



SERVICES DESIGN TECHNOLOGY International



Master Planning
and Urban Design



Master Planning and Urban Design

At SDT our planning work draws on our understanding of the market forces and our grasp of the broader community and the public interest context for development projects.

Our work demonstrates a continuing commitment to the highest level of design standards and technical expertise. Working closely with each client, we determine the unique project needs and tailor our services to those needs.

Our goal is to achieve quality designs which integrate the expectations of the client, attributes of the natural and man-made setting, and the personal commitment of our staff to the design process.

Environmental opportunities and constraints, project scheduling, programming and costs are analyzed within the context of the client's goals. A conceptual design is then generated which is subsequently refined through an evaluation of critical design elements.

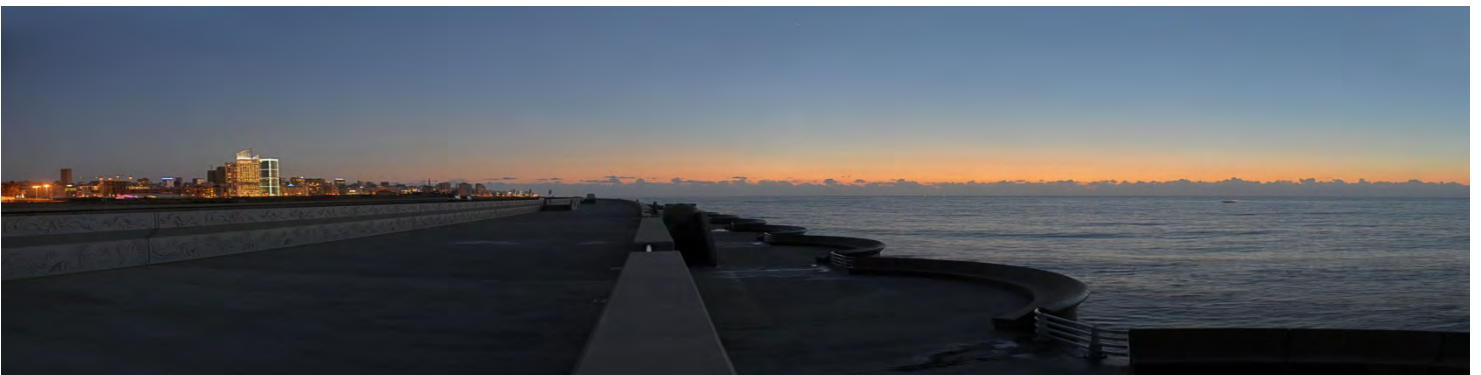
Our approach to successful planning is by utilizing the knowledge of our team and binding their intellectual and experiential capabilities in realizing the clients' vision. As such interaction, participatory approach, and exchange of information among different stakeholders are necessary conditions for successful plans.

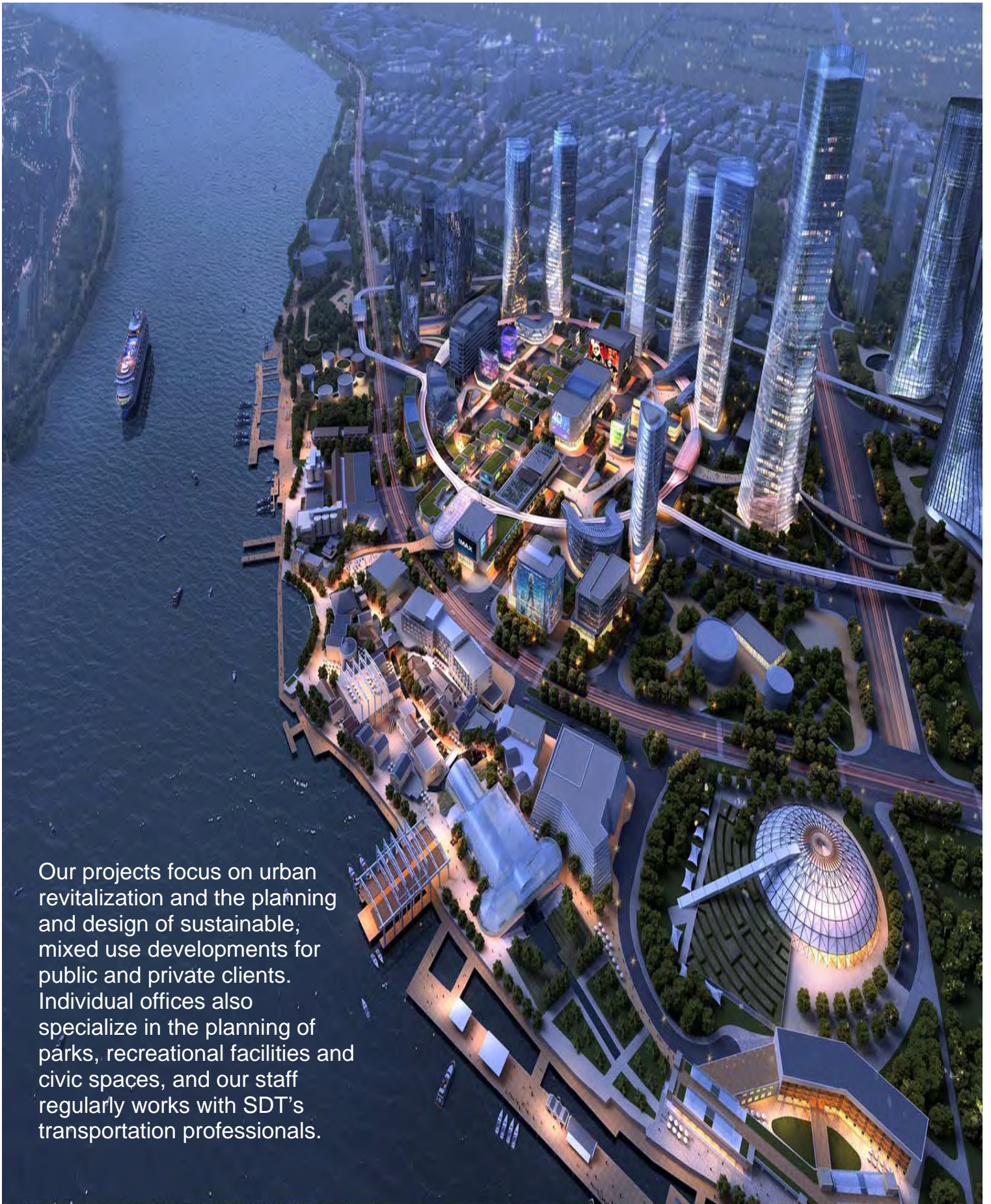


SDT and our Philosophy

We know from experience that “*companies don’t do things, people do*”. When SDT is commissioned to carry out a project, the company directors are personally involved in every step of the project from start to finish.

