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## **Byron Stigge, environmental engineer**

**The environmental engineer is busy now as a member of the Great Park design team.**

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**IRVINE WORLD NEWS**  
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For most of the design team, the Great Park will be the project to crown their successful careers. But for Byron Stigge it is the project that could launch his career.

Sure the 29-year-old environmental engineer and designer has already been involved in some incredible projects. He worked on the Millennium Dome in London and the Team Think World Trade Center memorial project.

But the Great Park is Stigge's chance to shine.

The park will be about twice the size of Central Park in New York and it may well serve as the most comprehensive sustainable place – a place created in such a way as to preserve the environment for future generations.

Stigge's job is the energy part of sustainability – reducing energy needs, using alternative energy sources and measuring the park's energy efficiency.

He hopes that the Great Park project, and his turning 30 soon, will give him an opportunity to change the world.

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Stigge was born in Omaha and grew up in the suburbs. His parents divorced when he was young and lived with his father.

That childhood started Stigge on a creative life.

His father let him do pretty much whatever he wanted. So Stigge turned the basement into his play land – painting with oil paints, building with Legos and playing with toy cars.

Stigge's dad also instilled in him the love of traveling. Each Christmas Day the two would board an airplane for some exotic destination – Paris, Vienna, the Cayman Islands.

Stigge attended the ivy-league Washington University and majored in architecture and structural engineering – a grueling combination that meant three all-nighters each week. Some of the professors ignited his mind.

"They challenged me to make a difference," he said.

A summer internship at design firm Buro Happold also shaped Stigge.

In the summer of 1998 he interned for the company – his first project was creating structural drawings and architectural models for the Millennium Dome in London.

It just clicked.

"I've worked for them ever since," he said.

Since he's worked for the firm, Stigge has taken two educational breaks.

He studied environmental and mechanical engineering at MIT.

"It made me feel like I could change the world," he said.

Stigge also took a break to get a master's degree in design studies at Harvard. There he learned about transit systems, landscape planning, and the business and political sides of environmental design.

Back at Buro Happold, Stigge has helped grow the firm's New York office – from six people working in Chinatown to 70 people working in an office at 100 Broadway.

In that office, at age 23, Stigge was able to learn from a partner in the company, Tony McClaughlin.

"He can draw humidity with a pencil," Stigge said. "He has the sensibility of what's important in an environment."

In the early 2000s, as green building was growing in popularity, Stigge was given the flexibility to move in that direction.

"They said 'yeah go for it.'"

Now, environmental engineering has grown into its own thing – giving the company a good reputation and more projects.

It also grew Stigge's profile. He now has seven people working on his team, and he'll be hiring another three in January.

Now, Stigge is working on the Great Park and two other large projects – a Las Vegas hotel complex and a 21-million-square-foot mixed-use project in Seoul. His team is also working on 10 smaller jobs.

The intense schedule keeps Stigge moving – in the past two years he's been to 25 countries and traveled more than 300,000 air miles. (But he does pay toward wind turbines that reduce carbon emissions to make up for his air traveling.)

So what's next for Stigge? Can he help make the Great Park a sustainable mecca?

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No one knows yet how the Great Park will turn out. But, Stigge and the design team are working on some ideas that may make it one of the largest sustainable projects in the world.

Those concepts include **connecting and measuring** the park's energy systems with fiber optic cables, and **making energy from sunlight** with solar sterlings, as first suggested by students in a UC Irvine Great Park class. Each mirrored dish can power eight to 20 homes.

But, Stigge isn't stopping there.

At his young age, he dreams of changing the world.

He wants to help design cities and buildings in Africa, serve as a mentor to other designers, have a wife and children, and – his never-ending goal – to figure out the point of life.

For now, he'll keep traveling and building his career – which he said "allows me to think of my life in terms of the other 6 billion people in the world."

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Byron Stigge is the energy consultant for the Great Park.

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