Worcestershire Local Transport Body

WLTB Local Non Major Scheme Business Case

Worcester Six – Off-site Infrastructure Enabling Works

September 2015

STRATEGIC CASE Date 10th September 2015 Scheme Name: Worcester Six – Off-site Infrastructure Enabling Works

Case for Change

Summary of Strategic Case

The aims of the Worcester Six Off-site Infrastructure Enabling Works are to facilitate the delivery of the Worcester Six development and to remove an existing traffic bottleneck. Worcester Six is one of four key Game Changer employment sites in the county. It has a net developable area of 30 hectares (73 acres) and is located immediately east of M5 motorway close to Junction 6. The development has planning consent for 140,000 sq m (1.5 million sq ft) of B1, B2 (65%) and B8 (35%) development - approved in March 2015. It is a strategically important scheme for Worcestershire and recognised as a top priority for Worcestershire Local Enterprise Partnership (LEP) in its Strategic Economic Plan (SEP).

In July 2014, central government announced a Local Growth Deal with Worcestershire LEP which committed £5 million capital investment to Worcester Six off-site infrastructure costs. The works commenced in June 2015. This submission is seeking retrospective approval to the Local Growth Fund (LGF) funding for the scheme.

The proposed package of highway and services works has been identified following a previous review of options. The project fits with local transport and economic strategies, as well as national policies. It will provide improved local and strategic access.

The project is consistent with the priorities outlined in Worcestershire LEP's SEP, which includes ensuring that Worcestershire is a world class business location with suitable sites and premises and appropriate infrastructure. It is also consistent with the County Council's Corporate Plan, which promotes infrastructure development to support job creation, Gross Value Added (GVA) growth and inward investment.

The forecast economic impacts of the project are over 5,500 gross on-site new full-time equivalent jobs and £290 million of gross GVA for the local economy once the Worcester Six development is complete.

Objectives

Objective 1	To improve access and address a traffic bottleneck
Measure of Success	Improve accessibility and reduced congestion
Timescale	March 2016 -
Indicators	Traffic movements/data

Dependencies, Risks, Constraints	Linked to Highway England's works to Junction 6
Objective 2	To facilitate the development of the Worcester Six site
Measure of Success	Private sector investment and additional economic activity
Timescale	March 2016 -
Indicators	Amount of development floorspace by use, number of jobs accommodated and GVA generated
Dependencies, Risks, Constraints	Linked to delivery of the Spetchley Estate and Stoford development scheme

Problems	Scheme Objective	Organisation's Objective	Contribution of Scheme Proposal
1 Transport bottleneck	To improve access and address a traffic bottleneck	To improve transport accessibility and reliability	Will help deliver SEP and transport policies
2 Need for enabling infrastructure	To facilitate the development of the Worcester Six site	To promote economic growth	Will help deliver SEP

Stakeholders

Worcestershire County Council will be responsible for the delivery of the project, working in partnership with Wychavon District Council as the Planning Authority, Worcester City Council and Worcestershire LEP. The Council has also worked with Highways England to ensure that the project aligns with improvements to Junction 6 of the M5, and with Spetchley Estates and Stoford, the site landowner and developer respectively. The Worcester Six Phase 1 development has recently secured planning consent. The key stakeholders are fully supportive of the scheme.

Scheme Name: Worcester Six – Off-site Infrastructure Enabling Works Date 10th September 2015

Economic Summary: (Illustrative analysis)		Value for Money Category
PV Benefits (£m)	£17,016	See DfT guidance:
PV Costs (£m)	£7,610	http://assets.dft.gov.uk/publications/value- for-money-assessments-
BCR	2.23	guidance/vfmguidance.pdf

Assessment Approach and Assumptions

The economic case draws on the modelling undertaken as part of the previous (October 2013) assessment of the M5 Junction 6 to Plough Lane Roundabout Corridor Improvements, which was undertaken using the Worcester Transport Model developed based on 2008 survey data and in line with guidelines, procedures and processes contained within the Department for Transports WebTAG documentation. This model has been used extensively to assess the Worcester Transport Strategy (WTS) and has provided the evidence base for Major Scheme Business Case (MSBC) funding submissions which culminated in the granting of Full Approval for the package and the award of funding from Department for Transport (DfT) in January 2013. The model was also used to inform the Outline Major Scheme Bid to the Worcestershire LTB for the Worcestershire Parkway and A4440 Southern Link Road Dualling schemes.

Key Risks, Sensitivities and Uncertainties

The scheme has commenced and therefore the major risks have now been transferred to the term contractor and other providers. At this stage the risks are considered to be very low. Previous sensitivity work indicated that the BCR of an earlier very similar scheme would reduce from 2.38 to 2.22 with the combined effects of potential downside scenarios.

Scenario	Travel Time	VOC	Indirect Tax	Total	BCR
Core Scenario					
Low Growth					

Appraisal Summary Table

Attach Appraisal Summary Table and all Worksheets.

Impacts	Positive Impacts not Included in BCR	Scale of Impact
Wider economic benefits	Over 5,500 gross jobs and £290	Large/high beneficial

	million per annum in GVA	
Security	Improved security	Slight beneficial
Access to services	Enhanced access to services	Moderate beneficial
Further Comments:		

Impacts	Negative Impacts not Included in BCR	Scale of Impact
Landscape/townscape	Some loss of hedgerow/trees	Slight adverse
Biodiversity	Some loss of habitat	Slight adverse

Further Comments:

Delivery of	Houses	Jobs / Employment	Retail Floor Space
Development		Floor Space	
Development delivered / unlocked by scheme		5,500 jobs 175,000 sq m	
Development that scheme would contribute to delivering			

Value for Money Statement

Conclusion from value-for-money assessment and VfM category.

Overall the scheme is assessed as providing very good value for money.

FINANCIAL CA	SE									
Scheme Name:	Worcester Six – 0 Works	Off-site Infrastructu	re Enabling	Date: 10 September 2015						
			Summai	ry Financia	ls					
Overall Cost of Scheme	£5.13 m	LTB Contribution	£ 5.0 m Available Budget £		£ 5.0 m		Contingent Liabilities		£ m	
			Sche	me Costs						
Main Expenditur separately) (£m)	re Items (include p	oject income	Previous Years	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Scheme preparation management	n costs including des	ign and project								
Land and compensa	ation including Part	l claims								
Works construction optimism bias)	n including stats cost	s (including risk and	£0.005m	£4.683m	£0.441m					£5.129 m
Site supervision and	d other external cost	S								
TOTAL COST			£0.005m	£4.683m	£0.441m					£5.129 m
			Budgetary I	mpact Sun	ımary					
Forecast Net Bud	get profile (£m)		Previous years	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Total Required Bu	dget		£0.005m	£4.683m	£0.441m					£5.129 m
Total Local Contri	bution (Secured)		£0.005m		£0.124m					£0.129m

Total Local Contribution (Unsecured)							
Total LTB Requirement	£4.0	583m	£0.317m				£5.0m
Antio	cipated Funding & Fin	ancing	Arranger	nents			1
It is proposed that the scheme is funded from two source	es – LGF (97.5%) and V	orcest	tershire Co	ounty Cou	ncil (2.5)	%).	
Financial Risks							
The key financial risks have now been transferred to the contractors who are currently implementing the scheme. The main funding risk is associated with the approval of the LGF support, which is the subject of this Business Case.							
Additional Notes							

Scheme Name: Worcester Six – Off-site Infrastructure Enabling Works Introduction The key deliverable are the implementation of the enabling infrastructure works and then the subsequent delivery of the Worcester Six development. Capability, Skills and Evidence of Previous Project Delivery Worcestershire County Council has extensive experience of successfully implementing projects of this nature. It has appointed a well-known project manager (CH2M Hill) and contractor (Griffiths). Procurement Strategy & Sourcing Options The County Council has used the Term Civil Engineering Contract to appoint the contractors for this

Financing Arrangements and Payment Mechanisms

The Term Civil Engineering Contract has an incentivised cost control incorporated within the contract, which is designed to control cost over-runs whilst not encouraging high target prices.

Risk Allocation and Transfer

The contracting arrangement has allowed for risk transfer to the contractor.

scheme.

MANAGEMENT CASE

Scheme Name: Worcester Six – Off-site

Infrastructure Enabling Works

Date: 10th September 2015

Introduction

Worcestershire County Council has followed its established procedures to develop, assess and procure the Worcester Six Off-site Infrastructure Enabling Works scheme.

