## SIVAN DESIGN LTD

# 3D Simulation in CAD and GIS

Sivan Design Ltd was founded by its present CEO, Shlomo Sivan and David Sivan, and incorporated as a privately held company in 1996. Since its inception the company has been dedicated to the development of Civil Engineering CAD products and GIS turnkey software solutions. The R&D and management divisions of Sivan Design are located in Israel, where a team of highly qualified experts in software, CAD and civil engineering develop technology and products. The software is sold worldwide through representatives or strategic alliances with local providers of professional services. The company currently employs 21 professionals and sales have increased by 30% annually over the past three years.

### **Mission and Products**

The company aims to become a global leader in civil-engineering CAD and GIS software systems. It began its marketing activities in 1999 with CivilCAD and CivilCAD 2000 established the company as a major player in the civil-engineering software market. Today CivilCAD 2006 offers extensive, true 3D-simulation capabilities based on new technologies. The suite is designed for road construction and design, surveying and handling of upper and underground infrastructure, earth-works volume calculations, water engineering, landscape design, and lifelike 3D-simulation. The product named LAPS, introduced in 2001, was to be replaced by GeoERP, the first ERP-GIS integrated solution for management of land, property, roads and underground infrastructures. This serves as a data warehouse for the above categories, offering quick navigation between the various data sections and dynamic linking of related system items. GeoERP also includes a powerful, integrated GIS environment; each main spatial datum (land, road, or pipeline) is placed on the regional map and linked to its respective data.

#### **Customer Base**

With over three thousand installations worldwide, Sivan Design has firmly established itself as a new contender in its field. Some features of the software, such as its extensive true 3D-simulation capabilities, are unique and currently experience little competition. Our products and solutions are used by some of the worldâ€<sup>™</sup>s top civil engineering companies and authorities, from â€<sup>™</sup>Fortune 1000â€<sup>™</sup> small and mid-size companies to federal, state, country and local municipalities. Products are marketed internationally through long-term strategic alliances with local Value Added Resellers who offer services such as training, support and upgrades. These distribution channels aid the company in penetrating new markets. We target developed and developing and emerging markets and have distributors in the USA, Portugal, Romania, China, Nigeria, Uganda, and India, while we plan to expand to South America, Ghana, Angola and Ethiopia.

#### The Market

The users of our flagship product, CivilCAD, include surveyors, contractors, road designers and water engineers. Their work is getting more and more sophisticated, and to stay competitive they need computers and software adequate to ensure their projects are of high quality and finish in time. More and more young people are entering the market and they demand new technology to make their work easier. In addition, tools currently in use are improving and becoming more sophisticated. The main demand we foresee is in-built 3D-simulation capabilities. The need is for real-time 3D-simulation allowing every change in design to immediately be reflected in the 3D-simulation, making it useful as an engineering design tool. A year ago it took weeks to create a lifelike 3D-simulation of a project, and this was mainly used to sell the design to the customer. Today it is possible to create 3D-simulation at a click and use it throughout the design process for measuring distance, simulating driving along a newly designed road, checking line-of-sight and so on. We also foresee demand for connectivity between elements, so that change in one is automatically reflected in the entire design. For example, change in the road centreline should automatically change road profile (vertical alignment) and cross-sections. We see similar demand emerging in architecture under the new buzz-word BIM (Building Information Modelling). This may be compared with the demand in Information systems like ERP (Enterprise Resource Planning); all elements are connected and all is incorporated within one system.

#### The Future

We foresee strong growth in demand for realistic 3D-simulation capabilities in civil-engineering CAD and GIS and will continue to develop and expand our two product lines with special emphasis on 3D-capabilities and seamless compatibility and integration with third-party software applications. This will offer customers the application of advanced and extensive 3D-simulation capabilities to existing projects. Sivan Design aims to become a GeoERP platform supplier. This implies that we offer a system to serve as a technology platform for specific information systems tailored to individual customer requirements. The technology platform will include the GIS-ERP engine, database, and 3D-simulation technology. We intend to concentrate our marketing efforts on massive penetration of the American market by expanding our existing distributor network and recruiting more sales personnel in more states. We also plan to introduce and expand marketing activities in India, China, the UK, Spain, Romania, Poland, Mexico, Brazil, Ethiopia, Ghana, Uganda, Angola, and the Ivory Coast.