improvements to consider for this movement corridor include:

- Major redesign of A438 / A49 roundabout to prioritise pedestrian, bus (and cycle) movements
- Pedestrian and cycle priority over side streets
- Reduction of vehicle lanes for new cycle lane/bus lane/boulevard on A49
- Widen footways on A49
- Extend/widen shared use
- New crossings at junction with Blackfriars St

Risks and Opportunities

2.7.43. The key risks and opportunities which have currently been identified for this movement corridor are:

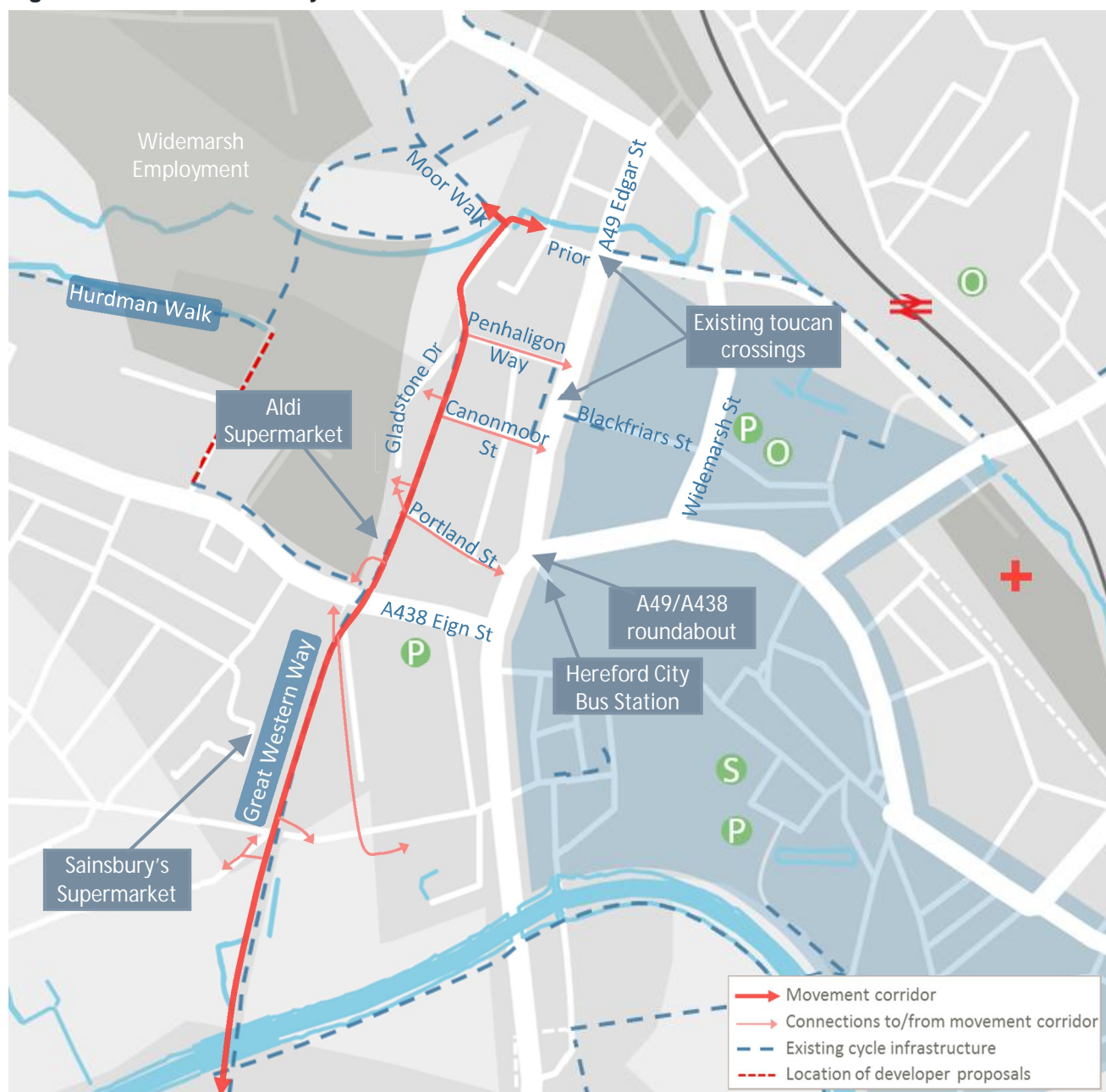
- Risk: Potential improvements on Portland Street may be limited by highway boundary
- Risk: High costs associated with redesign of A49/A438 Roundabout
- Opportunity: Potential ability to influence route choice for cross city movements at A49/A438 roundabout

GREAT WESTERN WAY MOVEMENT CORRIDOR

Overview

- 2.7.44. The Great Western Way is a highly used pedestrian and cycle path which runs along a former railway corridor. Designed in the 1980's and 90s the route would benefit from upgrading to reflect current standards, particularly at the access junctions at Portland Street, Canonmoor Street, Penhaligon Way, Moor Walk and Barton Yard. It runs parallel to the A49 and provides an additional river crossing opportunity for pedestrians and cyclists only as shown in Figure 17. The purpose of the Great Western Way movement corridor is to improve journey quality along the corridor and improve connectivity to and from the corridor.
- 2.7.45. This movement corridor connects with the following movement corridors:
- College Road movement corridor
 - A49 Edgar Street movement corridor
 - A49 Victoria street movement corridor
 - A438 Whitecross Road movement corridor
 - Three Elms Road / Hurdman Walk movement corridor
 - Grandstand Road movement corridor
 - A49 Holmer Road movement corridor

Figure 17 Great Western Way movement corridor.



Key Corridor Considerations

2.7.46. The improvements for this movement corridor need to:

- Improve connectivity, comfort and journey quality along and to/from the Great Western Way
- Tie into connections to the City Link Road, the city centre and employment areas
- Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.47. Improvements to consider for this movement corridor include:

- Improved lighting and surfacing on Great Western Way and access ramps
- Provide paths to / from Great Western Way that align with where people want to travel
- Improvements to access points at Portland Street / Canonmoor Street, Penhaligon Way, Moor Walk and Barton Yard
- Widen foot/cycle path

Risks and Opportunities

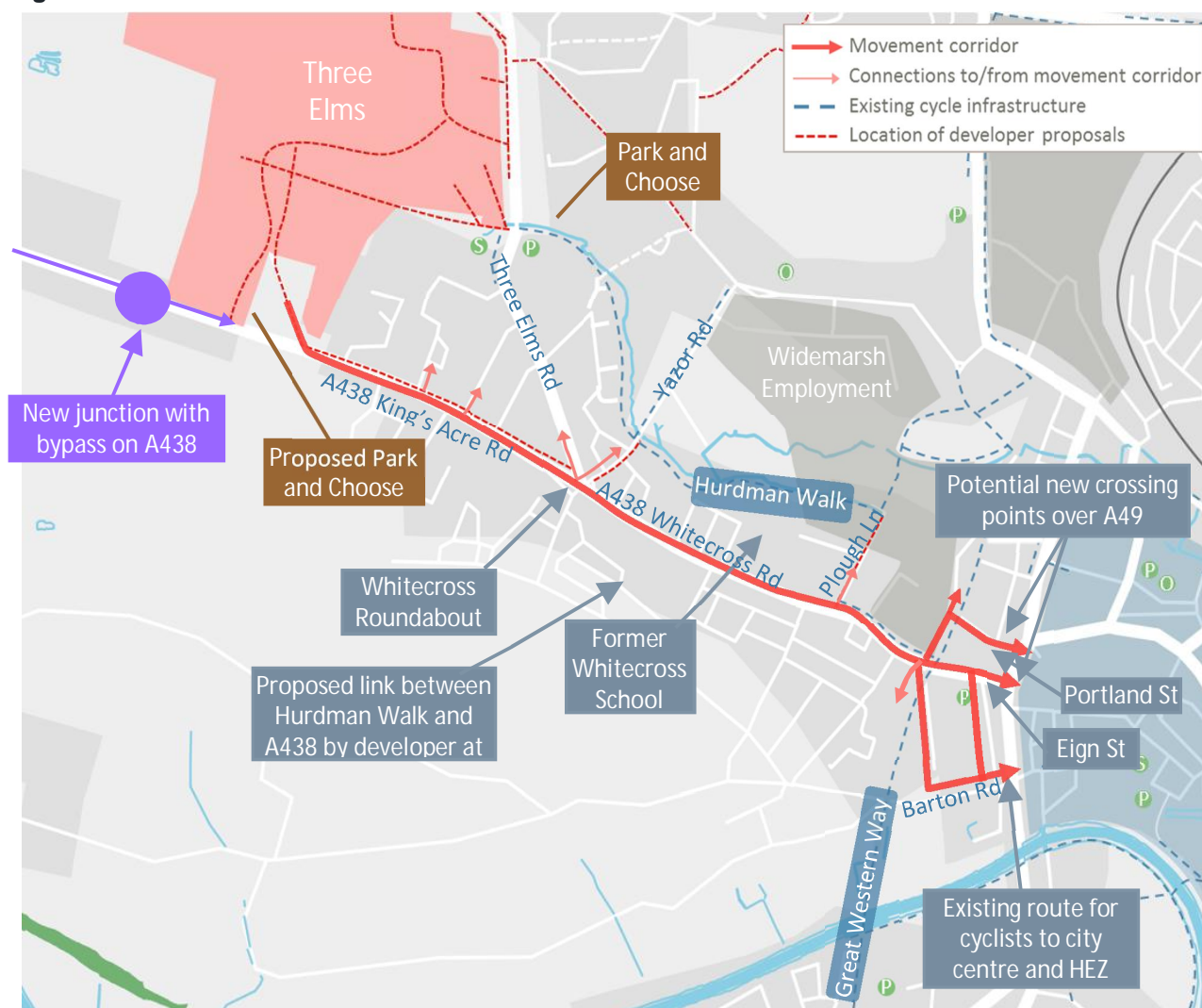
- 2.7.48. The key risks and opportunities which have currently been identified for this movement corridor are:
- Risk: Potential improvements on Portland Street may be limited by highway boundary
 - Opportunity: Delivery not dependent on bypass

A438 WHITECROSS MOVEMENT CORRIDOR

Overview

- 2.7.49. This movement corridor concerns movements along and across the A438 King's Acre Road / Whitecross Road / Eign Street as shown in Figure 18.
- 2.7.50. The A438 connects residential areas in north-west Hereford and the city centre. The A438 separates the wider Whitecross residential area from the Widemarsh employment area. The corridor has been selected to improve connectivity and safety along the A438 and improve connections across the A438 for cyclists and pedestrians.
- 2.7.51. There are developer proposals for improvements on the A438 and adjoining streets as set out in Section 2.6 which will be taken into consideration.
- 2.7.52. Improvements for crossings over the A49 to connect to the city would also benefit the following corridors which connect to this corridor:
 - A49 Victoria Street movement corridor
 - Great Western Way movement corridor
 - Three Elms Road / Hurdman Walk movement corridor

Figure 18 A438 Whitecross Road movement corridor.



Key Corridor Considerations

2.7.53. The improvements for this movement corridor need to:

- Improve connectivity, safety and priority between Whitecross / Kings Acre Road area and city centre/employment via A438
- Improve connectivity to Great Western Way and Hurdman Walk
- Tie in to links to the new Whitecross School and the development on the former Whitecross School at Baggallay Street
- Tie in with Three Elms developer proposals including Park and Choose sites
- Ensure continuity with any pedestrian, cycle or horse-riding measures associated with bypass
- Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.54. Improvements to consider for this movement corridor include:

- Redesign of A49/A438 roundabout and A49/A438 Eign Street junction to improve accessibility for pedestrians and cyclists and bus priority
- Provide new crossing over A49 at Eign Street and/or Portland Street
- Cycle priority at A49/Barton Road junction e.g. advanced green signal for cycles
- Potential contraflow cycle lane on Friar Street
- Cycle lane/shared use on Plough Lane
- Shared use route on A438 between Plough Lane and Whitecross Roundabout
- Widening of A438 footway between Plough Lane and Bricknell Close
- Pedestrian and cycle priority over side streets
- New crossings over A438

Risks and Opportunities

2.7.55. The key risks and opportunities which have currently been identified for this movement corridor are:

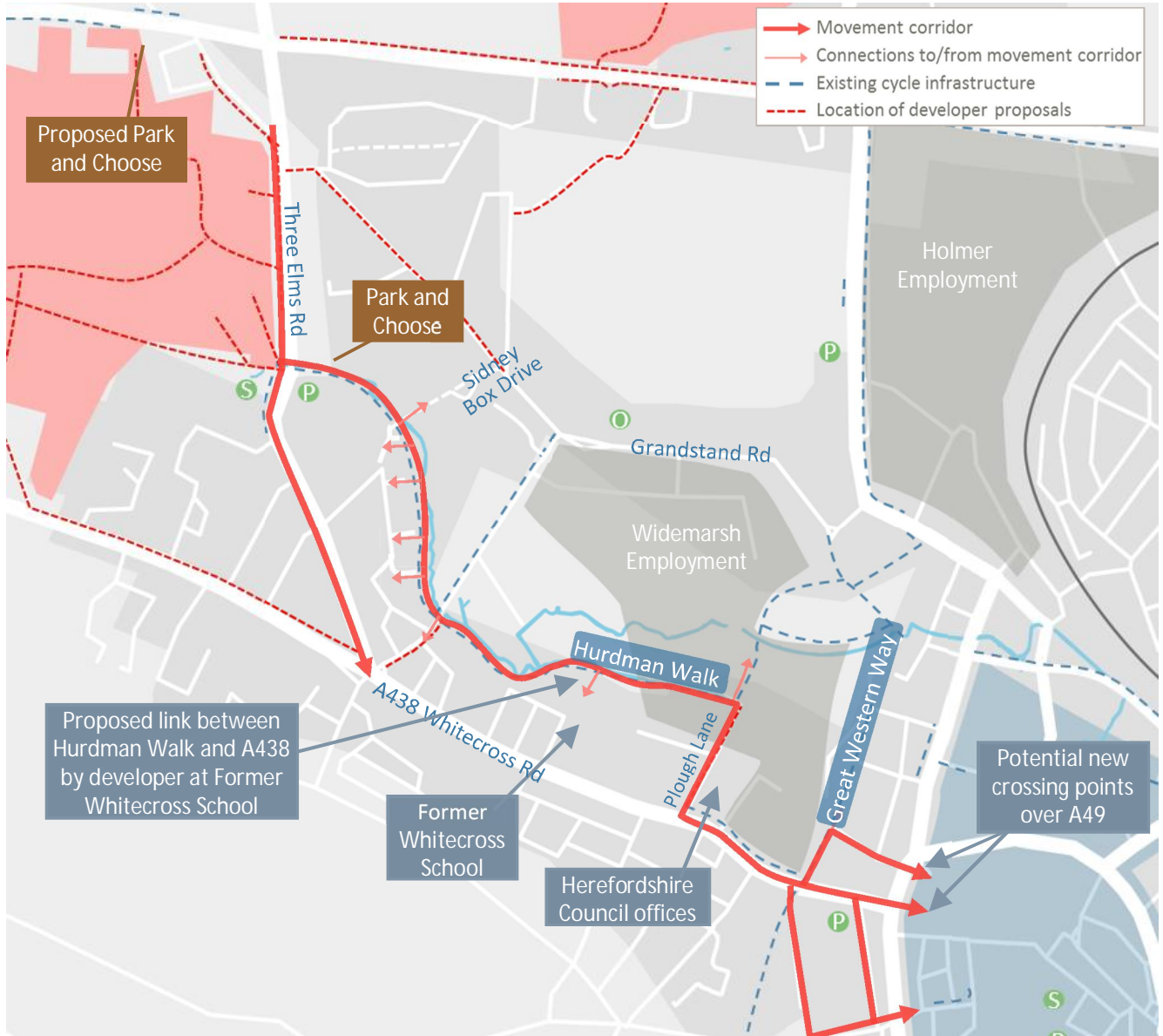
- Risk: Uncertainty of developer proposals
- Risk: High costs associated with realignment of A438 carriageway to accommodate continuous shared use route
- Risk: High costs and traffic impact associated with redesign of A49/A438 Eign St junction
- Risk/Opportunity: Phasing of bypass, Three Elms development and corridor scheme delivery
- Opportunity: To tie into a proposed link between A438 Whitecross Road and Hurdman Walk which has Section 106 funding associated with the development of the former Whitecross School Site