Governance, Organisational Structure & Roles

Senior Responsible owner: Nigel Hudson

Project Manager: Claire Brown

The governance and delivery arrangements for the project are as follows:

- Worcester Six Scheme has project board comprising senior executive representation from Worcestershire County Council, Worcestershire LEP, Worcester City Council, Wychavon District Council, Spetchley Estate and Stoford (developer);
- This Programme Board meets bi-monthly and receives highlight report/update on off-site highways works as part of main business agenda;
- Worcestershire County Council BEC Directorate (Business, Environment and Community) has a Transport Programme Board which meets monthly and oversees full range of transport schemes underway in County, including Worcester Six off-site works; and
- there is a Worcestershire County Council Project Manager in place to manage the construction project.

The Senior Responsible Officer (SRO) for the scheme is Nigel Hudson and the project manager is Claire Brown.

Are governance arrangements in place? Yes

Risk Management Strategy

Worcestershire County Council has established robust Risk Management processes, which comprise::

- the Worcester Six scheme has a central risks and issues log maintained by the WCC Project Manager, which is regularly reviewed and updated with the project team and work-stream leads to ensure appropriate risk management/mitigation measures are implemented; and
- high impact/high likelihood risks (rated red on a traffic light system) from individual workstreams feed into the central risks log and are escalated as necessary to the Project Sponsor, and ultimately Worcester Six Project Board as required. Risks retained by the Council have identified

risk owners to manage the mitigation strategies.

The key risks have now been transferred to the contractor, who is currently implementing the works, with the main exception being the funding risk associated with LGF support.

Has a risk management strategy/plan been completed? Yes

Have key risks been identified and managed? Yes

Project Plan

The key construction milestones for this project are:

- Start on site 8 June 2015
- Project completion March 2016

Communications and Stakeholder Management

Identify the key milestones and dependencies, including all approvals processes that will be required. Assess the resources required to deliver the project.

Attach details of any Consultation, Consultation Report, Stakeholder Analysis and Communications Strategy / Plan.

Assurance & Approvals Plan

The scheme has been subject to appropriate assurance processes as required by the County Council.

Key Issues for Implementation

Scheme implementation is currently underway and no significant issues are envisaged.

Contract Management

Worcestershire County Council is currently project managing the works contract and monitoring performance.

Benefits Realisation Plan

Monitoring arrangements will be established to assess the extent to which the transport and wider economic benefits of the scheme are realised. In particular, progress in delivering the Worcester Six development scheme will be monitored. This will include tracking performance in relation to the floorspace developed by use and the employment accommodated.

Monitoring and Evaluation

Summarise outline arrangements for monitoring and evaluating the intervention.

Attach Monitoring and Evaluation Plan.

Contingency Plan

Scheme implementation is now well progressed and therefore delays are not envisaged. If there is an

over-run the works would be completed as soon as is possible.

Scheme Name	Worcester Six – Off-site Infrastructure Enabling Works
Promoter	Worcestershire County Council

1. Headline description:

The Worcester Six Off-site Infrastructure Enabling Works scheme is a key priority for Worcestershire County Council, the Worcestershire LEP, Members of Parliament, Wychavon District Council and Worcester City Council . In conjunction with improvements at Junction 6 of the M5 Motorway (by Highways England) this scheme will address a bottleneck to economic growth. It will open up access to Worcester Six (formerly Worcester Technology Park), a strategic employment site within South Worcestershire, the delivery of which is a priority for key partners, including Worcestershire LEP. The proposed scheme will relieve traffic congestion, provide improved access, promote economic growth and can be delivered during 2015/16.

In July 2014, central government announced a Local Growth Deal with Worcestershire LEP, which committed £5 million capital investment to the Worcester Six off-site infrastructure enabling costs.

2. **Geographical area:** Please append a map showing the location (and route) of the proposed scheme, existing and committed transport infrastructure and services and other points of particular relevance and interest to the bid e.g. locations of existing and planned housing, employment and commercial development, and key constraints, including physical and environmental.

The scheme is located along the A4538 to the east of Worcester City and the M5 motorway. The A4538 links directly to Junction 6 of the M5 and forms an essential part of the local highway network. The 30 hectare (73 acre, net developable area) Worcester Six site is to the west of the scheme situated in a triangle of land between the A4538, the M5 motorway to the west and the B4638 to the south. The Worcester Six scheme is one of the four Game Changer sites identified in the Worcestershire LEP Strategic Economic Plan (SEP). The site is particularly well-placed to accommodate technology rich businesses including in the advanced manufacturing growth sector, which is one of the key growth sector identified in the SEP. The location of Worcester Six means that as well as enhancing economic growth it can also assist the areas of relative income deprivation that exist within the City of Worcester district, through providing increased opportunity to access employment locally.

The proposed layout of the Worcester Six development is shown below:



3. The Strategic Case: Please append supporting documents and evidence as required.

3.1 Description of problems to be addressed: (Quantified wherever possible)

This project will deliver essential improvements to the existing highway network, reducing journey times and costs as well as the provision of services (electricity, gas, waste and broadband) to support the delivery of the Worcester Six scheme, which is a strategic employment development included within the South Worcestershire Development Plan (SWDP). The project will deal with an existing bottleneck and create the opportunity to support future sustainable growth of Worcester and South Worcestershire. It will also support the market-led delivery of substantial and sustainable business environment for companies and organisations capable of driving the economic growth of Worcestershire and the wider economy. The performance of the transport network and specifically the local highway network has been viewed as a constraint on the delivery of the proposed employment development at the Worcester Six site. Without the public sector working with the private sector to remove this barrier the development is very unlikely to come forward.

Lying at an important gateway to Worcester, close to the Strategic Road Network, Worcester Six will target technology rich manufacturing and other companies. It has planning permission for 140,000 sq m (1.5 million sq ft) of B1, B2 (65%) and B8 (35%) development in Phase 1. Once Phase 2 is included the total scheme will comprise 175,000 sq m (1.9 million sq ft) of development. The objectives of the Worcester Six scheme are to:

- create a gateway employment site of strategic significance within a campus style environment;
- target technology rich manufacturing, research & development and office activities;

- attract investment, in particular in the short-term, which will generate a substantial number of new jobs; and
- contribute to the sustainable development and growth of Worcestershire though the quality of access, design, and environmental amenity provided by the scheme.

Worcester Six has the potential to be one of the region's flagship developments and is one of the best undeveloped sites between Birmingham and Bristol.

Economic Context

Worcestershire is located at the heart of the UK with excellent connections to markets and employment opportunities nationally and abroad via road (M5, M42 and M50 motorways and strategically important interurban highway links), rail (which will be improved following delivery of Worcestershire Parkway) and air (Birmingham International, East Midlands and Bristol).

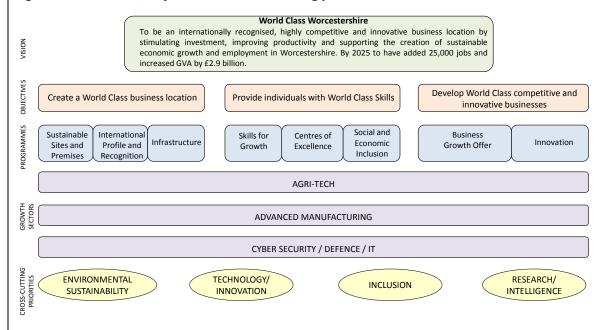
Despite strong long-term growth rates in Gross Value Added (GVA) (1997 – 2011) outside of the Greater South East, the County has not realised its full potential. Key parts of the Worcestershire economy are still regarded as weak, with a significant proportion of employment within the public sector, which is and will continue to be subject to contraction. There is a clear need to stimulate economic growth and activity through improving conditions to support new and expanded businesses. There are other issues that need to be addressed, such as comparatively low productivity levels.

The Worcester Six development will help to addresses these issues and enable Worcestershire to realise its full economic potential.

Worcestershire LEP priorities

The Worcestershire LEP Strategic Economic Plan (SEP) sets out an ambitious vision to grow the local economy by 2025 by over 25,000 jobs and to increase GVA by £2.9 billion (see Figure 1). Whilst significant employment growth is forecast, a particular focus of the Plan is on securing growth in GVA per worker and average annual earnings.

Figure 1: SEP's vision, objectives and cross-cutting priorities

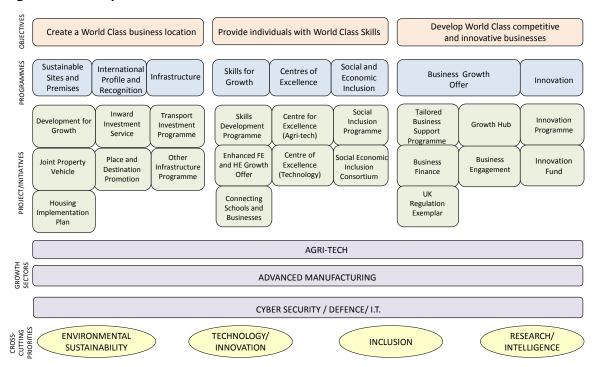


The SEP provides the overarching framework for the European Structural and Investment (ESI) Funds Strategy. Over the period 2014 to 2020, Worcestershire has an allocation of European Funding of £60.5 million (€70.9 million).

