

# **SOUTH WORCESTERSHIRE INFRASTRUCTURE DELIVERY PLAN INTERIM POSITION STATEMENT: WORK STILL IN PROGRESS**

## **SECTION 1: INTRODUCTION**

### **STATUS**

- 1.1 This is the South Worcestershire Infrastructure Delivery Plan Interim Position Statement (SWIDPIPS) which is written in support of the South Worcestershire Development Plan Proposed Schedule of Changes which were approved by the three South Worcestershire Councils (SWC) on 03/07/12.
- 1.2 The SWIDPIPS should be regarded at this stage as a technical supporting paper and it is an Interim Position Statement where work is still in progress because it is still far from complete. It contains a number of gaps and limitations and the information gathering process is both ongoing and dynamic. Whilst every effort has been made to ensure accuracy, the document contains a number of gaps and it may inevitably contain some inaccuracies which is quite normal at this stage of the plan making process. It is intended that any shortcomings will be resolved before the document is approved as the South Worcestershire Infrastructure Delivery Plan and this will be published in Autumn 2012 in support of the formal version of the South Worcestershire Development Plan (SWDP).
- 1.3 This paper has no formal planning status whatsoever in respect of any policy or development management decisions by any of the Councils and is simply a technical paper upon which work is in progress.

### **CONTEXT**

- 1.4 The following structure of the South Worcestershire Infrastructure Delivery Plan, based on national best practice and due for publication in Autumn 2012, was approved by the Joint Advisory Panel (JAP) on 02/03/12 :-
  1. Introduction.
  2. South Worcestershire Context
  3. SWDP IDP Approach
  4. Physical Infrastructure
  5. Social Infrastructure
  6. Green Infrastructure
  7. Spatial planning of Infrastructure.
  8. Costing of Infrastructure
  9. Delivering infrastructure
  10. Delivery of Infrastructure : funding mechanisms
  11. Conclusions
  12. Appendices.
- 1.5 In this Interim Position Statement only the following main sections have been prepared:-

- 1. Introduction
- 4. Physical infrastructure
- 5. Social Infrastructure
- 6. Green Infrastructure.
- 7. Spatial planning of infrastructure.
- Appendix Y on crucial infrastructure

- 1.6 Following its approval by 3<sup>rd</sup> July Councils, there will be a technical consultation on this SWIDPIPS during the summer period.
- 1.7 A full and proper South Worcestershire Infrastructure Delivery Plan will need to be ready for approval by the three SWC Councils in autumn 2012.

### **RELATIONSHIP WITH COUNTY INFRASTRUCTURE STRATEGY**

- 1.8 In parallel with the work on this document, Worcestershire County Council is in the process of preparing a Worcestershire Infrastructure Strategy (WIS) and efforts have been made to bring together the evidence collected for these two workstreams. The County Council document is currently called "Planning for Infrastructure in Worcestershire: a Strategic Options Paper to Inform the Preparation of Strategy". This has just been published on 13/06/12. It is intended that a process of targeted consultation on the County document will take place during the summer period with stakeholders and infrastructure providers on the evidence gathered regarding strategic infrastructure requirements to date. The County Council intends to develop a first draft Strategy document on the back of current evidence gathering by October 2012. Every effort will be made to ensure that the conclusions of the South Worcestershire Infrastructure Delivery Plan, which will support the SWDP, will be consistent with that draft Worcestershire Infrastructure Strategy and ensure that infrastructure providers, developers and the public are provided with a reliable picture of infrastructure needs over the coming years.
- 1.9 As with the SWDPIPS, the County Council's document will be a living document subject to monitoring and review.

### **RELATIONSHIP WITH WORCESTERSHIRE LOCAL ENTERPRISE PARTNERSHIP (LEP).**

- 1.10 The South Worcestershire Authorities have engaged with the Worcestershire LEP both at the Preferred Options Stage and subsequently in relation to possible changes to the emerging SWDP, including a presentation to a LEP workshop organised on Planning and Development in June 2012 to inform the LEP's revised Business Plan. Given the role of the LEP in promoting the economic interests of Worcestershire and the emphasis placed on the emerging SWDP on delivering economic prosperity, it has been essential to ensure a positive and complementary relationship between the LEP priorities, including the LEP's priorities for infrastructure provision and the contents of this document. Again every effort will be made to strengthen these linkages further by Autumn 2012.

## **SWDP POLICY CONTEXT**

- 1.11 This SWIDPIPS document supports the SWDP Proposed Changes, approved on 03/07/12, and the SWIDP will support the formal version of SWDP in Autumn 2012. This is a supporting technical document which currently takes the form of an Interim Position Statement.
- 1.12 In both cases the “anchor point” policy in SWDP will be the proposed new policy SWDP 6 on Infrastructure as approved by the three SWC Councils on 03/07/12.

This currently reads as follows:-

### **NEW POLICY SWDP 6: INFRASTRUCTURE**

- 1.13 “The three South Worcestershire Councils will work closely with its partners, especially the County Council, to bring forward the necessary and proportionate crucial infrastructure which is required in order to deliver the Spatial Strategy, as set out in the Plan.

The current assessment of crucial infrastructure requirements is set out in “appendix Y” to this Plan and will be explained in more detail in the Infrastructure Delivery Plan.

Development will be required to provide or contribute towards the provision of infrastructure needed to support it. Developers will also need to contribute towards community benefits related to the development.

Where new infrastructure is needed to support new development, the crucial infrastructure must be operational no later than the completion of the development, or the appropriate phase of development, for which it is needed.

The three South Worcestershire Councils each intend to introduce a Community Infrastructure Levy by March 2014.

The three South Worcestershire Councils intend to explore a range of funding mechanisms in order to finance the necessary and proportionate crucial infrastructure and these will be set out in more detail in the Infrastructure Delivery Plan in Autumn 2012.”

- 1.14 The reasoned justification and context for this Policy is contained in the SWDP policy papers.
- 1.15 “Appendix Y” lists the best current understanding of crucial infrastructure.
- 1.16 It is intended that “Appendix Y” serves not only as an Appendix to the SWDP Proposed Changes document in support of new policy SWDP 6 but is also attached to this Interim Position Statement.
- 1.17 Appendix Y will be refined and updated during the summer months in a technical fact check consultation with infrastructure providers and other key partners so that it can be firmed up by autumn 2012 to support the formal version of SWDP

## **SECTION 4 : PHYSICAL INFRASTRUCTURE.**

### **A. MOVEMENT**

#### INTRODUCTION

- 4.1 This section relates not just to new policy SWDP 6 on Infrastructure but also refined policy SWDP 4 on Moving Around South Worcestershire.
- 4.2 Cross reference should also be made to the Transport Background Paper, which is still in the course of preparation.
- 4.3 The position on this topic is very dynamic and fast changing and is heavily reliant upon information from transport officers from Worcestershire County Council.
- 4.4 Like many sections of the SWIDPIPS, it draws heavily upon strategic work on Infrastructure undertaken by the County Council. In its latest emerging form as published on 13/06/12, the document called "Planning for Infrastructure in Worcestershire" summarised for the purposes of this document as the Worcestershire Infrastructure Strategy (WIS). This draws on an earlier County evidence base (as yet still to be updated) which gives fuller information.
- 4.5 In respect of movement, SWC has worked closely and positively with the County Council as it has progressed its transportation work on the SWDP and this has been reported to JAP and members of all three Councils during Spring and early Summer 2012.
- 4.6 The County Council provided a position statement on 28/05/12, which was updated on 11/06/12 and again on 18/06/12 and it is this material which has been summarised in the remainder of this section.
- 4.7 It should be noted that there is the key issue at the end of the Movement section which relates to the position of the Highways Agency. All four Councils have worked together to assess and address this situation as best as is practicable pending the input from the Highways Agency.
- 4.8 With that major caveat in mind, this analysis is derived from the County's May 2012 information, as updated on 11/06/12, 18/06/12 and 20/06/12

#### ASSESSMENT OF TRANSPORT IMPACT OF SWDP GROWTH

- 4.9 Worcestershire County Council has, on behalf of SWC, undertaken two stages of assessment to understand the impacts of SWDP growth on all modes of transport in South Worcestershire and to support the SWC in developing the SWDPDP and the emerging SWIDP. Two stages of assessment were undertaken:-
  - Stage 1 (Summer 2011).  
Assessment of :-
    - a) The impact of the SWDP growth on the Worcester transport network (using the Worcester Multi-Modal Model).
    - b) The accessibility of SWDP sites by walk, cycle and passenger transport.
    - c) Preliminary traffic assessments in the South Worcestershire towns, utilising the Evesham, Pershore, Malvern and Droitwich Spa Development Models.

- Stage 2 (December 2011-May 2012)

Building on the Stage 1 work, an assessment of the wider impact of the SWDP growth (with updated SWDP planning assumptions provided by SWC in February 2012) including:-

- a) Generated travel demand (by all modes of transport)
- b) Trip distribution
- c) Impact on performance of the South Worcestershire network
- d) Identification of the schemes and mitigation measures required to accommodate the SWDP planned growth.
- e) Estimated capital and ongoing maintenance costs of the identified transport schemes and mitigation measures

- 4.10 These assessments were undertaken in line with Worcestershire County Council transport policy contained within the Local Transport Plan 3 and will support the development of the LTP3 Package approach. A detailed description of the Stage 1 and 2 processes is provided in the following sections.

#### TRANSPORT POLICY

- 4.11 The key transport policies are provided in the Worcestershire's third Local Transport Plan (LTP3) which covers the period 2011-2026. The transport assessment contained in the SWIDPIPS supporting the SWDP covers the period up to 2030.
- 4.12 The LTP3 includes the South Worcestershire Transport Strategy which consists of the following packages of transport measures which have and will, in their planning and development, take account of planned growth in South Worcestershire:
- Worcester Transport Strategy and associated package of schemes
  - The Upton on Severn Urban Package
  - The Droitwich Spa Urban Package
  - The Great Malvern Urban Package
  - The Tenbury Wells Package
  - The South Worcestershire Rural Package.

#### STAGE 1: ASSESSMENT OF TRANSPORT IMPACT OF SWDP GROWTH ( May –June 2011)

- 4.13 Subsequent to the adoption of the Worcestershire LTP3, bespoke research was commissioned to investigate the transport impact of proposed SWDP development sites. This work was undertaken in May/June 2011 in terms of the impact on the performance of the Worcester transport network across all modes of transport.
- 4.14 For the wider South Worcestershire area, transport accessibility was assessed by all modes of transport along with an initial indication of the traffic impact of the main urban areas of Droitwich, Evesham, Malvern and Pershore. The assessment was undertaken using draft SWDP planning location, type, quantum and phasing assumptions provided in May 2011 by SWC; this included the quantum, type and phasing of sites.

- 4.15 The detailed assessment for Worcester was undertaken using the WTM model. This identified the following transport requirements for Worcestershire to accommodate the draft SWDP growth.

#### ENHANCEMENTS TO WORCESTER TRANSPORT NETWORK REQUIRED TO SUPPORT DELIVERY OF DRAFT SWDP GROWTH PLANNED FOR THE 2011-2020 PERIOD

- 4.16 The modelling work undertaken during 2011 covered a period up to 2020. Whilst SWDP uses a phasing up to 2019, the transport advice is that the conclusions will not be materially changed by the slight difference in time period. This issue will need to be considered prior to Autumn 2012. In the interim, the conclusions based on the period up to 2020 are quoted in this SWIDPIPS document.

- 4.17 Highway enhancements;

\* Dualling of the A4440 between Whittington Junction and Ketch Junction, including significant enhancements to the capacities of the following junctions:

- a) Whittington (A4440/A44)
- b) Norton (A4440/Norton Road/St Peter's Drive)
- c) Ketch (A4440/A38).

• Key corridor improvements (road junctions, traffic signals, public realm, walk, cycle and passenger transport infrastructure and services) for the following corridors:-

- a) North East (Tolladine Road) Corridor
- b) North (Ombersley Road) Corridor
- c) South (Bath Road) Corridor including City Centre.

- 4.18 Rail enhancements

- Improvements to passenger facilities, interchange infrastructure and information systems at Worcester Foregate Street station and Malvern Link station improvements.

- 4.19 Walking & Cycling Infrastructure enhancements

- Improved facilities for pedestrians and cyclists, in particular for journeys to/from/within the City.
- Transport related public realm enhancements where this encourages greater use of walk and cycle modes.

- 4.20 Local Passenger Transport Enhancements

- High quality passenger transport services to/from all new developments, linking these with key destinations in and across the City (as defined in the Worcestershire Transport Strategy) and in the transport elements of the Development Briefs for the Sustainable Urban Extensions as referenced in the Draft SWDP
- Improved infrastructure at bus stops.
- Real time Information at bus stops, interchanges and via SMS/website.
- Quicker and more reliable bus services through traffic signal and highway infrastructure measures.

#### 4.21 Smarter Choices/Information

- Variable Message signing (linked to City Centre car park management system)
- Effective and adequately funded Travel Plans for all new developments compatible with best practice identified through the Worcester and Redditch Choose How You Move Project.

#### 4.22 Parking

- Improved parking facilities and systems in and on approaches to the City Centre (including links to the Variable message Signing system).

#### 4.23 Worcestershire Parkway Regional Interchange

- The proposed new Worcestershire Parkway regional Interchange is a key rail infrastructure scheme for South Worcestershire and its economy. Whilst it will also support the delivery of the Draft SWDP, the plan is not dependent on it.

### ENHANCEMENTS TO WORCESTER TRANSPORT NETWORK REQUIRED TO SUPPORT DELIVERY OF THE DRAFT SWDP GROWTH PLANNED FOR THE 2020-2030 PERIOD

#### 4.24 Highway enhancements

- A4440: further significant enhancements to the capacity of the A4440 including:-
  - a) Southern Link Road (and junction with A449)
  - b) Swinesherd Way (and junction with A44)
  - c) Nunnery Way (and junction with Newtown Road).
- Key corridor improvements (road junctions, traffic signals, public realm, walk, cycle and passenger transport infrastructure and services) for the following additional corridors:-
  - a) South West (Bromwich Road/Malvern Road) Corridor.
  - b) North West (Hylton Road) Corridor
  - c) Rainbow Hill/Astwood road Corridor
  - d) Whittington- Sixways- Blackpole Orbital Corridor

#### 4.25 Rail Enhancements

- Improvements to passenger facilities, Interchange Infrastructure and information systems at Worcester Shrub Hill Station.

#### 4.26 Walking & Cycling Infrastructure Enhancements

- Additional improved facilities for pedestrians and cyclists for journeys to/from/within the City.

#### 4.27 Local Passenger Transport Enhancements

- Additional improvements to passenger transport infrastructure and services with high quality passenger transport services provided to/from all new developments, linking these with key destinations in and across the City.
- Improved infrastructure at bus stops.
- Extension of Real Time Information System.

#### 4.28 Smarter Choices/Information

- Extension of Variable Message signing (linked to City Centre car park management systems)
- Effective Travel Plans for all additional new developments.

#### 4.29 Parking

- Further improvements to parking facilities and systems.

4.30 The traffic assessments for other main urban areas of South Worcestershire identified a series of key “pinchpoints” on the network that would be under pressure in terms of capacity following the delivery of the planned growth. The accessibility assessments of the draft SWDP identified that, in addition to highway infrastructure improvements, investment in walk, cycle and passenger transport infrastructure and services would be required to enable new developments to meet relevant policy goals and accessibility standards. Maximising the use of sustainable transport modes, particularly for journeys to/from/within the main urban areas and along the key inter-urban corridors, is key to managing the performance of the transport network such that it can support key policy aims such as supporting the economy. This balanced multi-modal approach is a key element of the Worcestershire LTP3 and has been developed to support the performance of the economy (through managing congestion) and help to reduce carbon emissions and adverse environmental impacts of growth in travel demand.

4.31 The findings of the Stage 1 assessments (using the Worcester Transport Model, Town Development Models and Accessibility Model) have been fed into the subsequent Stage 2 SWDP IDP (transport) project assessment undertaken in 2012 to identify and cost the schemes needed to support the delivery of the SWDP growth (see section below).

#### STAGE 2 :ASSESSMENT OF TRANSPORT IMPACT OF SWDP GROWTH : (DECEMBER 2011-MAY 2012)

4.32 In December 2011, the County Council supported the South Worcestershire planning authorities in identifying the necessary transport related infrastructure and services , and advising on and preparing the transport evidence needed to support the SWDP and its IDP. The transport infrastructure (highway, passenger transport, cycle and pedestrian) and passenger transport services identified on the basis of SWDP planning assumptions provided by the SWC in February 2012.

4.33 It is recognised by all four authorities that additional proposed development has emerged for inclusion in the SWDP Proposed Changes July 2012 document. Whilst officers have been mindful of these proposals in the advice which they have been giving, it is important to be clear that these latest proposals have not yet been modelled and tested by the County Council consultants. It is proposed that this work should be undertaken during the summer of 2012 to guide decisions about the formal version of SWDP which is due to be approved in October 2012.

- 4.34 The SWDP with its new infrastructure policy (SWDP 6) backed up by Appendix Y on crucial infrastructure and the information contained in this SWIDPIPS will provide the evidence base for the infrastructure that is required to support the growth set out in the SWDP. It is envisaged by the four Councils that this information will be used to develop a Community Infrastructure Levy which is programmed to be in place by Spring 2014. It will also inform and support negotiations with developers about specific s. 106 agreements. It will also inform the development of LTP3 packages and schemes in South Worcestershire.
- 4.35 A key premise in this SWDP transport assessment is the recognition that the quantum of development proposed in South Worcestershire will not only have a local transport impact immediately adjacent to the site but also on the strategic transport network further afield. Thus, whilst the local impacts of any development can be directly identified and minor mitigation measures implemented, the tougher and key issue is that for the strategic transport network (and locations further away from the proposed development sites), the problems are all too obvious but the real cause may not be so evident.
- 4.36 It is that interwoven complexity of current and proposed development and the transport network which lies at the heart of the challenge for the SWDP. Therefore, the transport advice has sought to provide evidence to show how the development growth has an impact on the wider network across all modes of transport.
- 4.37 In order to undertake a network wide assessment of the transport network in South Worcestershire and specifically to assess the cumulative transport impact on the transport networks resulting from SWDP developments, a strategic gravity modelling tool (Vehicle/Trip Generation Model) was developed. This modelling tool enables:-
- The calculation of the numbers of trips that each proposed development site will generate.
  - An assessment of the way in which those trips will route on the network.
  - The ability to sum the trips to establish an overall impact assessment.
- 4.38 This drew upon existing evidence and previously related transport tools and SWDP studies; namely:-
- Worcester Multi-Modal Transport Model
  - Evesham, Pershore, Malvern and Droitwich Town Development Models
  - Accessibility assessments
  - Officer workshops.
- 4.39 In identifying the future year (2030) transport infrastructure, the schemes have, where appropriate, drawn on existing transport packages. For example, scheme proposals identified through the Worcester Transport Strategy and associated May/June 2011 work (as summarised above) have been taken as the core schemes for Worcester and schemes identified through the "Development Traffic Impact assessment 2 work (also May/June 2011) have been used as a basis for the main towns (Droitwich, Evesham, Malvern and Pershore).
- 4.40 Where additional issues have been identified in both Worcester and the four main towns, and for areas not previously covered, this transport project has identified further locations where further locations where mitigation is required to overcome or reduce the impact of proposed development. That is, there are locations outside Worcester that do not currently have the benefit of an existing LTP3 package of measures. Furthermore, there are some SWDP development sites that were not considered at the time the LTP3 Strategy was developed. For these sites, an additional task has been undertaken to identify schemes and other mitigation measures. These proposed schemes have been identified with the assistance of the Vehicle /Trips Generation Model.

