Role Definition

Job Title: **Graduate Sustainability Modeller/Analyst**
Reporting to: **Head of Sustainability**

The Sustainability Group offers a wide range of design transforming services to our projects at city, building and product scale. You will work from London on some of the most exciting projects throughout the world. You will be a member of a dynamic sustainability group and will focus on developing predominantly numerical simulations and similar to optimise design of buildings, master plans, cities and products. This is an inventive and fast developing area and the ability to apply integrated systems thinking to develop models to optimise multi-dimensional parametric problems is key.

Responsibilities

- To undertake rigorous, data driven, intuitive, sustainable systems-thinking models to optimise design.
- To undertake, numerical and statistical analysis to inform sustainable design choices
- To undertake Eco and Carbon Footprint and other Circular Economy analysis
- To underpin numeral modelling and simulation with sound methodology that is proven and evidenced
- To conduct research into existing and emerging sustainable data sets, systems, tools and models
- Application of these techniques to the analysis and evaluation of architectural designs and mock-ups
- Producing convincing visual outputs and reports to explain and advocate sustainable design direction.
- To record evidence of the training in accordance with the requirements of a recognised professional body
- To have thorough knowledge of and compliance with F+P procedures and standards
- To contribute, or otherwise assist, as required

Qualities and skills required
Essential

- Understanding of numerical systems-based optimisation techniques for design, manufacture and construction
- Understanding of full lifecycle carbon analysis (RICS methodology, EN 15978 or equivalent) that can be applied to building and masterplan scale.
- Understanding of international climate policy; including but not limited to the Paris Climate Agreement and the UN Sustainable Development Goals
- A passion for sustainability and committed to the development of sustainability thinking
- Ability to communicate complex technical information in an engaging non-technical manner
- Having a flexible attitude and building good relationships at all levels, internally and externally
- Having excellent organisational skills
- A good numerically based undergraduate degree, or higher, with significant sustainability content
- Committed to obtaining a professional qualification
- Being legally able to work in the country in which the position is based

Desirable

- An understanding of CAD, BIM and GIS packages including but not limited to, Revit, Rhino, Grasshopper, Dynamo, ArGIS.
- Experience with a programming language, preferably python, C# or JavaScript.
- An understanding of Eco and Carbon Footprint analysis
- Ability to use InDesign, Illustrator packages

This description reflects the core activities of the role but is not intended to be all-inclusive and other duties within the group/department may be required in addition to changes in the emphasis of duties as required from time to time. There is a requirement for the post holder to recognise this and adopt a flexible approach to work. Job descriptions will be reviewed regularly and where necessary revised in accordance with organisational needs. Any major changes will be discussed with the post holder.

June 2019