Worcestershire's sector strengths reflect local specialisations across the county and include advanced manufacturing, cyber security/defence/IT and agri-tech¹. The destination and visitor economy will also be an important source of jobs growth in some parts of the county, in particular in areas where accessible jobs are needed. In addition, the potential for Worcester to grow as a centre of high value added professional and business services is a major opportunity. These sectors will form an important focus for growth.

A comprehensive programme of actions is proposed to achieve the vision (see Figure 2). Each of the three objectives will be delivered through integrated programme areas, which comprise prioritised projects and initiatives.

Figure 2: SEP Implementation Plan



The availability of suitable sites and premises is essential to ensure that firms can expand and inward investment can be attracted. A shortfall of such provision has been identified as a constraint on the recent development of the Worcestershire economy.

Therefore, the Game Changer sites programme forms a key component of the SEP. The Worcester Six development forms part of one of four Game Changer sites identified because of their regional significance, scale, economic impact potential and deliverability.

Rationale for Intervention

The rationale for public sector intervention will normally involve justifying an activity in terms of its expected impact on economic efficiency, or in terms of stated Government policy objectives (such as social objectives), or some combination of the two.

Improving the economic performance in the Worcester and wider South Worcestershire area will involve using limited resources efficiently in order to deliver the maximum benefits to local communities. Currently, the private sector is delivering sub-optimal benefits to the local economy and local communities because of 'market failures', which result in the failure of resources to be used

For the purposes of this Strategic Economic Plan, the definition of the 'agri-tech' sector is the supply chain spanning seeds, agro-chemicals, machinery, engineering, skills and other inputs including green energy, across arable and livestock agriculture, forestry horticulture, food processing, packaging and retailing.

efficiently. The correction of market failures leads to improvements in efficiencies.

There are a number of market failures which provide a strong rationale for the provision of support to the development of Worcester Six:

Positive externalities – a cause of market failure is the existence of positive externalities, specifically external benefits that would not be fully retained by the private sector. The project is expected to result in a number of positive externalities, such as the additional benefits derived from increased competitiveness, as well as local multiplier effects. Furthermore, benefits to the area are also expected to arise from making it nationally and internationally more attractive as a business location, as well as from strengthening the local economic base.

These benefits would not occur in the absence of the development. They would not be reflected in market prices, leading to 'under consumption'. The private sector would not take account of these benefits when making its investment decisions.

Asymmetric risk and uncertainty – uncertainty amongst developers concerning the viability of investing where there are high off-site infrastructure costs can constrain private sector activity. These costs, together with the associated risks and imperfect information, mean that speculative developments within such areas is unlikely to take place without public sector investment and support.

The project will seek to reduce risk and uncertainty by removing current highway capacity and service infrastructure constraints while enabling investment in Worcester Six at a time when market led development finance is still relatively difficult to secure due to ongoing problems in the capital markets.

Demonstration effects – the project is expected to demonstrate the substantial potential for business growth in the Worcestershire area by delivering public sector support for the related development activity.

Furthermore, the project will help to raise confidence and aspirations within the local area, stimulating other nearby landowners to invest within their own sites, further enhancing the image and vitality of the area. This is expected to contribute towards attracting greater levels of inward investment, raising the profile and aspiration of Worcestershire.

There is, therefore, a strong rationale for the development of Worcester Six, and hence the investment in the improvements to the highway network, including the M5J6 to Plough Lane Corridor Improvements, and service infrastructure enablement.

Barriers to Growth

Traffic congestion within the Worcester area and adjacent to the M5 resulting from the lack of capacity on the highways network acts as a key constraint to new development. In response, this project seeks to implement the improvements to A4538 Pershore Lane to remove existing constraints, unlock development and accelerate the growth opportunity for the County. The enabling and delivery of the Worcester.

Worcester Six remains a strategic priority to Local and County Authorities and is also a key strategic project for the Worcestershire LEP within the SEP.

Delivery of the project as public highway and servicing works requires significant capital investment. The significant cost of developing the adjoining Worcester Six development and the limitations of the prevailing market financing models mean that these off site transport measures cannot be delivered without public sector support. This project will enable the early phase of development of Worcester Six so adding certainty and improved programme for delivery of the full development.

Unless the enabling infrastructure is addressed by the public sector, the Worcester Six development will not progress. The lack of development, investment and employment opportunities will continue to act as a key barrier for the County's economic potential.

Proposed Solution

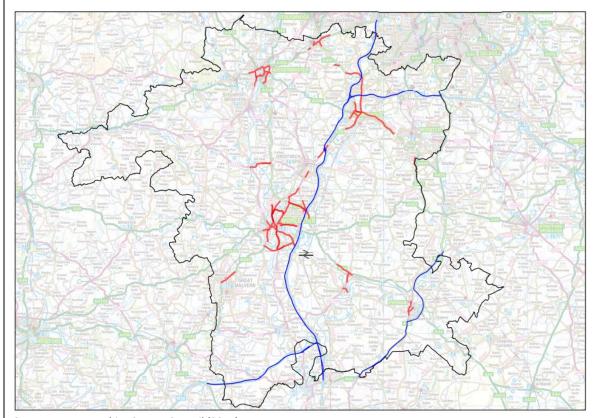
Implementation of this off-site highway and servicing infrastructure scheme will respond to the problem of an existing transport related bottleneck, demonstrate proactive engagement from the public sector and so create the condition to lever in-market investment to the adjoining Worcester Six development.

3.2 The context for the development of the package or scheme: (Including whether it forms a part of a wider transport strategy and an analysis of the existing and forecast transport problems, e.g. poor access to specific locations/markets, increasing journey times and costs and growing variability in journey times etc.)

Place

The county is well-connected to other parts of the UK, particularly through the Highways England managed Strategic Road Network (SRN) including the M5, M42 and M50 motorways and the A46 Trunk Road, which run through the county and provide good access to London, Birmingham (and the North), and to Wales and the South West. However, access to/from the SRN is constrained in parts of the county due to capacity constraints on the local highway network, particularly around urban areas, with Worcester and Bromsgrove having particularly acute problems. Figure 3 shows the significant congestion points on the current highway network.

Figure 3: Major areas of congestion



Source: Worcestershire County Council (2014)

The lack of sites and premises has significantly constrained growth and led to lost investment. However, four initial Game Changer sites have been identified (Malvern Hills Science Park Expansion, Redditch Eastern Gateway, South Kidderminster Enterprise Park and Worcester Growth Corridor, which includes the Worcester Six development) and are being progressed for development. The development of the priority Game Changer sites is, however, dependent on specific off-site infrastructure to unlock them and wider growth opportunities.

A summary of Worcestershire's main strengths, weaknesses, opportunities and threats, in relation to Place, is presented in Table 1.

Table 1: Place Strengths **Opportunities** Connectivity - road, rail and air Key strategic sites (which will be brought forward Attractive living environment - relatively high life through the Game Changer programme) satisfaction Worcester city – retail, office and leisure Central strategic location to key markets and New/improved infrastructure – transport, digital distribution channels – rail, air and deep water and utilities Links to HS2 and Birmingham Airport (UK Central), Important visitor destinations - history and as well as Heathrow heritage Improved rail connectivity **Defined employment locations** Motorway corridors and junctions as drivers of economic growth Weaknesses **Threats** Current lack of strategic sites (but Game Changer sites will address once infrastructure constraints Longer term supply of readily available strategic are overcome) and other employment sites/premises (beyond Affordability of housing in some areas initial Game Changer sites) Some access pinch points to the strategic Failure to deliver housing transport networks - which are constraining Vulnerability of key infrastructure and resources economic growth to flooding and climate change Limited superfast broadband take-up

People

The population of Worcestershire is estimated at around 569,000. The local authority with the most residents was Wychavon with 117,700, whilst Malvern Hills had the lowest number of residents with 75,000. Notably, population growth has been relatively modest over the past decade.

Generally, Worcestershire benefits from a relatively well qualified workforce, with around a third of the population aged 16-64 qualified to National Vocational Qualification (NVQ) Level 4 or higher and around half of the population qualified to NVQ Level 3 or above. The proportion of the population with no qualification is just over one in ten.