- 4.41 The transport schemes proposed have been identified to mitigate against forecast future year issues. Specifically:-
- The proposed highway infrastructure schemes aim to improve capacity at key junctions which are anticipated to incur additional delays in future years as a result of the housing and employment growth proposed for the SWDP area, based on the February 2012 data.
  - The proposed sustainable transport schemes aim to connect the proposed SWDP development (as of Feb. 2012 data) to the existing transport network and, where appropriate, improve the existing transport network to encourage greater use of more sustainable transport modes.
- 4.42 In developing the list of scheme proposals, policy and strategy, feasibility, deliverability and the appropriate design standards and guidelines have all been considered. Each of proposed transport schemes is accompanied with a cost for implementation. Costs allow for construction, with relevant percentage uplifts to account for scheme preparation and development costs over and above the basic construction and materials and optimism bias.
- 4.43 A very thorough assessment has been carried out in preparing the list of scheme proposals. Each of the proposed transport schemes is accompanied with a cost for implementation. Costs allow for construction and materials with relevant cost uplifts added to allow for risk, contingency, and scheme preparation and design. Finally, in accordance with standard practice and Government (Department for Transport) guidelines, an additional allowance (known as “Optimism Bias”) has been added to allow for the fact that schemes are at an early stage of development.
- 4.44 In summary, the total capital costs for the proposed transport schemes on an area by area basis are as follows:-  
 Droitwich = £7.48m.  
 Evesham = £6.86m.  
 Malvern = £5.83m.  
 Pershore = £3.72m.  
 Inter-Urban Highways (5)= £14.21m.  
 Inter-Urban /Rural Walk & Cycle (Rural Wychavon and Malvern Hills) = £0.79m.  
 Inter-Urban /Rural Passenger Transport = £0.83m.  
 Worcester (Notes 2, 3&4) = £153.30m.  
 TOTAL = £193.04m

Notes.

- (1). Costs exclude any land acquisition and CPO costs (in the event that these are required), passenger transport operating costs and local s.278 highway works.
- (2) Includes allowance for M5 junctions 6 and 7 (but these are being assessed by Highways Agency).
- (3) Includes allowance for Key Corridors improvements, traffic signal improvements, Southern Link dualling, Traffic Regulation Orders, Improvements to Foregate and Shrub Hill stations and a new Worcestershire Parkway station, improved bus stop infrastructure, RTIS and public transport elements of key corridors, new/improved walk and cycle routes and additional bridge.
- (4) Excludes City Centre Public Realm Improvements.
- (5) Improvements to A46 (Evesham By Pass) junctions (but these are being assessed by Highways Agency).
- (6) Total does not exactly add up because of minor rounding of figures.

## SCHEME MITIGATION METHODOLOGY

- 4.45 Where appropriate, the Transport analysis has drawn on existing Transport Packages. For example, scheme proposals identified through the Worcester Transport Strategy have been taken as the core schemes for Worcester and schemes identified through the LTP3 packages have been used as a basis for the towns. Where additional issues have been identified through the use of Vehicle/Trip Generation model, further work has been undertaken to identify schemes and other mitigation measures.
- 4.46 Proposed highway schemes have been identified to mitigate against forecast transport issues. The schemes aim to improve capacity at key junctions which are anticipated to incur additional delays in future years as a result of the housing and employment growth proposed for the SWDP area.
- 4.47 The proposed sustainable transport infrastructure schemes aim to connect the planned SWDP development sites to the existing transport network and, where appropriate, improve the existing transport network to encourage greater use of more sustainable transport modes. These schemes have been identified through consideration of the results of Vehicle/Trip Generation model to determine where additional infrastructure is required to support trips by sustainable transport modes to and from these development sites and develop the network of sustainable transport infrastructure.
- 4.48 The proposed schemes are illustrated in Fig 1. This shows the location of the schemes identified as a result of the Vehicle/Trips Generation Model (across South Worcestershire) and the Worcester Transport Model within Worcester. Outside Worcester, at all locations where a problem has been identified by the Vehicle/Trips Generation Model, a scheme has been explored and proposed. Within Worcester, with greater ability to encourage mode change and greater use of sustainable modes, a more network wide approach has been adopted. This has resulted in a range of schemes covering all transport modes across South Worcestershire, including highways, passenger transport, cycle and walk. This balanced and integrated approach across South Worcestershire aims to encourage the use of more sustainable travel modes and relieve congestion on the highway network and maximise the performance of the transport network.

**DRAFT SWDP IDP - DRAFT Transport Requirements**

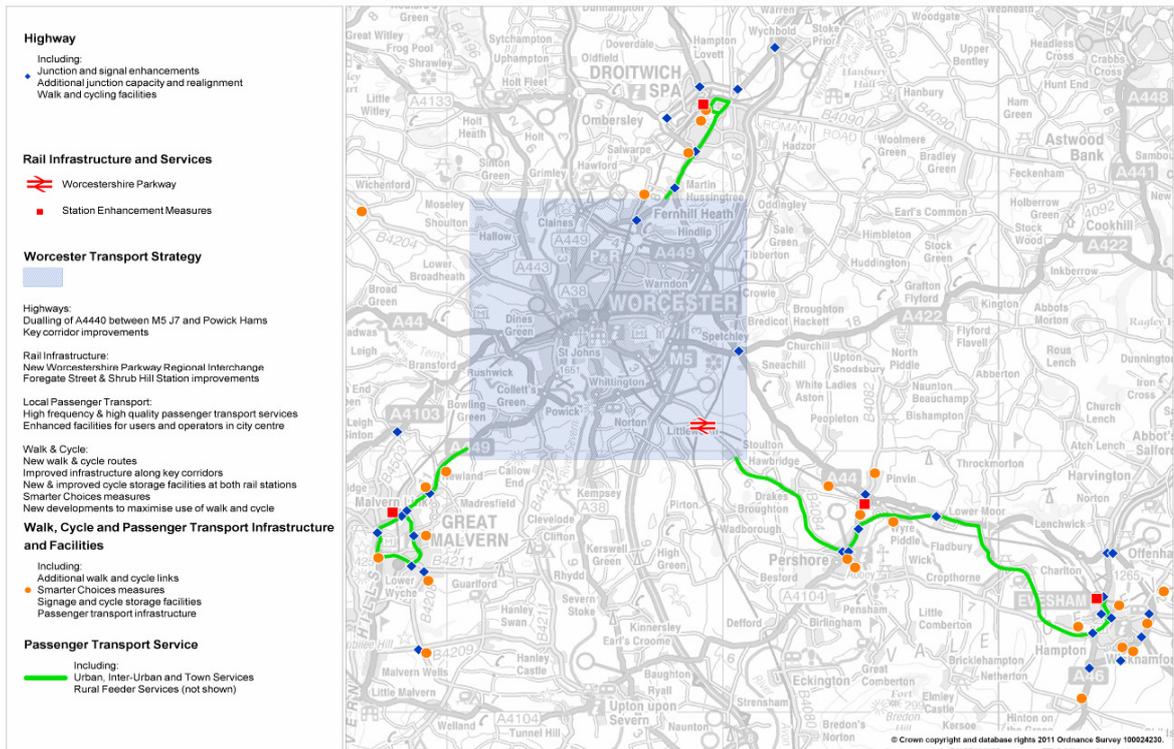


Figure1

**PROGRAMMING OF TRANSPORT SCHEMES IDENTIFIED IN STAGE 1 & 2 ASSESSMENTS**

4.49 A range of transport schemes for all modes of transport has been identified from Stage 1 and 2 assessments for the transport impacts of SWDP growth. These schemes and delivery periods are outlined below.

**WORCESTER UP TO 2019/2020**

4.50 Next phase of the Worcester Transport Strategy including:-

- Southern Link Road; dualling Ketch-Whittington
- A38 Bath Road; Key Corridor Improvements
- A449/ Ombersley Road Key Corridor improvements
- Tolladine Road Key Corridor Improvements
- City Centre junctions & traffic circulation (including Public Transport circulation and facilities)
- Foregate Street and Shrub Hill Railway stations and interchange improvements
- Walk & Cycle route improvements.
- Public Transport improvements (including priority at signals)
- Smarter choices measures at all new developments.
- Development of specific measures designed to maximise use of walk, cycle and local passenger transport for journeys to/from/within Worcester (e.g. see South Worcestershire Transport “Vision” document).

- Worcestershire Parkway (whilst not critical for SWDP, it will support the delivery of the SWDP; i.e. the SWDP plan is not dependent on it.)

#### INTER URBAN CORRIDORS UP TO 2019/2020.

##### 4.51 A38 Corridor

A38 Corridor Junction Improvements (including A38 approaches), especially:-

- A38/ Bromsgrove Road (Hill End junction)
- A38/ Worcester Road ( Copcut junction)
- A38/ Pershore Lane ( Martin Hussingtree)
- A38/Hurst Lane (Fernhill Heath).

##### 4.52 A44 Corridor

A44 Corridor Junction Improvements (including A44 approaches):-

- A44/ Station Road (Pinvin Crossroads).
- A44/A46 (This is mainly a Highways Agency issue.)
- A44/ Evesham Road.

##### 4.53 A449 Corridor (Malvern-Powick)

A449 Corridor Junction Improvements (including A449 approaches).

- A449/Townsend Way (Newlands)
- A449/Pickersleigh Road (Malvern Link).
- A449 Corridor in Malvern Town Centre and Malvern Link.

##### 4.54 A449 Corridor (M5 Junction 6 – Ombersley)

A449 Corridor Junction Improvements (including A449 approaches)

- A449/M5 Junction 6 (linked with performance of M5 junction 6 - Highways Agency).
- A449/Ombersley Road junction (@ Claines)

#### URBAN AREAS (ALL UP TO 2019/2020)

##### 4.55 EVESHAM

- Cheltenham Road -Waterside (Abbey Road junction)
- Pershore Road- Waterside (Abbey Road junction)
- Walk & Cycle route enhancements (important to increase mode shares and reduce pressure on town network).
- Public transport service and infrastructure enhancements (important to increase mode share and reduce pressure on town network).

#### 4.56 MALVERN

- a) Pickersleigh Road between A449 and Barnards Green (including junction with Townsend Way)
- b) A4103- A449 corridor (between Leigh Sinton and Malvern Link)
- c) Walk & Cycle enhancements (important to increase mode shares and reduce pressure on town network)
- d) Public Transport service and infrastructure enhancements (important to increase mode shares and reduce pressure on town network).

#### 4.57 DROITWICH

- a) Walk & Cycle Route Enhancement (important to increase mode share and reduce pressure on town network)
- b) Public Transport Service and Infrastructure enhancements ( important to increase mode share and reduce pressure on town network)

#### 4.58 PERSHORE

- a) Pershore High Street and junction with Station Road.
- b) Walk & Cycle Network (important to increase mode share and reduce pressure on town network)
- c) Public transport Service enhancements (important to increase mode share and reduce pressure on town network).

### POST 2030 SCHEMES

#### WORCESTER

- 4.59 The post 2020 schemes are listed earlier under the section entitled Enhancements to the Worcester Transport Network required to support the delivery of the Draft SWDP planned growth for the period up to 2030.

### INTER URBAN CORRIDOR CORRIDORS INTER UP TO 2030

#### 4.60 A38 Corridor

- a) A38/A442 junction
- b) A38/A4133 junction.

### URBAN AREAS UP TO 2030

#### 4.61 EVESHAM

- a) Further enhancements to performance of town centre junctions.

#### 4.62 MALVERN

- a) Enhancements to junctions on B4208 and B4209 corridors.
- b) Enhancements to junctions to/from Blackmore Park.

#### 4.63 PERSHORE

- a) Enhancements to the Three Springs Road/Worcester Road junction.
- b) Enhancements to the Station Road/High Street/Worcester Road junction.

### SPATIAL POSITION ON TRANSPORT

4.64 The following information was presented to SWC officers at a Transport Workshop on 04/05/12 and the key conclusions were presented to JAP on 11/05/12. This material has been updated by the County Council on 11/06/12 and again on 18/06/12.

#### 4.65 DROITWICH

##### THE EVIDENCE

- Cumulative impact on highway network indicates SWDP growth impacts on all A38 junctions and junction 5 of M5.
- Passenger transport: inadequate bus stop/shelter/priority provision of suitable standard on routes serving SWDP development sites.
- Walk & Cycle: Poor connectivity across the town and severance issues for walking and cycling into the Town Centre from proposed development due to A38, Worcester Road, and railway line; and lack of secure cycle parking facilities in Town Centre.

##### THE SCHEMES

- Highway schemes- Junction Improvements: additional capacity provided at A38 junctions with B4090/A442/A4133 through provision of additional turn lanes, by-pass lanes and signalisation of key junction approaches.
- Passenger transport schemes: provision of suitable levels of service/bus stop/shelter/priority infrastructure to meet County standards on routes serving SWDP development sites.
- Walk & Cycle Schemes: provision of additional walk and cycle footbridges over the A 38 to improve cycle and pedestrian access to the Town Centre and railway station; improvements to canal towpath; provision of cycle parking facilities in Town Centre; public realm enhancements in Town Centre.

#### 4.66 EVESHAM

##### THE EVIDENCE

- Cumulative impact on highway network indicates SWDP growth impacts on A46 junctions with Cheltenham Road, Broadway Road, Millennium Way and Badsey Road (Highways Agency) and also key Town Centre junctions.
- Passenger transport: inadequate bus stop/shelter/priority provision of suitable standard on routes serving SWDP development sites; and inadequate interchange facilities with rail.
- Walk & Cycle: lack of secure cycle parking facilities in Town Centre; and severance issues for walking and cycling into the Town Centre due to A46 by-pass route and River Avon.

##### THE SCHEMES

- Highway schemes junction improvements: additional capacity provided on A46 junctions with Cheltenham Road, Broadway Road, Millennium Way and Badsey Road through additional approach lanes, junction reconfigurations and extensions to existing approach lanes (HA). Also additional capacity provided at key Town Centre junctions through optimising performance of signal junctions.
- Passenger transport schemes: provision of suitable levels of service/ bus stop/ shelter/ priority infrastructure to meet County standards on routes serving SWDP development sites; and also improved bus/rail interchange facilities.
- Walk & Cycle Schemes ; provision of additional walk and cycle bridges over the River Avon & over the A46 to improve cycle & pedestrian access to Town Centre from surrounding residential and employment areas; and provision of cycling facilities in Town Centre.

#### 4.67 MALVERN

##### THE EVIDENCE

- The cumulative impact on the highway network indicates SWDP growth impacts on A449 junctions in and on approaches to the Town and the B4208 and B4209 and associated junctions in Malvern.
- Passenger transport : inadequate bus stop/shelter/priority provision of suitable standard on routes serving SWDP development sites; and also inadequate interchange facilities with rail.
- Walk & Cycle: lack of secure cycle parking facilities in Town Centre.

##### THE SCHEMES

- Highway schemes: additional capacity provided at A449, B4208 & B4209 junctions in and on approaches to the Town through additional approach lanes, junction reconfiguration, extensions to existing approach lanes and installing, where appropriate, new operating systems. Also key Town Centre junctions to be signalised.
- Passenger transport schemes: provision of suitable levels of service/ bus stop/shelter/priority infrastructure to meet County standards on routes serving SWDP development sites; and improved interchange with rail at Malvern Link.
- Walk & Cycle schemes : provision of cycle parking facilities in Town Centre.

#### 4.68 PERSHORE

##### THE EVIDENCE

- The cumulative impact on highway network indicates SWDP growth impacts on both the A44 junctions and the A4104 junctions with B4083 & B4084.
- Passenger transport: inadequate bus stop/shelter/priority provision of suitable standard on routes serving SWDP development sites; and poor interchange with rail.
- Walk & Cycle: lack of secure parking facilities in Town Centre and poor connectivity for pedestrians and cyclists between Pershore Town Centre and Pershore Railway Station.

##### THE SCHEMES

- Highway schemes ; provision of additional capacity at A44 through junction realignment, bypass lanes and signalisation of junction approaches; and reconfigurations of A4104 junctions with B4083 & B4084 to provide additional capacity through signalisation of key approach arms.
- Passenger transport schemes: provision of suitable levels of service/ bus stop /shelter/priority infrastructure to meet County standards on routes serving SWDP development sites; and improved interchange facilities.
- Walk & Cycle Schemes: provision of improved pedestrian link between Pinvin with the railway station and the Town Centre; and provision of cycle parking facilities in Town Centre.

#### 4.69 WORCESTER

##### THE EVIDENCE

- The cumulative impact on highway network indicates SWDP impacts on:
  - a) Worcester City network (all radial corridors and east/north orbital routes).
  - b) A4440 ( Southern Link Road and Eastern By Pass)
  - c) A449 (Northern By Pass)
  - d) M5 junctions 6 & 7 (H.A.).
- Passenger Transport: insufficient corridor-length measures to enable efficient operation of the network; lack of bus stop/shelter provision of suitable provision of suitable standard serving SWDP development sites; and poor interchange facilities with rail.
- Walk & Cycle: lack of secure cycle parking facilities in City Centre and poor connectivity for pedestrians and cyclists across the City and severance issues due to River Severn.

##### THE SCHEMES

- Highway schemes include:-
  - a) Worcester Technology Park and Worcester Transport Strategy proposals;
  - b) Significant improvements to capacity of A4440, including dualling, additional approach lanes and implementation of signalised junctions.
  - c) Key corridor enhancements, smooth traffic flow and enhance efficiency.
  - d) Enhanced traffic signal system.
  - e) Junction reconfigurations at key City Centre junctions including signal schemes.