THREE ELMS ROAD / HURDMAN WALK MOVEMENT CORRIDOR

Overview

- 2.7.56. This movement corridor concerns movements between north-west Hereford and the city centre via the Three Elms Road and Hurdman Walk as shown in Figure 19.
- 2.7.57. Hurdman Walk is a traffic free pedestrian and cycle path which runs alongside Yazor Brook between Three Elms Road and Plough Lane. There is a Park and Choose facility at the western end of Hurdman Walk. The purpose of this movement corridor is to improve journey quality along the corridor and improve connectivity to and from the corridor.
- 2.7.58. There are developer proposals for improvements on the A438 Plough Lane as set out in Section 2.6, which will be taken into consideration.
- 2.7.59. Improvements to the footpath between Grandstand Road and Hurdman Walk would also benefit the Three Elms Road / Hurdman Walk corridor.
- 2.7.60. Improvements for crossings over the A49 to connect to the city would also benefit the following corridors:
 - A49 Victoria Street movement corridor
 - A438 Whitecross movement corridor
 - Great Western Way movement corridor

Figure 19 Three Elms Road / Hurdman Walk movement corridor.



Key Corridor Considerations

2.7.61. The improvements for this movement corridor need to:

- Improve connectivity and journey quality between north-west Hereford and the city centre/Widemarsh employment area via Three Elms Road and Hurdman Walk
- Improve connections to Great Western Way and Hurdman Walk
- Tie in with Three Elms developer proposals including Park and Choose sites
- Consider any pedestrian and cycle proposals associated with bypass development
- Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.62. Improvements to consider for this movement corridor include:

- Extend proposed shared use on Three Elms Road through to access to Hurdman Walk
- Widen Hurdman Walk
- Upgrade/widen paths between Hurdman Walk and Grandstand Road/Widemarsh employment, such as the path connecting to Sidney Box Drive
- Cycle lane/shared use on Plough Lane

Risks and Opportunities

2.7.63. The key risks and opportunities which have currently been identified for this movement corridor are:

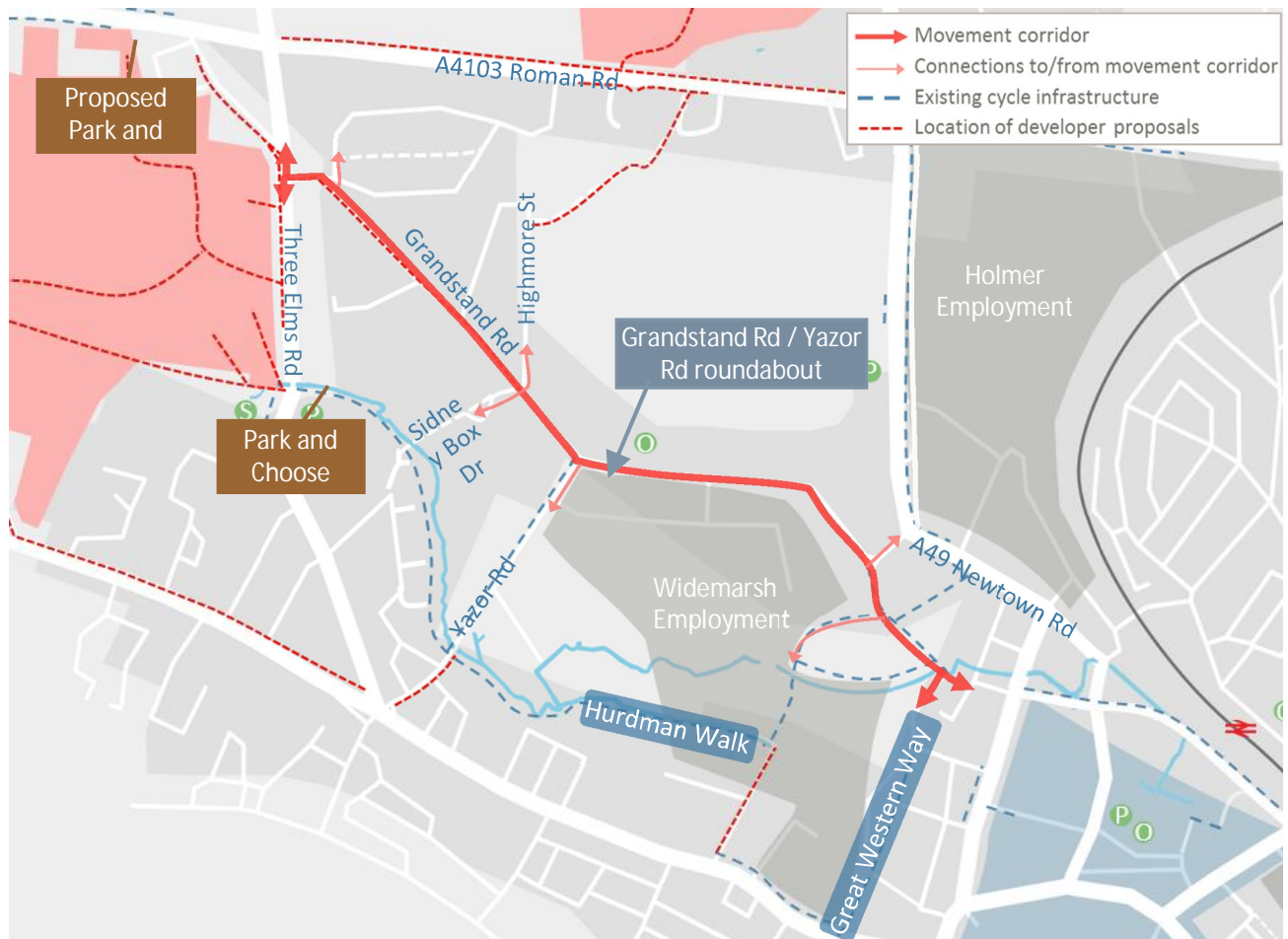
- Risk: Uncertainty of developer proposals
- Risk: Compatibility with and extent of Three Elms developer proposals
- Opportunity: Three Elms developer funding
- Opportunity: Section 106 funding is available to widen Hurdman Walk
- Opportunity: To tie into a proposed link between A438 Whitecross Road and Hurdman Walk which has Section 106 funding associated with the development of the former Whitecross School Site
- Opportunity: To utilise S106 funding for walking/cycling schemes at Sidney Box Drive and Hurdman Walk

GRANDSTAND ROAD MOVEMENT CORRIDOR

Overview

- 2.7.64. This corridor concerns movements between north-west Hereford and the city centre via Grandstand Road as shown in Figure 20.
- 2.7.65. The purpose of this movement corridor is to improve connectivity between north-west Hereford and Widemarsh employment area and the Great Western Way.
- 2.7.66. Improvements to the footpath between Grandstand Road and Hurdman Walk would also benefit the Three Elms Road / Hurdman Walk corridor.
- 2.7.67. This movement corridor connects to the following movement corridors:
 - College Road movement corridor
 - Great Western Way movement corridor
 - A49 Holmer Road movement corridor

Figure 20 Grandstand Road movement corridor.



Key Corridor Considerations

- 2.7.68. The improvements for this movement corridor need to:
 - Improve connectivity and safety between north-west Hereford and employment via Grandstand Road
 - Connect to the Great Western Way for onward connections to city centre / Hereford City Link Road
 - Tie in with Three Elms developer proposals
 - Improve quality of connections to Great Western Way and Hurdman Walk

- Consider any pedestrian and cycle proposals associated with bypass development
- Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.69. Improvements to consider for this movement corridor include:

- New crossings at Grandstand Road/Yazor Road roundabout
- Widen footway
- New shared use/segregated cycleway/ cycle lane on Grandstand Road
- Upgrade/widen paths between Grandstand Road and Great Western Way/Hurdman Walk
- Improve crossings at Highmore Street / Sidney Box Drive junction

Risks and Opportunities

2.7.70. The key risks and opportunities which have currently been identified for this movement corridor are:

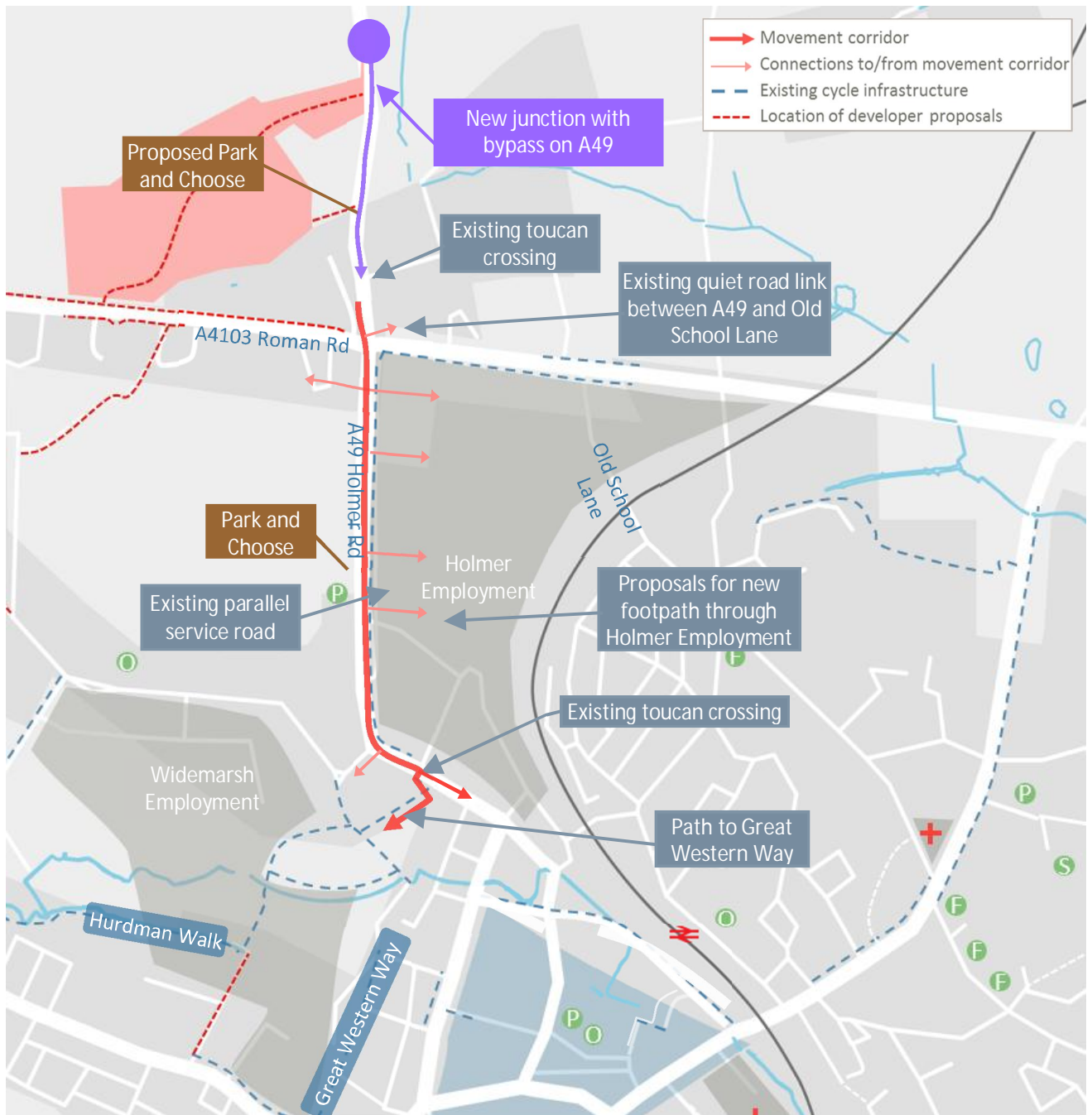
- Risk: Uncertainty of developer proposals and timing of delivery
- Opportunity: To phase some of the improvements ahead of bypass delivery
- Opportunity: To connect with S106 improvements on upgrade of racecourse footpath
- Opportunity: To utilise S106 funding for walking/cycling schemes at Highmore Street/Grandstand Road, Sidney Box Drive and Hurdman Walk, and the junction of Grandstand Road/Yazor Road from Holmer West SUE developer
- Risk/Opportunity: Phasing of bypass, Three Elms development and corridor scheme delivery

A49 HOLMER ROAD MOVEMENT CORRIDOR

Overview

- 2.7.71. The A49 movement corridor concerns the length of the A49 between the A49 / A4103 roundabout and Newtown Road / Edgar Street roundabout as shown in Figure 21.
- 2.7.72. The corridor runs along the border of the Holmer employment area and connects the employment to the Great Western Way and onto A49 Edgar Street. The corridor will also serve future movements from the Holmer West SUE to the city centre.
- 2.7.73. Links to the east of this roundabout would also benefit the College Road corridor.

