

**Impact Assessment completed by:**

Name/Job Title(s)  
**Rory Millar, Graduate Transportation  
Planner**

**Date: 22<sup>nd</sup> October 2014**

**Responsible officer:**

Name/Job Title  
**Jamie Hulland, Transportation Planning  
& Road Safety Manager**

**Date: 24<sup>th</sup> October 2014**

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## 1. Background

### 1.1 Title

Science Park Drive Interim Use Upgrade

### 1.2 Description

This scheme includes works to upgrade Science Park Drive so that it can be opened as a public highway in the interim period between the opening of the first phase of the Tithebarn Link Road in March and the delivery of the remaining section of road from Science Park Drive through to the old A30 near Blackhorse. Along with the western section of the Tithebarn Link Road scheme, it will deliver a 6.5m carriageway from Cumberland Way to the old A30 near Blackhorse. This will offer an alternative route that will bypass Junction 29 and unlock a series of developments in the Exeter and East Devon Growth Point currently constrained by planning conditions.

### 1.3 Service users

The scheme will benefit all road users trying to cross the motorway as they will be able to bypass Junction 29 and the Honiton Road corridor. This will re-distribute significant levels of planned future traffic between the Heavitree Road and Pinhoe Road corridors, helping to manage congestion in the area.

### 1.4 Describe any reasons for change and intended aims and benefits

The scheme is considered essential in order to allow future housing and employment growth to proceed in advance of the delivery of the full Tithebarn Link Road. This new bypass route will divert traffic away from the congested Moor Lane roundabout with the reduced traffic at the congested part of the network resulting in more reliable journey times.

### 1.5 Overlap with other policies, services etc

The scheme overlaps with policies relating to housing and employment development such as the Devon and Torbay Local Transport Plan 2011-2026, Exeter City Council's Core Strategy and East Devon District Council's Draft Local Plan.

## 1.6 The following stakeholders have been involved in this assessment

Exeter and East Devon Growth Point Principals Group; Exeter Science Park Company; Highways Agency; East Devon District Council

## 2. Analysis

### 2.1 Social impacts

	<b>In what way is this characteristic relevant, or not relevant, to the service, policy or practice?</b>
Age:	Improved crossing facilities on the drive and improved streetlighting may benefit vulnerable groups such as young people
Disability:	Tactile paving on the footway that will be constructed has considered pedestrians with impaired sight
Gender/Sex (men and women):	Personal security improved through streetlighting, which may reduce the fear of crime for women
Marriage and civil partnership:	No specific impact
Pregnancy and maternity:	No specific impact
Race/ethnicity:	No specific impact
Religion/belief:	No specific impact
Sexual orientation:	No specific impact
Trans-gender/gender identity:	No specific impact
Other (e.g. socio-economic, general health and wellbeing, human rights, safeguarding):	Improved public health as air quality is improved by the effective redistribution of traffic from Honiton Road / Heavitree Road corridor
<b>Geographic areas affected:</b>	Broadclyst & Whimble; Pinhoe & Mincinglake; Heavitree & Whipton Barton

#### 2.1.1 Positive impacts

The use of Science Park Drive as a temporary link road will improve journey times and enable people to travel more easily for access to employment, education and leisure. Additionally it will provide congestion relief along the Honiton Road corridor.

There is a potential safety issue for young and elderly people or for people with disabilities needing to cross the Science Park Drive, which will be more heavily trafficked as part of these proposals. The scheme designs incorporate a raised table feature to provide more convenient access for pedestrians and cyclists, and will help alert drivers of the crossing point near the Redhayes Bridge. The design for the footway also includes tactile paving adjacent to the crossings which has a positive impact for those with impaired sight.

The scheme will help redistribute traffic between the Heavitree Road corridor and the Pinhoe Road corridor to better manage congestion. Heavitree Road, in particular experiences high exceedances of the nitrogen dioxide target pollutant levels, which should be improved by a better flow of traffic with benefits to public health.

The streetlighting that is being included in the scheme design will improve security for young people and women walking along the footway at night.

### 2.1.2 Negative impacts and mitigations or justification

The Science Park Drive will be open to the public increasing traffic levels across the route of the east-west cycle route. This may make it less convenient or safe for young or elderly people or for people with disabilities needing to cross the Science Park Drive. As a way of mitigating this impact, the scheme designs incorporate a raised table feature to provide more convenient access for pedestrians and cyclists, and will help alert drivers of the crossing point near the Redhayes Bridge. It also includes calming measures on the approach to the crossing. The design for the footway also includes tactile paving adjacent to the crossings which has a positive impact for those with impaired sight.