- Passenger Transport schemes : key corridor enhancements, including Real Time information, bus stops, & shelters and more efficient working through junctions; and improved interchange with rail at Foregate Street and Shrub Hill.
- Walk & Cycle schemes: provision of pedestrian foot bridge over River Severn to reduce severance issue linking City Centre with West Worcester; provision of cycle parking facilities in City Centre; and public realm enhancements in City Centre.

#### 4.70 INTER URBAN AND RURAL NETWORK

##### THE EVIDENCE

- The cumulative impact on the highway network indicates SWDP growth impacts upon:-
  - a) A38 junctions between Fernhill Heath and M5 junction 5.
  - b) A44 at junction with A46 in Evesham.
  - c) A44 between Fladbury and Pershore (Pinvin Crossroads).
  - d) A449 junctions in Malvern and between Malvern and Powick.
- Passenger Transport: inadequate bus stop/shelter/priority provision of suitable standard on routes serving SWDP development sites.
- Walk & Cycle: lack of secure cycle parking facilities in villages; and poor sustainable routes linking villages.

##### THE SCHEMES

- Highway schemes:-
  - a) Provide additional capacity through A38 junctions between Fernhill Heath and M5 through widening existing junction approaches, additional approach lanes and installing new signal operating scheme.
  - b) Reconfiguration of the A44 at junctions with A46 in Evesham, Evesham Road (Persnore) and Station Road (Pinvin) to provide additional capacity and reduce congestion and delays.
  - c) Increased capacity at A449 junctions in Malvern and between Malvern and Powick.
- Passenger Transport schemes; provision of suitable bus stop /shelter infrastructure to meet County standards on routes serving SWDP development sites and rural settlements.
- Walk & Cycle schemes : improved rural cycle routes and associated infrastructure.

#### 4.71 RAIL

##### THE EVIDENCE

- Access to InterCity and regional rail services needs to be improved.
- Station infrastructure is currently inadequate and constrains growth in rail use, particularly at Droitwich, Evesham, Malvern Link, Persnore and Worcester.
- Cotswold Line service frequencies and journey times require enhancement.
- Capacity constrained by inadequate infrastructure in Worcester and along parts of the Cotswold line.

#### 4.72 THE SCHEMES

- Proposed Worcester Parkway is a key rail infrastructure scheme for South Worcestershire.
- Improved facilities for passengers at Droitwich, Evesham, Malvern Link, Pershore and Worcester stations.
- Improved interchange facilities (all access modes) at these stations.
- The County is also seeking improved rail provision through:-
  - a) Worcester-London journey times of less than two hours.
  - b) 2 trains per hour between great Malvern/Worcester and London
  - c) Further Cotswold Line redoubling to improve reliability
  - d) New signalling and track layout in Worcester City Centre.
  - e) Improved rail service between Worcester and Cheltenham/Gloucester.

#### 4.73 BUS

##### THE EVIDENCE

- Accessibility of SWDP development in more rural areas constrained by financial sustainability of service provision.
- Developments in urban areas must be supported by infrastructure and Smarter Choices Travel Plans which deliver frequent and financially sustainable bus services to reduce traffic impact, reduce carbon emissions and deliver sustainable growth.

##### THE SCHEMES

- Major urban extensions require high frequency bus services to reduce traffic impact, reduce carbon emissions and deliver sustainable growth.
- New urban extension developments should be designed to LTP3 and related policy document standards, such that they can be served efficiently and effectively by local and, if appropriate, regional and national bus, rail and coach services consistent with the aim to maximise use of these modes of transport, reducing the impact on the highway network and increasing the financial sustainability of the services maximise the accessibility to, use of and financial sustainability of bus and rail services
- Services to meet the LTP3 Operation Standards.
- Implementation of Key corridor measures
- Implementation of Real Time information in Worcester.

## **HIGHWAYS AGENCY**

- 4.74 This is a crucial issue because the Highways Agency is currently responsible for the M5 motorway (including junctions 5, 6 & 7) and also the A46 in South Worcestershire.
- 4.75 In response to the SWDP Preferred Option in autumn 2011, the Highways Agency put in a holding objection to the SWDP, on the grounds of insufficient transport evidence.
- 4.76 There has been extensive dialogue with the Highways Agency, especially by the County Council. On 14/06/12 the Highways Agency confirmed that they have been working with the County Council with the objective that at the Examination in Public there is sufficient evidence to ensure that the SWDP is sound. The Highways Agency has given an assurance that it will do all that it can to support the SWDP.
- 4.77 Members will be updated on this important issue at the 03/07/11 SWC Councils' meetings and, if appropriate, this document will be refined accordingly before it is distributed.

## B. UTILITIES

- 4.78 The current position is set out in the evidence base of the draft Worcestershire Infrastructure Strategy (as of 21/03/12 and 23/04/12 and as of updated information on 11/06/12). The County Council has engaged with Western Power Distribution (WPD) and National Grid Gas. WPD representatives have attended two meetings and a meeting is scheduled with National Grid Gas later in June. WPD has begun a high-level consideration of the capacity of the network to accommodate SWDP proposed sites.
- 4.79 The key issue will be to distinguish that infrastructure which is absolutely critical before development can go ahead and what might be considered to be either essential or desirable.
- 4.80 The Baker Associates report took the view that the need for developer contributions for this category was lessened because connections to the grid are standard parts of the build costs for sites. Utility companies enable connection of the network where there is capacity or where improvements are part of their organic load growth. Unplanned strengthening of the network to accommodate development sites needs to be funded by developers.
- 4.81 In order to meet carbon emission targets, the County Council rightly emphasises the importance of the careful management of the way in which energy is used and supplied across Worcestershire.

## RENEWABLE ENERGY

- 4.82 By way of context, a wide range of EU and national legislation has been established with the objective of tackling climate change by reducing the emissions of carbon dioxide, reducing our overall demand for fossil fuel and promoting the security of energy supply. This legislation includes the 2008 Climate Change Act and the 2009 Renewable Energy Directive which establishes national targets for carbon emission reductions and the development of renewable energy.
- 4.83 The Climate Change Act 2008 established a legal requirement for the UK to achieve an 80% cut in CO<sub>2</sub> emissions by 2050, with a 34% cut by 2020. Both targets are against a 1990 baseline.
- 4.84 The EU Renewable Energy Directive (Directive 2009/28/EC) sets an overall target for 20% of the energy consumed in the EU to come from renewable sources by 2020. This overall target is divided by country with the UK's target being 15% by 2020.
- 4.85 The SWDP has not set carbon reduction or renewable energy targets for South Worcestershire. The reason for this that whilst the planning system plays a key role in delivering the necessary infrastructure to reduce carbon emissions and ensure continued security of energy supply, many factors which influence carbon emissions (e.g fuel prices, population growth etc.) and the take-up of renewable and low carbon energy (e.g. installation costs; feed-in tariffs etc.) are beyond the control of a Development Plan.
- 4.86 The County Council begin in their look at renewable energy with the work of their consultants IT Power. The consultants concluded that a suggested realistic target of 3.5% of energy consumption from renewables could be achieved by 2026 across Worcestershire.
- 4.87 The County accept that the baseline position is low (with around 9.5 MW of installed capacity through large scale renewables, which comes mainly from landfill generators) and

that there is no strategy for achieving this target across Worcestershire. The County does comment upon the SWDP references for combined heat and power at Worcester South and Worcester West but concludes that these are desirable rather than essential and a low priority for developer contributions and the private sector.

- 4.88 A proportion of Energy from Waste (EfW) constitutes renewable energy. The County Council was minded to approve an EfW plant at Hartlebury with an export capacity of 13.5 MW (of which up to 60% could be renewable) but this application has been called in by the Secretary of State for Communities and Local Government for a final decision which is expected in summer 2012.

## ELECTRICITY

- 4.89 The National Grid owns and operates the major (high voltage) electricity generation and transmission system. Within Worcestershire, the smaller scale transmission network (11 and 32kV) is the responsibility of the Western Power Distribution Network.
- 4.90 The current situation was assessed at a meeting between Western Power Distribution, the County Council and South Worcestershire Councils (SWC) on 09/02/12. At that meeting it was explained that Western Power Distribution submit funding requests to OFGEM for improvements to the network to deal with growth and are about to submit their next bid in June 2012. In terms of development proposals, Western Power assess whether the development can be accommodated through an addition to the local 11kV network. The cost of any additions to that loop must be borne by the developer.
- 4.91 Western Power Distribution (WPD) is one of the consultees which the County Council has approached. WPD has provided an initial response but this requires expansion and interpretation before it can be used. This is being co-ordinated by the County Council and WPD has indicated that further information should be available later in June.

## GAS

- 4.92 National Grid Gas owns the Local Distribution Zone with gas reaching consumers via individual suppliers.
- 4.93 National Grid prepares annual delivery plans and major reinforcements can be programmed if communicated in advance.
- 4.94 The Baker Associates Study indicated that network reinforcement may be necessary in the Worcester area but is assumed that National Grid will fund this requirement. More specifically, the SWDP refers to the need for a new gas supply to be provided to the Worcester South extension. It is expected that this will be funded by National Grid Gas. This was described as a medium priority and desirable but not essential requirement.
- 4.95 A meeting has been arranged with National Grid Gas by the County Council with SWC in late June to progress these matters.

## ELECTRICITY AND GAS

- 4.96 In respect of electricity and gas, the County Council is seeking costings from the various infrastructure providers. The works needed to connect to the electricity grid (which can include significant cabling and substations within the development site itself) are open to competition, so costings for these elements cannot be estimated but these costs should be considered a standard part of build costs. It is hoped that any costs needed for strengthening the grid can be provided through broad estimates from WPD.

## WATER SUPPLY AND WASTE WATER

- 4.97 The current situation is assessed in the evidence base of the draft Worcestershire Infrastructure Strategy as of 21/03/12 and 23/04/12 and further advice received on 15/06/12.
- 4.98 Within Worcestershire, Severn Trent Water Ltd. (STWL) has a statutory duty to provide potable water as well as the treating and disposing of waste water.
- 4.99 Whilst conventional treatment of waste water at water treatment works is the usual method used, it should not be forgotten that on site or alternative private treatment is quite possible. The Worcestershire Waste Core Strategy positively encourages this approach.
- 4.100 The capacity of existing water infrastructure (water supply and water treatment works) could have a significant impact on the timing of development and this will apply to both residential and employment land.
- 4.101 STWL has stated the difficulties for them of undertaking upfront analysis to determine the extent and costing of their infrastructure requirements.
- 4.102 For new developments the only recoverable costs for Water and Sewerage Companies (WASCs) from developers apply to connections to the WASC's existing water mains and sewers, and a contribution for on-site works.
- 4.103 The costs for serving specific developments are not determined until application by developers when costs are calculated on a site by site basis. Adoption of the sewers is agreed between the developer and STWL by way of a s.104 agreement (this is purely for adoption as an administrative exercise and does not receive any commuted sum for capital or revenue)
- 4.104 Wider infrastructure costs e.g. sewage treatment works are not borne by the developer rather they are agreed through STWL Business Plan (or AMP) for the next 5 years and 20 years (on a 5 year cycle. This has been discussed in recent STWL workshops which were attended by an officer from both the County and SWC. Therefore, the cost is ultimately borne by STWL and their customers (both residential and commercial) through their water bills
- 4.105 This is why importance is placed by STWL on the need for communication with planning authorities about proposed development locations and volumes.
- 4.106 The STWL Water Resource Management Plan re-assessed their demand-supply analysis and indicated sufficient supply to meet demand until 2013/14 but beyond this a negative balance reaching a projected shortfall of about 120ml/day by 2035. This data is largely from

the South Worcestershire Water Cycle Study. There needs to be further discussion between SWC and STWL and the County Council on this matter.

- 4.107 This water supply issue was discussed at a meeting between STWL and SWC on 06/12/12. STWL officers indicated that the Severn Trent Water Asset Management Plan 2010-2015 aims to increase the resilience of the water supply network. In terms of accommodating the level of growth set out in the SWDP there are no “showstoppers”.
- 4.108 STWL has indicated to the County that in general in South Worcestershire that, whilst sewage treatment works may not have sufficient capacity to accept the proposed levels of development, it does not mean that development cannot go ahead. In terms of development proposals they will need to consider the capacity at the following sewer treatment works: Malvern (Mill Lane); Evesham; Droitwich (Ladywood); Pershore (Tiddesley Wood), Powick and Worcester (Bromwich Road).
- 4.109 A further more detailed provisional list is included in the 23/04/12 County evidence base which is now being checked out with STWL. Once that info has been refined and endorsed, it will need to be included in the SWIDP.
- 4.110 This also relates to the 06/12/11 meeting with the STWL Sewage Strategy Section regarding all the SWDP allocations and the proposed SWDP phasing as this needs to dovetail with the planned investment in STWL infrastructure.
- 4.111 The need for a STWL response was raised with STWL by the County Council, at the request of SWC, at a meeting on 23/04/12. STWL has offered to respond to SWC on the SWDP as soon as possible but, at the time of writing, this info. has not yet been received. It is imperative that this issue is resolved by autumn 2012.
- 4.112 There are issues to do with the updating of the Water Cycle Study for South Worcestershire which need to be clarified with the Environment Agency, STWL and the County Council by autumn 2012. It would also be helpful to clarify costings for water supply and sewerage infrastructure for inclusion in the SWIDP by autumn 2012.  
For example, Severn Trent is investing £4.5m. in the Bromyard Road works
- 4.113 It also needs to be borne in mind that under the Water Industry Act, developers have a right to a connection to the existing sewers irrespective of whether there is downstream capacity or not. If additional capacity is required then the cost will be funded by Severn Trent. The developer has only to fund the cost of connecting their site to the existing sewers. However, if funding for infrastructure is limited, it is important to plan development in a way which makes effective use of that infrastructure provision. It will be important to involve the Environment Agency in those discussions

## C) FLOOD RISK AND DRAINAGE

4.114 The current situation is considered in the evidence base of the Worcestershire Infrastructure Strategy (latest version as updated on 21/03/12 and 23/04/12 with further advice received on 15/06/12). This section will also need to be refined by autumn 2012 to draw on evidence from the South Worcestershire Strategic Flood Risk Assessment and Water Cycle Study.

4.115 Key points from the County evidence base include:-

- Previously, PPS 25 and the Water Directive used to set the context in which flood risk and water drainage must be considered but this is now replaced by the technical guidance for the National Planning Policy Framework
- Under the Flood Water and Management Act 2010, there is a new lead role for Worcestershire County Council in managing local flood risk.
- About 10% of the land area is considered to be at risk from flooding (pluvial or fluvial)
- A number of flood defences schemes are already underway or recently completed in South Worcestershire. These have been led by the Environment agency and supported by the County Council and the relevant District Council.

Major schemes include:-

Pershore-complete.

Upton-upon-Severn: New Street complete; Waterside underway.

Powick; complete

Kempsey; underway.

Riddings Brook: complete.

Badsey Brook.

Uckinghall: complete.

There are other local flood defence/alleviation schemes e.g. Harvington ; Barbourne Brook etc

- There is an understanding of the areas prone to flooding in each District in South Worcestershire.
- The Baker Study set out indicative costs for providing flood defences.
- Further consultation with the Environment Agency is required and we are currently awaiting feedback.
- The way in which Government funding is allocated to flood risk management schemes is changing. The new system will begin for now for all projects seeking financial approval.
- Particular importance is attached to the full use of Sustainable Urban Drainage Systems (SUDS).
- Early work has been done on costings but more work needs to be done.

4.116 In the emerging WIS (23/04/12), the County Council states that neither Worcestershire County Council, as Lead Local Flood Authority (LLFA) nor the local authorities have a comprehensive understanding of future flood need, projects or funding requirements. Ongoing work by the LLFA and partners (e.g. development of Surface Water Management Plans) will attempt to address this but it will be another 12 months before implications and costs are some way to being understood. In addition the implications of SUDS requirements and the costs will only truly be understood once development proposals come forward. Updated information on schemes is contained on page 64 of the emerging County WIS (June 20112) and this will be integrated in to the SWIDP by autumn 2012

## D) COMMUNICATION INFRASTRUCTURE

- 4.117 The current situation is assessed in the evidence base for the draft Worcestershire Infrastructure Strategy as of February 2012 and as updated on 23/04/12 and again on 31/05/12 and 15/06/12.
- 4.118 Communication infrastructure includes telephone systems (both wire and mobile) and broadband. The Government is committed to securing a world-class communication system and currently the main barrier to this is the availability of super-fast broadband, especially in the more rural areas.
- 4.119 The law requires that copper wire telephone services are provided to all new development. It is therefore assumed that there will be no issue with the provision of telephone services to new development.
- 4.120 The County analysis of mobile phone services is still general. Key points include:-
- Mobile phone ownership and usage is rising across the U.K.
  - There remain a number of areas of the UK without basic 2G (second generation) coverage. These are known as “not spots” and while some are in urban areas, most are in rural areas. These are being investigated by OFCOM.
  - Poor mobile coverage makes delivering rural services more inefficient and difficult.
  - Mobile phone coverage is measured nationally according to population not landmass so the methodology for calculating coverage does not pick up areas of poor coverage in sparsely populated areas. An area may be classed as covered when in fact large areas may not be. OFCOM classifies a postcode district as covered if 90% of the population within that postcode area can receive outdoor coverage from at least one operator.
  - OFCOM calculates that 98% of England has 2G coverage and 87% has 3G coverage.
  - Third Generation (3G) technology is increasing in prominence and enables people to use the internet and send and download large quantities of data as well as making calls and sending texts.
  - Nationally, 2G coverage has reached its commercial limit so further roll out is unlikely. 3G is unlikely to exceed the footprint of 2G so “not-spots” will remain even when 3G has reached its commercial limit.
  - OFCOM agrees that 2G “not-spots” still affect parts of rural England and is investigating why.
  - Changing the methodology for measuring access to mobile networks from population to landmass could provide a better overview of “not-spots” and, therefore, a clear indication of where improvements need to be made in coverage in order to enable , at the very least, emergency roaming.
  - There are now four UK mobile phone operators: Everything Everywhere (Orange & T-Mobile), O2, Three and Vodafone. The Mobile Operators Association (MOA) represents these four mobile phone operators.