In terms of earnings, the median earnings for people who live in Worcestershire are 12% higher than those for people who work in Worcestershire. This difference is explained by the net out-commuting from Worcestershire to other places, particularly amongst those employed in higher paid occupations. Worryingly, this gap has widened further in recent years.

In terms of the labour market performance, Worcestershire performs well on a number of variables. For example, it has a high proportion of residents employed in higher order occupations and benefits from a relatively low unemployment rate (and thus a high employment rate). However, whilst unemployment is generally low, young people and the long-term unemployed represent an increasing share of the unemployed. Unemployment rates also vary across the county.

In terms of wider deprivation, as measured by the Index for Multiple Deprivation (IMD), the higher incidences of this are concentrated in pockets in the urban areas of Worcester, Kidderminster, Redditch and Malvern (Pickersleigh).

A summary of Worcestershire's main strengths, weaknesses, opportunities and threats, in relation to People, is set out in Table 2.

Table 2: People

_		
	Strengths Low unemployment/ high employment rate Relatively highly skilled workers/ higher order occupations Strong school age educational attainment	Opportunities Comprehensive HE/ FE offer linked to business needs Mobilise potential of older workers Retention of graduates/young people Reduced out-commuting Improved business-school linkages
	Weaknesses Skills shortages, particularly in key growth sectors Pockets of deprivation Increasing youth/ long-term unemployment Net outflow of commuters – with consequential difference in residential and workplace-based incomes	Threats • Ageing population – increased dependency, but also a source of labour • Supply of labour – forecast decline in 16-64 population • Out-migration of younger cohorts

Business

Worcestershire's performance in terms of GVA per head and per worker has been consistently below the national average in recent years², although this can to a considerable extent be explained by the dominant effect London and some surrounding counties have on the national figures. Indeed, Worcestershire has had one of the highest long-term (1997-2011) growth rates in Gross Value Added (GVA) outside the Greater South East (although this growth slowed down in the period 2006-2011, relative to other LEPs³).

Notwithstanding this recent relative decline in GVA growth, the Worcestershire economy has substantial potential to return to a higher growth rate and contribute to national economic growth. For example, Worcestershire has particular sector strengths in high technology growth sectors such as advanced manufacturing (ranked 3rd out of all LEPs), cyber security/defence/IT (a nationally recognised cluster centred in and around Malvern) and agri-tech (it accounts for 20% of horticulture output in the West Midlands). However, these sectors currently face a number of challenges, including access to finance, energy/resource efficiency, skills development, innovation and R&D support, many of which are a result of information and innovation related market failures⁴. It will be important to address such market failures and challenges in order to ensure that these growth sectors fulfil their potential and support growth in Worcestershire and beyond.

The county's economy is characterised by a large number of SMEs, many of which are small and have been trading for a relatively long time. In some cases these SMEs will be 'lifestyle businesses' with limited aspirations for growth, but many do want to expand. However, the entrepreneurial spirit of Worcestershire has weakened in recent years, with relatively fewer start-ups and limited enterprise churn.

Worcestershire has had limited success in terms of attracting inward investment historically, despite a number of locational advantages. Recent growth and job creation has principally come from the indigenous business base, which is, as noted, primarily made up of SMEs. In part, the past performance reflects what has been identified as the under-developed national and international profile of the county. However, Worcestershire's location and assets mean that it has significant potential to attract mobile investment. Furthermore, according to the latest figures released by UK Trade and Investment (UKTI) Worcestershire has been performing much better - 1,062 jobs were created and another 30 safeguarded in the County due to foreign investment during 2014/5 compared with the previous year's

² For example, it is ranked 29th out of the 39 LEPs in terms of GVA per worker (2011) and 28th in terms of GVA per head (2011).

Worcestershire LEP is ranked 34th out of 39 LEPs in terms of average annual GVA growth (%) between 2006 -2011.

See, for example, the Worcestershire Cyber Security Strategy (2012), Getting to the Heart of Horticulture (2011) and the Manufacturing Survey (2013)

(2013/4) 177 jobs – an increase of 500%.

Table 3 presents a summary of Worcestershire's main strengths, weaknesses, opportunities and threats, in relation to Business.

Table 3: Business Strengths **Opportunities** Large SME base Building on the high levels of entrepreneurship 3rd highest share of employment in high/mediumand developing the existing base of SMEs high technology sectors Development of key growth sectors and Key growth sectors – advanced manufacturing, businesses through targeted programmes (e.g. agri-tech, cyber security/defence/IT business support, supply chains, skills strategy High patent registration rate delivery) Strong long-term growth in GVA Cross-sector efficiency - ICT/ broadband, renewable energy/energy, water and waste efficiency High potential for internationalisation Major economic and demographic growth in Birmingham and Solihull Weaknesses **Threats** Below average GVA per head/productivity Lack of access to finance Under-performance of large employment sectors Relatively low levels of inward investment Limited innovation and research activity Skills shortages Spatial variation in performance – economic Lack of centres of excellence Lack of business-HEI collaboration divergence across the county Major economic and demographic growth in Underdeveloped national/international profile Lack of high quality hotel and conference Birmingham and Solihull (although this also represents a significant opportunity) provision Increasing energy, water and waste resource costs

3.3 Scheme description:

Scope of the Project

The scope of the project comprises improvements to the existing network and upgrading services to remove a bottleneck to economic growth and facilitate development of a planned strategic employment site. Through these works, the potential for more than 175,000 sq m of workspace will be unlocked on the proposed Worcester Six development.

It should be noted that additional improvements at Junction 6 of the M5 motorway are being developed by Highways England (working in partnership with Worcestershire County Council) and are therefore not included in the scope of the works submitted for funding this bid.

3.4 Options Considered: (This should include the option development and sifting process and the results of such assessment).

A high level assessment process was previously completed for different options that could address the barriers to congestion and economic objectives. This work identified at a high level that the impact of alternative, non-highway only, improvements to the transport network (i.e. bus, cycle and walk) would, on their own, fail to deliver the outcomes, and in particular those relating to economic growth, that could be achieved from the proposed highway improvement scheme.

The level of mode shift required to generate significant congestion relief on the Pershore Lane could not be achieved with walk, cycle and public transport measures given the location of the scheme and associated development trip attractions/generators and would not, on their own, provide the level of accessibility to unlock new employment sites and create new jobs in Worcester Six. The non-highway only option of improving bus, walk and cycle infrastructure and services was, therefore, discounted. It should be noted, however, that such measures will be required to

maximise the use of walk, cycle and passenger transport and ensure that the development site has a high level of accessibility by all modes.

A further advantage of the proposed scheme is the improved access that this will provide to the Worcestershire Parkway station scheme which is currently being developed by Worcestershire County Council in conjunction with the rail industry (including Network Rail and Train Operating Companies). This scheme will improve Inter City rail access between Worcestershire and destinations served by the Worcester – London (Cotswold) Line and the Derby – Bristol (Cross-Country) Line, offering an alternative to the car for journeys to key areas such as London, Heathrow Airport, Oxford, Reading, the Thames Valley, Bristol and Cardiff. This will have benefits in terms of the Strategic Road Network and the local (Worcestershire) network in addition to supporting economic growth.

The performance of an option to retain the existing road layout (providing a simple access into Worcester Six) was tested as part of the assessment of the proposed scheme. This option performed poorly and failed to address existing congestion resulting in a further reduction of journey time reliability. As such this option was discounted.

3.5 Expected benefits / outcomes: (*Drawn from the economic and financial assessment*)

The proposed highway improvements and servicing infrastructure will unlock the full Worcester Six site by removing a direct development barrier. Therefore, the employment and GVA outputs achieved as a result of the Worcester Six development reflect the economic impacts resulting from the scheme. These impacts can be split into the construction and operational stages.

This direct impact is articulated in the form of the following affects:

- Construction based GVA and employment outputs, as a result of the £5.13m construction expenditure of the proposed scheme proposals. This is estimated at £1.75m of GVA and some 10 construction based gross new ten-year equivalent jobs in 2015/16.
- Operational GVA and employment outputs, as a result of the 175,360 sq m of employment floorspace delivered on the site: this is estimated as 5,543 gross new full-time equivalent jobs from a range of manufacturing, value adding services and distribution sectors (between 2016 and 2026) and 3,808 net additional jobs after allowing for leakage, displacement, deadweight and multiplier effects. This would result in gross GVA per annum of £290 million for the local economy.

In summary, the direct economic impacts of the proposed scheme are:

- 5,543 gross on-site new full-time equivalent jobs; and
- £290 million of gross GVA for the local economy.