Figure 21 A49 Holmer Road movement corridor.



Key Corridor Considerations

2.7.74. The improvements for the movement corridor need to:

- Improve continuity, safety and priority for cyclists and pedestrians between Holmer/Holmer West SUE and city centre/employment
- Improve connections to Great Western Way, Hurdman Walk and Grandstand Road
- Tie in to Holmer West developer proposals including the Park and Choose site and existing cycle route on A4103 eastbound
- Ensure continuity with any pedestrian, cycle or horse-riding measures associated with the bypass
- Tie into any proposals from other movement corridors which coincide with this corridor

Improvements to Consider

2.7.75. Improvements to consider for this movement corridor include:

- New/upgraded crossing provision at A49 / A4103 roundabout
- Widen/enhance existing shared use route
- Priority over side streets
- Extend cycling provision alongside A49 Holmer Road to entrance to SUE on A49

Risks and Opportunities

2.7.76. The key risks and opportunities which have currently been identified for this movement corridor are:

- Risk: High costs for upgrading crossing provision at A49 / A4103 roundabout
- Risk: Dependency of improvements at A49 / A4103 roundabout on bypass
- Opportunity: To tie into new footpath to be provided through Holmer Employment through work with various land owners.
- Opportunity: To connect to existing Park and Choose at Aylestone Park

2.8 DEVELOPMENT OF TRAFFIC MANAGEMENT

2.8.1. The development of the traffic management improvements is set out in Table 3.

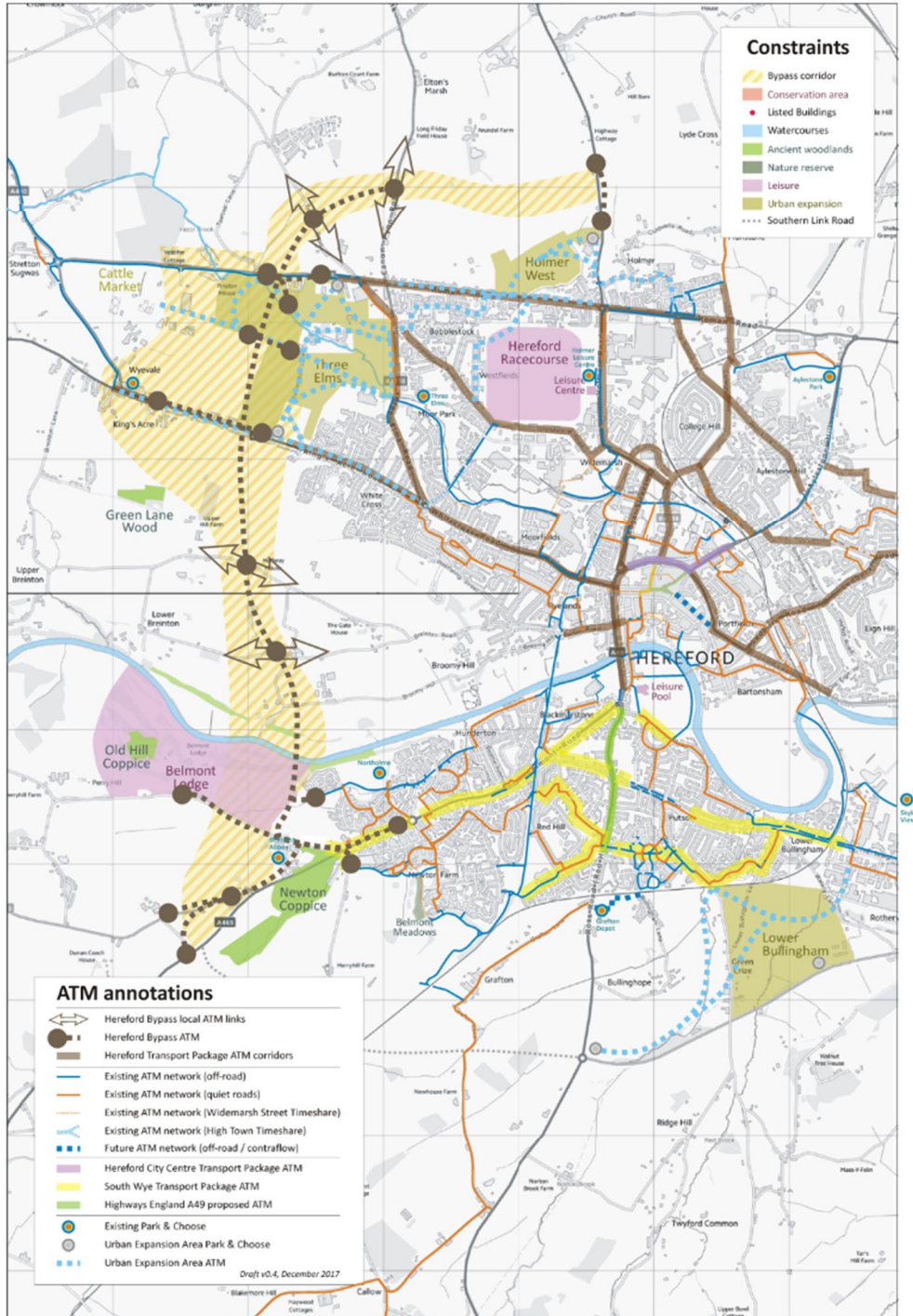
Table 3 Development of traffic management improvements.

Traffic management option	Purpose	Key risks/opportunities
HGV restrictions within central Hereford	To reduce HGV traffic through the city centre, particularly through the AQMA	Maintaining local deliveries and supporting businesses Enforcement capabilities
20mph speed limit on all streets north of the River Wye	To reduce traffic speeds to improve pedestrian/cycle comfort and safety.	Enforcement capabilities
Intelligent Transport Systems	To manage traffic demand through Hereford through intelligent transport systems	Technology advancements

2.9 INTERACTIONS WITH BYPASS

- 2.9.1. Integration of measures to enable the use of active travel modes alongside and across the bypass route will be a key part of the design for the scheme and will be developed as part of the next stage of scheme development in accordance with the WCHAR.
- 2.9.2. Figure 22 shows the bypass corridor in the context of Hereford and its existing active travel network. It illustrates a number of interactions along with opportunities to improve connections for walking, cycling and horse riding, both on-line and off-line.
- 2.9.3. The WCHAR process set out in HD 42/17 is a requirement for schemes impacting on the motorway and trunk road network. The process will consider dedicated walking and cycling facilities within the limits of the bypass or in areas outside/parallel to the bypass alignment. It will also consider and provide for where the bypass interacts with the existing highway and Public Right of Way network.
- 2.9.4. The bypass will create new junctions with the A465 Belmont Road A483 Kings Acre Road, A4103 Roman Road and A49 north of Hereford. The design of these junctions will take account of the need to ensure maximum connectivity for walking and cycling. The walking, cycling and horse-riding measures associated with the bypass will be developed to tie in with movement corridors, in particular the A438 Whitecross Road and A49 Holmer Road movement corridors, complementing the active travel improvements within Hereford.
- 2.9.5. Further detail on the WCHAR Guidance and its application to HTP is set out in Appendix A.

Figure 22 – Areas for consideration of walking, cycling and horse riding

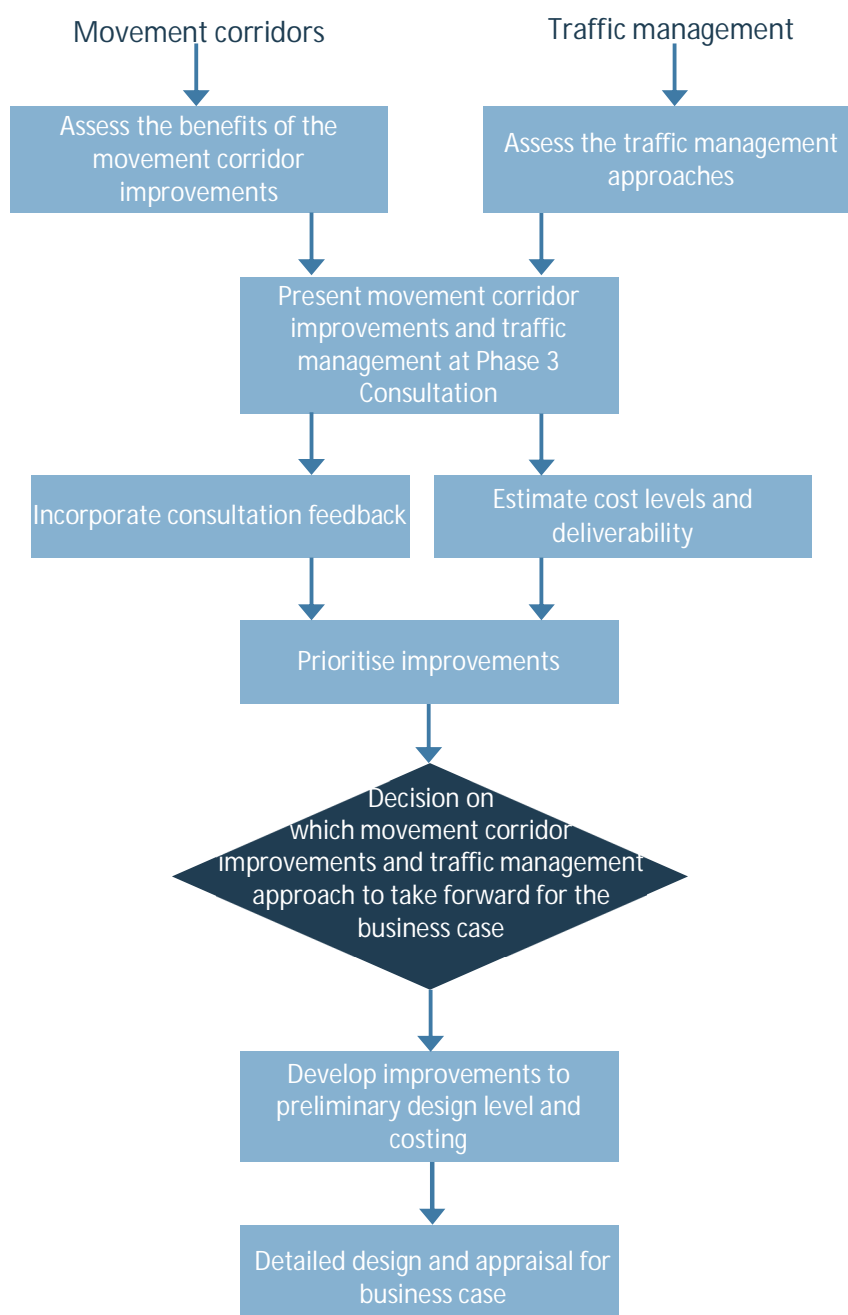


3 NEXT STEPS

3.1 OVERVIEW

- 3.1.1. This section outlines the next steps from developing the movement corridors and traffic management to informing the outline business case. The next steps are summarised in Figure 23 and described in more detail in the following sections.
- 3.1.2. The development of the active travel improvements form a key part of the development of the overall HTP and the business case for the whole scheme. Provision of improvements for active travel within the city and walking, cycling and horse-riding measures associated with the bypass route itself will make a significant contribution to achieving the overall benefits for Hereford.

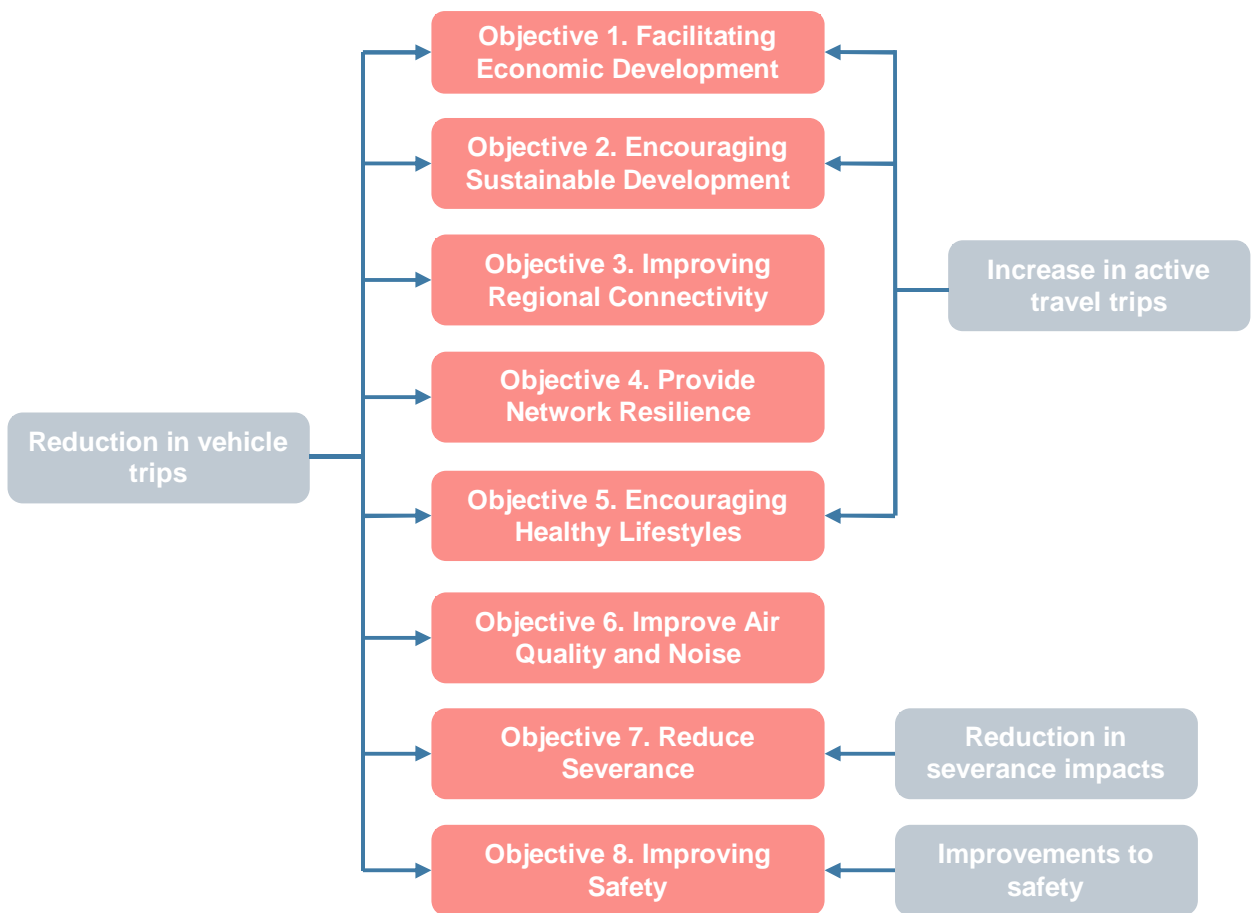
Figure 23 Next steps for developing the active travel improvements within Hereford.