4.121 Likewise, in terms of broadband:-

- Traditionally broadband is provided by ADSL (Asymmetric Digital Subscriber Line). Speeds using this technology are limited because the further away from the exchange the premises is, the slower the broadband speed achieved. In Worcestershire, 12% of the postcodes fall below the Universal Service Commitment.
- Increasingly the demand is for super fast broadband using fibre optic technology but there is no legal requirement to provide this facility. BT is currently rolling out superfast broadband to two thirds of the UK by 2015. In April 2011, for example, Malvern was announced for inclusion in this programme.
- Superfast broadband is not necessarily the best product for businesses with an Ethernet Local Area Network providing a better product.

4.122 The Coalition Government's aim is to create the best broadband network in Europe. This is echoed by the County Council's Corporate Plan for which "Open for Business is a priority and broadband is a key enabler. This is fully supported by the business community and the Worcestershire Local Enterprise Partnership (LEP).

4.123 The vision for Worcestershire is to deliver faster broadband for all by 2015: namely:-

- 90% of businesses in Worcestershire to have access to the Superfast Broadband.
- Minimum 2Mbps speed for everyone in Worcestershire.
- 90% of Worcestershire with access to the Superfast Broadband.

4.124 The UK government will spend £530m. over the next three years on rolling out Superfast Broadband to places where the market alone would not reach. Bidding for the first £50m. of funding opened in March 2011. Local public authorities are able to apply to Broadband Delivery UK (BDUK) for this funding to improve broadband in their area. The County Council submitted an Expression of Interest for the second wave of funding and as a result was granted £3.35m. In addition, the County Council Cabinet allocated £8.5m for the broadband programme in November 2011. The private sector partner, procured through Central Government's Procurement Framework is expected to match the total public sector funding made available for Worcestershire.

4.125 The Worcestershire Local Broadband Plan (LBP), "Connecting Worcestershire", is intended to facilitate a drive in economic growth and improve the quality of life for all residents and local businesses. As part of the Broadband Programme, the County Council has been actively engaged with local communities and commercial suppliers. Through such engagement, the County Council is aiming to raise broadband awareness, and to educate communities as to their potential use of broadband and thereby stimulate demand which will then maximise opportunities for private sector investment, this reducing the need for public sector investment.

4.126 Work has already commenced in Worcestershire, including some parts of South Worcestershire. Allocated grant funding (Green Infrastructure Fund and Sustainable Transport Fund) is available for improvements to broadband in rural areas which is outside of the LBP. The communities which will receive this funding have been selected through an Expression of Interest and Business Case process.

## E) WASTE INFRASTRUCTURE

- 4.127 The current position is assessed in the evidence base of the draft Worcestershire Infrastructure Strategy which was provided on 21/03/12 and 23/04/12 with updates on 29/05/12 and 30/05/12.
- 4.128 Key points are as follows:-
- The Waste Management sector is a primary industry which is critical to the functioning of the economy.
  - The EC Waste Directives are key drivers both in respect of waste management via the waste hierarchy and the need to attain self sufficiency via the adoption of a waste plan; and for Worcestershire this means the emerging Worcestershire Waste Core Strategy.
  - The County evidence base refers to the 79 waste management facilities currently operating in Worcestershire.
  - It distinguishes between the responsibilities for:
    - a) Local Authority Collected Waste (LACW) which is managed by the County Council as waste disposal authority in partnership with the District Councils as waste collection authorities through a PFI partnership with Mercia Waste.
    - b) Commercial and Industrial Waste (C&I) which is managed by the private sector though with some district council involvement in commercial waste collection
    - c) Construction & Demolition waste (C&D) where there are often crossover contracts between the private and public sectors.
    - d) Hazardous waste where special arrangements are required.
  - The emerging Waste Core Strategy which is due to be adopted in late 2012/ early 2013 analyses waste management data from the Environment Agency. The County Council needs to plan for waste management capacity which is equivalent to the amount of waste that is produced in the County. The need is calculated on what is required to meet European, national and local recycling targets. These and waste infrastructure requirements are set out on pages 79 and 80 of the WIS (13/06/12 version). Conclusions are drawn on a phased basis up to 2035 on the capacity gap and the consequent total land requirement.
  - The evidence base finishes with references to the costing of meeting the MSW element being provided by the WCC Waste Disposal Section. It is also stated that it must be assumed that normal private sector considerations apply to the provision of facilities for C&I, C&D and hazardous waste.
  - The evidence base makes some general comments about provision.
  - The updated info. indicates that the proposed Energy from waste facility at Hartlebury (which is currently awaiting a planning decision from the Secretary of State for the Environment) could involve capital expenditure of between £120-160m, according to County Council estimates, but this will not require any public sector expenditure.
  - In relation to private sector recycling facilities the County Council estimate that this could involve capital expenditure of £70m. up to 2025/2026 and an estimated £210m. up to 2035.
  - The County Council is involved in discussions with respect to Household recycling Centres in Worcester, Malvern, Upton, Tenbury and Evesham.
  - A key issue in ensuring sufficient waste management capacity is to ensure the provision of sufficient land. This is estimated by the County Council to be about 30 ha. by 2025 and 35 ha. by 2035. This is likely to be predominantly on new employment land. This issue requires further analysis by autumn 2012

## **F) WAY FORWARD ON PHYSICAL INFRASTRUCTURE**

4.129 Further work is required on:

- Transport section to update, where necessary.
- The Highways Agency issue, which as we are aware is the most crucial outstanding matter
- Other sections also require work before this document comes back to the SWC Councils in the autumn 2012.
- The issue of prioritisation of infrastructure, in particular, needs to be considered over the summer before this document is finalised in the autumn.

## **SECTION FIVE: SOCIAL INFRASTRUCTURE**

### **A) EDUCATION**

- 5.1 The current position is set out in the evidence base of the emerging County Infrastructure Strategy, which was updated on 26/03/12, 23/04/12 and then most recently on 29/05/12, 11/06/12 and 18/06/12.
- 5.2 The County has a statutory duty to ensure that there are sufficient school places for all children of statutory school age living in Worcestershire and whose parents/carers apply for a place at a state funded school.
- 5.3 Future housing development will lead to an increase in the 0-19 year old population, resulting from a demand for additional school places for all types of education (early years to post-16).
- 5.4 Strategic planning for school places is undertaken by WCC Children's Services and their assessments and means of forecasting are set out in their County evidence base.
- 5.5 Academy schools receive public funding but are less tied to local authority control than state schools. There are expected to be 22 academies in Worcestershire by April 2012 and it is likely that any new school from now on will be an academy.
- 5.6 Most Worcestershire Districts have adopted Supplementary Planning Documents which set out a formula for calculating developer contributions. (This has been updated as of April 2012). WCC recommends inclusion of educational provision within the Community Infrastructure Levy (CIL) charging schedule on the basis this would enable more effective targeting of resources.
- 5.7 The County has set out in its latest evidence base (18/06/2012) a schedule of educational provision related to SWDP development proposals and this is set out below. It should be noted that generally extensions and alterations are favoured over new schools. It is important to recognise that the lead in time to build a new school totals three and a half years and costs could be around £6m. for a 2 FE primary school. It should be noted that a new primary school will be required in respect of the Worcester South development.
- 5.8 The County expects to meet some of the growth by utilising spare capacity where it exists and by accessing such capital funding as is made available by central government. In simple terms the County expects at least 50% of the costs of additional educational provision to be met from developers' contributions. Where new schools are required to support developments, then developers may be asked to meet the full cost of the new infrastructure.
- 5.9 The estimates given in terms of educational contributions to support the SWDP are as follows. The figures relate to the SWDP Preferred Option and will need to be updated to reflect the Proposed Changes. It is envisaged that this task will be completed for the Autumn 2012 SWDP Infrastructure Delivery Plan which will support the formal version of the SWDP.

## SCHEDULE

Settlement	Dwellings	Primary	Secondary
"WIDER WORCESTER AREA"			
West Worcester	1,000	£2,130,079	£2,289,985
South Worcester	2,425	£6,000,000	£5,553,214
Kilbury Drive	300	£639,024	£686,996
Gwillams Farm	300	£639,024	£686,996
Ex Ronkswood Hospital	200	£426,016	£457,997
Shrub Hill Opportunity Zone	200	£426,016	£457,997
Gregory's Bank	140	£298,211	£320,598
Govt. Offices	120	£255,609	£274,798
Blockhouse Opportunity Zone	120	£255,609	£274,798
South of Lyppard Hill	100	£213,008	£228,999
Small sites in City	296	£630,503	£677,836
Windfall sites in City	204	£434,536	£467,157
<b>WORCESTER TOTAL</b>	<b>5405</b>	<b>£12,347,635</b>	<b>£12,377,369</b>

### 5.10 Current situation: May 2012

- Pressure on places at primary level for the next four years. Additional places have been made available for September 2012 with the Lyppard Grange and Nunnery Wood expansion planned for 2013. A review will be completed for potential September 2014 changes.
- Secondary school forecast running accurately with sufficient places available across the City. Low numbers will continue with no expected increased until September 2018.

## 5.11 MALVERN HILLS

Newland	700	£1,491,055	£1,602,990
QinetiQ	250	£532,520	£572,496
Malvern Small Sites	201	£428,146	£460,287
Kempsey Small Sites	139	£296,081	£318,308
Powick Small Sites	60	£127,805	£137,399
Lr. Broadheath Sites	67	£142,715	£153,429
Tenbury Small Sites	60	£127,805	£137,399
Upton Small Sites	55	£117,154	£125,949
Malvern Villages Sites	353	£751,918	£808,365
Malvern Windfall Sites	360	£766,828	£824,395
MALVERN TOTAL	2245	£4,782,027	£5,141,016

## 5.12 Current situation: May 2012

### MALVERN

- Malvern has a distinct urban/rural split with pressure on places in the urban area.
- Malvern village schools are dependent on the movement of pupils out from the town and therefore consideration will be given to increasing places within the town schools.
- At secondary level there are a high number of spare places. Low numbers will continue with no expected increase until September 2016.

## 5.13 MARTLEY

- Sufficient primary places for next four years. Need to monitor numbers in rural areas.
- Sufficient places at secondary school for in-catchment applications.

## 5.14 TENBURY

- There are sufficient places for all in-county applications for the next four years.

## 5.15 UPTON.

- Low numbers of children in the area.

- Secondary school is popular and filling with out-of-catchment pupils

#### 5.16 WYCHAVON

Droitwich; Copcut Lane	740	£1,576,258	£1,694,589
Pershore: Station Rd/Wyre Rd.	600	£1,278,047	£1,373,991
Evesham: Cheltenham Road	257	£547,430	£588,526
Evesham; Pershore Rd., Hampton	223	£475,008	£510,667
Evesham: Abbey Road	400	£852,032	£915,994
Droitwich Small Sites in Town	464	£988,357	£1,062,553
Evesham Small Sites in Town	292	£621,983	£668,676
Pershore Small Sites in Town	79	£168,276	£180,909
Broadway Small Sites	131	£279,040	£299,988
Hartlebury Small Sites	100	£213,008	£228,999
Honeybourne Small Sites	100	£213,008	£228,999
Inkberrow Small Sites	90	£191,707	£206,099
Offenham Small Sites	79	£168,276	£180,909
Fernhill Heath Small Sites	120	£255,609	£274,798
Other Category 1 Villages	118	£251,349	£270,218
Other Category 2 Villages	285	£607,073	£652,646
Other Category 3 Villages	172	£366,374	£393,877
Wychavon Windfall Sites	1080	£2,300,485	£2,473,184
WYCHAVON TOTAL	5330	£11,353,321	£12,205,620
SWC OVERALL TOTAL	20,630	£28,482,982	£29,724,010

OVERALL TOTAL FOR SOUTH WORCESTERSHIRE = £58,206,992

#### 5.17 Current situation : May 2012

##### a) DROITWICH

- Sufficient places for all in area applications for the next four years in all three stages.

##### b) EVESHAM

- High number of surplus places at reception level with the forecast in September 2012 reaching 515 compared with 608 places available.
- There is a significant difference between the urban and rural areas with the village schools dependent on the movement of pupils out from the town.
- This trend will continue with a maximum forecast, for reception intake, of 542 in the next four years.
- The middle and high schools are also likely to have surplus places although not to the same level.

##### c) PERSHORE

- At reception phase, Pershore will have around 45 spare places in September 2012.
- Incoming reception numbers in Pershore are declining with September 2015 currently forecasting 84 spare places.
- There are approximately 80 spare places at Middle School phase in Pershore. Middle School. Numbers as a whole are steady for the next few years with the drop off in reception numbers hitting from September 2018.

#### 5.18 General Note

- All figures are based on 2012/2013 building cost multiplier and approximate number of dwellings listed within the SWDP Preferred Option. These figures will need to be revised by Autumn 2012 to take account of July 2012 SWDP Proposed Changes. Each individual figure will be finalised when applications for development have been received and figures can be reviewed at this time.

## EARLY YEARS

- 5.19 The County Council has a statutory duty to ensure sufficiency of pre-school provision to allow all 3 and 4 year olds resident in Worcestershire to access free entitlement to childcare and Early Years education. From September 2013, some 2 year olds will be eligible for free nursery education.
- 5.20 Where new schools are created to serve new development, it is likely that some form of pre-school provision will be established.

## POST-16 EDUCATION AND TRAINING

- 5.21 Under current legislation those enrolled in education must remain there until the end of their statutory "school age", which lasts until the end of June of the school year in which they become 16. By 2015, all young people will be required by law to stay in education or training until their 18<sup>th</sup> birthday.
- 5.22 The County has a statutory responsibility to secure sufficient, suitable post-16 education and training to meet the reasonable needs of all young people in Worcestershire. The County does not fund school sixth forms or other post-16 education or training but the ongoing strategic planning of post-16 requirements will be undertaken by the County Council to ensure sufficiency of education and training opportunities, in terms of volume, mix and balance, location, meeting economic and community need and quality of provision.

## HIGHER EDUCATION

- 5.23 The University is the County's only University. The University has expanded significantly in the last five years and is the fastest growing University in the country. This expansion reflects a strong demand for places from within the County and beyond.
- 5.24 A meeting was held with the university on 30<sup>th</sup> April 2012 but this needs to be followed up in summer 2012 so that this section can be expanded, if necessary
- 5.25 The Worcestershire LEP recognises that every year almost one thousand young people aged between 15-19 leave Worcestershire. The LEP attributes these losses not only to a lack of employment opportunities but also to a lack of higher education provision.

## B) HEALTH AND PUBLIC HEALTH

- 5.26 The current position is set out in the evidence base of the Worcestershire Infrastructure Strategy, as updated on 21/03/12, and in the emerging Strategy (WIS: 23/04/12 and in published version on 13/06/12).
- 5.27 Services are currently provided by the Worcestershire Acute Hospitals NHS Trust, including the Worcestershire Royal Hospital, and the Worcestershire NHS Health and Care Trust.
- 5.28 The NHS is going through major structural reform and is now moving to a transition phase to implementation in April 2013. Commissioning in the future will be done by a very different set of structures and the precise local footprint is far from clear. There will be a need to review infrastructure responsibilities and emerging capital programmes during the course of this period of transition.
- 5.29 An important meeting took place on 05/04/12 which was organised by the County, involving SWC, with the key health agencies.  
At that meeting, it was explained that both the Acute Hospital Trust (AHT) and the Worcestershire Health and Care Trust (HACT) are in the process of developing new estate strategies as a result of the changing needs of the population and the need to make efficiency savings of around 20%.  
The HACT has a clear vision for the future, developing a hub and spoke model in order to ensure that they operate from high quality fit-for-purpose buildings located in the right place. The AHT are in the process of considering how best to deliver services in the future.  
These initial discussions all suggest that there is unlikely to be any new capital investment in new infrastructure in the short term.
- 5.30 Key current points from the evidence base of the WIS include:-
- The commissioning architecture is being completely reformed. From April 2013 the Worcestershire PCT is being abolished and its functions dispersed to:
    - a) Clinical Commissioning Groups (CCGs), including one for South Worcestershire.
    - b) NHS Commissioning Board which will have some sub-national structures with a second tier covering West Mercia.
    - c) Some services will be commissioned by a revamped Public Health Arrangement involving the local authorities with the County Council having a new function to improve population health.
  - Existing assets are reviewed in the evidence base. Reference is made to recent investment in community facilities including new community hospitals in Pershore and Malvern and new GP premises in Malvern.
  - Reference is made to the Baker Study in assessing the capacity of existing assets. There are some pragmatic rules of thumb in terms of future provision. Thus, an additional GP is needed for an extra 1,500 people whilst an extra dentist is needed for an extra 2,000 people.
  - In terms of future provision, there will be an important strategic role for the County Council in preparing a Joint Strategic Assessment which will set the context for

commissioning by the CCGs and other commissioning bodies. This will be kept under review by a Worcestershire Health and Well-being Board.

- It is important to remember that any assessment of future need and provision for capital infrastructure is being undertaken during a time of major structural reform and financial pressure in the NHS. The new Health and Social Care Act will create a new market in health provision and it is unclear what the consequences of this might be for health infrastructure planning.

5.31 It will be important to work with the County Council and the health infrastructure providers to update this position for the SWIDP in autumn 2012

## C) SOCIAL CARE

- 5.32 The current position is set out in the evidence base of the Worcestershire Infrastructure Strategy, as updated on 21/03/12. However, there is no reference to this provision in the emerging Strategy (WIS: 23/04/12 and as published on 13/06/12). This needs clarifying with the County Council by autumn 2012.
- 5.33 The earlier evidence base states that the County Council has a responsibility to support, care and protect people in the community; there are a wide range of social care needs from the very young to the elderly.
- 5.34 The evidence base lists out the range of facilities available in Worcestershire.
- 5.35 In terms of calculating infrastructure requirements and costs there is only one reference and that is to the JSNA (Joint Strategic Needs & Assessment) which estimates property requirements for supported housing for older people based on demographic changes:-
- |   |                        |
|---|------------------------|
| Sheltered housing to rent                   | 1,171 fewer properties |
| Sheltered housing for sale                  | 4,636 more properties  |
| Enhanced sheltered housing for rent or sale | 1,610 more properties  |
| Extra care housing for rent or sale         | 1,938 more properties  |
| Housing based provision for dementia        | 838 more places        |
| Residential care places                     | 3,068 more places      |
| Nursing care places                         | 1,069 more places      |
- 5.36 This schedule has implications for the County in terms of duty of care that will be transmitted down to the District authorities through assessment of SHLAAs and Housing Strategies. There is the additional need to identify providers of such services i.e. local authority or private sector.
- 5.37 Limited information has been made available on how investment into social care facilities is funded. The County Council in late May (22/05/12 & 25/05/12) did provide two general statements on social and community infrastructure which are summarised below.