Wider Regeneration Benefits

The GVA and employment outputs resulting from provision of the highway improvement scheme will go some way to meeting the economic targets outlined in the Worcestershire LEP, which are to:

- create 25,000 jobs in Worcestershire by 2025; and
- increased GVA by 2025 by over £2.9 billion.

The improvements will also support the delivery of wider proposals identified in the SWDP which states that the key challenges facing the area in planning for the future are:

- Job creation to promote economic prosperity;
- Housing provision and addressing a crucial need for affordable housing; and

• Ensuring adequate infrastructure, particularly transport infrastructure.

It is clear that the unlocking of the employment opportunities associated with Worcester Six has the potential to provide benefits to the areas within the City of Worcester district boundary that are ranked within the 20% most deprived across England in terms of income levels

The proposed scheme is not located within an Air Quality Management Area (AQMA). The impact of highway improvement schemes on local air quality are determined by changes in traffic and the subsequent change in NOx and PM10 emissions. Examination of the available traffic data indicates that the level of change in traffic flows is below the screening threshold for air quality assessment as defined in DMRB and would lead to a negligible impact on air quality.

There are no watercourses in the area directly affected by the proposed scheme.

Overall, the environmental issues on biodiversity can be mitigated without significant measures and cost, and at worst slight adverse impacts are expected from the scheme.

3.6 Project Scope:

The project scope comprises:

- highway improvements along the A4538 Pershore Lane;
- an upgrade of Plough Lane Roundabout and approaches;
- access to the proposed Worcester Six; and
- provision of electrical, gas, water and broadband fibre network services.

Throughout the lifecycle of the project, Worcestershire County Council in partnership with the Design Consultant and Term Civil Engineering Contract (TCEC) contractor (through Early Contractor Involvement) have sought opportunities to value engineer the scheme. The detailed design is complete and construction of the scheme commenced in June 2015, therefore, at this stage of the project, there is little further scope for value engineering. This said, the Delivery Team will continue to remain vigilant for value engineering opportunities throughout the on-going construction process. These opportunities may include:

- reducing costs associated with drainage works by co-ordination of activity with early onsite earth works activity; and
- reducing earthworks costs by giving detailed consideration to the reuse of surplus material on site to avoid the costs associated with disposal.

3.7 Related Activities:

The implementation and development of the proposed Worcester Six development is a related activity. This development is of strategic importance to Worcestershire County Council, the South Worcestershire local Planning Authorities (Worcester City, Wychavon District and Malvern Hills District), the Worcestershire LEP and other key stakeholders and delivery partners. Phase 1 of the proposed development (for 142,000 sq m of floorspace) has planning permission and the land owner, Spetchley Estate, is currently in negotiations with a number of developers. A preferred developer (Stoford) has been appointed by Spetchley Estate in August 2014.

3.8 Consequences of funding not being secured: (Quantified wherever possible)

If the funding for this project is not secured through this funding application the existing bottleneck will remain, and the opportunity associated with related development will remain undeveloped pending a revised funding solution. There is no lower cost alternative able to effectively unlock the identified

development sites and create private sector led sustainable employment opportunities inherent in the scheme.

- **4. Fit with Strategic Policy & Objectives**: (Please append supporting documents and evidence as required).
- **4.1 Fit with over-arching economic objectives:** (In particular any LEP, Economic Strategy objectives etc.)

Worcestershire LEP priorities

The SEP sets out a vision of a World Class Worcestershire which is an internationally recognised, highly competitive and innovative business location. This will be achieved by stimulating investment, improving productivity and supporting the creation of sustainable economic growth and employment. By 2025, it is seeking to have added 25,000 jobs and increased GVA by £2.9 billion.

This project will make a significant contribution to meeting the vision and objectives of the SEP. It will facilitate the delivery of one of the four Game Changer sites, which will help to attract substantial investment. Worcester Six will also support the development of the Worcestershire LEP's target sectors, in particular advanced manufacturing.

4.2 Fit with local policy objectives: (In particular; adopted Local Transport Plan; Local Plan, Development Plan, Core Strategy; other relevant plans / strategies etc.)

(i) Worcestershire County Council Corporate Plan Refresh 2013 to 2018

One of the themes of the Corporate Plan is 'Open for Business'. Among the strategic areas within this theme is 'Investing in the Fundamentals'. This relates to targeting investment in the key mechanisms which can drive growth, tackle market failure and lever in business investment. Among the identified issues within this area is infrastructure development.

The objectives of this theme include increases in:

- the overall employment rate of the County;
- · Worcestershire's Gross Value Added; and
- private sector investment levered and attracted into the County.

The delivery of the project will support the achievement of these objectives by providing employment opportunities and an environment which will be attractive to potential investors.

(ii) Worcester City Council Corporate Plan 2015 - 2020

This is built around five themes, one of which is 'Increasing Prosperity through Successful Businesses and Great Jobs'. Within this theme there are a number of objectives, including increasing the number of high-skilled jobs within the city and securing £100 million of private and public investment in the local economy by 2020. Delivering Worcester Six is identified in this theme as being an important factor in achieving these objectives.

(iii) Wychavon District Council Corporate Strategy (2012 – 2016)

The Council's stated purpose is to be a progressive Council delivering great value services and helping to create a strong economy, environment and community. Under the Strong Economy theme there are the following two objectives:

- attract more businesses and jobs into Wychavon and retain existing ones; and
- improve skill levels.

In summary the Worcester Six development and associated off-site enabling infrastructure works, is entirely consistent with a range of strategies and policies at the national and local/sub-regional levels. This consistency will result from the project's capacity to:

- promote private sector activity and job creation this is consistent with the aims of the national Growth White Paper and the Plan for Growth. At local/sub-regional level it is also consistent with the priorities of SEP; and
- remove barriers to growth and so attract investment to the UK this is a key aim of a number of national policies and strategies.

5. Deliverability: (*Please append supporting documents and evidence as required*)

5.1 Details of any previous work undertaken:

	Please tick as appropriate
Concept Study	
Feasibility	✓
Preliminary Design	✓
Detailed Design	✓
Risk Register	✓
Detailed Work Programme	✓
Quantified Risk Assessment	
Environmental Appraisal	
Member Approval	✓
Commitment of Partners	✓
Consultation with Key Stakeholders	✓
Strategic Business Case	
Business Case with BCR	
Other	

5.2 Dependencies and risks / barriers to delivery

Please provide a bullet point brief commentary as per below

- 5.2.1 Land Ownership landownership is not a barrier to delivery. Spetchley Estates, the owners of the Worcester Six site, are fully supportive of the project, and enterd into a legal agreement with the County Council in May 2015 to bring forward delivery of the scheme;
- 5.2.2 Requirement for Compulsory Purchase there are no CPO requirements. Therefore, this is also not a risk to implementation;
- 5.2.3 Land Type (e.g. all highways, presently occupied etc.) the project comprises in particular works to the highway and adjacent areas. Again, land type is not a barrier to delivery;
- 5.2.4 Requirement for major statutory instruments (e.g. TWA, Side Road Orders etc.) there are no risks associated with major statutory instruments;

- 5.2.5 Requirements for planning consents the project is being implemented under Permitted Development rights. Planning consents are also not a risk to delivery; and
- 5.2.6 Known environmental impacts (e.g. SSSIs, Ancient Monuments, Green Belt etc.) there are no known specific environmental issues that will affect delivery.

6. Timescales:

6.1 Earliest start on site

The scheme started on-site on 8th June 2015.

6.2 Scheme delivery date assessment

Delivery period	Overall Deliverability (Tick only one row)						
	Highly Readily No		No	Moderate	Significant	Highly	
	Deliverable	Deliverable	Major	Delivery	Delivery	Undeliverable	
			Barriers	Risks	Risks		
2015/16 to	✓						
2018/19							
(inclusive)							
2019/20 to							
2023/24							
(inclusive)							
Beyond 2023/24							

6.3. Approximate duration of the scheme (please append supporting programme)

June 2015 - March 2016

7. Delivery Agency: (*Please append supporting documents and evidence as required*)

7.1 Proposed delivery agency

Worcestershire County Council is responsible for delivery of the scheme. CH2M Hill is the design agency and project manager. The term contractor for the scheme is Griffiths.

7.2 Partnership bodies (if any) you plan to work with during design or delivery.

The scheme has been developed in partnership with Wychavon District Council (Planning Authority for the proposed Worcester Six development) and the Worcestershire LEP. Worcestershire County Council has also been working in partnership with Highways England to integrate this scheme with the improvements at the Junction 6 of the M5 to help ensure that the proposed measures meet the requirements of both authorities.