3.2 ASSESS BENEFITS OF THE MOVEMENT CORRIDOR IMPROVEMENTS

- 3.2.1. The next stage for the active travel improvements is to assess the benefits of the movement corridor improvements.
- 3.2.2. The improvements will be assessed against four assessment areas which have been identified based on the objectives for HTP and an understanding of the existing and future situation in Hereford.
- 3.2.3. The four assessment areas are:
 - Potential to increase active travel trips
 - Potential to reduce vehicle trips
 - Potential to reduce severance impacts
 - Potential to improve safety
- 3.2.4. Figure 24 demonstrates how these assessment areas relate to the HTP objectives. Further details on the HTP objectives are provided in Section 2.3.

Figure 24 Demonstration of how assessment areas relate to HTP objectives.



- 3.2.5. Section 2.4 sets out how the five active travel improvement options have been assessed using the EAST and OAF WebTAG processes. This assessment of the benefits is to be undertaken to inform the prioritisation process and the decision on which movement corridor improvements will be taken through to the business case. It is therefore not necessary for them to be re-assessed again using EAST or OAF appraisal criteria.
- 3.2.6. The proposed approach for assessing and scoring the movement corridor improvements against the four assessment areas is outlined below. Details of the methodology will be developed and agreed with Herefordshire Council.

PROPOSED APPROACH FOR ASSESSMENT AREAS

- 3.2.7. An increase in active travel trips will comprise of new trips and trips previously made by motor vehicle. A reduction in vehicle trips is considered to be due to trips previously made by motor vehicle switching to active travel modes or no longer being made.
- 3.2.8. The potential to increase active travel trips will be based on the following:
- How well the improvements connect key existing and future destinations
 - The size of the catchment population (i.e. the number of people who can make use of the improvement)
 - How likely the type of infrastructure and design is to encourage additional walking, cycling and public transport trips
- 3.2.9. The potential to reduce vehicle trips will be based on the following:
- How well the improvements connect key existing and future destinations
 - The size of the catchment population (i.e. the number of people who can make use of the improvement)
 - How likely the type of infrastructure and design is to encourage additional walking, cycling and public transport trips
 - To what degree the improvements connects origins and destinations where there are high levels of vehicle trips
- 3.2.10. A relative and quantitative assessment will be carried out to identify where there are origin-destination trips which have a high level of vehicle trips. This will be based on the Highway Assignment Model and be presented using a Geographic Information System (GIS). The top destinations for vehicle trips in Hereford will be identified using model data for the 2031 Do Something scenario. An analysis will then be undertaken to evaluate where the majority of the trips are originating.
- 3.2.11. A relative and qualitative assessment will be undertaken of the movement corridor improvements potential to reduce severance impacts and improve safety.

3.3 PHASE 3 CONSULTATION

- 3.3.1. The third phase of the consultation will present:
- The movement corridor improvements and the expected benefits based on the assessment described in Section 3.2
 - The traffic management improvements and the expected benefits
 - Walking and cycling facilities associated with the bypass, as described in Section 2.9
- 3.3.2. The consultation will be an opportunity to obtain feedback on the improvements and identify which improvements are most supported. This will be undertaken through the consultation questionnaire by asking which improvements respondents support/don't support.

3.4 COST LEVELS AND DELIVERABILITY

- 3.4.1. The cost level of the improvements will be estimated and categorised into an appropriate number of simple cost ranges, to be agreed. For example <£100k <£0.1-1m, £1-5m, £5-10m, £10-20m, and >£20m.
- 3.4.2. Cost levels will be identified for individual improvements on the basis that some could be included in a number of movement corridors. The costs will be aggregated to provide comparative cost levels for each movement corridor.
- 3.4.3. A qualitative assessment of the deliverability of each movement corridor improvement will also be undertaken. This will include consideration of dependencies and timescales.

3.5 PRIORITISE IMPROVEMENTS

- 3.5.1. The movement corridor improvements will be ordered from best performing to worst performing based on the following:
- Assessment of benefits of improvements (see Section 3.2)
 - Cost level of improvements (see Section 3.4)
 - Deliverability of improvements (see Section 3.4)

3.5.2. The deliverability of improvements will take into consideration the level of public support demonstrated through Phase 3 consultation questionnaire (see Section 3.3).

3.5.3. Details of the methodology for ordering the improvements will be provided and agreed with Herefordshire Council.

3.6 DECISION FOR BUSINESS CASE

3.6.1. A decision will need to be made by Herefordshire Council on which movement corridor improvements will be taken forward to the business case. The decision will be informed by the ordered list of improvements.

3.6.2. An estimate of the budget allocated to the active travel improvements alongside the cost level of improvements will be required to identify which improvements can be taken forward. This is to ensure that the amount of design work is proportionate to the potential scale and value of the active travel component of the package.

3.7 PRELIMINARY DESIGN AND COSTING

3.7.1. The active travel improvements which will be taken forward to the business case will be developed to preliminary design level. The preliminary designs will be the first phase of the design process and will define the design parameters and the overall layout.

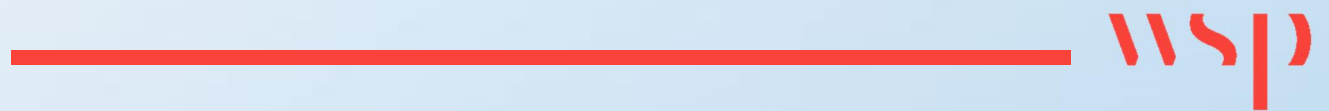
3.7.2. The preliminary designs will be developed by the design team who will be informed of the context, purpose and expectations of the movement corridor improvements and traffic management proposals by the active travel team. The design team will work closely with the active travel team to ensure the designs are developed accordingly.

3.8 OUTLINE BUSINESS CASE

Detailed appraisal of the designs will be undertaken as set out in the Appraisal Specification Report and will inform the outline business case.

Appendix A

WCHAR SCOPE



Walking Cycling and Horse Rider Assessment and Review (WCHAR) Scoping Note

INTRODUCTION

A Walking Cycling and Horse-Riding Assessment and Review (WCHAR) is required to be undertaken on a spatial area potentially impacted by the Hereford Bypass currently being designed within the Hereford Transport Package. The requirement relates to DMRB Volume 5, Section 2, Part 5, HD42/17 which replaces HD 42/05 (Non-Motorised User Audit). HD42/17 comprises an assessment of the existing facility provision in order to identify potential opportunities for improvement and integration, and then an ongoing review of the scheme design to assess integration.

This Scoping Note sets out the following:

- The new WCHAR requirements;
- The implications of the WCHAR on the Hereford Bypass;
- Links with development of walking and cycling schemes in the city; and
- Recommendations and next steps.

THE NEW WCHAR REQUIREMENTS

The WCHAR process applies to all highway schemes where there is a potential impact on pedestrians, cyclists or equestrians on the motorway and all-purpose trunk road network. The Hereford Bypass has the potential to impact on the trunk road network in two ways:

- i. By reducing traffic volumes and changing the composition of traffic on the existing A49(T) through Hereford – improving conditions for people walking and cycling along this and intersecting and converging corridors; and
- ii. Providing a new section of trunk road impacting on communities and routes along and either side of the new corridor

Walking, cycling & horse-riding modes (or users) are primarily defined within HD42/17 as:-

- Pedestrian – including mobility impaired and vulnerable pedestrians
- Cyclists – including mobility impaired and vulnerable cyclists
- Equestrians - including mobility impaired and vulnerable equestrians

Other users to be considered as part of this process include (but not limited to):-

- Scooter riders (non-motorised)
- Cyclists with electrically assisted pedal cycles (where these conform to Department for Transport or other relevant regional regulations and where they may legally be used)
- Users of powered wheelchairs (where these conform to Department for Transport or other relevant regional regulations and where they may legally be used)

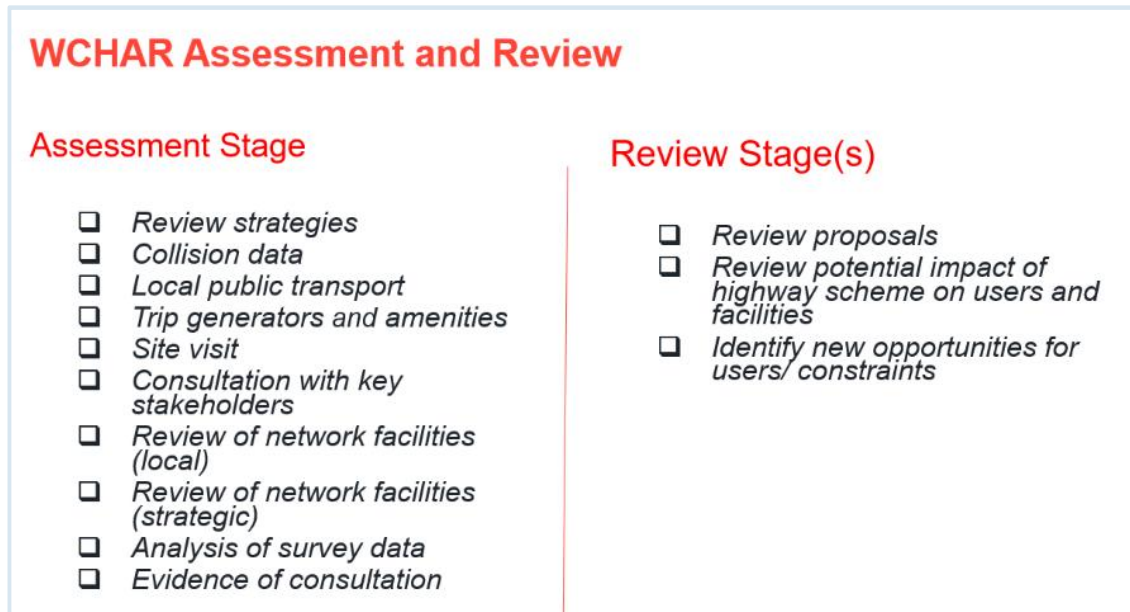
The completion of the WCHAR process is the responsibility of the design team; it is NOT an external audit of the walking, cycling and horse-riding matters related to the scheme. The competencies of the relevant practitioner are set out in HD42/17 and are reproduced as **Reference Item A** to this Note.

The process as laid out in HD42/17 is made up of two distinct parts:-

Assessment - is an assessment of the current or existing situation (Walking, Cycling & Horse-Riding Assessment) and is required to commence before the start of the preliminary design stage.

Review - relates to an ongoing review of user opportunities throughout the design process (Walking, Cycling & Horse-Riding Review). The process concludes prior to the end of the detailed design stage.

The WCHAR Assessment and Review processes will include the following elements:-



ASSESSMENT

HD42/17 states:-

“Walking, Cycling & Horse-Riding Assessment

2.9 The Assessment shall be undertaken during the options or concept stage of a highway scheme and shall apply to large and small schemes. The Assessment shall be completed before the commencement of preliminary design activities.

2.10 The output of the Assessment shall comprise an Assessment Report which shall be completed before the end of the preliminary design phase of the highway scheme.”

The aims of carrying out a Walking, Cycling & Horse-Riding Assessment are:

- a) To gain an appropriate understanding of all relevant existing facilities for pedestrians, cyclists and equestrians in the local area.
- b) To provide background user information that can be referred to throughout the design process.
- c) To identify opportunities for improvement for users.

Reference Item B shows the information requirements as detailed in Section 4 of HD42/17.

REVIEW

The aims of carrying out a Walking, Cycling & Horse-Riding Review are:

- a) To review proposals for pedestrians, cyclists and equestrians throughout the highway scheme design process.
- b) To review the potential impact of the proposed highway scheme on users in the area and on existing facilities.

c) To identify new opportunities for improvement (or constraints) for users that may arise from the development of the highway scheme that were not evident during the Assessment phase.

Reference Item C shows the Review steps as detailed in Section 5 of HD42/17

THE IMPLICATIONS OF WCHAR ON THE HEREFORD BYPASS

Under the considerations of HD42/17 (paragraph 2.7) the Hereford Bypass can be determined as a “large” scheme.

Under the Highways England Project Control Framework the scheme can be determined as nearing completion of the “Options” phase (i.e. *identifying the preferred road solution to the transport problem*). The next stage is the Development phase which focuses on the design of the preferred solution taking it through the necessary statutory processes up to where a decision to commit to investing in building the road solution can be made. Prior to commencing the next stage the design lead will need to appoint an appropriate Lead Assessor to undertake the WCHAR process.

LINKS WITH DEVELOPMENT OF WALKING & CYCLING SCHEMES IN THE CITY

A Hereford-wide package of walking, cycling, bus improvement and public realm measures are being developed as part of the Hereford Transport Package. Traffic management improvements including potential information technology systems, HGV and other traffic restrictions are also being developed as part of the package. These components will support the bypass by directing through traffic along the bypass and making the best use of the local transport infrastructure to encourage more sustainable journeys within the city.

The WCHAR will need to cover any scheme associated with Hereford Transport Package that impacts on the trunk road network. This comprises the proposed bypass and potentially schemes associated with the existing A49(T). Phasing of activities and associated outputs is likely to be required to account for the Bypass being developed ahead of complementing schemes within the built-up area of Hereford.

Schemes associated with South Wye Transport Package and the Hereford City Centre Transport Package, where they are considered to impact on the trunk road network, will have been subject to their own WCHAR (or the previous NMU) assessments at the relevant design stages.