### Statement One.

- 5.38 The County Council recognises that the public services landscape will have to change over the next few years in response to the global economic climate. Public sector funding levels are expected to continue to experience downward pressure, demographic changes will impact on levels of demand for services and customer expectations will continue to evolve. In response Worcestershire County Council is embarking on a programme of fundamentally reviewing all of its activities with the view of ensuring that it delivers the right level of service through the most appropriate provider at the right price. This could result in significant change within the Council as it works close with communities and partners to develop different, innovative and sustainable ways of meeting need.
- 5.39 Worcestershire has a wide variety of communities whose needs and opportunities can be significantly different. As a consequence, the County Council believes that a "one size fits all" approach to service provision is inappropriate, preferring instead to

develop bespoke solutions for individual communities. These bespoke solutions will, where possible, avoid reliance on single use buildings, preferring instead to promote multiple use of buildings. Some recent examples of this include:-

- a) Working with the County Capital and Asset Partnership partners, the County Council is seeking to rationalise its operational portfolio through co-location of services. There are various initiatives where a number of partners are now sharing back office accommodation, and the Partnership is examining potential efficiencies that will arise from the collaborative use of staff training venues, vehicle maintenance and depots. (See also Statement 2).
- b) Funding for positive activities for Young People will be delegated to local Member Forums which will commission targeted positive activities for young people in their local area and use whatever accommodation is deemed appropriate. This may result in existing Youth Service facilities becoming redundant or possibly become an asset transfer to a community group.
- c) The Libraries Service is looking at a number of innovative partnership arrangements which may involve sharing staff and buildings as well as exploiting technological advances to enable services to be maintained or improved at lower cost. These arrangements will often involve reliance on local volunteers, and may also include an asset transfer to a community group.
- d) Adult Day Services are also experiencing change, The County Council has moved away from traditional day centres for the physically disabled and with the advent of personal choice and personal budgets, service users and their carers now have a wide choice of activities available to them from within the wider locality. The County Council will continue to provide a drop-in centre in its major towns where service users may be dropped off and access care facilities before undertaking their chosen community based activity. This model is now being piloted by the Learning Disability Service.
- e) The County Council has a small number of specialised residential homes for the elderly and for people with Learning Disabilities. The County Council also provides Respite services. The pattern of service provision may be subject to commissioning review in future.

Key Points from Statement Two.

5.40 The Worcestershire Capital and Asset Partnership is engaged with Central Government's Total Place and subsequent Capital and Asset Pathfinder initiatives, focusing particularly on developing a closer working relationship with other public sector organisations in the locality regarding the use of property and collaborative service development. The Partnership includes 19 full partners with an additional 17 organisations from across the public and third service sectors being regularly involved as Stakeholders. Examples of this activity in South Worcestershire include:-

- a) Droitwich, where the library, CAB and Worcestershire Hub have co-located into the library, improving customer footfall, extending service availability, reducing running costs and releasing two buildings for disposal.
- b) Pershore, where the Town Council has bought the Library building, is refurbishing it and co-locating the Library with Tourist Information service and other voluntary groups to improve service availability at a lower cost.

- c) Broadway, where options to co-locate Police, Library, Parish Council and a voluntary organisation are under consideration.

## **D) COMMUNITY FACILITIES**

- 5.41 The current position is set out in the evidence base of the Worcestershire Infrastructure Strategy, as last updated on 21/03/12, and in the emerging Strategy (WIS; 23/04/12 and 13/06/12).
- 5.42 This section focuses on the provision of community facilities such as libraries, places of worship, community centres and leisure facilities, which are all important aspects of creating sustainable communities. These facilities need to be front loaded in the development process so that these facilities are available when new residents need them. However, new facilities need a critical mass of people to support them. Given a lead time of 2 years to design and build a community facility, they should be provided midway through the delivery of future developments.

### **LIBRARIES**

- 5.43 The County Council has a statutory duty to provide a public library service. There are currently 23 public libraries in Worcestershire.
- 5.44 The County Council has embarked on a major review of the library service with each library being assessed over a 3 year period. Cost saving measures include the co-location of local authority and partners' services. Consultation is underway in a number of cases and the detail is contained in both the evidence base and the emerging WIS Strategy.
- 5.45 The latest position on the various libraries is set out on page 96 of the emerging WIS, as published on 13/06/12.
- 5.46 A new multi-million pound Library and History Centre is currently under construction in Worcester City Centre and is due to open in July 2012.

### **RELIGIOUS BUILDINGS**

- 5.47 The WIS evidence base contains info. on religious buildings but there is no reference to this in the emerging Strategy.
- 5.48 In this section, religious buildings cover a wide range of faiths and infrastructure, including not only the place of worship but also any associated buildings (e.g. Church halls) which might serve a wider community purpose.
- 5.49 The evidence base does not contain any info. on religious buildings in South Worcestershire and it recognises that this is a gap which must be remedied.
- 5.50 Reference is made to some general research done in Cambridge by Three Dragons which concluded that 6% of the population actively participates in religion; and that an indicative standard of 0.5 ha per 3,000 dwellings is suggested but with the proviso that provision should be based on an assessment of local religious need.
- 5.51 The section contains no information on the funding of religious buildings but there was an event in 2009 on "Faith in the future of Worcestershire" and further info. from the County derived from that meeting would be helpful for the autumn version of the SWIDP.

## COMMUNITY CENTRES

- 5.52 There is information in the WIS evidence base but no sign of this in the emerging WIS strategy (23/04/12 and 13/06/12) and this needs to be checked out with the County Council before the SWIDP is firmed up in autumn 2012.
- 5.53 Community facilities provide valuable facilities to promote community cohesion. It is important with significant levels of proposed residential development that appropriate community facilities are provided.
- 5.54 The WIS evidence base assesses current provision with a detailed assessment of the pattern of community provision in Worcester City drawing on existing studies. There is no such information in this section for Malvern Hills or Wychavon.
- 5.55 The evidence base assesses general standards and, in particular, the Baker Study suggestion that an average standard of one 750 sq.m. facility is provided for every 2,250 dwellings is used to calculate the community centre requirement.
- 5.56 In respect of youth provision, the evidence base sets out the stark reality of a £1.4m. cut in County funding over a 3 year period for youth support. The consequence is that the County Council will no longer be the provider of Youth Support and will instead be the commissioner for this provision. This will have implications both in the level of support and the release of County building assets. The section sets out certain short term implications of this decision. This may need to be updated by the County Council in accordance with their general statements on the provision of facilities

## BUILT LEISURE FACILITIES

- 5.57 Sport and recreation are important contributors to the health and economy of local communities. Built leisure includes infrastructure such as swimming pools, sports and leisure centres, theatres and cinemas.
- 5.58 The review of facilities in the evidence base is far from complete.
- 5.59 In terms of the general assessment of existing assets, reference is made to the Sports England recommended approach. This states that Malvern Hills is working with Sports England on a Play Pitch Strategy (PPS) but that Sports England consider that neither Worcester City nor Wychavon has an up to date PPS. This needs to be checked out.
- 5.60 The evidence base and the emerging Strategy now contain new material on South Worcestershire which makes extensive cross reference to the 2011 South Worcestershire Sports Facilities Framework. Generally sports facilities and playing pitch needs have been identified by a local standard of provision (e.g. the number of facilities needed per 1,000 population in new housing. The Programme for Development (POD) identifies built sports facilities, playing field proposals and tennis and MUGAs. It states where these should be located and the expected phasing of implementation which is related to the delivery dates of the individual housing developments. The drivers behind the proposals are:
- natural population changes
  - new population from the new housing
  - policy objective of 1% per year increase in participation.
- Priorities for spending on these facilities will depend on the local authority's POD and Programme of Works (POW).

- 5.61 The contributions sought are based on the capital costs of providing a typical facility. There are some interim calculations in the evidence base which still need to be finalised.
- 5.62 The evidence base concludes the section on Built Leisure by stating that the implementation of this strategy and the approach to developer contributions is a matter for the three South Worcestershire Councils.
- 5.63 The last part of the evidence base on Built Leisure refers to the University having completed the first stages of developing “The Worcester Arena” including a centre for drama, dance, sport and performance teaching facilities.
- 5.64 The emerging WIS strategy contains a new section on South Worcestershire and detailed info on Built Leisure which is summarised below, based on the 23/04/12 version.
- 5.65 The emerging Strategy states that a hierarchy of sports facilities has informed the process of identifying levels of developer contributions and is fully explained in the Herefordshire and Worcestershire Sports Facilities Framework.  
The contributions sought are based on the capital costs of providing a typical facility. For sports facilities costs have been calculated using a combination of Sports England costings and other appropriate data.  
In some cases, new residential developments will not generate the need for a new sports facility. However, where developments are located in areas where additional pressure will be placed on existing sports facilities by the development, the local authorities will seek contributions at the standard rate for the enhancement and extension of existing sports in the vicinity of the development.
- 5.66 Where larger developments can generate a need for suitable playing pitches then these will be located on-site. Otherwise off-site contributions will be sought to support nearby existing or new sites and, where appropriate, more strategic sites.
- 5.67 Summary of Schedule;
- University of Worcester Sports Arena: £15m.
- New Swimming Pool, Worcester: c. £16m
- 4 court Sports Hall (linked to Worcester West): £2.7m.
- 4 court Sports Hall (linked to Worcester South): £2.7m.
- 6 court Sports Hall (badminton performance centre) : Worcester : £4.1m.
- 5 court Sports Hall (indoor cricket), Wychavon : £3.4m.
- 8 court Sports Hall, Wychavon : £5.5m.
- 4 court sports hall, Wychavon : £2.75m.
- Worcester: 25m. pool plus teaching pool (linked to Worcester West) : £3.9m.
- 5.68 This information needs to be checked out by the three SWC Councils, particularly to ensure that all the costings are up to date.

## E) EMERGENCY FACILITIES

- 5.69 The current position is set out in the evidence base of Worcestershire Infrastructure Strategy, as last updated on 21/03/12 and the emerging Strategy ( WIS : 23/04/12 and 13/06/12).
- 5.70 Emergency infrastructure includes the requirements of the police, fire brigade and ambulance service. Increased development creates new areas that will require emergency service coverage and new people who will increase emergency incidents.
- 5.71 West Mercia Police are co-ordinating the infrastructure requirements of the emergency services. This to date, however, only covers the Police and Fire Service.
- 5.72 The evidence base explains the impact of the Autumn 2010 Comprehensive Spending Review and the tough funding formulae for grant for emergency services mean that only revenue costs are funded. Revenue funding is being squeezed as in the WIS .The emergency services will struggle to find capital for infrastructure and are therefore seeking developer contributions.
- 5.73 Key points from the evidence base regarding police requirements are as follows:-
- The evidence base lists out current police facilities in South Worcestershire.
  - It refers to the fact that both the police and fire services are engaged in comprehensive structural reviews which involve reassessing geographic priorities in response to the Comprehensive Spending Review. Consequently, WYG has been engaged to prepare a Strategic Infrastructure Assessment (SIA) though Fire service will deal with their issues internally.
  - The SIA for police requirements which was submitted to SWC in November 2011 include;
    - a) a new police station at South Worcester costing £1,625,000
    - b) a new police station at West Worcester costing £1,625,000
    - c) an extension to Evesham Police Station costing £1,420,000
    - d) an extension to Pershore Police Station costing £800,000
    - e) Five new police posts: two @ Worcester, Droitwich Spa, Hartlebury and Newlands, (NE Malvern.)  
Each of which will cost £159,000.  
Taking everything into account this amounts to a total infrastructure cost of £7,168,043.  
The aspiration is that this will be funded through the planning system (CIL/s. 106).
  - The evidence base contains extensive general info. on police funding.
  - The evidence base contains snippets of info. on various current developments but the picture is far from comprehensive
  - The evidence base also refers to the submissions by WMP in respect of the West Mercia HQ @ Hindlip Hall.
  - The section in the evidence base on police requirements ends with another list of requirements which is similar but not identical to the one listed above. One key point is that this second list refers to Joint Police and Fire Stations at both Worcester West and Worcester South- each with a total cost of £3m.

- 5.74 In terms of the emerging WIS this summarises much of what is already in the evidence base.  
Costings for the Police Service seem the same.  
For the Fire Service, there is reference to the fire appliance tied to the Worcester West Urban extension (£0.22m.), the need for one new fire appliance and improvements to Evesham Fire station (£0.35m.) and the need for new fire appliances at Droitwich, Malvern and Pershore (totalling £0.66m).  
For the Ambulance Service, there is reference to the implementation of their “Make Ready” initiative and the need for an “ambulance hub” in Worcester at an estimated cost of £0.4m.
- 5.75 The emerging WIS then goes on to consider the delivery of emergency services infrastructure. In summary:-
- 5.76 The Police, Fire and Ambulance Services are all engaged in processes of service rationalisation.
- 5.77 In addition to working with the Fire Service on joint stations, the Police Service is working with Warwickshire Police to achieve savings.
- 5.78 The Ambulance Service is looking to dispose of surplus estate to achieve savings which can be redeployed to enhance patient care.
- 5.79 Both the Police and Fire Services regard it as entirely reasonable to expect the new developments to contribute to the funding of new emergency facilities.
- 5.80 The Police have successfully negotiated contributions from a number of developers on sites in South Worcestershire but it is apparent that many of the developments are running ahead of the SWDP which hampers the calculations of developer contributions
- 5.81 The following info. from the evidence base also needs to be integrated into this section:  
For the Fire Service, information is much more limited. Emergency cover is provided by the Hereford & Worcestershire Fire & Rescue Service with one whole time fire station at Worcester supported by part time fire stations at Malvern, Droitwich & Evesham and 5 retained duty stations. The capacity of the Fire service to accommodate additional pressures is unknown but the County is working with the Fire Service to fill this gap in knowledge. The financial context is similar to the police service. Indicative costs of any new facility have been provided by the Fire Service to the County.
- 5.82 The Hereford & Worcestershire Ambulance Trust (HWAT) provides a 24 hour 7 days per week service for people living in and travelling through the two Counties. Limited info. is available on existing assets or the capacity of existing assets. No information is available on future infrastructure requirements for the ambulance service. The Baker Associates Study did set out a number of requirements but these are now regarded as being out of date by the ambulance service. Clearly further work on this topic is now required.

## **F) OTHER SOCIAL INFRASTRUCTURE**

5.83 The following services do not seem to be covered by the emerging draft Worcestershire Infrastructure Strategy:-

- Justice facilities
- Crematoria and burial facilities
- Employment training

These issues need to be discussed with the County Council and progressed as appropriate by autumn 2012.

## **G) WAY FORWARD ON SOCIAL INFRASTRUCTURE**

5.84 It is good that the SWIDPIPS has been able to start to build up a picture on Social Infrastructure requirements.

5.85 The very latest position on educational requirements is particularly helpful but needs checking again in the autumn in case the figures need to be updated.

5.86 In other sections information is partial and there are a number of important issues which need to be followed up by autumn 2012.

5.87 Again all authorities need to consider the issue of prioritisation of infrastructure over the summer period.

## **SECTION SIX: GREEN INFRASTRUCTURE**

### **A) INTRODUCTION**

- 6.1 This section of this document is written not only in support of new Policy SWDP 6 on Infrastructure which was considered by JAP on 15/06/12 but also revised Policy SWDP 5 which was considered by JAP on 11/05/12.
- 6.2 Key extracts from that SWDP 5 are shown below:-

#### **SWDP 5 Green Infrastructure.**

“ Development must contribute to the strategic aims and objectives of the Worcestershire Green Infrastructure Strategy (WGIS).

All allocations and major planning proposals will be required to set out at least 40% of their area for Green Infrastructure within their site. The precise form and function(s) of the green Infrastructure (GI) will depend on local circumstances, WGIS' priorities and must be agreed with the Local Planning authority in advance of a planning application. Effective management arrangements must be clearly set out and secured ....”

“...All qualifying development is required to contribute towards the maintenance, improvement and connectivity of the Green Infrastructure Network, as defined on the Proposals Map.

- 6.3 The current information position on Green Infrastructure is outlined in the evidence base for the emerging Worcestershire Infrastructure Strategy, as set out in papers on 21/03/12 and 23/04/12 and as updated on 24/05/12 and 18/06/12. There is a very recent statement of the County Council position on Green Infrastructure, as set out from Page 112 onwards, in the recently published (13/06/12) emerging WIS.
- 6.4 Green Infrastructure has been defined by the County Council as “the network of green spaces and natural elements that intersperse our cities, towns and villages. It is the open spaces, waterways, gardens, woodlands, green corridors, wildlife habitats, street trees, natural heritage and open countryside. Green infrastructure provides multiple benefits for the economy, the environment and people”
- 6.5 As explained in the County evidence base, Green Infrastructure considers both public and private assets in both a spatial dimension (e.g. areas or corridors) or as theme running through the various forms of infrastructure provision. The multi-functional nature of Green Infrastructure means that it considers cultural, landscape and ecological assets and concepts such as sustainable water and resource management. Many of these issues are relevant to human health and mental well being.
- 6.6 In considering future need, provision and funding of green infrastructure, it is important to recognise the multi functional role of such space and the different delivery tools for its planning and provision.

Examples of green infrastructure given in the evidence base include:-

- Sites protected for their historic or nature conservation value.
- The implementation of SUDS (sustainable urban drainage systems) within new development.

- Sustainable transport solutions, such as footpaths or cycleways within new or existing development.
  - Creation of parks and open space in both new residential and commercial development.
  - Regeneration or improvements to public space.
  - Flood plains flood defence schemes.
  - Innovative building design e.g. green roofs.
  - Wider landscape enhancements through countryside stewardship or management plans of owners.
  - Playing pitch provision.
- 6.7 There has been increased national recognition in recent years of the continuing importance of parks and green spaces. This included the PPG17: Planning for Open Space, Sport & Recreation. This is superseded by NPPF though this does still emphasise the importance of open space even if it is less prescriptive in defining a standard approach.
- 6.8 Other aspects of Green Infrastructure include the protection and potential enhancement of existing green infrastructure and environmental assets and public rights of way.

## **B) STRATEGIC ASSESSMENT OF GREEN INFRASTRUCTURE**

- 6.9 The County evidence base explains that a baseline assessment of the green infrastructure themes for biodiversity, landscape, historic environment has facilitated the development of an Environmental Character Areas map for Worcestershire, as part of the Worcestershire Green Infrastructure Strategy.
- 6.10 This combined assessment has been undertaken to give a high level analysis of the overarching quality of Green Infrastructure within each character area in Worcestershire. This is accompanied by a series of objective tables which highlight the issues and priorities for each of the character areas providing the focus for intervention.
- 6.11 The map identifies areas of strategic intervention based on the existing Green Infrastructure quality and the broad strategic approach to be taken i.e. protection, enhancement of existing assets or creation of new assets.
- 6.12 The work on the Green Infrastructure Strategy is on a broadly parallel course to both the emerging Worcestershire Infrastructure strategy and this Infrastructure Delivery Plan to support the SWDP. The draft GI Strategy will be prepared in conjunction with partners through autumn 2012 and should be ready by November 2012 with a view to it being finally approved by the GI Partnership by March 2013. It will be important by autumn 2012 to synchronise as far as is possible in the SWIDP the emerging conclusions of all three documents.
- 6.13 It is within this context that the Worcestershire Green Infrastructure Strategy (WGIS) is being prepared by the Worcestershire sub-regional Green Infrastructure Partnership. This consists of representatives from the County Council, the six District Councils, government agencies and the voluntary sector.
- 6.14 The purpose of the WGIS is to co-ordinate and plan green infrastructure across Worcestershire arising from both new development and to supplement and enhance existing Green Infrastructure provision and functionality. The strategy will “provide

guidance on maximising the functionality of green infrastructure using an ecosystems services approach and working through the Green Infrastructure Partnership to influence and inform their investment decisions which will both impact on and assist the delivery of green infrastructure in the County”.

- 6.15 The WGIS will bring together the existing evidence based framework documents to set out a programme for priority strategic infrastructure projects. The framework documents will be complete in autumn 2012 and the WGIS will be completed for adoption by the Green Infrastructure Partnership by March 2013.
- 6.16 The WGIS will be supported by more specific documents. These will undertake an assessment of the individual strategic development sites to support and deliver green infrastructure based on an assessment of the individual green infrastructure themes and the priority issues for the site. This approach is being piloted via the SWDP Sites. Further info on this progress needs to be fed into this document by October 2012.
- 6.17 Significant progress has already been made in the assessment of assets across Worcestershire. The typology of green infrastructure assets is varied recognising its multifunctional role. Key assets could be seen to include the woodlands, river corridors, country parks (e.g. Worcester Woods), formal parks, allotments, footpaths, cycleways and SUDS.
- 6.18 Emerging Worcestershire Green Infrastructure Study work, prepared for the Worcestershire Green Infrastructure Steering Group by Land Use Consultants, contains a summary table of sub-regional Green Infrastructure recreational assets in South Worcestershire.

Primary assets:

Malvern Hills etc	1,373.3 ha.
River Avon	415.9 ha.
River Severn	374.7 ha.
River Teme	305.7 ha.
Shrawley Wood	157.9 ha.
Kempsey Common etc.	103.3 ha.
Worcester Woods	33.8 ha.
Worcester Riverside	6.3 ha.
Evesham Country Park	39.8 ha.

Linear Assets:

Droitwich Canals	11.4 km.
Grand Union Canal	28.9 km.
Staffs. & Worcestershire Canal	31.8 km
Worcester & Birmingham Canal	44.3 km.
River Avon	72.4 km.
River Lugg	20.7 km.
River Severn	96.7 km.
National Sustrans route 41	19.4 km. (Bristol to Rugby via Evesham)
National Sustrans route 46	22.3 km. (Droitwich Spa to South Wales via Worcester & Malvern)
National Sustrans route 45	106.9 km. (Salisbury to Chester via Worcester & Droitwich)
Regional Cycle Route 44	13.5 km (Persore to Worcester Cycle Route)

- 6.19 This same assessment report establishes a clear pattern of assets that run through the central north –south corridor of Worcestershire close to the centres of population coming under most pressure. The majority of assets are at risk from increased visitor pressure from planned development both within and outside Worcestershire. Future development largely reinforces the pattern of current visitor pressure on assets with the central north-south corridor coming under pressure as the population increases in places like Worcester and Kidderminster.
- 6.20 The partnership will be considering five Potential Strategic Green Infrastructure Schemes, as recommended by Land Use Consultants, three of which are in South Worcestershire but it should be noted that these are indicative schemes which have not as yet been endorsed by the Green Infrastructure Partnership:-
- Worcester/Droitwich Park; canal ring centred on Hindlip and extending south to junction 6 of the M5
  - Hallow Riverside Park : Grimley South to Northwich and Eastbury along both sides of the river
  - Sandford (Clifton) Water Park : south of Draycott and extending south to the base of Knight Hill

### **C) CALCULATING GREEN INFRASTRUCTURE REQUIREMENTS AND COSTS**

- 6.21 The County evidence base explains that in order to understand or test the viability of the provision of green infrastructure and the implications for developer contributions, it is necessary to have an understanding of the strategic provision of green infrastructure.
- 6.22 Such an assessment will need to include a summary and analysis of the District authorities PPG17 audits and play pitch strategies. There is then the difficulty in building a strategic picture because each District has adopted a differing methodology for assessing requirements.
- 6.23 The County Council proposes that strategic assessments will be informed by the Worcestershire AIRS (Access & Informal Recreation Strategy) and by Strategic Plans such as Local Transport Plans and management Plans for AONBs.
- 6.24 In assessing green infrastructure provision, it is important to recognise that the distribution of provision by topology may vary significantly across a District. This can bring a significant disparity between total provision across a District, which may even have a surplus, and provision at a local scale, where at ward level there may be significant deficiencies.
- 6.25 Access to natural greenspace has been evaluated across Worcestershire using a methodology called ANGst, which has been developed by Natural England. This standard measures a distance/size threshold between different sites. Further info. is available in the County evidence base.
- 6.26 Ultimately, the future provision of green infrastructure will need to be assessed on an individual site basis based on a site's characteristics and those of surrounding neighbourhoods.

- 6.27 There is wide variation in the cost of open space provision identified across existing evidence. This reflects the differing experiences across the authorities and the varying costs of provision of different typologies and designs.
- 6.28 Indicative costs quoted from elsewhere are listed in the County evidence:-  
Proposed woodland structure: whip planting; £3 per metre.  
Linear park formal/soft landscaped: £75 per sq. m.  
Swales for 10m/ha/ of developable land: £200 per m.  
Dry attenuation basins (1 per 5000 houses): £100,000.
- 6.29 The County evidence states that there is no overall assessment of the cost of green infrastructure in South Worcestershire as this will be determined by strategic priorities and schemes in the WGIS. The Partnership has produced a series of indicative generic capital and revenue costs for green infrastructure based on the type of interventions such as habitat creation , access improvements etc. Using a hypothetical site model, two indicative costs for green infrastructure on a strategic development have been developed for illustrative purposes and are quoted in the County evidence base:-
- Capital costs : £ 19,226 per hectare of Green Infrastructure
  - Maintenance (revenue costs) : £1,346 per ha. per year.
- 6.30 Green infrastructure is a multifunctional asset and will be influenced by the plans and delivery mechanisms from a number of cross cutting areas. Therefore, in the County documentation, in order to avoid double counting, the analysis of cost (where available) has centred on the provision of green space rather than other assets such as sustainable transport infrastructure or SUDS though these will need to be picked up elsewhere in the overall analysis.
- 6.31 Currently in the County evidence base document, there is no new green infrastructure identified but provision will come forward via different routes including:-
- Areas linked to the strategic allocations of housing and employment land.
  - New sustainable transport infrastructure as part of LTP3 (Local Transport Plan).
  - Requirements for SUDS approvals prior to planning permission under the 2010 Flood & Water Act.
- 6.32 The Worcestershire Green Infrastructure Partnership currently has no direct funding and the County Council envisages that funding will be required through a number of routes. In summary:-
- The local authorities themselves though this will be difficult in current financial climate
  - Partner organisations: e.g. Natural England; Forestry Commission; Worcestershire Wildlife Trust etc.
  - Central Government Departments including specific schemes such as Regional Growth Fund and Growth Point Funding
  - Hypothecated Funding: e.g. Landfill Community Fund
  - European Funding e.g. RDPE (rural); INTERREG; EU life+ (nature conservation)
  - National Lottery: Big Lottery & Heritage Lottery Fund
  - Developer contributions; s.106 contributions and, in time, Community Infrastructure Levy (CIL)
  - Financial markets where there is a future revenue stream
  - Private sector endowments from individuals, businesses or communities
  - Funding in kind from voluntary or not-for profit-groups
  - Agri-environment schemes: e.g. Environmental Stewardship; English Woodland Grant scheme until 2013
  - New Homes Bonus

- Local Transport Capital settlement can include walking & cycling schemes
- Local sustainable Transport Fund for schemes which promote walking & cycling.
- Flood & Water Management Act. This mainly relates to Physical Infrastructure but there may be some scope under this heading.

## **SOUTH WORCESTERSHIRE**

- 6.33 The County evidence base makes extensive reference to the South Worcestershire Sports Facilities Framework (SWSFF) together with the Herefordshire and Worcestershire Sports Facilities Framework and the three District Playing Pitch Strategies. : Some of this material has already been covered under Social Infrastructure but there is also new material so it is relevant to pick up this issue of sports facilities again under this section.
- 6.34 The SWSFF focuses primarily on facilities designed for community sport and physical activity. The SWSFF suggests that proposals contained in SWSFF should be considered alongside other local facilities including parks, play areas, routes for walking, cycling and horse riding.
- 6.35 The demand and supply of grass playing facilities, primarily for football, cricket and rugby have been considered as an integral part of the SWSFF. The findings in relation to grass pitches are summarised below.
- 6.36 Although both Malvern Hills and Wychavon have a generally sufficient stock of playing fields to meet their communities' needs up to 2026, there are some notable shortages of provision in Evesham, Malvern and, to a lesser extent, Droitwich. These deficits will worsen as new housing is developed in these towns and additional playing fields should be provided. There is a major export of players in all of the pitch sports from Worcester City to Wychavon and, to a lesser extent, to Malvern Hills. The export is primarily due to a lack of pitch provision within the city of Worcester and the situation will worsen if the increased participation rates are achieved for each of the sports and the anticipated housing is provided.
- 6.37 The South Worcestershire Programme of Development (POD) and Developers' Contributions Report is part of a suite of documents that make up the SWSFF. The POD provides the details of how the proposed built facilities and playing fields should be provided including location, costs and phasing. It also contains policy proposals in relation to developers' contributions.
- 6.38 The POD identifies the facility needs, their locations and the expected phasing of delivery based on the following timescales; up to 2016; 2016-2021 and 2021-2026. The Developers' Contributions section takes the identified facility needs and identifies how to calculate the developers' contributions in respect of new housing. This needs to be checked and refined, as necessary, by autumn 2012.
- 6.39 As covered in the Social Infrastructure section, the drivers behind the SWFF arise from a combination of:-
- Natural population changes
  - New population from the new housing
  - A policy objective of a 1% per year increase in sports participation.

- 6.40 There is a table in the evidence base of the WIS drawing on the SWSFF then goes on to give playing field need in South Worcestershire.
- 6.41 Worcester East (location tbc but separate from cricket site in East): 6.9 ha for football: 2016-2021.
- Worcester West SUE : 6.5 ha for football : 2016-2021.
- Worcester South SUE : 6.4 ha. for football: 2016-2021.
- Worcester East (location tbc but separate from football site in the East): 4 ha. for cricket : 2016-2021.
- Worcester West SUE : 4 ha. for cricket : 2016-2021
- Worcester South SUE : 2 ha. for cricket : 2021-2026.
- Worcester South SUE (or possibly Worcester West) : 7 ha. for rugby: 2016-2021.
- Malvern Town East/Mayfield Road SUE : 6 ha. for football: 2016-2021 & 2021-2026.
- Malvern Town East/Mayfield Road SUE (or North/Newland SUE): 2 ha. for cricket : 2016-2021 & 2021-2026.
- Evesham SUE ( Hampton /Persore Lane or Cheltenham Road): 6 ha. for football : 2011-2016 & 2016-2021.
- Evesham North SUE (Offenham Lane) : 6 ha. for football: 2011-2016.
- Evesham South or SW SUE (Hampton/Persore Lane or Cheltenham Road): 2 or 4 ha. for cricket : 2011-2016 & 2016-2021.
- Evesham North SUE (Offenham Lane): 2 ha. for cricket: 2011-2016.
- Droitwich Spa SUE (north of Pulley Lane preferably or possibly Copcut Lane) : 2 ha. for cricket.
- Notes:  
 Playing fields are to be developed as and when the new housing developments are commenced.  
 SUE : Sustainable Urban Extension  
 (Other notes do not appear to be relevant).
- 6.42 The County evidence base states that the contributions sought are based on the capital costs of providing a typical facility. The calculation includes basic building costs, landscaping and external works, professional fees and initial equipment costs.
- 6.43 It states in the evidence base that the SWSFF has calculated that the total future need for playing fields is 60.45 ha. Costing has been calculated at £125,000 based on:-
- £80k.per 6400 sq.m. (Sport England : 2010) = £125,000.
- 6.44 Therefore, total contributions for South Worcestershire are calculated at £9,548,750.
- 6.45 The relevant section of the evidence base for WIS ends with some inconclusive work on costings where at present its main source is work done in relation to the original

proposal for the Middle Quinton Eco town. Clearly there is much more work to be done in respect of the costings of Green Infrastructure.

- 6.46 The only costings in the emerging WIS for Green Infrastructure (23/04/12 version) are indicative average costings;-  
Viz. Up to £7,000 per hectare for informal greenspace  
Up to £400,000 per hectare for formal park.

## **WAY FORWARD ON GREEN INFRASTRUCTURE SECTION**

- 6.47 The County work on Green Infrastructure seems, at present, less developed than for either Physical Infrastructure or Social Infrastructure.  
It is still mostly generalised and strategic.  
And, with the exception of playing fields provision, which has come from SWSFF, there are no accurate figures on provision: either areas or costings.  
Clearly, much depends upon the progress made by the Worcestershire Green Infrastructure Strategy. It will be important to establish the contents and the practicalities of its proposals so that it can inform, in time for October 2012, the SWIDP.
- 6.48 There is a need to start reviewing this material during the summer so that we have a good understanding from a SWC perspective.
- 6.49 Then it will also be important to talk to relevant officers at the three Districts and to see how much they can input.  
For example, in discussions with officers @ Worcester City, they have referred to a number of other potentially relevant documents e.g.
- Faber Maunsell: Green Infrastructure Study ; Dec.2007.
  - Green Infrastructure for Growth Areas: Sept. 2008.
  - Green Infrastructure Interim Report : Nov. 2009
  - Plus all the PPG 17 material including the Worcester Study done by Strategic Leisure in July 2006.
- 6.50 It might also be helpful to check with the County about the use of Baker Associates Study with updating.
- 6.51 All four authorities will want to consider the issue of the prioritisation of Green Infrastructure during the summer period.

## SECTION SEVEN: SPATIAL PLANNING OF INFRASTRUCTURE

- 7.1 After assessing Physical Infrastructure, Social Infrastructure and Green Infrastructure, the SWIDPIPS now moves on to examine the Spatial Planning of Infrastructure across South Worcestershire. This is followed by Appendix Y which itemises the crucial infrastructure for South Worcestershire.
- 7.2 The provision of infrastructure is, by its very nature, something which changes through time. Hence the contents of this section will inevitably need significant updating and this will include refinements to section 7 to reflect the new proposals which are emerging in the July 2012 Proposed Changes. The information listed out below from various sources is the best available at the time of drafting but will need reviewing by autumn 2012.
- 7.3 The main sources of data are as follows:-
- i) SWDP: Autumn 2011. This gives the relevant SWDP spatial policy as a reference point and then lists out the key infrastructure points as given under the relevant SWDP policy.
  - ii) SWIDPIPS ; reference is made to earlier sections of this document and in particular the material gleaned and summarised from the latest version of the Worcestershire Infrastructure Strategy.
  - iii) The basic SWC schedule on Infrastructure produced in 2010/2011 with the latest version dated 01/04/11. This is fairly full schedule giving costings and phasing in most but not in all cases. For fuller info (e.g. on funding) reference should be made to the primary source material.
  - iv) The Baker Associates Study which informed the South Worcestershire Councils' submissions to the Regional Spatial Strategy Examination in Public in 2009.
- 7.4 Table 25 which appeared in the Preferred Options Consultation document of 2011 has not been reproduced as part of this document. Instead, its contents have been divided and treated separately as:
- a. the housing and phasing figures in Table 25 have been revised as part of the separate work on the housing and employment figures. They are, consequently, not repeated in this work as part of the Infrastructure Delivery Plan.
  - b. Appendix Y sets out the crucial infrastructure requirements for the Plan with costings and phasing where known.
- 7.5 As a separate exercise, the County Council is preparing the Worcestershire Infrastructure Strategy. An early version of the County document (23<sup>rd</sup> April 2012) has been taken into account and, as the two documents progress, care will be needed to maintain consistency between them. Where costings are included in Appendix Y they have been based on source data from the service/infrastructure providers themselves (many elements of which are County Council sources).
- 7.6 The main infrastructure policies in the Preferred Options Consultation Document 2011 were SWDP 4, Transport, SWDP 5, Green Infrastructure, and some of the site allocation policies which include specific references to infrastructure. The text below, and table Y, associate infrastructure with site specific policies where appropriate. However, it must be noted that these "associations" are for guidance only. In each case a development site is likely to need to contribute pooled contributions for infrastructure beyond the immediate needs of the development, whether collected by the current Section 106 arrangements or Community Infrastructure Levy in the future.

- 7.7 New development creates demands for infrastructure in a variety of ways and it is important to keep in mind the full range and packages of new infrastructure required. For example, whilst new development creates a wide range of new requirements for the movement of people and goods, it is very important to bear in mind that this needs to be addressed by the full range of sustainable transport options, not just by increasing road capacity. Thus, whilst Appendix Y starts with transport schemes they should not be considered in isolation.
- 7.8 The analysis which follows is summarised settlement by settlement in the order set out in the Settlement Hierarchy, Policy SWDP 1 in the 2011 Preferred Option consultation:-
- Worcester  
Droitwich Spa  
Evesham  
Malvern  
Persore  
Tenbury Wells  
Upton upon Severn  
and  
Rural Areas.
- 7.9 Each "Place" section below sets out :-
- a) A table summarising the main policy reference points derived from the 2011 Preferred Options consultation document, followed by
  - b) A description of the known list of infrastructure requirements, as now understood following the Preferred Options consultation. For costings (where known) reference should be made to Appendix Y.
- 7.10 An explanation of the source requirements for infrastructure is set out in the earlier sections of this document: notably Transport (in section 4), Education (in section 5) and Green Infrastructure (section 6).

**WORCESTER a) Policy reference points (2011)**

<b>WORCESTER – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 6	City allocations	Developer contributions expected for infrastructure including recreation, education and other community infrastructure
SWDP 7	City Centre Opportunity sites	Developer contributions expected for infrastructure including Travel Plans, public realm, streets and open spaces, and use of Community Infrastructure Levy for strategic infrastructure
SWDP 8/1	Southern Urban Extension for Norton Barracks and Broomhall Communities. 2,450 dwellings (40% affordable) 20 ha. employment land 20 pitches for Gypsies and Travellers Neighbourhood Centre	Park and Ride site to serve the A 38 corridor. Social and physical infrastructure including education, (new primary school) children’s centre and youth facilities Local green infrastructure including a linear park between the two new communities Substantial “wooded buffer” to the north of Broomhall Lane. Additional sports and social facilities at Norton barracks Improvements to Southern Link Road Foot/cycle bridges over the A4440 Improved sustainable transport links to the City Centre
SWDP 8/2	Western Urban Extension: Temple Laugherne 975 dwellings (40% affordable) 5 ha. employment land 10 pitches for Gypsies and Travellers Small local shops	Network of open spaces including play facilities, sporting and informal recreational facilities, allotments. Local Green Infrastructure Measures to maintain separation from Crown East and Lower Broadheath. Contributions to Transportation, Education, sporting and recreational facilities Measure to improve access by non-car modes.
SWDP 8/3	Eastern Urban Extension: Kilbury Drive 300 dwellings (40% affordable) Enhanced local shopping provision at Baynham Drive	Measures to maintain separation from Swinesherd Way Network of open spaces, including play spaces, informal open space and allotments. Measures to improve accessibility by non-car travel modes. Contributions to transport, education, sporting and recreational facilities. Traffic calming.
SWDP 8/4	Northern Urban Extension: Gwilliam’s Farm 300 dwellings (40% affordable) Enhanced local shopping provision based on the existing farm shop.	Measures to maintain separation from Bever. Pedestrian and cycle access to River Severn Network of open spaces, including play spaces, informal open space and allotments. Contributions to transport, education, sporting and recreational facilities. Measures to improve accessibility by non-car travel modes, including access to Park and Ride

		site.
SWDP 8/5	Worcester Technology park, Phase 2.	Of itself, a sustainable technology park.

### **WORCESTER b) Description of Infrastructure Requirements (2012)**

- 7.11 Junction capacity enhancements are expected on the M5 Motorway at both junctions 6 and 7. The details and costs of the schemes are not known at this stage and are awaiting Highways Agency costings. They will need to be funded from Department for Transport sources rather than the SWDP.
- 7.12 The A4440 Southern Link Road is already suffering congestion, and although works are being undertaken in the summer of 2012 at the Whittington roundabout, further works will be needed to accommodate the growth of both Worcester and the parts of the plan area to the west of the City such as the site at Newland (SWDP 17). This is likely to include dualling the A 4440 between Whittington and the Ketch Roundabout (A44 to A38) in the first phase of the plan period. Allowance also needs to be made for further enhancements to the section from the Ketch westwards in the later phase of the plan. The first phase improvements will include improved pedestrian and cycle crossing facilities (including foot/cycle bridges over the A4440) and bus related infrastructure. In other words – the capacity improvements must relate to all modes, not just private transport.
- 7.13 In addition to work to improve capacity (for all modes) around the periphery of the City, key corridor improvements will be needed on the radial routes linking the urban extensions to the City Centre. These will include at least one park and ride site.
- 7.14 Rail travel will not be forgotten either. Important enhancements are needed at both Shrub Hill and Foregate Street Station (the latter being, by a very wide margin, the busiest in the whole County). In addition the business case is being prepared (summer 2012) for the Worcestershire Parkway Station in a location based on the crossing point of the Bristol to Birmingham line and the Worcester to Oxford line.
- 7.15 Other transport related schemes will include “Real Time Information Systems” for bus users, and better infrastructure generally on key bus routes.
- 7.16 One new primary school will be required in Worcester, principally to serve the southern urban extension. Elsewhere, enhancements to existing primary and secondary schools will be required to meet demand without building further new schools.
- 7.17 In terms of built leisure facilities the new Worcester Arena is under construction (summer 2012) and three new sports halls will be required, along with new swimming pools (one a replacement and one new). An extensive schedule of sports pitch requirements is included in Appendix Y
- 7.18 Other crucial infrastructure includes new police stations for south and west urban extensions and two new “Police Posts”. It will be desirable to encourage joint use of buildings to minimise the likely costs of providing dedicated single buildings for each function.
- 7.19 In terms of Green Infrastructure, the County Council is in the preliminary stages of developing a County-wide strategy that may well result in some sub-regional new facilities based partly in and near Worcester – possibly one based on the Worcester/Droitwich “Canal ring” and the other based on the River Severn and environs between Grimley and Northwick.

7.20 Other infrastructure demands cannot be specified at this stage. For example, the health needs of existing and new communities are all under review, including the wind down of the PCT and it is being replaced with new commissioning bodies. Likewise details of water supply and treatment investment is awaiting further information from the water company concerned, as is details of new energy requirements.

7.21 **DROITWICH SPA a) Policy reference points (2011)**

<b>DROITWICH SPA – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 9	Sites in Droitwich Spa, including regeneration of Netherwich Basin including residential, office retail and leisure elements.	Developer contributions expected for: Improved public transport links to Birmingham and Worcester Droitwich Spa “Green Necklace” and cycle/walking networks Increased parking capacity at the station Increased school capacity New police infrastructure
SWDP 10	Copcut Lane: 740 new dwellings 3.5 ha of employment land Local neighbourhood centre including shops, community facilities and a police post.	Enhanced public transport, cycle and pedestrian connections. New public open space, green infrastructure, community woodland and the “Green necklace”. Landscape buffers.

**DROITWICH SPA b) Description of Infrastructure Requirements (2012)**

7.22 The planned development in Droitwich will put further strain on the highway network, including both the M5 Motorway (especially junction 5) and A38 generally. This needs to be considered by the Highways Agency in respect of the motorway in particular – but other interventions will include capacity enhancements on all the key A38 junctions. It is, however, important to stress that alternatives to the private car must be pursued as well, and hence there will also be investment in passenger transport schemes and walking and cycling infrastructure to improve accessibility from new developments into the town centre. There will also be associated “Public realm” investments needed in the Town Centre.

7.23 Some rail investment relevant to Droitwich is also expected including improved parking facilities at the station, station enhancements generally, and on a strategic note the possibility of improving rail capacity by dual tracking the currently single track section of the line to Stoke Works. However, this last project depends very much on Network Rail.

7.24 In Droitwich there will be a strong emphasis on Green Infrastructure, especially the “Green necklace” around the Town. The landscape strategy will include community woodland and landscaped buffers. One of the potential sub-regional facilities, a project based on the Droitwich canal ring, will also benefit the Town.

7.25 Community infrastructure will include appropriate investment in existing schools, a new police post and new sports pitches.

7.26 Various of the above points will come together in the redevelopment proposals for the Netherwich basin, which will be a significant infrastructure project in its own right.

**EVESHAM a) Policy reference points (2011)**

<b>EVESHAM – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 11	Urban Capacity Sites in Evesham	Improved parking provision at the station. New public open space/recreation New pedestrian cycle bridge connecting Hampton with the town centre. Enhanced hospital provision New police infrastructure High Street regeneration
SWDP 12	Evesham Urban Extensions: SWDP 12/1: Cheltenham Road 400 houses; protection of the Chemtura employment site. SWDP 12/2 Pershore Road, Hampton. 400 houses SWDP 12/3 Vale Industrial Park 10 ha employment land	Enhanced public transport, cycle and pedestrian connections. New public open space, green infrastructure, including alongside the River Isbourne and landscape buffers to new development sites. Contributions to formal sporting facilities, health facilities, schools allotments and transport. Contributions to the pedestrian cycle bridge across the River Avon

**EVESHAM b) Description of Infrastructure Requirements (2012)**

- 7.27 Evesham has a number of crucial transport improvements needs, not just for improvements to road capacity. Hence a significant new item of infrastructure will be the proposed cycle/footbridge across the River Avon to connect Hampton with the town centre. There will also be bus network enhancements and investment in the railway station.
- 7.28 The A46 is a trunk road, managed by the Highways Agency, who are carrying out their own studies with proposals due to come forward during the plan period.
- 7.29 There will be significant investments to increase capacity of local schools, and social infrastructure will include new sporting facilities, an extension to the police station and fire station enhancements.
- 7.30 Attention to Green Infrastructure will include particular consideration of the River Isbourne and environs, and strategic landscaping corridors/buffers associated with the new developments.
- 7.31 The Evesham High Street Regeneration Project is expected to be extended.
- 7.32 Further investment in Evesham Hospital will be dependent on the overall review of the provision of Health facilities which is currently under way (2012).

## MALVERN a) Policy reference points (2011)

<b>MALVERN – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 13	Malvern and Allocated Sites	[No infrastructure requirements specified]
SWDP 14	QinetiQ 4.5 ha of employment land 250 dwellings	Open space and recreational facilities. Links to green corridors Improved public transport links, walk and cycle facilities.
SWDP 15	Blackmore Park 4.5 ha of employment land	[No infrastructure requirements specified]
SWDP 16	Three Counties Showground Agriculture, horticulture, equestrianism and other countryside uses.	[No infrastructure requirements specified]
SWDP 17	Newland 10 ha of employment land 700 dwellings Neighbourhood shopping facilities.	Community infrastructure including a primary school, community hall, cemetery and police post Green infrastructure: green buffer. Sustainable transport measures, public transport and safe pedestrian/cycle links to local services. Public open space: play areas, playing fields, informal open space and allotments.

## MALVERN b) Description of Infrastructure Requirements (2012)

- 7.33 Malvern will require a number of town centre (Great Malvern) improvements and improved links on the connecting roads including Townsend Way, Pickersleigh Road and the A4013 to A449 link via Leigh Sinton. However, another important element will be improved cycle and footway links and enhancements to the railway stations, both Great Malvern and Malvern Link.
- 7.34 Cycle and footpath links, both new and enhancements to existing, will be needed to ensure the new developments are properly served with sustainable transport options.
- 7.35 There will be investments to increase capacity in local schools, new football and cricket pitches, and a new police post at Newlands.
- 7.36 Malvern does, of course, benefit from nationally significant green infrastructure in the form of the Malvern Hills AONB - and appropriate green infrastructure links will be needed to enhance this very significant asset.

**PERSHORE a) Policy reference points (2011)**

<b>PERSHORE – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 18	Pershore Allocations	Enhancements of public transport links between Worcester, Evesham and Cheltenham. Enhancement of railway station and links to the town. Alleviate the bottleneck of the A44 Pinvin crossroads. Link road between Wyre Road and A44 bypass. New open space Education capacity enhancements. Extend the High Street regeneration scheme
SWDP 19	Pershore Urban Extensions: SWDP 19/1 Land to the North of Pershore 600 new homes New Link Road SWDP 19/2 Land to the North East of Pershore 5 ha of employment land	Network of public open space Contributions to education, formal sport, Strategic Green Infrastructure Contribution to the Wyre Road/A44 link road

**PERSHORE b) Description of Infrastructure Requirements (2012)**

- 7.37 The main transport issues in Pershore include creating better station facilities and connections to the Town Centre, and easing traffic flows on the A44 particularly through the Pinvin crossroads. A comprehensive approach to public transport enhancements and improved cycle facilities (including cycle parking in the town centre) will be needed.
- 7.38 Investment will be needed to increase capacity of existing schools, and there will need to be pro-rata increases in public open space. The Police station will need to be extended.

### TENBURY WELLS a) Policy reference points (2011)

<b>TENBURY WELLS – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 20	Tenbury Wells and Allocations SWDP 20/1 30 dwellings SWDP 20/2 0.88 ha employment land	[No infrastructure requirements specified]

### TENBURY WELLS b) Description of Infrastructure Requirements (2012)

- 7.39 The small scale of development proposed should not be taken to diminish the role that Tenbury Wells has as the principal settlement in the west of the County, serving as it does the rural hinterland including adjacent areas of Herefordshire and Shropshire. However, no specific infrastructure needs have been identified and therefore a pro-rata approach will be taken to contributions from development to education, recreation, green infrastructure and other social needs.

### UPTON UPON SEVERN a) Policy reference points (2011)

<b>UPTON UPON SEVERN – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 21	Upton upon Severn and allocations SWDP 21/1: 50 dwellings	[No infrastructure requirements specified]

### UPTON UPON SEVERN b) Description of Infrastructure Requirements (2012)

- 7.40 Upton upon Severn is, of course, very constrained by floodplain issues and flood mitigation works continue to protect the town where possible. This limits the scope for significant new development despite the importance of the town at a crossing point of the River Severn.
- 7.41 Whilst further enhancement of the town's tourist potential will be encouraged no specific infrastructure needs have been identified to support this. In common with most rural areas there is a need for appropriate affordable housing.
- 7.42 In terms of Strategic Green Infrastructure one of the County's potential sub-regional facilities, the Clifton (Sandford) Water park may come to fruition during the plan period in a location to the north of Upton upon Severn.
- 7.43 Developer contributions to infrastructure will therefore be applied on a pro-rata basis

## RURAL AREAS a) Policy Reference points (2011)

<b>RURAL AREAS – site allocations</b>		
<b>Summary of infrastructure needs as proposed in Preferred Options Consultation 2011</b>		
<b>Policy Reference</b>		<b>Associated Infrastructure</b>
SWDP 23	Category 1 Villages	[No infrastructure requirements specified]
SWDP 24	Category 2 Villages	
SWDP 25	Category 3 Villages	

## RURAL AREAS b) Description of Infrastructure Requirements

- 7.44 The infrastructure needs of individual villages varies considerably, especially in terms of highways and schools investment. Opportunities need to be taken on a village-by-village basis where, for example, local cycle and/or footpath connections require enhancement. Similarly, public transport investment needs to be looked at in terms of whole localities rather than related to individual development sites. This does not diminish the need for pro-rata developer contributions to strategic infrastructure to serve the plan area as a whole.

## APPENDIX Y

- 7.45 There now follows Appendix Y which is a schedule of the crucial infrastructure required for South Worcestershire. It should be noted that Appendix Y is also attached to the SWDP itself in support of new Policy SWDP 6 on infrastructure.

Technical draft completed on 25<sup>th</sup> June 2012  
Minor editing of Introduction completed on 24<sup>th</sup> July 2012-07-24  
South Worcestershire Councils.

**Table to be read in conjunction with (new) Policy SWDP 6, Infrastructure**

Notes:

1. Policy numbers (in this version) relate to the policies in the September 2011 consultation document on the Preferred Options – they need updating to the final list of policy numbers (when known).
2. Many transportation items originate in LTP3 – but where the individual projects cannot be associated with a particular site they are allocated to SWDP 4 – which effectively “joins” LTP3 into the SWDP. Even where allocated to individual site policies (e.g. SWDP8/1 Worcester South Urban Extension) the project will have wider significance and should not be interpreted to mean that developer contributions for that site will be limited to just one project.
3. “Developer” contributions typically arise at present from S 106 payments which may be targeted at a specific project or a pooled contribution. Once CIL comes into effect (which should be the case for most of the plan period) that will be the main source of pooled developer contributions.
4. Some rounding errors may occur where costs are summarised to £million to 2 decimal places.
5. Whilst all costs are estimates at this stage it should be noted that in the “Movement” sections the costs do not include land acquisition and CPO costs (if needed), passenger transport operating costs and local highways agreements under Highways Act Section 278
6. Abbreviations:
  - BW = British Waterways
  - County = Worcestershire County Council (as transport authority and as the local authority for other services such as adult social care, children’s services, countryside services etc. etc.)
  - DfT = Department for Transport
  - EA = Environment Agency
  - FC = Forestry Commission
  - HA = Highways Agency
  - PT = Public transport generally
  - SE = Sport England
  - STWL = Severn Trent Water Limited
  - SWC = South Worcestershire Councils, i.e. Malvern Hills District Council, Worcester City Council and Wychavon District Council acting collectively.
  - WMC = West Mercia Constabulary
  - WWT = Worcestershire Wildlife Trust

Category	Project	SWDP Policy	Delivery Partners	Estimated cost	Potential sources of funding	Estimated Timescale	Costs/Funding/Delivery Notes	Further details
<b>PHYSICAL INFRASTRUCTURE</b>								
<b>A. Movement</b>								
<b>Worcester</b>	<b>(Worcester Transport Strategy)</b>			<b>Total £153.3 M</b>				
<b>Highways</b>	Including: M5 Junctions 6 and 7 (HA to confirm) Southern Link Road Capacity enhancements. Key Corridor enhancements (Ombersley Road, Tolladine Road, Bath Road, Bromwich Road/ Malvern Road, Hylton Road, Rainbow Hill, A4440 corridor).	SWDP 6, 7 and 8 sites	DfT County Developers	£105.7 M (subject to details from HA of M5 costs)	DfT, County, Developers	2012–2020 and 2020-2030	2012-2020 Dualling A4440 Whittington to Ketch.  2020-2030 Further enhancements to A4440 and Key Corridors	
<b>Rail</b>	Including Foregate Street and Shrub Hill station improvements – and Worcestershire Parkway	SWDP 6, 7 and 8 sites	Network Rail, Train operators County	£22.1 M	DfT, Network Rail, Train operators County	2012-2020 and 2020-2030	2012-2020 Foregate Street and Worcestershire Parkway.  2020-2030 Shrub Hill (but advanced if Sherriff Street/ Lowesmoor redevelopment	

							brought forward)	
<b>Local PT</b>	Including: Stop infrastructure, Real Time Information Systems, PT elements of Key Corridors	SWDP 6, 7 and 8 sites	County, City Council, Bus operators	£18.0 M	Dft, County, Bus operators, Developers		Across both phases 2012-2020 and 2020 to 2030	
<b>Walking and Cycle Enhancements</b>	Including: Walk and Cycle Routes, additional walk and cycle bridge. Excludes City Centre transport-related public realm improvements.	SWDP 4	County, Developers	£7.5 M	DfT County, Developers		Across both phases 2012-2020 and 2020 to 2030	
<b>Droitwich Spa</b>				<b>Total £7.48 M</b>				
<b>Highways</b>	See Inter-urban section below for A38 junction enhancements in the vicinity of Droitwich Spa						Across both phases 2012-2020 and 2020 to 2030	
<b>Walk and Cycle</b>	Including: Provision of walk and cycle footbridges over A38 linking development sites to Town Centre	SWDP 9, 10	County, Developers	£5.93 M	County, Developers		Across both phases 2012-2020 and 2020 to 2030	
<b>Passenger Transport Infrastructure</b>	Including: Infrastructure to serve SWDP sites and improvements to interchange facilities	SWDP 9, 10	County, Developers Network Rail, Train operators	£1.55 M	County, Developers, Network Rail, Train operators		Across both phases 2012-2020 and 2020 to 2030	
<b>Evesham</b>				<b>Total £6.87 M</b>				
<b>Highways</b>	Including:	SWDP 11	County,	£0.88M	County,	2012-2020	2012-2020	