Close liaison will also continue to take place with Spetchley Estates, land owner of the site of the proposed Worcester Six, and its appointed preferred developer, Stoford. This will ensure the scheme

maximises the development potential of the site.
8. Costs & Funding: (Please append supporting documents and evidence as required)

8.1 Cost

Please append supporting cost spreadsheets as evidence

Specific estimate if available					
<£0-5m	✓				
£5-15m					
£15-30m					
£30-50m					
£50-100m					
£100-200m+					
Unknown at this stage					

8.2 Proposed sources of funding

Source	Contribution (tick)	Approx %
LTP	√	97.5%
Local Growth Fund/Devolved Major Scheme Fund		
CIL		
Highways England		
Network Rail		
Regional Growth Fund		
Local Authority (e.g. Prudential Borrowing / asset release)	✓	2.5%
Transport Operator		
Private Sector		
Other (specify if known)		

8.3 Project Costs

8.3.1 Table A: Funding profile (Nominal terms)

£000s	2015/16	2016/17	2017/18	2018/19	Later Years	Total
LGF funding sought	£4,683	£317				£5,000
Local Authority contribution	£5	£124				£129
Third Party contribution						
TOTAL	£4,688 ¹	£441				£5,129

¹ Note:£5,110 of expenditure incurred in 2014/15 for site preparation included in this total

8.3.2 Table B: Cost estimates Notes:

Cost heading	Cost (£000s)	Date estimated	Status (e.g. target price)
Services	£1,148		Contracted
Works	£3,911		Contracted
Statutory requirements	£ 70		Contracted
TOTAL	£5,129		

A more detailed breakdown of the costs is provided below:

• Off-Site Highways Infrastructure

• Pershore Lane improvements £3,911,206

• Main Site Access Roundabout

• Plough Lane roundabout re-alignment

• S278 Crossing Point – Parsonage Way £70,000

• Off-Site Services Infrastructure

Electric supplies to POC
 Gas supplies
 Water supplies
 Broadband fibre network
 £150,000

TOTAL £5,129,186

Notes:

- 1) LGF funding must not go beyond 2018/19 financial year.
- 2) A minimum local contribution of 25% (local Complete the following table: party) of the project costs is required.
- 3) Costs in Table B Complete the following table: in outturn prices and must match the total amount of funding indicated in Table A.
- **9. Economic Assessment**: (This section should include a summary of the economic assessment of the scheme utilising standard WebTAG guidance)

Complete the following table:

	Tick one box for each row only						
	Large / High Beneficial	Moderate Beneficial	Slight Beneficial	Neutral	Slight Adverse	Moderate Adverse	Large / High Adverse
Economic (N	Note: VfM: Lo	ow = 0 > 1.4, N	Medium 1.5 >	· 2.0, High 2	.0+)		
Transport Economic Efficiency (VfM)		√					
Reliability		√					
Wider Economic Benefits	√						
Environment							
Noise				✓			
Local Air Quality				√			
Greenhouse Gasses				√			

Landscape /					✓		
Townscape							
Heritage				✓			
Biodiversity					√		
Water				✓			
Environment							
Social							
Physical				✓			
Fitness							
Journey				✓			
Quality							
Accidents				√			
Security			√				
Access to		✓					
Services							
Affordability				✓			
Severance				✓			
Option Values				✓			
Provide a brief	bullet point s	summary of j	ustification fo	or the above	WebTAG ap	praisal based	on each of
the three main	headings only	y:					
Economy	• The proposed Worcester Six off-site infrastructure enabling works (non-major) scheme is expected to deliver substantial local economic benefits. Consequently, the scheme is assessed cautiously as having a moderate beneficial transport economic efficiency impact, as well as reliability impact. In terms of wider economic benefits the impact of the scheme is assessed as being large/high beneficial impact.						
Environment	Slight adverse impacts are anticipated in relation to landscape and biodiversity. The other impacts are All expected to be neutral.						
Social	Most impacts are assessed as being neutral, although a slight beneficial impact is expected in terms of security and a moderate beneficial impact in relation to access to services.						

10. Financial Case – Affordability & Risk: (*Please append supporting documents and evidence as required*)

Provide brief bullet point summary of the Financial Case for the scheme, including development, construction and ongoing costs.

There are few risks to overall project delivery timescales above and beyond those normal to a construction project. The detailed design (including ECI) is completed, the scheme is being constructed under Permitted Development rights. There is no requirement for a Public Inquiry or CPO. The scheme is on-site being implemented

In summary, it is not anticipated that there are any significant risks remaining that would affect the proposed year of completion (2015/16).

11. The Economic Case – Value for Money: (Please append supporting value for money report)

Provide a brief summary of the costs and benefits of the scheme.

Economic Appraisal

The project is expected to facilitate the delivery of over 5,500 gross operational on-site jobs and 3,800 net additional jobs at the Worcestershire level, after allowing for leakage, displacement, deadweight and multiplier effects. In total over 10 years, it is estimated that discounted (at 3.5%) GVA of £1,719 million would be generated.

A previous very similar scheme (Worcestershire County Council, M5 Junction 6 to Plough Lane Roundabout Corridor Improvements – Value for Money Report, October 2013) identified that transport improvements in this area could deliver substantial benefits, as follows:

Benefits	Economic Value 2010 Prices and Values £m's	Percentage of the Total
Time	£13,317	79.6%
VOC	£2,394	14.3%
Reliability	£1,480	8.8%
Indirect Tax	-£455	-2.7%
Total	£16,735	100.0%

Note: Values in £000"s at 2010 prices and values.

The overall analysis of monetised costs and benefits identified the present value of benefits as being £17.0 million and the present value of costs as £7.1 million. Therefore, at that stage, the Benefit Cost Ratio (BCR) was 2.38 and the net present value £9.9 million, based on TUBA and the value in WebTAG. Sensitivity analyses were undertaken at that time which identified that the combined effect of the potential downsides to the economic case would reduce the BCR to 2.22. The current Worcester Six Off-

site Enabling Infrastructure scheme also includes provision for off-site services. If the additional cost of these is added in, then the estimated **BCR** of the current scheme might be in the order of 2.2.

Environmental Appraisal

Noise

The project may result in increased road traffic noise in the vicinity of the site and at properties adjacent to the wider road network, although there are few nearby noise receptors. There is also the potential for changes in traffic-induced vibration levels at properties located adjacent to carriageways affected by changes in traffic flow. The project will cause only negligible changes on the surrounding road network.

Assessment - Neutral.

Air Quality/ Greenhouse Gases

The impact of road schemes on local air quality are determined by changes in traffic and the subsequent change in emissions. Traffic data indicates that the level of change in traffic flows is below the screening threshold for air quality assessment and would lead to a negligible impact on air quality.

Assessment - Neutral.

Landscape/Townscape

The existing hedgerows and trees provide structure to the landscape and field boundaries but sensitive design and mitigation planting should ensure that landscape impacts are minimised. However, the project will have some adverse impacts associated with the lighting along Pershore Lane, the new roundabout and the larger and more complex arrangement of Plough Lane roundabout.

Assessment - Slight Adverse

Heritage of Historic Resources

There are no designated sites or Listed Buildings in the vicinity. However, some archaeological field investigation is required and, if any archaeological interest is discovered, appropriate mitigation would be identified and implemented.

Assessment - Neutral.

Biodiversity

An ecological appraisal of the project identified no impact on designated sites. Habitats within the site include semi-improved grassland, scrub, hedgerows and broad-leaved trees and are considered to be of importance at no greater than the local level. Provided best practice working measures are adopted to minimise impacts on wildlife, the project is considered unlikely to have significant biodiversity impacts. However, the proposed new lighting element of the scheme may have an adverse impact on bat flight patterns.

Assessment - Slight Adverse

Water Environment

The project does not involve any direct impacts on any nearby watercourses.

Assessment - Neutral.

Social Impacts Appraisal

Physical Fitness

There is unlikely to be any significant shift towards cycling or walking as a result of the project.

Assessment - Neutral.

Journey Quality

The project's effects on journey quality are likely to be limited, as the extent of the highway network affected is relatively small, with no need or scope to provide extensive facilities for users.

Assessment - Neutral.

Accidents

There is potential for accidents to increase as a result of providing a roundabout. However this will be of modern design and the road will be well lit, which will provide an additional safety feature. The improvements to the Plough Lane roundabout will reduce the potential for accidents, which is particularly relevant given that this facility considered to be sub-standard.

Assessment - Neutral.

Security

The extent of the highway network affected by the proposals will be lit, providing safety benefits and security reassurance to road users.

Assessment - Slight Beneficial.

Access to Services

A Travel Plan will be developed which will ensure that public transport services are promoted as the preferable mode of choice for accessing the site.

Assessment - Moderate Beneficial.

Affordability

The proposed intervention will not make material changes to the cost of transport within the locality.