RECOMMENDATIONS AND NEXT STEPS

Upon announcement of the Preferred Route for the Hereford Bypass the Design Lead will need to determine what area(s) the WCHAR applies to and appoint a Lead Assessor. The Lead Assessor is to carry out the Assessment stage of the WCHAR process to inform the design and undertake the Review stage through the development of the designs.

The Assessment Stage will make use of the wealth of data obtained for WebTAG ‘Step 1 – Understanding the existing situation’ which is documented in the Hereford Transport Package Option Assessment Report. Although there is significant data and knowledge on networks and their usage, there may be gaps that surface during the assessment and/ or review stages of the WCHAR, particularly in relation to walking and equestrian movements or demand.

The key locations where the bypass is anticipated to interact with existing or future walking, cycling and horse rider routes are as follows:

- In the vicinity of the proposed junction with the A438 Kings Acre Road



- Within the Three Elms urban extension area
- In the vicinity of the proposed junction with the Southern Link Road
- A number of PROWS and lanes that interact with the bypass along its length
- In the vicinity of the proposed junction with the A4103 Roman Road
- In the vicinity of the proposed junction with the A49

A plan prepared by Herefordshire Council showing areas that may be considered during the Assessment stage is shown as **Reference Item D**. This includes new connections between existing and new communities and employment areas. There are also off-line opportunities to be considered, for example in relation to the A4103 Roman Road and Belmont areas at either end of the scheme.

Reference Item A

ASSESSMENT AND REVIEW TEAM REQUIREMENTS.

Volume 5 Section 2
Part 5 HD 42/17

Chapter 3
Assessment and Review Team Requirements

3. ASSESSMENT AND REVIEW TEAM REQUIREMENTS

Lead Assessor Role

3.1 The Lead Assessor:

- a. Shall be part of the design team for the highway scheme providing advice on Walking, Cycling & Horse-Riding issues.
- b. Shall co-ordinate the activities and resources required as part of the WCHAR process.
- c. Shall demonstrate the competencies needed to complete the process - in line with the guidance set out in Table 3/2.

Lead Assessor Competency

3.2 The competencies expected of Lead Assessors are detailed in Table 3/2 below.

Table 3/2 – Lead Assessor Competencies

Background
An understanding of walking, cycling and horse-riding policies within the UK.
Knowledge of the needs of each user group - pedestrians, cyclists and equestrians and the various sub- groups of these.
Knowledge of current best practice in infrastructure design for all user groups.
Knowledge and an understanding of the planning and operation of walking, cycling and horse-riding networks.
Knowledge of potential issues created by facilities that provide for a combination of users.
Experience
Experience of managing stakeholder consultation events.
Experience of managing conflicting stakeholder views and expectations.
Experience of working on Strategic Road Network highway schemes.
Experience of designing facilities for pedestrians, cyclists and equestrians.
Experience of completing feasibility studies and reviews of walking, cycling and horse-riding infrastructure design.
Assessment Competencies
Knowledge and experience of identifying key trip attractors and subsequent desire lines for pedestrians, cyclists and equestrians.
Experience of the analysis and subsequent interpretation of survey data such as pedestrian count data and automatic cycle count data.

May 2017

3/1

Experience of the assessment of existing routes and facilities used by pedestrians, cyclists and equestrians including condition surveys performed during site visits.
Experience of collision data analysis in the context of providing facilities for pedestrians, cyclists and equestrians.
Experience of being able to make viable and proportionate recommendations for the improvement of facilities.
Knowledge of public transport networks and their operation, including the opportunities and issues arising from potential multi-modal transport options for pedestrians, cyclists and equestrians.
Review Competencies
Experience of presenting options to key stakeholders and promoting the various benefits and dis-benefits of options.
Experience of working as part of a wider design team(s) in order to present and discuss options for enhancing the design for all user groups.

Assessment and Review Team

- 3.3 The Lead Assessor may deem it necessary to be assisted by an additional Assessor(s), particularly for large schemes. This may be beneficial where the Lead Assessor feels there are particularly complex issues for pedestrians, cyclists and equestrians within a highway scheme that require specific specialist knowledge.
- 3.4 The Lead Assessor and any additional Assessors shall record their involvement and specified role in a highway scheme through the Assessment and Review Report documentation.
- 3.5 Whilst additional Assessors are not required to demonstrate any specific competencies, the Lead Assessor shall ensure that the additional Assessor(s) have relevant knowledge and experience for the task they are being asked to undertake.
- 3.6 Members of the WCHAR Assessment and Review Team shall not be permitted to be members of the Road Safety Audit Team, in order to maintain the independence of the Road Safety Audit Team. The Lead Assessor shall be permitted to seek guidance from the Road Safety Audit Team about road safety matters but this should be documented within the Assessment and/or Review Reports.

Reference Item B - WALKING, CYCLING & HORSE-RIDING ASSESSMENT REQUIREMENTS

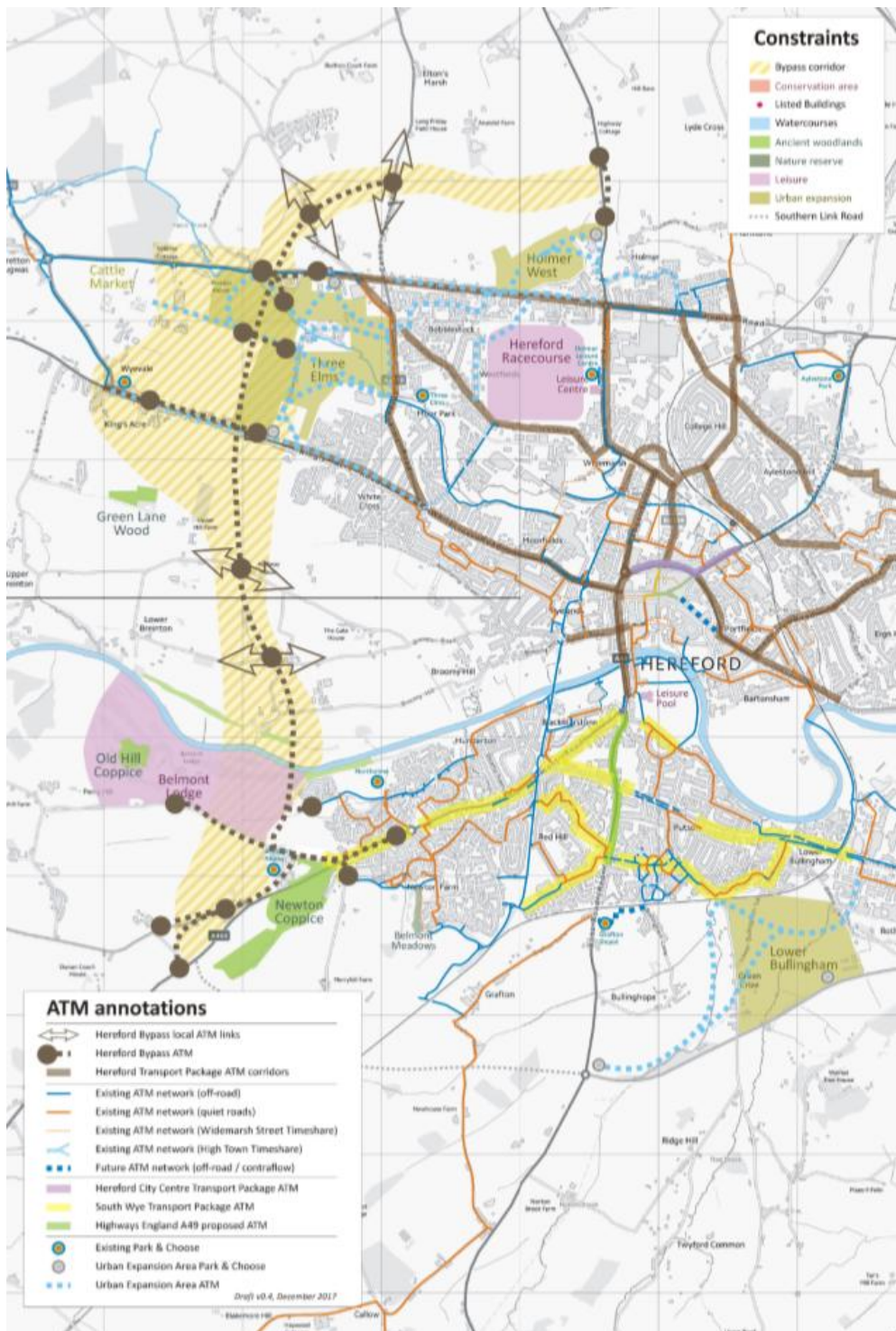
Information type	Large scheme	Small scheme
Review of walking, cycling & horse-riding policies and strategies relevant to the scheme area.	✓	✓
Collision data – analysis of all collisions in study area.	✓	✓
Description of local public transport service and interchange information.	✓	✓
Description of key trip generators and local amenities.	✓	✓
Evidence of site visit.	✓	✓
Evidence of consultation with key stakeholders.	✓	✓
Description and review of existing walking, cycling & horse-riding network facilities within the local area.	✓	✓
Description and review of existing walking, cycling & horse-riding network facilities at a county wide (strategic) level.	✓	
Collation and analysis of walking, cycling & horse-riding user survey data.	✓	
Evidence of consultation with local user groups and wider public.	✓	

Reference Item C

WALKING, CYCLING & HORSE-RIDING REVIEW REQUIREMENTS

Likely steps required for completion of Review Report	For a large scheme (Review required at preliminary and detailed design stages)	For a small scheme (Review required at detailed design stage only)
Review of Assessment Report	✓	✓
Review of preliminary design stage Review Report	✓	N/A
Review of highway scheme proposal	✓	✓
Consultation	✓	✓
Site visits	<i>If necessary</i>	<i>If necessary</i>
Review of steps taken to implement opportunities	✓	✓

Reference Item D – PLAN SHOWING POSSIBLE AREAS FOR CONSIDERATION OF WCHAR AT ASSESSMENT STAGE





1 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ

wsp.com

Appendix 10 – Examples of Active Travel Engineering Measures

Overview

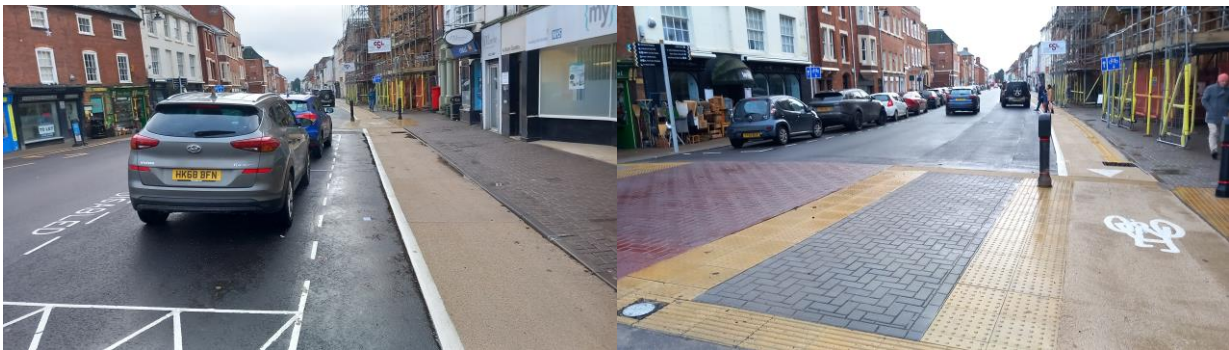
The effective delivery of active travel schemes is achieved when there is a clear masterplan, from which components of the wider network can be delivered as funding and other elements become available. Rarely can a single scheme in isolation provide a coherent link, but equally it is rarely feasible to deliver an extensive network as a single scheme.

This Appendix provides examples of measures that have been delivered over recent years, from a whole street intervention, through to the implementation of simple signage.

St Owen Street Cycle Contraflow

This scheme provides an east to west link into Hereford city centre from the Ledbury Road and Bartonsham areas.

St Owen Street was a scheme that was subject to significant engagement and development and was delivered in 2022 as the first LTN 1/20 compliant scheme in Herefordshire.



In addition to the contraflow cycle lane, improvements for pedestrians were made including raised table crossings and a controlled crossing at the eastern end. During the delivery of the scheme the opportunity was taken to resurface St Owen Street, one of the key streets in the historic core of Hereford. Due to sufficient width on the street, the scheme was able to accommodate the cycle lane on one side, a buffer and parking.

Greenway Link

This scheme comprised the construction of a shared footway cycleway path from Holme Lacy Road across to the greenway where it linked into the Rotherwas estate. This short link delivered a significant benefit to the existing greenway as it provided a link to Holme Lacy road without the need to enter the Rotherwas Industrial Estate. As a result the greenway became a more attractive route for residents on Holme Lacy Road.

Greenway

The connect 2 greenway connects Bartonsham with Rotherwas and includes the Canary bridge over the River Wye and the onward link to Holme Lacy Road.



The link was constructed in 2011 and provides a valuable off road route from the city centre to Rotherwas, supporting active travel as an alternative mode of transport for the expansion of employment in the area. It also provides a leisure route for communities in both Bartonsham and around Holme Lacy Road to access green space and the River Wye.

Roman Road Shared Cycleway

This scheme comprised widening a footway on Roman Road between the Starting Gate and the Furlongs development to create a shared footway cycleway, constructed in 2015.



The scheme provides a connection between the new residential development of 350 Homes at The Furlongs to the cycle route on Holmer Road that links on to the Great Western Way. This provides a viable active travel route from this development into the centre of Hereford and supports the mode shift for traffic arising from new developments.

South Wye Cycle Signage

In addition to dedicated cycle paths, the active travel network across Hereford also makes use of 'Quiet Routes'.



These are 'on road' routes on quieter roads that are more appealing to a wider range of cyclist, especially those less confident to use more major routes.

To encourage and increase the use of these routes, a scheme to provide additional signage to guide cyclists was delivered in 2022. The works provided directional signage to a range of locations with estimated journey times. As many of the routes go through a number of residential streets the signage provides confidence as to what route should be followed, as sometimes a route can be less intuitive than following major routes to destinations. The scheme provided an extensive network of routes for a relatively small budget and demonstrated one of the complementary interventions to major active travel schemes.



Title of report: Work programme 2024/5

Meeting: Environment and Sustainability Scrutiny Committee

Meeting date: 23 September 2024

Report by: Statutory Scrutiny Officer

Classification

Open

Decision type

This is not an executive decision

Wards affected

All Wards

Purpose

To consider the draft work programme for Herefordshire Council's scrutiny committees for the municipal year 2024/25.