	Town Centre junction enhancements	SWDP 12	Developers		Developers			
<b>Walk and Cycle</b>	Including: Provision of walk and cycle bridges over barriers to movement (River Avon and A46) New developments links to existing walk and cycle networks.	SWDP 11 SWDP 12	County, Developers	£4.26 M	County, Developers		Across both phases 2012-2020 and 2020 to 2030	
<b>Passenger Transport Infrastructure</b>	Including: Improved infrastructure, improvement to interchange facilities	SWDP 11 SWDP 12	County, Bus Operators Network Rail, Train operators	£1.73M	County, Bus Operators Network Rail Train operators		Across both phases 2012-2020 and 2020 to 2030	
<b>Malvern</b>				<b>Total £5.83 M</b>				
<b>Highways</b>	Including: A449 junctions (Townsend Way, Pickersleigh Road) Improvements to B4208, B4209 and B4211 & junctions	SWDP 13, 14, 15, 16, 17	County Developers	£5.24 M	County, Developers	2012-2020	Across both phases 2012-2020 and 2020 to 2030	
<b>Walk and Cycle</b>	Including: Provision of cycle parking facilities in Town Centre, Linking new developments to existing networks.	SWDP 13, 14, 15, 16, 17	County, Developers	£0.32 M	County, Developers	On-going	Across both phases 2012-2020 and 2020 to 2030	

<b>Passenger Transport Infrastructure</b>	Including: Improved interchange with rail at Malvern Link. New bus infrastructure on routes serving new development sites.	SWDP 13, 14, 15, 16, 17	County, Bus operators Network Rail, Train operators	£0.27 M	County, Bus operators Network Rail, Train operators		Across both phases 2012-2020 and 2020 to 2030	
<b>Pershore</b>				<b>Total £3.73 M</b>				
<b>Highways</b>	Including Junction enhancements A4104 with B4083 and B4084	SWDP 19	County, Developers	£0.81 M	County, Developers		Across both phases 2012-2020 and 2020 to 2030	
<b>Walk and Cycle</b>	Including: Provision of improved pedestrian route linking north Pershore, Pinvin, Station, and town centre. Provision of cycle parking in town centre.	SWDP 18 SWDP 19	County, Developers	£1.23 M	County, Developers		Across both phases 2012-2020 and 2020 to 2030	
<b>Passenger Transport Infrastructure</b>	Including: Provision of suitable bus infrastructure on routes serving new development sites, Improved interchange facilities.	SWDP 18 SWDP 19	County, Bus operators Network Rail, Train operators	£1.69 M	County, Bus operators Network Rail, Train operators		Across both phases 2012-2020 and 2020 to 2030	
<b>Rural and Inter-urban</b>				<b>Total: £15.83 M</b>				
<b>Highways</b>	Including: A38 junctions between Fernhill Heath and M5 junction 5	All SWDP sites	County, Developers	£14.21 M	County, Developers		Across both phases 2012-2020 and 2020 to 2030	

	A44 junction improvements between A46 and A422 A46 Junction improvements (HA to confirm) [Note: A449 improvements included in Malvern row above]							
<b>Walk and Cycle</b>	Including: Linking new developments with existing walk/cycle networks. Additional cycle parking	Rural SWDP sites	County, Developers	£0.79 M	County, Developers		Across both phases 2012-2020 and 2020 to 2030	
<b>Passenger Transport Infrastructure</b>	Including: provision of suitable bus infrastructure on routes serving SWDP development sites Improved PT infrastructure	Rural SWDP sites	County, Bus operators Network Rail, Train operators	£0.83 M	County, Bus operators Network Rail, Train operators		Across both phases 2012-2020 and 2020 to 2030	
<b>B. Utilities</b>								
Renewable Energy schemes	[site specific schemes only]		Developers					
Electricity	[awaiting information from Western Power Distribution]	[strategic sites generally]	Western Power	tbc	Developers Utility companies	As required		
Gas	[awaiting information from National Grid Gas]	[strategic sites generally]	National Grid Gas	tbc	Developers Utility companies	As required		
Water (supply)	Supply – detail of any		STWL	tbc	Developers	As required		

and waste water)	new capital schemes yet to be notified by STWL. Waste – STWL yet to submit details.				STWL			
<b>C. Flood Risk and Drainage</b>								
	[major schemes completed or under construction. SUDS technology to be used site-by-site in future]	[strategic sites generally]	EA Developers County	Tbc	Developers			
<b>D. Communications Infrastructure</b>								
	[Broadband scheme well advanced – no specific additional requirement notified for the purposes of SWDP]	[New policy on Broad-band]	County, Developers	tbc				
<b>E. Waste Infrastructure</b>								
	[awaiting SoS decision on Hartlebury EfW plant – otherwise smaller schemes will be developer funded]		County, Waste contractor, Developers	tbc	Developers			
<b>SOCIAL INFRASTRUCTURE</b>								
<b>A Education</b>								
<b>Worcester City - Primary</b>								
	West Worcester	SWDP 8/2	County, Developers	£2.13 M	County, Developers	As required		
	South Worcester	SWDP 8/1		£6.0 M		“		

	(includes new Primary School)		“		“			
	Kilbury Drive	SWDP 8/3	“	£0.64 M	“	“		
	Gwillam’s Farm	SWDP 8/4	“	£0.64 M	“	“		
	Ex Ronkswood Hospital site	SWDP 6/13	“	£0.43 M	“	“		
	Shrub Hill Opportunity Zone	SWDP 7/4	“	£0.43 M	“	“		
	Gregory’s Bank	SWDP 6/2	“	£0.30 M	“	“		
	Govt. Offices, Whittington Road	SWDP 6/15	“	£0.26 M	“	“		
	Blockhouse Opportunity Zone	SWDP 7/5	“	£0.26 M	“	“		
	South of Lyppard Hill	SWDP 6/1	“	£0.21 M	“	“		
	Small sites in City	SWDP 6	“	£0.63 M	“	“		
	Windfall in City	SWDP 6	“	£0.43 M	“	“		
<b>Worcester City - Secondary</b>								
	West Worcester	SWDP 8/2	County, Developers	£2.29 M	County, Developers	As required		
	South Worcester	SWDP 8/1	“	£5.55 M	“	“		
	Kilbury Drive	SWDP 8/3	“	£0.69 M	“	“		
	Gwillam’s Farm	SWDP 8/4	“	£0.69 M	“	“		
	Ex Ronkswood Hospital site	SWDP 6/13	“	£0.46 M	“	“		
	Shrub Hill Opportunity Zone	SWDP 7/4	“	£0.46 M	“	“		
	Gregory’s Bank	SWDP 6/2	“	£0.32 M	“	“		
	Govt. Offices, Whittington Road	SWDP 6/15	“	£0.27 M	“	“		
	Blockhouse Opportunity Zone	SWDP 7/5	“	£0.27 M	“	“		

	South of Lyppard Hill	SWDP 6/1	“	£0.23 M	“	“		
	Small sites in City	SWDP 6	“	£0.68 M	“	“		
	Windfall in City	SWDP 6	“	£0.46 M	“	“		
<b>Malvern Hills District - Primary</b>								
	Newland	SWDP 17	County, Developers	£1.49 M	County, Developers	As required		
	QinetiQ	SWDP 14	“	£0.53 M	“	“		
	Malvern Small sites	SWDP 13	“	£0.43 M	“	“		
	Kempsey Small Sites	SWDP 23	“	£0.30 M	“	“		
	Powick Small Sites	SWDP 24	“	£0.13 M	“	“		
	Lr Broadheath Small Sites	SWDP 23	“	£0.14 M	“	“		
	Tenbury Small Sites	SWDP 20	“	£0.13 M	“	“		
	Upton Small Sites	SWDP 21	“	£0.12 M	“	“		
	Malvern Village sites	SWDP 23, 24, 25	“	£0.75 M	“	“		
	Malvern District windfalls	SWDP 23, 24, 25	“	£0.77 M	“	“		
<b>Malvern Hills District - Secondary</b>								
	Newland	SWDP 17	County, Developers	£1.60 M	County, Developers	As required		
	QinetiQ	SWDP 14	“	£0.57 M	“	“		
	Malvern Small sites	SWDP 13	“	£0.46 M	“	“		
	Kempsey Small Sites	SWDP 23	“	£0.32 M	“	“		
	Powick Small Sites	SWDP 24	“	£0.14 M	“	“		
	Lr Broadheath Small Sites	SWDP 23	“	£0.15 M	“	“		
	Tenbury Small Sites	SWDP 20	“	£0.14 M	“	“		
	Upton Small Sites	SWDP 21	“	£0.13 M	“	“		
	Malvern Village sites	SWDP 23, 24, 25	“	£0.81 M	“	“		

	Malvern District windfalls	SWDP 23, 24, 25, 32	“	£0.82 M	“	“		
<b>Wychavon District - primary</b>								
	Droitwich Copcut Lane	SWDP 10	“	£1.58 M	“	“		
	Droitwich – other sites	SWDP 9	“	£0.99 M	“	“		
	Evesham – urban extensions	SWDP 12	“	£1.87 M	“	“		
	Evesham – small sites	SWDP 11	“	£0.62 M	“	“		
	Pershore – urban extensions	SWDP 19	“	£1.28 M	“	“		
	Pershore – small sites	SWDP 18	“	£0.17 M	“	“		
	Broadway	SWDP 23	“	£0.28 M	“	“		
	Fernhill Heath	SWDP 24	“	£0.26 M	“	“		
	Hartlebury	SWDP 23	“	£0.21 M	“	“		
	Honeybourne	SWDP 23	“	£0.21 M	“	“		
	Inkberrow	SWDP 23	“	£0.19 M	“	“		
	Offenham	SWDP 23	“	£0.17 M	“	“		
	Other Category 1 villages	SWDP 23	“	£0.25 M	“	“		
	Other Category 2 villages	SWDP 24	“	£0.61 M	“	“		
	Category 3 villages	SWDP 25	“	£0.37 M	“	“		
	Wychavon Windfall	SWDP 32	“	£2.30 M	“	“		
<b>Wychavon District - secondary</b>								
	Droitwich Copcut Lane	SWDP 10	“	£1.69 M	“	“		
	Droitwich – other sites	SWDP 9	“	£1.06 M	“	“		
	Evesham – urban extensions	SWDP 12	“	£2.02 M	“	“		
	Evesham – small sites	SWDP 11	“	£0.67 M	“	“		
	Pershore – urban extensions	SWDP 19	“	£1.37 M	“	“		
	Pershore – small sites	SWDP 18	“	£0.18 M	“	“		
	Broadway	SWDP 23	“	£0.30 M	“	“		

	Fernhill Heath	SWDP 24	“	£0.27 M	“	“		
	Hartlebury	SWDP 23	“	£0.23 M	“	“		
	Honeybourne	SWDP 23	“	£0.23 M	“	“		
	Inkberrow	SWDP 23	“	£0.21 M	“	“		
	Offenham	SWDP 23	“	£0.18 M	“	“		
	Other Category 1 villages	SWDP 23	“	£0.27 M	“	“		
	Other Category 2 villages	SWDP 24	“	£0.65 M	“	“		
	Category 3 villages	SWDP 25	“	£0.39 M	“	“		
	Wychavon Windfall	SWDP 32	“	£2.47 M	“	“		
Total cost for SWDP plan area for Primary				£28.48 M				
Total cost for SWDP plan area for Secondary				£29.72 M				
<b>Total</b>				<b>£58.20M</b>				
Further Education	[local authorities not involved in funding]							
Higher Education	[local authorities not involved in funding]							
<b>B. Health and Public Health</b>								
	[current fundamental changes in management of these services is such that the needs for and procurement of capital investment will not be clarified in time for SWDP submission]		Clinical Commissioning Groups, NHS Commissioning Board. County	tbc				
<b>C. Social Care</b>								
	[awaiting info from County]			tbc				

<b>D. Community Facilities</b>								
Libraries	[unlikely to be major new capital investment in near future following the opening of “The Hive” in summer 2012]		County	tbc				
Religious Buildings	[no information yet relevant to SWDP Infrastructure Planning]		tbc	tbc				
Community Centres	[Baker study proposed a ratio of facilities to population – but no specific proposals confirmed]		Developers, Various service providers. Local communities	tbc	Developers, Various service providers. Local communities. County			
Built Leisure Facilities	University of Worcester Sports Arena.	SWDP 6, 7 and 8 sites (notably 6/17, Grove Farm?)	University SE	£15 M	University SE Trustees of the Foundation for Sports and the Arts England Basketball England Badminton Private donations	2012-2013	Under construction 2012	
	New Swimming Pool,	SWDP 6,	SWC	£16 M	SE	tbc		

	Worcester	7 and 8 sites	SE Developers		SWC Developers			
	4 court sports hall (Worcester West)	SWDP 8/2	SWC Developers	£2.7 M	Developers	tbc		
	4 court sports hall (Worcester South)	SWDP 8/1	SWC Developers	£2.7 M	Developers	tbc		
	6 court sports hall (Worcester)	SWDP 6, 7 and 8 sites	SWC Developers	£4.1 M	Developers	tbc		
	5 court sports hall – indoor cricket (Wychavon)	SWDP 11 and 12	SWC Developers	£3.4 M	Developers	tbc		
	8 court sports hall - (Wychavon)	SWDP 9, 10 SWDP 11, 12 SWDP 18, 19	SWC Developers	£5.5 M	Developers	tbc		
	4 court sports hall - (Wychavon)	SWDP 9, 10 SWDP 11, 12 SWDP 18, 19	SWC Developers	£5.5 M	Developers	tbc		
	25m Swimming (teaching pool) Worcester West	SWDP 6, 7 and 8 sites	SWC SE Developers	£3.9 M	SE SWC Developers	tbc		
<b>E. Emergency Facilities</b>								
	Police Station for South Worcester	SWDP 8/1	WMC Developers	£1.63 M	WMC Developers	2012-2019		
	Police station for West	SWDP 8/2	WMC	£1.63 M	WMC	2012-2019		

	Worcester		Developers		Developers		
	Extension to Evesham Police Station	SWDP 11, 12	WMC Developers	£1.42 M	WMC Developers	2012-2019	
	Extension to Pershore Police Station	SWDP 18, 19	WMC Developers	£0.80 M	WMC Developers	2012-2019	
	New Police Posts at: <ul style="list-style-type: none"> <li>• Worcester (2)</li> <li>• Droitwich</li> <li>• Hartlebury</li> <li>• Newlands</li> </ul>	SWDP 6, 7, 8, 9, 10, 17 and 23 sites	WMC Developers	£0.80 M	WMC Developers	2012-2019	
	Evesham Fire Station improvements	SWDP 11, 12	H&W Fire and Rescue Service	£0.35 M	H&W Fire and Rescue Service, Developers	2012-2019	Other Fire Service requirements include new appliances – not costed as “Infrastructure”
	Ambulance “Hub” Worcester	SWDP 6,7 and 8 sites	West Midlands Ambulance Service	£0.40 M	WM Ambulance Service, Developers	2012-2019	
<b>F. Other Social Infrastructure</b>							
	[e.g. Justice, Crematoria, Burial services, Employment Training]			tbc			
<b>GREEN INFRASTRUCTURE</b>							
	Sub-Regional facility: “Worcester/ Droitwich Park” (based on the canal ring)	SWDP 6, 7, 8, 9 and 10 sites and various rural sites	County, Developers, SWC, NE, EA, FC, WWT, BW	tbc	County, Developers, SWC, NE, EA, FC, WWT, BW	tbc	Concept only at this stage
	Sub-regional facility:	SWDP 8/2	County,	tbc	County,	tbc	Concept only at this

	“Hallow Riverside Park” (includes sites on both side of the River Severn between Grimley and Northwick)		Developers, SWC, NE, EA, FC, WWT		Developers, SWC, NE, EA, FC, WWT		stage	
	Sub-regional facility: “Sandford (Clifton) Water Park” (south of Draycott and extending south to base of Knight Hill)	SWDP 8/1 SWDP 21, SWDP 23 (Kempsey )	County, Developers, SWC, NE, EA, FC, WWT, Minerals operators	tbc	County, Developers, SWC, NE, EA, FC, WWT, Minerals operators (Landfill Community Fund)	tbc	Concept only at this stage	
	Worcester South football pitch (6.4 ha)	SWDP 8/1	SWC, SE, Developers	(See note below for total sports provision figure)	SWC Developers	2016-2021		
	Worcester West football pitch (6.5 ha)	SWDP 8/2	SWC, SE, Developers	“	SWC Developers	2016-2021		
	Worcester East football pitch (6.9 ha)	SWDP 8/3	SWC, SE, Developers	“	SWC Developers	2016-2021		
	Worcester South - 2 ha for cricket	SWDP 8/1	SWC, SE, Developers	“	SWC Developers	2021-2026		
	Worcester West - 4 ha for cricket	SWDP 8/2	SWC, SE, Developers	“	SWC Developers	2016-2021		
	Worcester south – 7 ha for rugby	SWDP 8/1	SWC, SE, Developers	“	SWC Developers	2016-2021		

	Malvern Town east - 6 ha for football	SWDP 17	SWC, SE, Developers	“	SWC Developers	2021-2026		
	Malvern Town East (or Newland) - 2 ha for cricket	SWDP 17	SWC, SE, Developers	“	SWC Developers	2016-2021 or 2021-2026		
	Evesham - 6 ha for football	SWDP 12	SWC, SE, Developers	“	SWC Developers	2016-2026		
	Evesham north - 6 ha for football	SWDP 12	SWC, SE, Developers	“	SWC Developers	2011-2016		
	Evesham south or south-west 4 ha for cricket	SWDP 11 and 12	SWC, SE, Developers	“	SWC Developers	2011-2016 or 2026		
	Evesham north - 2 ha for cricket	SWDP 12	SWC, SE, Developers	“	SWC Developers	2011-2016		
	Droitwich – Copcut Lane or Pulley Lane – 2 ha for cricket.	SDWP 10	SWC, SE, Developers	“	SWC Developers	2012-2016		
	<b>Total for sports facilities listed above =</b>				<b>£9.55 M</b>			

South Worcestershire Councils 20<sup>th</sup> June 2012