# **Carbon Impact Assessment:**

# **Initial assessment**

#### What are the proposed outcomes of the policy/decision?

Improvements are required to the junction of the A605 Whittlesey Road with the B1095 Milk and Water Drove. This junction is located on the eastern edge of Peterborough close to the border with Cambridgeshire. The need for the improvements has come about due to the high volumes of traffic travelling eastward out of Peterborough in the PM Peak. Eastbound traffic turning right from the A605 onto the B1095 blocks traffic heading towards Whittlesey and beyond. This subsequently causes long queues on the B1092 through Whittlesey and also on the A605 Stanground Bypass. The improvements will be designed to allow traffic to turn right without blocking the straight ahead movement. This should alleviate the congestion currently occurring.

#### Now consider whether any of the following aspects will be affected:

Aspect	Likely c	y climate effect:		Commentary
	+ve	-ve	neutral	
The council's energy consumption via buildings (electricity, gas, oil). Tick +ve if consumption will reduce.		x		There will be an increase of energy used as additional street light columns will be added as a result of the scheme. The exact number of columns has not yet been confirmed as the project is still within the design stage
The council's energy consumption via travel (eg petrol). Tick +ve if consumption will reduce.	X			The scheme will alleviate congestion in the area as a whole, this will reduce the carbon emissions generated by staff commuting to and from work on the A605
The councils water usage (especially hot water). Tick +ve if consumption will reduce.			X	No Impact
Creation of renewable energy. Tick +ve if it increases renewable energy production.			X	No Impact
Carbon offsetting – will the proposal offset carbon emissions such as through tree planting. Tick +ve if yes.	Х			We have also committed to planning a number of trees to offset any additional impact as a result of the scheme, such as additional street lights. The exact number of trees is yet to be confirmed as there are several possible design options at this stage of the project.
Reducing carbon emissions through amending ongoing activities not covered above eg management of land, such as peat soils, in a way which reduces carbon dioxide emissions. Tick +ve if yes.			X	No Impact
If the project involves the creation or acquisition of a building, has the energy rating been considered. Are / will measures be included to make the			X	No Impact

building energy efficient? Tick +ve if yes.		
Embodied carbon - will the project involve purchasing new materials? Tick -ve if new materials will be purchased.	X	We are keen to ensure that the scheme is designed in a way that seeks to minimize the amount of carbon embodied within the materials and processes used in the construction stage. Skanska have recently developed a comprehensive tool that allows the design team to select materials based on levels of embodied carbon (not just cost and suitability) which will allow conscious decisions to be made that seek to reduce the overall impact of the scheme.

#### What information is available to help the environmental impacts identified above to be quantified?

As mentioned there will be a number of additional street light columns added, this will increase energy consumption, currently the project is within the design stage therefore we do not have the number of additional columns to be installed, however once this information becomes available we will be in a position to quantify the energy use.

#### Can any differences be justified as appropriate or necessary?

N/A

# Are any remedial or mitigation actions required?

No

## Once implemented, how will you monitor the actual impact?

We will carry out surveys before and after the scheme to assess journey times before and after, this will be done using a wide range of data sets (such as Tomtom data and traffic master data). In addition to this the Combined Authority are looking to carry out air quality assessments on the highways network in Peterborough and Cambridgeshire.

## Overall summary to be included in your covering report.

To summarize the project as a whole will have a positive impact and will reduce carbon emissions by improving journey times and reducing congestion along the route and surrounding area. Although there are factors, such as additional street lighting, embodied energy in the materials which will have a negative impact, we will look to limit the impact of these through planting trees which will provide a long term benefit.

Policy review date	At each stage of the scheme development process
Assessment completed by	Sohail Ilyas
Date Initial CIA completed	22/10/2019
Signed by Head of Service	Charlotte Palmer
Date approved by the Transport and Environment Team and supporting comments	In authorising the issue of a work package to Skanska as described above, Skanska are required to submit details to the Group Manager Peterborough Highway Services of proposals for minimising, as far as is reasonably practical within the budget available, the carbon impact of the scheme, taking account of matters such as the embodied energy of the materials used in the construction of the scheme, the ongoing energy demands associated with the lighting of the scheme and the offsetting of carbon emissions through, for example, tree planting associated with the scheme. The Group Manager has delegated authority to approve such measures, and will only withhold such approval if reasonable practical efforts have not been demonstrated. Where agreement on reasonable measures can not be achieved, the

		proposal will be returned for further consideration by Council
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