Recommendation(s)

That:

- a) **The committee agree the draft work programme for Environment and Sustainability Scrutiny Committee contained in the work programme report attached as appendix 1, which will be subject to monthly review, as the basis of their primary focus for the remainder of the municipal year.**
- b) **The committee note the work programme for the other scrutiny committees, and identify any opportunities for collaboration or alignment of work.**

Alternative options

1. The committee could decline to agree a work programme for its future committee meetings. This would likely result in unstructured and purposeless meetings.
2. The committee could also decline to identify areas of potential collaboration or alignment of work with other committees. This could result in duplication or overlap of work.

Key considerations

3. A fundamental part of good scrutiny is planning and agreeing a programme of work for the committee to undertake. A well-considered work programme:

- a. identifies priorities for the committee's work that align with corporate and partnership priorities, as well as reflecting community concern;
 - b. ensures that each identified topic has clear objectives that focus the committee's work;
 - c. creates a timetable for the committee's programme of work so that the committee carry out its work at the optimal time; and
 - d. provides officers and partners with requirements for evidence that will support the committee in providing evidence-based scrutiny
4. To prepare this work programme, the committee chairs have met with officers of the council to identify potential priority areas of work for the committee. These priority areas have been scheduled within the work programme to ensure the committee considers topics when it is most useful to do so. A draft of this work programme has then been circulated to the council's corporate leadership team and other key senior directors, alongside committee chairs, for further comment and refinement.
 5. As agreed by Scrutiny Management Board, I have replaced individual work programme reports, updated in time for each committee meeting, with a single combined work programme, published at the beginning of each month. This makes it easier for committees to plan work on topics that straddle the remit of more than one committee. It also facilitates planning for specific items on the work programme from corporate directors. The most recent work programme was published on 2 September 2024 and is attached as Appendix 1.
 6. Attached as Appendix 2 to this report is the council's forward plan of key decisions.

Community impact

7. Effective scrutiny enables the committee to reflect community concern, one of the four purposes of scrutiny as outlined by the Centre for Governance and Scrutiny.

Environmental impact

8. This report contains no direct environmental impacts. However the work that the committee will undertake resulting from agreeing this work programme may have direct impacts. Reports arising from or supporting this work will outline their potential environmental impact.

Equality duty

9. The public sector equality duty (specific duty) requires us to consider how we can positively contribute to the advancement of equality and good relations, and demonstrate that we are paying 'due regard' in our decision making in the design of policies and in the delivery of services. This report contains no direct equality impacts. However the reports and issues that the committee will consider may have direct impacts. Reports arising from or supporting this work will outline the any associated equality impacts for committee consideration.

Resource implications

10. This report constitutes part of the typical function of this committee. Similarly, a programme of work undertaken by committee is an integral part of the council's 'business as usual'. There is no resource implication in setting or agreeing a work programme. However agreed topics in the work programme, in particular any requests for bespoke research or the involvement of outside experts or community groups, may incur resource costs. These will be contained in any reporting or planning of agreed topics within this work programme.

Legal implications

11. The remit of the scrutiny committee is set out in part 3 section 4 of the constitution and the role of the scrutiny committee is set out in part 2 article 6 of the constitution.
12. The Local Government Act 2000 requires the council to deliver the scrutiny function.

Risk management

13. There are no risks identified in the committee agreeing an effective and timely programme of work. However there is a risk to the council's reputation if committees fail to set a work programme, or set a programme of work that does not address local authority, partnership or community priorities.

Consultees

14. In drafting this work programme, consideration has been given to:
 - a. The previous work of scrutiny committees;
 - b. Priorities suggested by members of the committee; and
 - c. Work with Herefordshire Council officers to develop topics and agree optimum timings to bring items for consideration.
15. This work programme is subject to ongoing review, which may involve additional consultees.

Appendices

Appendix 1 – Scrutiny work programme 2024/25 September 2024

Appendix 2 – Herefordshire Council Forward Plan 6 September 2024 onwards

Background papers

None

SCRUTINY WORK PROGRAMME 2024-2025

Below are the work programmes of Herefordshire Council’s five scrutiny committees.

Work programmes are subject to change, with revised programmes agreed at the end of formal committee meetings.

Children and Young People Scrutiny Committee

Briefing

2 September 2024

Auditing and quality assurance

Committee Meeting

17 September 2024 report publication date **9 September 2024** pre meeting lines of enquiry planning **6 September 2024**

Topic and Objectives	Evidence required	Attendees*
Quality Assurance <ul style="list-style-type: none"> Scrutinise audit work to ensure that its practice is of the highest standard possible. Understand the common weaknesses in practice and how staff are supporting to address them. Analysis of common issues in other local authorities 	<ul style="list-style-type: none"> Overview of case management activity Briefing on quality assurance from Leeds City Council Quality Assurance Framework Quality Assurance Framework, Leeds 	<ul style="list-style-type: none"> Service Director Early Help, Quality Assurance, and Prevention Chair, Safeguarding Children Partnership
Improvement Plan <ul style="list-style-type: none"> Scrutiny of Herefordshire Children’s Services and Partnership Improvement Plan Phase 2 	<ul style="list-style-type: none"> Improvement Plan Phase 2 Quality Assurance – Hearing the Voice of the Children Young People and Parent / Carers plan on a page 	<ul style="list-style-type: none"> Corporate Director, Children and Young People

Committee Meeting**26 November 2024** report publication date **18 November 2024** pre meeting lines of enquiry planning **15 November 2024**

Topic and Objectives	Evidence required	Attendees*
Including children’s voices in council policy <ul style="list-style-type: none"> • Understand the role of the council’s children’s advocacy team. • Scrutinise the council’s participation and engagement strategy • Scrutinise how the council seeks to understand the priorities of children and young people with regard to council areas of responsibility. <ul style="list-style-type: none"> ○ Area of focus – transport 	<ul style="list-style-type: none"> • Focus group with children and young people, both within and outside the service • Children and Young People quality of life survey 	<ul style="list-style-type: none"> • Complaints and Children’s Rights Manager • Tori Lynch, Head of Service for Corporate Parenting • Hereford City Youth Council

Committee Meeting**21 January 2025** report publication date **13 January 2025** pre meeting lines of enquiry planning **10 January 2025**

Topic and Objectives	Evidence required	Attendees*
Ensuring sufficiency for children and young people with a SEND <ul style="list-style-type: none"> • Evaluate the level of need for SEND provision in Herefordshire, and how Herefordshire Council and partners meet that need. • Understand how Herefordshire Council, the Department for Education and other bodies fund the development of capacity to support children with a SEND. • Scrutinise how the council, schools and health partners work together to support children, with or without a statement of need or education, health and care plan (EHCP). • Explore the role of short breaks and their commissioning. • Measure progress in meeting recommendations following the review by the Local Government Association. 	<ul style="list-style-type: none"> • To be confirmed 	<ul style="list-style-type: none"> • Liz Farr Service Director, Education • Hilary Jones – Service Manager SEND • Jade Brooks – Integrated Care Board Children’s Lead • Wye Valley Trust

Briefing**February 2025**

Update on school attainment

Committee Meeting

18 March 2025 **report publication date 10 March 2025** pre meeting lines of enquiry planning 06 March 2025

Topic and Objectives	Evidence required	Attendees*
Child exploitation <ul style="list-style-type: none">• Understand different ways children are at risk of exploitation and the factors that contribute to that risk.• Scrutinise how the different agencies work together to tackle exploitation.• Scrutinise the role of the Herefordshire Safeguarding Children Partnership in tackling exploitation.	<ul style="list-style-type: none">• Member briefing on child exploitation• Criminal exploitation of children, young people and vulnerable adults - county lines• Childrens-society-Criminal-Exploitation-Stages-of-Recruitment• Exploitation Safety Plan Practice Guidance	<ul style="list-style-type: none">• Service Director, Safeguarding• West Mercia Police• West Mercia Youth Justice Service• Wye Valley NHS Trust

*The Corporate Director, Children and Young People and Portfolio Holder, Children and Young People, both have a standing invitation to each committee meeting. It is assumed that the portfolio holder will attend each meeting.

Connected Communities Scrutiny Committee

Working Group Meeting

8 October 2024

Topic and Objectives	Evidence required	Attendees*
Public Realm Future Operating Model <ul style="list-style-type: none"> Scrutinise proposals for a new operating model for the council's contract for public realm works. 	<ul style="list-style-type: none"> Overview of proposed operating model Draft contract 	<ul style="list-style-type: none"> Service Director Environment and Highways Programme Director – major contracts

Committee Meeting

15 October 2024 **report publication date 7 October 2024** pre meeting lines of enquiry planning 1 October 2024

Topic and Objectives	Evidence required	Attendees*
Local authority housing delivery models <ul style="list-style-type: none"> Consider commissioned research into housing delivery models in other local authorities Make recommendations to Cabinet on potential operating models in Herefordshire. 	<ul style="list-style-type: none"> Commissioned research 	<ul style="list-style-type: none"> Service Director, Economy and Growth Head of Service, Housing and Wellbeing Head of Housing Development
Public Realm Future Operating Model Task and Finish Group recommendations <ul style="list-style-type: none"> Agree recommendation from the committee's task and finish group scrutinising proposals for a new operating model for the council's contract for public realm works. 	<ul style="list-style-type: none"> Task and finish group report 	<ul style="list-style-type: none"> Service Director Environment and Highways Programme Director – major contracts
Work programme <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

Committee Meeting13 November 2024 **report publication date 5 November 2024** pre meeting lines of enquiry planning 31 October 2024

Topic and Objectives	Evidence required	Attendees*
Enterprise Zones <ul style="list-style-type: none"> Scrutinise operation of Hereford Enterprise Zone and how learning from the project will be applied to future enterprise zones. Understand the economic and social benefits of enterprise zones. 	<ul style="list-style-type: none"> Outline of the economic and social benefits of enterprise zones. SWOT of enterprise zone proposals 	<ul style="list-style-type: none"> Current and previous chairs of the Hereford Enterprise zone Representative from Ross Enterprise Zone
Work programme <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

389

Committee Meeting15 January 2025 **report publication date 7 January 2025** pre meeting lines of enquiry planning 6 January 2025

Topic and Objectives	Evidence required	Attendees*
Local Transport Plan <ul style="list-style-type: none"> Scrutinise findings of public consultation on Local Transport Plan proposals. Review draft plan before Council approval. 	<ul style="list-style-type: none"> Draft Local Transport Plan Plan consultation findings 	<ul style="list-style-type: none"> Service Director Environment and Highways Head of Transport and Access Services Members of Connected Communities Scrutiny Committee
Work programme <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

Committee Meeting

12 March 2025 report publication date **4 March 2025** pre meeting lines of enquiry planning **21 February 2025**

Topic and Objectives	Evidence required	Attendees*
Highways Winter Maintenance <ul style="list-style-type: none">Review of winter maintenance of highways following the 2024-25 winter period.	<ul style="list-style-type: none">Overview of winter serviceMap of highways and footpaths gritted during the winter period	<ul style="list-style-type: none">Service Director Environment and HighwaysHead of Highways and Traffic
Work programme <ul style="list-style-type: none">Review work programme	<ul style="list-style-type: none">Draft work programme	<ul style="list-style-type: none">Statutory Scrutiny Officer

*The Corporate Director, Economy and Environment, Cabinet Member, Economy and Growth, Cabinet Member, Community Services and Assets, Cabinet Member, Roads and Regulatory Services, and Cabinet Member, Transport and Infrastructure, all have a standing invitation to the meeting.

Environment and Sustainability Scrutiny Committee

Committee Meeting

23 September 2024 **report publication date 13 September 2024** pre meeting lines of enquiry planning 16 September 2024

Topic and Objectives	Evidence required	Attendees*
<p>Active travel measures including road safety for all users</p> <ul style="list-style-type: none"> Explore the county policy on implementing active travel measures where new road build is being proposed. Explore where the council is on implementation of active travel measures across the county. Explore the benefits and challenges of active travel measures around key buildings such as schools and hospitals and residential roads in Herefordshire. 	<ul style="list-style-type: none"> Active Travel policy Appropriate case studies from within the county and other authorities 	<ul style="list-style-type: none"> Herefordshire Council leads on active travel measures Groups representing relevant stakeholders including: pedestrians, walkers, cyclists and other vulnerable road users.
<p>Work programme</p> <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

Committee Meeting

18 November 2024 **report publication date 8 November 2024** pre meeting lines of enquiry planning 7 November 2024

Topic and Objectives	Evidence required	Attendees*
<p>Bus service improvement plan</p> <ul style="list-style-type: none"> Scrutinise plans to invest the indicative £1,064,000 allocated to Herefordshire Council by the Department for Transport to improve bus services. 	<ul style="list-style-type: none"> Funding allocation and proposed improvements to bus services in Herefordshire. 	<ul style="list-style-type: none"> Head of Transport and Access Services Bus services user groups
<p>Work programme</p> <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

Committee Meeting

20 January 2025 **report publication date 10 January 2025** pre meeting lines of enquiry planning 9 January 2025

Topic and Objectives	Evidence required	Attendees*
<p>Tree and Hedgerow management</p> <ul style="list-style-type: none"> • Understand the findings of the recent Defra consultation on hedgerow management. • Scrutinise council tree and hedgerow management policy and see whether it is fit for purpose for the county and climate change resistant. • To consider the county tree strategy as an enabler for Herefordshire to become a carbon offset trading partner with others. • Look at countywide action on ash dieback and replacement. 	<ul style="list-style-type: none"> • Council policy on tree and hedgerow management 	<ul style="list-style-type: none"> • National Farmers Union • CPRE (formerly Council for the Protection of Rural England) • Policy leads on tree and hedgerow management
<p>River Lugg water quality</p> <ul style="list-style-type: none"> • Investigate work to improve the water quality of the River Lugg and the prospect of getting some of the £35 million for the River Wye improvement diverted to the River Lugg. • Understand the implications of poor water quality on the ability to plan and build new housing. • Evaluate the progress on developing new wetland areas on river improvement and their impact on housing development. 	<ul style="list-style-type: none"> • 5 Years of analysis of water quality data (from Nutrient Management Board or Environment Agency) • Evidence from Merry Albright (Home Builders Federation) 	<ul style="list-style-type: none"> • Herefordshire Construction Industry Lobby Group • Natural England • Environment Agency • Natural Resources Wales • Defra River Wye champion
<p>Work programme</p> <ul style="list-style-type: none"> • Review work programme 	<ul style="list-style-type: none"> • Draft work programme 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer

Committee Meeting

24 March 2025 **report publication date 14 March 2025** pre meeting lines of enquiry planning 13 March 2025

Topic and Objectives	Evidence required	Attendees*
Energy Efficiency and Retrofitting <ul style="list-style-type: none">• Understand the outcomes of the Building Retrofit and supply chain development funded by Climate Reserve fund• Evaluate progress on Keep Herefordshire Warm initiatives• Consider whether new houses and self –build properties are ‘zero carbon ready’	<ul style="list-style-type: none">• Climate Reserve fund financial reports• Stats of surveys undertaken, grants awarded, work completed• Future Homes Standard	<ul style="list-style-type: none">• Gareth Ellis – Sustainability & Climate Change Officer• Andrew Cooper – LGA, previously Renewable Energy Assoc., Yorkshire Energy Services• Jackie Jones – Building Sense
Work programme <ul style="list-style-type: none">• Review work programme	<ul style="list-style-type: none">• Draft work programme	<ul style="list-style-type: none">• Statutory Scrutiny Officer

*The Corporate Director, Economy and Environment and Cabinet Member, Environment, both have a standing invitation to the meeting.

Health Care and Wellbeing Scrutiny Committee

Briefing

20 September 2024

Supporting care leavers

Committee Meeting

3 October 2024 **report publication date 25 September 2024** pre meeting lines of enquiry planning 23 September 2024

Topic and Objectives	Evidence required	Attendees*
Supporting care leavers <ul style="list-style-type: none"> How do we identify and meet the housing and support needs of care leavers? How do we ensure that the council’s looked-after children leave its care with good life skills? Where needed, how does the council ensure a smooth transition from children’s to adult services? 		<ul style="list-style-type: none"> Head of Service, Corporate Parenting Service Director – All Ages Commissioning Head of Service, Living Well Head of Service, Housing
Review of Talk Community <ul style="list-style-type: none"> Pre-decision scrutiny of the review of Talk Community 	<ul style="list-style-type: none"> Review final report 	<ul style="list-style-type: none"> Service Director, Communities
All-age carers’ strategy working group <ul style="list-style-type: none"> To agree a terms of reference for a working group to scrutinise the council’s draft all-age carers’ strategy action plan. 	<ul style="list-style-type: none"> Working group terms of reference 	<ul style="list-style-type: none"> Statutory Scrutiny Officer
Work programme <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

Working Group Meeting

Date to be confirmed

Topic and Objectives	Evidence required	Attendees*
All-age carers’ strategy action plan <ul style="list-style-type: none"> Scrutiny of all-age carers’ strategy action plan Recommendations to further develop the action plan 	<ul style="list-style-type: none"> Draft action plan 	<ul style="list-style-type: none"> Commissioning Manager, Community Wellbeing Chair, Carers’ Partnership Group

Committee Meeting

25 November 2024 report publication date 15 November 2024 pre meeting lines of enquiry planning 14 November 2024

Topic and Objectives	Evidence required	Attendees*
West Mercia Police “Most Appropriate Agency” policy <ul style="list-style-type: none"> Scrutinise the impact of the change in West Mercia policy regarding responses to welfare, mental health incidents and missing persons. Further scrutinise the delivery of the policy. 	<ul style="list-style-type: none"> West Mercia Police “Most Appropriate Agency” policy Herefordshire Council policy 	<ul style="list-style-type: none"> West Mercia Police Director of Public Health
Supported housing for working age adults with additional needs <ul style="list-style-type: none"> How do we forecast, commission and meet the housing needs of adults with a learning or with a severe and enduring mental health problem? How do we work with developers to provide the required housing? 		<ul style="list-style-type: none"> Service Director – All Ages Commissioning Head of Housing
All-age carers’ strategy action plan – recommendations of the working group <ul style="list-style-type: none"> Discuss and agree recommendations of the proposed working group. 	<ul style="list-style-type: none"> Working group report and draft recommendations 	<ul style="list-style-type: none"> All-age carers’ steering group chair Senior commissioning officer
Work programme <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

Committee Meeting27 January 2025, **report publication date 17 January 2025** pre meeting lines of enquiry planning 16 January 2025

Topic and Objectives	Evidence required	Attendees*
Health and Wellbeing Strategy <ul style="list-style-type: none"> To examine the objectives of the strategy. To scrutinise delivery plans underpinning key objectives of the Health and Wellbeing Strategy. To measure progress in developing Herefordshire’s Joint Strategic Needs Assessment. 	<ul style="list-style-type: none"> Health and Wellbeing strategy 	<ul style="list-style-type: none"> Chair, Health and Wellbeing Board Director of Public Health
Work programme <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

396

Committee Meeting31 March 2025 **report publication date 21 March 2025** pre meeting lines of enquiry planning 20 March 2025

Topic and Objectives	Evidence required	Attendees*
Topic to be confirmed		
Work programme <ul style="list-style-type: none"> Review work programme 	<ul style="list-style-type: none"> Draft work programme 	<ul style="list-style-type: none"> Statutory Scrutiny Officer

*The Corporate Director, Community Wellbeing and Cabinet Member Adults, Health and Wellbeing, both have a standing invitation to the meeting.

Scrutiny Management Board

Committee Meeting

10 September 2024 **report publication date 2 September 2024** pre meeting lines of enquiry planning 29 October 2024

Topic and Objectives	Evidence required	Attendees*
Herefordshire Council financial position <ul style="list-style-type: none"> • Scrutinise: <ul style="list-style-type: none"> ○ The 2023-24 budget outturn ○ Preparations for the 2025-26 budget 	<ul style="list-style-type: none"> • 2023-24 budget outturn 	<ul style="list-style-type: none"> • Director of Finance (Section 151 officer)
Work programme <ul style="list-style-type: none"> • Review work programme 	<ul style="list-style-type: none"> • Draft work programme 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer

Committee Meeting

28 October 2024 **report publication date 18 October 2024** pre meeting lines of enquiry planning 16 October 2024

Topic and Objectives	Evidence required	Attendees*
The management and delivery of capital projects <ul style="list-style-type: none"> • How does the council approach project manage • Understand the council's approach to project management overall • What have been the strengths and areas for improvement of the PMO approach? • How does the council ensure that it has the right capability and capacity to deliver projects at the right quality, within budget and to agreed timescales? • How does the council ensure value for money through the delivery of capital projects? • How does the council understand its performance with regards to the management and delivery of projects, how does it ensure it constantly improves its performance? 	<ul style="list-style-type: none"> • TBC 	<ul style="list-style-type: none"> • Corporate Director, Economy and Environment

<ul style="list-style-type: none"> • How does the council ensure that the interactions between capital projects and the revenue budget are effectively managed? • What impact has the council had through capital project and how can it have greater impact in the future? 		
<p>Devolution – options for Herefordshire</p> <ul style="list-style-type: none"> • To assess prospective options for a submission to Government for devolution powers to include: <ul style="list-style-type: none"> ○ Options for partnership arrangements with other local authorities. ○ Understanding the path to a devolution settlement ○ The opportunities and benefits for Herefordshire Communities from devolution ○ The risks and Risks and challenges to Herefordshire from devolution 		<ul style="list-style-type: none"> • Corporate Director, Economy and Environment
<p>Herefordshire Council Plan – Delivery Plan Working Group</p> <ul style="list-style-type: none"> • Agree terms of reference for a Council Plan Delivery Plan Working Group, to contribute to the development of the delivery plan. 	<ul style="list-style-type: none"> • Draft working group terms of reference 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer
<p>Work programme</p> <ul style="list-style-type: none"> • Review work programme 	<ul style="list-style-type: none"> • Draft work programme 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer

**Working Group Meeting
November 2024**

Topic and Objectives	Evidence required	Attendees*
<p>Herefordshire Council Plan delivery plan</p> <ul style="list-style-type: none"> • Understand what actions the Executive is prioritising in the Delivery Plan • How will the Executive ensure that they are sufficiently ambitious but also realistic? 	<ul style="list-style-type: none"> • Draft delivery plan 	<ul style="list-style-type: none"> • To be confirmed

<ul style="list-style-type: none"> • How is the council performing in terms of this year’s delivery plan? <ul style="list-style-type: none"> ○ How will that impact next year’s delivery plan? • What will be the impact of the delivery plan on Herefordshire communities? 		
---	--	--

Committee Meeting

16 December 2024 report publication date **6 December 2024** pre meeting lines of enquiry planning **4 December 2024**

Topic and Objectives	Evidence required	Attendees*
<p>Financial Monitoring</p> <ul style="list-style-type: none"> • Review of 2024-2025 Quarters 1 and 2 outturn • How effective has the executive been in managing the budget for the first 6 months of the year • Where has the executive failed to achieve planned savings and what mitigating actions have been taken? • Where has the executive seen unplanned growth in budgets and what mitigating actions have been taken? • What are the key risks to the delivery of the budget over the remainder of the year? • What has been the impact of the executive’s work on the communities of Herefordshire? • Scrutiny of management action to achieve planned budget outturn. 	<ul style="list-style-type: none"> • Budget 2024 Quarter 1 and 2 outturn 	<ul style="list-style-type: none"> • Director of Finance
<p>Workforce planning and strategy</p> <ul style="list-style-type: none"> • How does the council determine its workforce requirements? • Where are the gaps in the current council staffing structures and skills, and what work is underway to fill those gaps? • What has been the impact of MERS on the council’s structure, and how will those impacts be addressed? • What programmes are planned and are underway to develop the council’s workforce? 	<ul style="list-style-type: none"> • Workforce strategy • Annual staff survey findings 	<ul style="list-style-type: none"> • Director of Human Resources and Organisational Development

Herefordshire Council Plan – Delivery Plan Working Group <ul style="list-style-type: none"> • Agree findings of the delivery plan working group 	<ul style="list-style-type: none"> • Final working group report 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer
Work programme <ul style="list-style-type: none"> • Review work programme 	<ul style="list-style-type: none"> • Draft work programme 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer

Committee Meeting

14 and 24 January 2025 **report publication dates 6 and 16 January 2025** pre meeting lines of enquiry planning 3 or 6 January 2025 (date to be confirmed)

Topic and Objectives	Evidence required	Attendees*
Budget, Capital Programme and Medium-Term Financial Strategy <ul style="list-style-type: none"> • Scrutinise the proposed 2025-26 budget for Herefordshire Council. • Evaluate the alignment between the medium term-financial strategy and the Herefordshire Council Plan and its delivery plan. • Ensure that the capital priorities in capital programme align with the priorities of the delivery plan. 	<ul style="list-style-type: none"> • Draft 2025-26 budget • Capital Programme • Medium-term financial strategy 	<ul style="list-style-type: none"> • Director of Finance • All corporate directors • Leader, Council
Work programme <ul style="list-style-type: none"> • Review work programme 	<ul style="list-style-type: none"> • Draft work programme 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer

Committee Meeting

11 March 2025 report publication date **3 March 2025** pre meeting lines of enquiry planning **28 February 2025**

Topic and Objectives	Evidence required	Attendees*
<p>Financial Monitoring</p> <ul style="list-style-type: none"> • Review of 2024-2025 quarter 3 outturn. • Scrutiny of management action to achieve planned budget outturn. • Scrutiny of portfolio holder action to identify risks in delivery of agreed budget. 	<ul style="list-style-type: none"> • Quarter 3 outturn 	<ul style="list-style-type: none"> • Director of Finance
<p>Digital, Data and Technology</p> <ul style="list-style-type: none"> • What are the council’s proposed investments in digital and data technology? • How does the council achieve value for money in its investments? • What are the gaps in the council’s information technology, and how will address them? • What staffing, training and corporate restructuring will be required to deliver the proposed investments? • What opportunities exist to digitise council services? <ul style="list-style-type: none"> ○ How will the council ensure that digitisation does not exclude vulnerable groups? 		
<p>Work programme</p> <ul style="list-style-type: none"> • Review work programme 	<ul style="list-style-type: none"> • Draft work programme 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer

401

Committee Meeting

May 2025 report publication date **May 2025** pre meeting lines of enquiry planning **May 2025**

Topic and Objectives	Evidence required	Attendees*
<p>Hoople</p> <ul style="list-style-type: none"> • How does our relationship with Hoople deliver value for money for the council? How does our relationship with Hoople deliver value for money for the council? 		<ul style="list-style-type: none"> • Director of Finance

<ul style="list-style-type: none"> • How does Hoople itself deliver value for money? • What are Hoople’s areas of competence and expertise? • How does the council balance the friction caused by having a client/supplier relationship with the benefits of having a Tekkal supplier and a specialist? • How does the council capture Hoople’s expertise in shaping relevant policies and plans? • What has been in the impact of Hoople on the communities of Herefordshire? • How does Hoople contribute to the priorities in the Council Plan and its annual delivery plan? 		
<p>Work programme</p> <ul style="list-style-type: none"> • Review work programme 	<ul style="list-style-type: none"> • Draft work programme 	<ul style="list-style-type: none"> • Statutory Scrutiny Officer

*The Director of Finance and all Cabinet portfolio holders have a standing invitation to each committee meeting. Portfolio holder attendance is dependent on the topic being discussed.

HEREFORDSHIRE COUNCIL FORWARD PLAN



This document, known as the Forward Plan, sets out the decisions which are expected to be taken during the period covered by the Plan by either Cabinet as a whole, or by individual Cabinet Members. The Plan is updated regularly and is available on the Herefordshire Council website (www.herefordshire.gov.uk) and from Council Offices. This edition supersedes all previous editions.

The council must give at least 28 days' notice of key decisions to be taken. A key decision is one which results in the council incurring expenditure or making savings of £500,000 or more, and/or is likely to be significant in terms of the strategic nature of the decision or its impact, for better or worse, on the amenity of the community or quality of service provided by the council to a significant number of people living or working in the locality affected.