Assessment - Neutral.

Severance

The project impacts upon an already existing highway route that currently has limited pedestrian access

and activity. There is very limited pedestrian activity in the area currently.

Assessment - Neutral

12. The Commercial Case: (*Please append supporting documents and evidence as required*)

Provide a summary of the proposed procurement strategy that will be used to select a contractor.

The Term Civil Engineering Contract being used is an NEC Target Cost contract designed to deal effectively with risk by using contractor experience early in projects to mitigate risk and allocate it to the party most able to control it. This directly and beneficially affects outturn costs and the programme. An extract from the Contract describing what is expected from ECI is reproduced at the end of the response to this question.

The Term Civil Engineering Contract is in place and is with a single supplier tendered in compliance with the Public Contract Regulations and EU Directives.

Target Prices are derived using tendered Defined Costs (equivalent to resource rates) and benchmarked against similar projects and activities to ensure best value and consistency. Contract performance is driven by KPIs including Share Savings Achieved which is a gateway Key Performance Indicator (KPI) having a target of 5%. This is designed to control cost over-runs whilst not encouraging high target prices. The Contractor's Share is 50% below 110%, which means that the employer's liability is limited to 5% above target prices and both the Employer and Contractor equally share gains below 100%. Cost control is therefore incentivised.

The significant risks that are best controlled by the Contractor include:

- Contaminated ground (with the benefit of information in the Ground Investigation (GI) report)
- Buried underground services
- Unforeseen ground conditions (with the benefit of information in the GI report)
- Presence of invasive weeds
- Re-usability of excavated material (with the benefit of information in the GI report)

Extract from the Contract:

Early Contractor Involvement (ECI)

Early Contractor Involvement (ECI) involves the creation of a Contractor/Consultant/Client team, led by the Project Manager, which caters for the consideration of buildability and value issues earlier in the design process, leading to shorter construction periods and reduced impacts during construction.

The benefit of ECI is that it utilises contractors' unique understanding of construction processes to optimize the design and delivery process. The difference is, as the name implies, that ECI involves the contractor far earlier. With ECI, the contractor joins the team early and is involved with planning, assessing buildability, cost estimating and value engineering. ECI is the key to ensuring both programme and cost certainty for Worcestershire County Council. The Contractor is expected to be involved in a project as early as possible. A strong team ethos is critical in producing the most cost efficient project.

The goal of ECI is to provide the possibility for forecasting project results with more certainty. It should prepare all parties to jointly solve problems, address unknowns in difficult environments and avoid or resolve conflicts more effectively.

Range of benefits gained by participating in ECI

- Early creation of delivery team
- More scope for innovation
- More flexibility and better value
- Integrated and incentivised supply chain
- Improved risk management with fair allocation of risks
- Improved Health and Safety
- Shorter construction periods and reduced impacts during construction
- Maintaining a competitive and sustainable supply chain
- Clear points of responsibility, no unnecessary layers of supervision
- Good and appropriate quality of design to meet project objectives
- Partnership approach and team ethos based on long-term relationships
- Performance measurement with continual improvement targets
- Improved communications and liaison with the key stakeholders during consultation and construction

Requirements

The Contractor provides suitably qualified and experienced individuals who are capable of assisting WCC in the implementation of the benefits as outlined above. The Contractor provides an ECI service to WCC as part of the project team. This reflects a partnering relationship that should increase transparency and therefore reduce risk, increase shared responsibility and limit the extent of change.

The Contractor's representative also assists in the development of the communications plan and attends public consultation/ information/ exhibitions should a particular scheme require it. These often occur outside of normal working hours to maximise public representation. Effectiveness and value of ECI is reviewed at quarterly review meetings.

b) What is the preferred procurement route for the scheme and how and why was this identified as the preferred procurement route? For example, if it is proposed to use existing framework agreements or contracts, the contract must be appropriate in terms of scale and scope.

Worcestershire County Council has recently awarded its Term Civil Engineering Contract (TCEC) to enable delivery of highway improvement and civil engineering projects. The estimated value of civil engineering works for this project (circa £5m) is of the nature and scope of that for which the contract was developed. Electrical infrastructure works will not be delivered under this contract.

Setting the Target Price was straight forward because the Contractor has very good knowledge of the project through Early Contractor Involvement and meaningful input into the construction programme and works design.

The purpose of the TCEC was described in the Invitation to Tender as presented below:

- The Works to be carried out under this Contract are located throughout the County of Worcestershire.
- The Works consist of highway improvements and structures projects. Tenderers may wish to view LTP3, Worcestershire's third Local Transport Plan, which can be found here: http://www.worcestershire.gov.uk/cms/local-transport-plan.aspx

The supplier may be required to design and construct or solely construct. Examples could be junction

improvements, cycleways, corridor improvements, public realm enhancements, structures, retaining wall construction & maintenance, bridge deck refurbishment, masonry repairs, etc. The size and value range of projects will be variable, the largest could be in the order of £5m, the smallest around a hundred thousand pounds, with any size in between.

The contractor participates as a member of the project team for each project and to positively contribute by Early Contractor Involvement in order to produce demonstrable value for Worcestershire County Council.

The contract is under NEC3 ECC Option C target cost arrangements for a duration of four years with the potential to extend for up to a further two years, dependent upon performance and value to the Council.

Appointed Contractors

The following contractors have been appointed to undertake this scheme:

- Services
 - Electric supply Western Power Distribution
 - Gas supply Murphys
 - Water supply Severn Trent
- Works
 - Highways Griffiths
 - Hedge Removal CJFS
 - Excavators/wood shredders/labour MONTEL
 - Development manager Stoford
- Client side project manager CH2M Hill

13. The Management Case – Delivery: (*Please append supporting documents and evidence as required*)

13.1 Development and Construction milestones

The key construction milestones for this project are:

- Start on site 8 June 2015
- Project completion March 2016

13.2 Previous delivery performance

The Worcester Transport Strategy (Phase 1) was delivered by Worcestershire County Council. This was a £19.6 million multi-modal package of improvements to the existing transport network in and around Worcester. It includes:

- Worcester Southern Link Road Junction Upgrades including the Ketch Roundabout (and approaches)
- Rail Station Improvements at Worcester Foregate Street and Malvern Link Stations
- Key Corridor Improvements comprising city centre public realm improvements to improve traffic flows; reduce severance for pedestrians and to improve traffic conditions for other road users; junction improvements including signalisation and junction layout modifications; TROs to change

waiting / loading restrictions to improve traffic flow and new pedestrian facilities introduced along key desire lines.

- Real Time Information (RTI) for buses including on board equipment, new RTI displays at bus stops and key interchanges and live interaction via the internet
- Car park occupancy Variable Message Signs (VMS) to reduce traffic in the city centre by informing drivers of available parking capacity
- Enhanced Urban Traffic Management and Control central system to provide monitoring and control functions

14. Statutory Powers and Consents: (*Please append supporting documents and evidence as required*)

Please list separately each statutory power / consent required.

The scheme is an improvement to an existing highway and is to be constructed under permitted development powers.

The outstanding statutory powers / consents are listed below.

Statutory Powers and consents required			
Description	Act or Legislation	Comments	
Side Roads Order	Highways Act 1980	Required for "no stopping". Will not affect overall programme	
Land Drainage Consent	Land Drainage Act 1991	Following completion of the FRA, consent will be required to discharge surface from the highway to the River Sour	
European Protected Species Licence	Conservation of Habitats and Species Regulations 2010	To be determined by Natural England Low potential for EPSL to be required, but would be necessary if bat roost impacted. Will not affect overall programme.	
Badger Disturbance Licence	Badger Protection Act 1992	To be determined by Natural England if a badger sett is impacted/disturbed. Low potential and will not affect overall programme	

15. Governance: (*Please append supporting documents and evidence as required*)

Provide a summary of the proposed organisation of the project

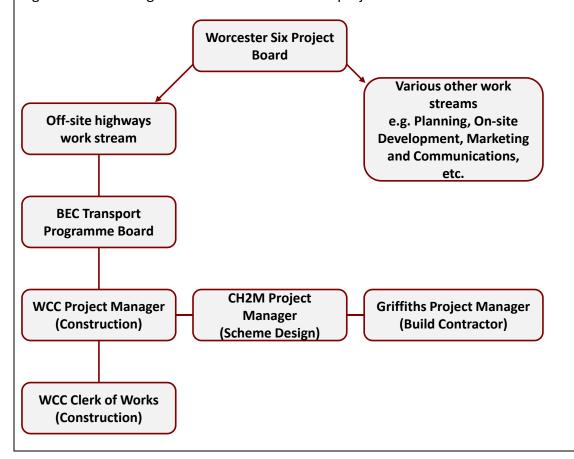
The governance and delivery arrangements for the project are as follows:

- Worcester Six Scheme has project board comprising senior exec representation from Worcestershire County Council, Worcestershire LEP, Worcester City Council, Wychavon District Council, Spetchley Estate and Stoford (developer);
- This Programme Board meets bi-monthly and receives highlight report/update on off-site

highways works as part of main business agenda;

- Worcestershire County Council BEC Directorate (Business, Environment and Community) has a
 Transport Programme Board which meets monthly and oversees full range of transport schemes
 underway in the County, including Worcester Six off-site works;
- there is a Worcestershire County Council Project Manager in place to manage construction project;
- Griffiths are the contractors on-site who are physically constructing the scheme; and
- Procurement of CH2M Hill (Design and PM) and Griffiths (construction) has been made by Worcestershire County Council through its Term Contract arrangements.