The scheme will increase traffic levels along Science Park Drive and the areas of the network in close proximity to it resulting in an increase in noise pollution; however, the Science Park campus is a low density development remote from the road, which should not disadvantage any particular protected characteristic group.

## 2.2 Economic impacts

	<b>In what way is this factor relevant, or not relevant, to the service, policy or practice?</b>
Impact on knowledge and skills	The link road will remove a number of planning barriers and will facilitate growth on phase 2 land at Science Park, which is a knowledge-intensive development
Impact on employment levels	The link road will facilitate a number of jobs on phase 2 land on the Science Park development
Impact on local business	Improved journey time reliability for routes into the city and to junction 29 will have positive economic benefits

### 2.2.1 Positive impacts

The interim use of the Science Park Drive will allow 58,850sqm of development to come forward and give businesses better access to the local and strategic road networks prior to the completion of the Tithebarn Link Road. It will reduce congestion and delays and improve network resilience, as well as increase safety by stopping traffic queuing back onto junction 29 of the M5. Increased average speeds will improve fuel efficiency and reduce pollution.

### 2.2.2 Negative impacts and mitigations or justification

There are no identified negative economic impacts due to this scheme.

## 2.3 Environmental impacts

**2.3.1** The policy or practice does not require the identification of environmental impacts using this Impact Assessment process because it is subject to (please select and proceed to Section 2.3, otherwise complete table below):

X	Devon County Council's Environmental Review Process for permitted development highway schemes.
	Planning Permission under the Town and Country Planning Act (1990).
	Strategic Environmental Assessment under European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment".

	<b>In what way is this factor relevant, or not relevant, to the service, policy or practice?</b>
Reduce waste, and send less waste to landfill:	None
Conserve and enhance biodiversity (the variety of living species):	None
Safeguard the distinctive characteristics, features and special qualities of Devon's landscape:	None
Conserve and enhance the quality and character of our built environment and public spaces:	None
Conserve and enhance Devon's cultural and historic heritage:	None
Minimise greenhouse gas emissions:	Fewer greenhouse gas emissions
Minimise pollution (including air, land, water, light and noise):	Less queuing on the Honiton Road / Heavitree Road corridor
Contribute to reducing water consumption:	None
Ensure resilience to the future effects of climate change (warmer, wetter winters; drier, hotter summers; more intense storms; and rising sea level):	Fewer emissions and pollution
Other (please state below):	None

### 2.3.2 Positive impacts

There will be environmental benefits as a result of the Science Park Drive being used as a public highway as it will help redistribute traffic away from junction 29, Moor Lane roundabout and the Honiton Road corridor a long way in advance of the delivery of the final element of the Tithebarn Lane scheme. The reduction in queues and delays due to this new road will result in less greenhouse gas emissions and pollution.

### 2.3.3 Negative impacts and mitigations or justification

The scheme will result in more traffic using Science Park Drive sooner than originally anticipated, creating a barrier for walkers and cyclists using the east-west ped/cycle corridor. This may discourage use of the route, therefore additional features to improve safety and ease of access have been included to maintain its attractiveness.

## 3. Actions and risk management

### 3.1 Actions

There is a risk that when Science Park Drive is being used (ie next 3 years) as a public highway prior to Exeter Science Park being fully developed, vehicle speeds may be higher than desired along Science Park Drive, particularly in the location of the east-west pedestrian/cycle crossing. To mitigate this risk, it is proposed the following traffic calming measures are installed: speed cushions on Science Park Drive on the approach to the cycle crossing at Blackhorse Lane and a raised table on Science Park Drive at the location of the cycle crossing. These measures are recommended by DCC Safety Audit team.

There are also concerns that following the interim use as a public highway, proposals to stop up the highway and return the drive to private use are met with objections through the traffic order process. This represents a low risk which the Science Park Company have been made aware of through the legal negotiations in respect of the Section 106 deed of variation.

### 3.2 Risk assessment

**Inherent risk (mark an X in one box).**

<b>Severity</b>	Catastrophic	5					
	Major	4					
	Moderate	3			X		
	Minor	2					
	Negligible	1					
			1	2	3	4	5
			Rare	Unlikely	Possible	Likely	Almost certain

**Likelihood (in a 5 year timeframe)**

**Current risk (mark an X in one box).**

<b>Severity</b>	Catastrophic	5				
	Major	4				
	Moderate	3				
	Minor	2		X		

Negligible	1					
		1	2	3	4	5
		Rare	Unlikely	Possible	Likely	Almost certain

**Likelihood** (in a 5 year timeframe)