Current cabinet members are listed below. For more information and links papers for Cabinet meetings please visit <https://councillors.herefordshire.gov.uk/mgCommitteeDetails.aspx?ID=251>

Councillor Jonathan Lester	Corporate Strategy and Budget (Leader of the Council)
Councillor Elissa Swinglehurst	Environment (Deputy Leader of the Council)
Councillor Carole Gandy	Adults, Health and Wellbeing
Councillor Ivan Powell	Children and Young People
Councillor Harry Bramer	Community Services and Assets
Councillor Graham Biggs	Economy and Growth
Councillor Pete Stoddart	Finance and Corporate Services
Councillor Barry Durkin	Roads and Regulatory Services
Councillor Philip Price	Transport and Infrastructure

403

Documents submitted in relation to each decision will be a formal report, which may include one or more appendices. Reports will usually be made available on the council website at least 5 clear working days before the date of the decision. Occasionally it will be necessary to exempt part or all of a decision report from publication due to the nature of the decision, for example if it relates to the commercial or business affairs of the council. Other documents may be submitted in advance of the decision being taken and will also be published on the website unless exempt.

To request a copy of a decision report or related documents please contact governancesupportteam@herefordshire.gov.uk or telephone 01432 261699.

The following information is provided for each entry in the Forward Plan:

Heading	Contains
Report title and purpose	A summary of the proposal
Decision Maker and Due date	Who will take the decision and the date the decision is expected to be made
Lead cabinet member and officer contact(s)	The cabinet member with responsibility for this decision and the officers producing the decision report.
Directorate	The directorate of the council responsible for the decision.
Date uploaded onto plan	The date the decision was first uploaded and the notice period started for key decisions.
Decision type, exemptions and urgency	Whether the decision is a Key or Non-Key decision, if the report is expected to be fully open, partly exempt or fully exempt and if urgency procedures are being followed.

Decisions to be taken by Cabinet at a formal meeting are listed first, ordered by date, and include both Key and Non-Key decisions. Decisions to be taken by individual Cabinet Members are then listed, grouped by portfolio area and sorted by date. These include Key decisions only.

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
--------------------------	-----------------------------	--	-------------	-------------------------	---------------------------------------

Cabinet decisions by date (Key and Non-key listed)

<p>Children and Young persons' Improvement Plan – progress update To provide a progress update in respect of the Children and Young persons' Improvement Plan</p>	<p>Cabinet 26 September 2024</p>	<p>Cabinet member children and young people</p> <p>Victoria Gibbs, Service Director Early Help, Quality Assurance and Prevention, Rachel Gillott, Service Director, Safeguarding and Family Support, Bart Popelier, Project Lead</p> <p><small>victoria.gibbs@herefordshire.gov.uk, Rachel.Gillott@herefordshire.gov.uk, Bart.Popelier@herefordshire.gov.uk</small></p>	<p>Children and Young People</p>	<p>30 August 2024</p>	<p>Non Key Open</p>
<p>Q1 2024/25 Budget Report To report the forecast position for 2024/25, including explanation and analysis of the drivers for the material budget variances.</p>	<p>Cabinet 26 September 2024</p>	<p>Cabinet member finance and corporate services</p> <p>Rachael Sanders, Director of Finance</p> <p><small>Rachael.sanders@herefordshire.gov.uk</small></p>	<p>Corporate Support Centre</p>	<p>30 August 2024</p>	<p>Non Key Open</p>

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
<p>Q1 Performance Report Note and approve the quarterly performance report</p>	<p>Cabinet 26 September 2024</p>	<p>Cabinet member finance and corporate services</p> <p>Jessica Karia, Head of Corporate Performance and Intelligence jessica.karia@herefordshire.gov.uk</p>	<p>Corporate Support Centre</p>	<p>30 August 2024</p>	<p>Non Key Open</p>
<p>To re-commission the Integrated Community Equipment Service (ICES) in Herefordshire To approve the re-commissioning of the county's Integrated Community Equipment Service (ICES), which supports residents to live safely and independently in their own homes and communities for longer</p>	<p>Cabinet 26 September 2024</p>	<p>Cabinet member adults, health and wellbeing</p> <p>Sharon Amery, Senior Commissioning Officer sharon.amery2@herefordshire.gov.uk</p>	<p>Community Wellbeing</p>	<p>30 August 2024</p>	<p>KEY Open</p>
<p>Corporate Parenting Strategy To approve the corporate parenting strategy</p>	<p>Cabinet 24 October 2024</p>	<p>Cabinet member children and young people</p> <p>Caroline Marshall, Project manager, Julie Mepham caroline.marshall3@herefordshire.gov.uk,</p>	<p>Children and Young People</p>	<p>30 August 2024</p>	<p>KEY Open</p>

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
<p>Herefordshire and Worcestershire Group Training Association Ltd (HWGTA) Investment Partnership Model</p> <p>To develop a business case outlining options for a preferred investment model and;</p> <p>to approve the preferred investment model option for the HWGTA Ltd and Herefordshire Council partnership to enable the development of a vocational centre of excellence on Skylon Park.</p>	<p>Cabinet 24 October 2024</p>	<p>Cabinet member community services and assets</p> <p>Joni Hughes, Head of Chief Executive's Office, Gabriela Singh, Project Manager</p> <p><small>Joni.Hughes@herefordshire.gov.uk, Gabriella.Singh@herefordshire.gov.uk</small></p>	<p>Corporate Support Centre</p>	<p>30 August 2024</p>	<p>KEY Open</p>
<p>Student Accommodation Update and Recommendations</p> <p>To update Cabinet Member on the progress and budget for the project</p>	<p>Cabinet 24 October 2024</p>	<p>Cabinet member community services and assets</p> <p>Joni Hughes, Head of Chief Executive's Office, Susan White, Programme Manager</p> <p><small>Joni.Hughes@herefordshire.gov.uk, Susan.White2@herefordshire.gov.uk</small></p>	<p>Economy and Environment</p>	<p>30 August 2024</p>	<p>KEY Open</p>

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
<p>To agree a long term lease with a city centre tenant To agree a long term lease with a city centre tenant</p>	<p>Cabinet 24 October 2024</p>	<p>Cabinet member community services and assets Helen Beale, Senior Estate Manager <small>HBeale@herefordshire.gov.uk</small></p>	<p>Corporate Support Centre</p>	<p>30 August 2024</p>	<p>KEY Fully exempt</p>
<p>New care facility To consider and agree the business case to invest in and develop the council's own care facility in Herefordshire to meet future demand</p>	<p>Cabinet 23 January 2025</p>	<p>Cabinet member adults, health and wellbeing Hilary Hall, Corporate Director Community Wellbeing, Hayley Doyle, Service Director - All Age Commissioning <small>Hilary.Hall@herefordshire.gov.uk, Hayley.Doyle@herefordshire.gov.uk</small></p>	<p>Community Wellbeing</p>	<p>30 August 2024</p>	<p>KEY</p>
<p>Cabinet Member Decisions (Key decisions only)</p>					
<p>Portfolio: adults, health and wellbeing</p>					

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
<p>Community Spaces Capital Grant Scheme To approve the approach for the Community Spaces Capital Grant Scheme</p>	<p>Cabinet member adults, health and wellbeing 23 September 2024</p>	<p>Cabinet member adults, health and wellbeing Amy Pitt, Service Director Communities, Community Wellbeing <small>Amy.Pitt@herefordshire.gov.uk</small></p>	<p>Community Wellbeing</p>	<p>30 August 2024</p>	<p>KEY Open</p>
<p>To re-commission the technology enabled care and call monitoring service in Herefordshire To approve the re-commissioning of the county's technology enabled care and proactive / reactive call monitoring service, which supports residents to live safely and independently in their own homes and communities for longer</p>	<p>Cabinet member adults, health and wellbeing 26 September 2024</p>	<p>Cabinet member adults, health and wellbeing Sharon Amery, Senior Commissioning Officer <small>sharon.amery2@herefordshire.gov.uk</small></p>	<p>Community Wellbeing</p>	<p>30 August 2024</p>	<p>KEY Open</p>
<p>Carer Support Service re-procurement To agree the proposal to re-procure Herefordshire Carer Support Service for a period of 2 years with an option to extend for a further 12 months</p>	<p>Cabinet member adults, health and wellbeing 10 October 2024</p>	<p>Cabinet member adults, health and wellbeing John Burgess, Senior Commissioning Officer <small>John.Burgess3@herefordshire.gov.uk</small></p>	<p>Community Wellbeing</p>	<p>30 August 2024</p>	<p>KEY Open</p>
<p>Portfolio: children and young people</p>					

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
<p>Recommissioning of Early Help Family Befriending & Mentoring Services</p> <ul style="list-style-type: none"> The purpose of this document is for the Cabinet Member to be made aware of and agree to the recommissioning recommendation proposed – to tender for new contract/s for the same or redesigned service/s. To delegate future operational decisions to Service Director. 	<p>Cabinet member children and young people 6 September 2024</p>	<p>Cabinet member children and young people</p> <p>Richard Watson, Senior Commissioning Manager - All age disability, Sam Westwood, Commissioning Officer, All Age Disability, Community Wellbeing</p> <p><small>rwatson@herefordshire.gov.uk, Sam.Westwood@herefordshire.gov.uk</small></p>	<p>Community Wellbeing</p>	<p>30 August 2024</p>	<p>KEY Open</p>
<p>Children and Young People's Workforce Strategy</p> <p>To approve the children and young people's workforce strategy</p>	<p>Cabinet member children and young people 14 October 2024</p>	<p>Cabinet member children and young people</p> <p>Caroline Marshall, Project manager, Debbie Thompson, HR Business Partner, Danielle Pyemont, Senior Project Manager</p> <p><small>caroline.marshall3@herefordshire.gov.uk, debbie.thompson@herefordshire.gov.uk, danielle.pyemont@herefordshire.gov.uk</small></p>	<p>Children and Young People</p>	<p>30 August 2024</p>	<p>Non Key Open</p>
<p>Portfolio: community services and assets</p>					

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
<p>High Needs Capital Grant: Purchase of a building for Herefordshire's Pupil Referral Unit To approve the spend from the High Needs Grant to purchase a suitable building, to relocate on to one site, Herefordshire's Pupil Referral Unit</p>	<p>Cabinet member community services and assets 26 September 2024</p>	<p>Cabinet member community services and assets Hilary Jones, Virtual headteacher, Caroline Marshall, Project manager, Quentin Mee, Head of Educational Development <small>hjones@herefordshire.gov.uk, caroline.marshall3@herefordshire.gov.uk, Quentin.Mee@herefordshire.gov.uk</small></p>	<p>Children and Young People</p>	<p>30 August 2024</p>	<p>KEY Open</p>
Portfolio: economy and growth					
<p>HBID Third Term Ballot Decision To agree to vote yes in the upcoming BID ballot (October 2024) ahead of the HBID's third term which is due to commence in April 2025</p>	<p>Cabinet member economy and growth 23 September 2024</p>	<p>Cabinet member economy and growth Nadine Kinsey, Economic Development Officer <small>nkinsey@herefordshire.gov.uk</small></p>	<p>Economy and Environment</p>	<p>30 August 2024</p>	<p>KEY Open</p>

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
<p>Merton Meadow Flood Alleviation Scheme To seek approval to spend the £2m Brownfield Land Release Fund grant awarded by government to the council to design and implement the required flood alleviation scheme.</p>	<p>Cabinet member economy and growth 23 September 2024</p>	<p>Cabinet member economy and growth Roger Allonby, Service Director Economy and Growth, Stephen Holland, Interim Head of Housing Development <small>Roger.Allonby@herefordshire.gov.uk, stephen.holland@herefordshire.gov.uk</small></p>	<p>Economy and Environment</p>	<p>30 August 2024</p>	<p>KEY Open</p>
<p>Acquisition Fund For Housing Development To seek approval to spend up to £5m of the Acquisition Fund For Housing Development allocation in the Capital Programme, to enable the council to respond to short term opportunities to acquire and develop key strategic sites to meet critical social and affordable housing need.</p>	<p>Cabinet member economy and growth 30 September 2024</p>	<p>Cabinet member economy and growth Roger Allonby, Service Director Economy and Growth, Hayley Crane, Head of Service Housing, Stephen Holland, Interim Head of Housing Development <small>Roger.Allonby@herefordshire.gov.uk, Hayley.Crane@herefordshire.gov.uk, stephen.holland@herefordshire.gov.uk</small></p>	<p>Economy and Environment</p>	<p>NEW ITEM</p>	<p>KEY Open</p>
<p>Portfolio: environment</p>					

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
Portfolio: finance and corporate services					
<p>To approve the Hoople Ltd Service Level Agreement for 2024/25</p> <p>The report will describe the services that Hoople Ltd are commissioned to deliver with an agreed budget and seek authority to enter into contract with Hoople including authorisation of the SLA for 2024/2025 financial year. It will also authorise a performance framework that will be monitored over the duration of the contract</p>	<p>Cabinet member finance and corporate services</p> <p>26 September 2024</p>	<p>Cabinet member finance and corporate services</p> <p>Joni Hughes, Head of Chief Executive's Office</p> <p><small>Joni.Hughes@herefordshire.gov.uk</small></p>	<p>Corporate Support Centre</p>	<p>30 August 2024</p>	<p>KEY</p> <p>Open</p>
Portfolio: roads and regulatory services					
<p>24/25 Winter Service</p> <p>To seek approval for the arrangements being made for the provision of winter service during the period of 2023 through to 2024 season, as set out in the Winter Service Plan.</p> <p>The Winter Service Plan continues to build on existing best practice and the findings of reviews that have taken place both locally and nationally. Herefordshire Council will continue to meet its duties towards the maintenance of the highway network in full and by working in partnership with Herefordshire's communities, wherever practicable, enhance the county's resilience to the impact of prolonged or severe winter weather.</p>	<p>Cabinet member roads and regulatory services</p> <p>1 October 2024</p>	<p>Cabinet member roads and regulatory services</p> <p>Bruce Evans, Engineering Manager</p> <p><small>bj@herefordshire.gov.uk</small></p>	<p>Economy and Environment</p>	<p>30 August 2024</p>	<p>KEY</p> <p>Open</p>

Report title and purpose	Decision Maker and Due date	Lead cabinet member and officer contact(s)	Directorate	Date uploaded onto plan	Decision Type, exemptions and urgency
Portfolio: transport and infrastructure					
Hereford Public Art Strategy To consider and agree the recommendations arising from the Hereford Public Art Strategy developed as part of the Hereford City Centre Improvements (HCCI) public art programme.	Cabinet member transport and infrastructure 6 September 2024	Cabinet member transport and infrastructure Sarah Lee, Culture and Leisure Lead <small>sarah.lee@herefordshire.gov.uk</small>	Community Wellbeing	30 August 2024	Non Key Open