Figure 4 shows the governance structure for the project.



16. Risk Management: (*Please append supporting documents and evidence as required*)

Provide a brief summary of the proposed Risk Management Strategy outlining how risks will be managed and referencing the Risk Register

Worcestershire County Council has established robust Risk Management processes. In relation to the Worcester Six Off-site Enabling Infrastructure project:

• the Worcester Six scheme has a central risks and issues log maintained by the WCC Project Manager, which is regularly reviewed and updated with the project team and work-stream leads to ensure appropriate risk management/mitigation measures are implemented; and

 high impact/high likelihood risks (rated red on a traffic light system) from individual workstreams feed into the central risks log and are escalated as necessary to the Project Sponsor, and ultimately Worcester Six Project Board as required. Risks retained by the Council have identified risk owners to manage the mitigation strategies.

17. Stakeholder Management: ((Please append supporting documents and evidence as required)

Provide a brief summary of your strategy for managing stakeholders

The Stakeholder management arrangements are as follows:

- The Worcester Six project has a communications strategy which is managed by WCC in collaboration with Barques (appointed by scheme developer Stoford) whilst WCC take the lead on local stakeholder engagement e.g. residents, parish councils, local members etc, Barques are responsible for marketing the wider scheme within the market to commercial agents, potential occupiers, trade press etc.
- This collaborative approach to the communications strategy enables synergies to be made between both parties across identified key milestones in the plan so that a consistent message is provided
- There is a discrete workstream around the off-site infrastructure enabling works, informed by the project plan with key comms milestones identified throughout the planned lifecycle of the project
- An example of this, is the joined-up approach taken by WCC, local partners and Stoford/Barques
 to prepare the press release signifying the commencement of off-site highways works in June
 2015
- A similar joined-up approach is being adopted in preparation of the temporary traffic management arrangements which will be implemented on the off-site highways scheme later this year
- Regular communication meetings are held between WCC and Stoford/Barques to manage and monitor the communications plan
- Key stakeholder groups have been identified by the project team and updates on the scheme are provided via a range of communication vehicles but primarily via WCC's website
- Regular briefings have been arranged with the local elected members for the Worcester Six geographic area, so that communication can be cascaded to Parish Councils and local residents as appropriate.

18. Benefits Realisation, Monitoring and Evaluation: (Please append supporting documents and evidence as required)

Provide a brief summary of how you plan to measure and report on the benefits identified

The commitment to monitor scheme impacts, and evaluate the overall impact of the scheme once

implemented is based on best practice guidance. This indicates that details are set out on the likely benefits and how they will be measured and reported. It is proposed that this will broadly follow the 'standard monitoring' approach set out in the 'Monitoring and Evaluation Framework for Local Authority Major Schemes', although as a "small" scheme (no more than £5m of DfT contribution), this effort will be adjusted accordingly, to be appropriate, proportionate and cost effective.

The primary benefit of the scheme is associated with its ability to 'unlock' the employment potential associated with the Worcester Six development site. The scheme will contribute both directly and indirectly to the creation of 5,500 new gross on-site jobs, boosting the local economy. It is estimated that this equates to a direct GVA contribution of some £290 million per annum.

The rate of progress in respect of job creation and the profile of investors at Worcester Six will be monitored by Worcestershire County Council, noting that Worcestershire LEP will promote a close working relationship with Worcester Six delivery partners and stakeholders. The performance of the transport infrastructure that is the subject of this bid will also be assessed in terms of its ability to accommodate the demand associated with Worcester Six whilst maintaining travel times and journey time reliability, alongside minimising any negative environmental impacts. Worcestershire County Council will evaluate such impacts through ensuring that investors in the development site adhere to an appropriate travel plan with relevant targets that are adequately monitored, and through its own wider monitoring schemes where possible. This approach will ensure that the additional capacity provided as a result of the scheme is maximised in terms of its efficiency and long term sustainability.

A standard monitoring will be adopted that is based on the 'Monitoring and Evaluation Framework for Local Authority Major Schemes' DfT guidance document. This will include measures that focus on the three key areas of evaluation; process, impact and economic. For the purposes of this scheme, it is proposed to consider (but not limit the evaluation process to) the following questions:

Process Evaluation

- Was the scheme delivered to the projected costs and timescale?
- Were any unexpected challenges encountered during the delivery process?

Impact Evaluation

- Has the scheme delivered the desired impacts?
- What lessons can be learnt to help develop future transport interventions?

Economic Evaluation

- Has the scheme delivered the types and scale of forecast benefits?
- Does the scheme show outturn value for money as projected?

The scheme build would be monitored, covering procurement, achievement of timescale and key milestones, risk outcomes and stakeholder feedback. The actual scheme as delivered would be assessed, including success of the design and materials used. Outturn costs will be compared to forecasts, ensuring the scheme remains affordable and within the budgeted allowance. Data collection methods during the process evaluation will include interviews with key staff on the delivery team, site inspections and progress reports.

The key desired outcome of the scheme is to support growth and development, by addressing constraints on the local highway network. Thus data on the impacts on outturn development and the performance of the local economy are important. It is proposed to use statistics on changes in employment and development permissions and completions as a measure of the achievement of these outcomes. These are standard datasets collected by Worcestershire County Council, thus limiting the need for bespoke data collection. The Worcestershire LEP will act as a key delivery partner with respect to this element of the monitoring and evaluation strategy.

The outcome of the scheme in relation to highway network performance will be considered through analysis of traffic flows, travel times and journey reliability (for journeys using the affected links and adjacent

corridors). This will be accomplished through data collection at the Plough Lane roundabout and on Pershore Lane (A4538). Existing data sources will be used as much as possible with limited bespoke data collection. For instance, journey times can be monitored through manual observation and/or use of StrateGIS, BLISS or Traffic Master data (if available).

WCC will continue to work closely with Highways England in order to ensure that the relationship between the development aspirations for the Worcester Six site and the operation of the M5 Junction 6 Roundabout is fully understood. This will involve utilising data made available by Highways England wherever possible.

Consideration will be given to key exogenous drivers of travel demand, including GDP, population, employment levels, fuel and fares, with a comparison made to assumptions in the modelling and forecasting processes to understand the way such factors will have influenced change. Data collection and reporting would include before opening (Stage 1), 1 year after full opening of the link (Stage 2) and 5 years after full opening (Stage 3), with reporting at stages 2 and 3. This will include the calculation of an outturn BCR based on final costs and benefits outcomes.

19. Equality Analysis: (Please append supporting documents and evidence as requi
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The project will benefit all groups. It will facilitate the delivery of accessible job opportunities at the Worcester Six development.

20. Senior Responsible Owner DECLARATION			
As Senior Responsible Owner for the Worcester Six Off-site Infrastructure Enabling Works Scheme I			
hereby submit this request for funding consideration to the Worcestershire Local Transport Body.			
Name:	Signed:		
Nigel Hudson			
Position:			
Head of Strategic Infrastructure and Economy			
Business Environment and Community Directorate (BEC)			
21. Section 151 Officer DECLARATION			
As Section 151 Officer for Worcestershire County Council I declare that the scheme cost estimates			
quoted in this bid are accurate to the best of my knowledge and that [name of authority]			
has allocated sufficient budget to develop and deliver this scheme on the basis of its proposed funding contribution			
Name:	Signed:		
Sean Pearce			

Position:				
Chief Financial Officer				
22. CONTACT DETAILS FOR FURTHER ENQUIRIES				
Lead Contact: Claire Brown				
Position: Worcester Six Highway Works Project Manager				
Tel: 01905 361343				

E-mail: Claire.brown1@ch2m.com

Alternative Contact: Luke Willetts

E-mail: lwilletts@worcestershire.gov.uk

Position:

Tel: