

Peterborough Highways Bio-diversity Register Fengate, Peterborough

Peterborough Highways (Skanska and Peterborough City Council)

BIG Challenge 2015 submission category: Small scale permanent

Project overview

In 2013, Skanska signed a 10-year contract with Peterborough City Council for the provision of highway maintenance services.

As one of the industry's leading 'green contractors', Skanska is using its Peterborough Highway Services partnership with the council to model its use of green technologies and sustainable techniques.

This chimes with the council's own commitment to become the UK's Environment Capital – leading in all areas of the environment, from green spaces to sustainable development.

As part of the contract Skanska agreed to aspire to a net gain in bio-diversity across any design works delivered. This year that has involved:

- Number of Schemes: 40
- Number of Designers: 8
- Number of Staff: 60
- Value of Schemes: £7 Million.

[What were the biodiversity conditions on site, prior to the enhancement?](#)

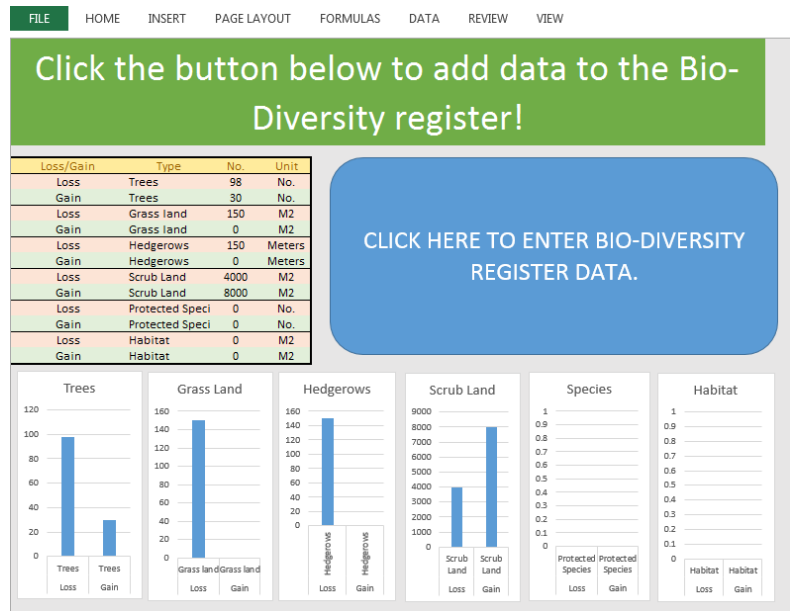


Photo: Biodiversity calculator

The project covers all aspects of a city urban environment as well as rural suburbs.

The initiative is being rolled out on all highways maintenance activities across the contract and covers all types of environment from verges, treed areas, shrub and aquatic environments.

[Were there any specific conditions that led to you carrying out this work?](#)

Skanska have the ambition to become the leading green contractor and this complements the

Peterborough City Council's ambition to become the UK Environment Capital.

Therefore when setting up the contractual requirements for the contract, Skanska suggested the "Net Biodiversity Gain" measurement.

This involved setting a net gain target for the contract requiring a new process to achieve this. This is explained fully in question 12.

What were the biodiversity measures taken?

To achieve a net gain in biodiversity across the Peterborough Highways contract, the Skanska Team had to devise a cheap way of tracking and assessing the existing biodiversity of the areas where work is to be undertaken.

Then a simple recording device was needed to track what improvements or loss had occurred due to the works being undertaken.

A simple tracking tool was developed in house by the Skanska team to record what bio resources would be lost due to the activities of the highways maintenance team and what mitigation would be put back as a result of the new design.

The tracking tool would be completed by the in house design team who as part of the design process always aim to have a net gain in biodiversity on a project, unless local constraints rule this out.

The tool records loss / gain on Trees, Grass Land, Hedgerows, Scrub Land, Known Species and Known Species Habitat. The tool was intentionally kept this simple to allow non-experts to complete it.



Photo: Biodiversity calculator

The tool itself does not provide a solution to biodiversity loss, but instead identifies how bad a loss is across the whole contract.

This helps focus the designers in delivering a sustainable design option with adequate biodiversity compensation options designed into it. The tool then allows for the mitigation to be recorded and a cross contract comparison made.

This low cost initiative could be replicated across other contracts and will easily help identify the decline or improvement in the volume of green space in an area.

How would you best describe the project?

An enhancement.

Further information

Once the tool had been developed by the environmental team at Skanska, it was issued to the design department along with some training on how to use it and a briefing about the net gain biodiversity target on the project.

Immediately it showed a decline in biodiversity trend resulting from standard design processes and policies of minimising future maintenance.

These issues have not yet been fully resolved but work is ongoing to alter design process, ensure resources

are available to design in a gain to biodiversity on a project and working with the client to accept increase maintenance from highways assets with increasingly higher amounts of green space.

If this project was to be repeated, the key lessons learnt would be to develop the process jointly with all involved from day one.

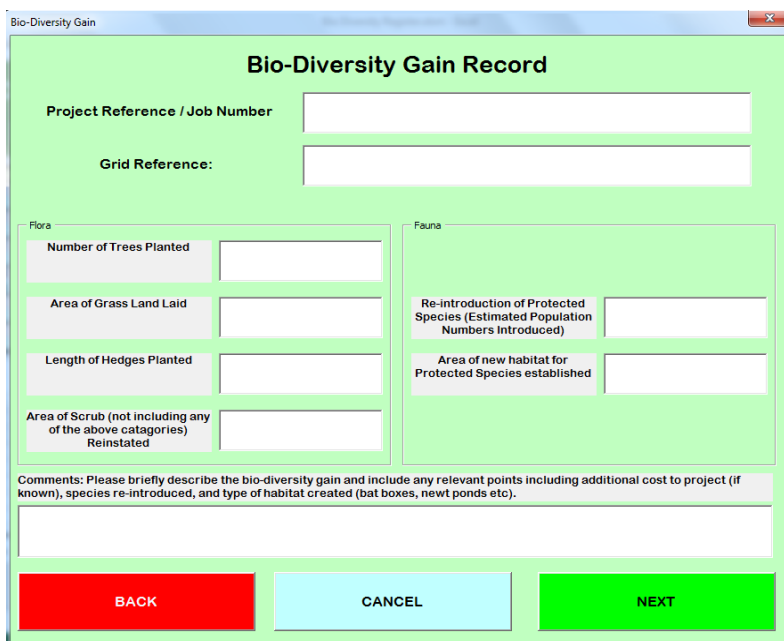
This would save time down the line in bringing all involved on a contract to the same standards and ways of thinking.

The differences between environmental concerns and financial constraints of the contract need to be overcome on day one to allow for a quicker implementation of the tool.

So far on the contract we are yet to meet the requirement for a net gain in biodiversity, but now the extent of the issue has been identified thanks to use of the new tool, we are able to plan going forward how we can achieve this in the remaining years of the contract.

What was your personal motivation for carrying out the enhancement?

I am an environmentalist at heart and believe in pushing the green agenda at all levels with the business.



The screenshot shows a web-based form titled "Bio-Diversity Gain Record". It includes fields for "Project Reference / Job Number" and "Grid Reference:". Below these are two main sections: "Flora" and "Fauna". The "Flora" section contains four input fields: "Number of Trees Planted", "Area of Grass Land Laid", "Length of Hedges Planted", and "Area of Scrub (not including any of the above categories) Reinstated". The "Fauna" section contains two input fields: "Re-introduction of Protected Species (Estimated Population Numbers Introduced)" and "Area of new habitat for Protected Species established". At the bottom, there is a "Comments" section with a text area and a note: "Comments: Please briefly describe the bio-diversity gain and include any relevant points including additional cost to project (if known), species re-introduced, and type of habitat created (bat boxes, newt ponds etc).". At the very bottom are three buttons: "BACK" (red), "CANCEL" (light blue), and "NEXT" (green).

Photo: Biodiversity calculator

With continued urbanisation and reduced budgets to deliver essential maintenance projects I think it is essential to keep driving forward with improved environmental performance or risk losing green space in cities forever.