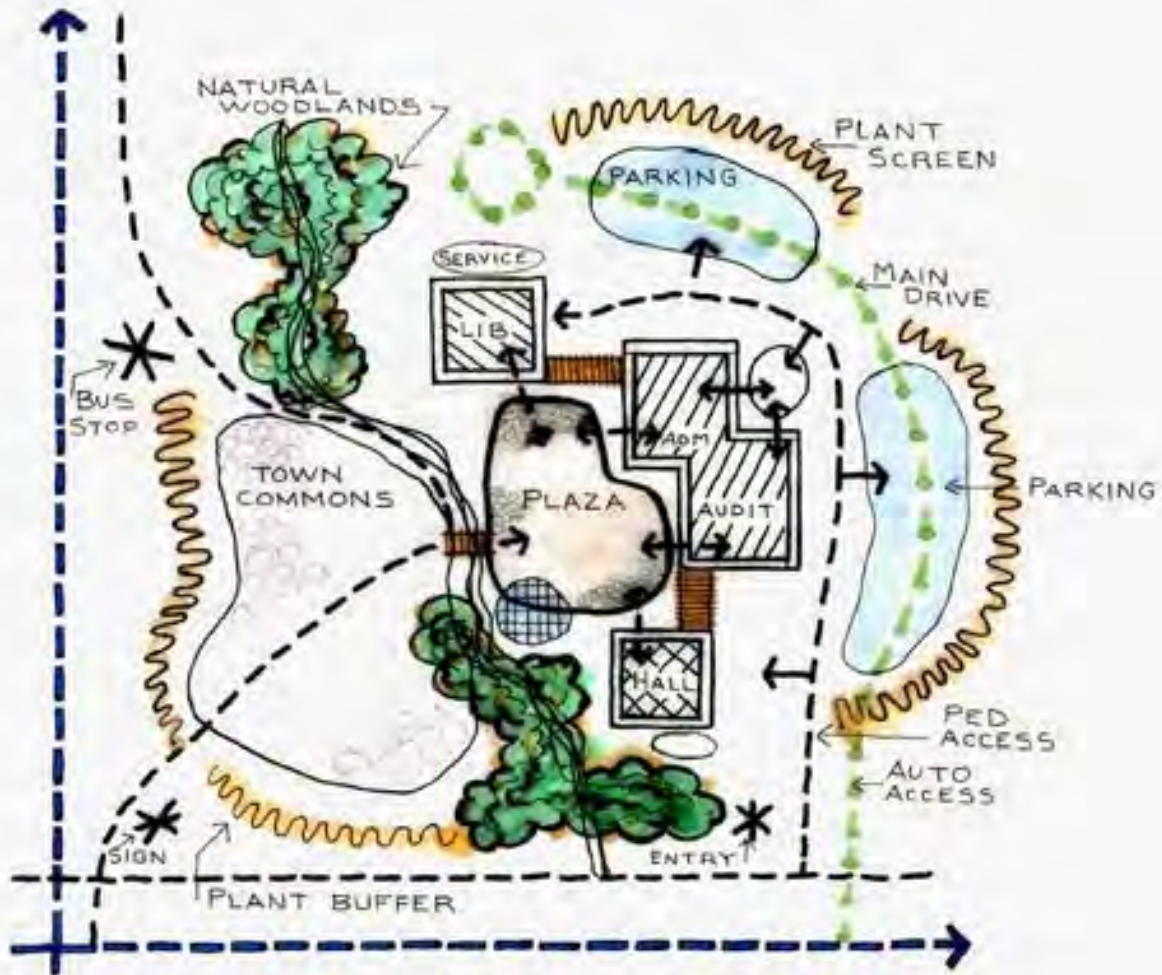
SDT does not offer a standard product. We listen closely to the client and then tailor a unique scope of work and set of deliverables responding directly to the client’s requirements for that specific project.





Our projects focus on urban revitalization and the planning and design of sustainable, mixed use developments for public and private clients. Individual offices also specialize in the planning of parks, recreational facilities and civic spaces, and our staff regularly works with SDT's transportation professionals.

The Planning Process



- Establish goals and vision together with the client
- Develop basic land-use and circulation options and review with client
- Prepare Preliminary Master Plan and review with client
- Prepare Final Master Plan
- Prepare infrastructure engineering support documentation
- Prepare documentation to support the client's marketing effort

CONCEPT PLAN



Our Approach

Teamwork and collaboration are key elements of our approach. We influence our extensive resources to create multi-disciplinary teams that tackle the most complex challenges and deliver the highest quality client services.

This approach is derived from our understanding of urban environments as integrated networks, similar in many ways to natural ecosystems.





Our Planning and Urban design services

SDT's experience and expertise extend into many areas of planning and design. Our services are organized according to their focus on community planning, mobility planning and environmental planning.

Community:

- Urban Revitalization
- Regional, Community and Neighborhood Planning
- Town Planning and Urban Design
- Form-based Codes and Design Guidelines
- Economic Development Consulting

Mobility:

- Transit Planning
- Corridor Planning
- Streetscape Design
- Bikeways and Trails Planning & Design

Environment:

- Parks and Recreation Master Planning
- Civic Space Design
- Open Space Master Planning
- Greenways Planning and Design
- Landscape Architecture
- Sustainable Environmental Planning





Our Engineering Teams and services

Civil Team

- Civil and road design
- Haul-road design
- Bulk earthworks
- Storage, dams and ponds
- Water management, supply and reticulation
- Sewerage, wastewater, drainage
- Workshops and site buildings
- Fuel facilities

Structures Team

- Transport structures, tunnels, bridges
- Heavy industrial structures
- Liquid retaining structures
- Workshops and site buildings
- Accommodation camps and housing

Mechanical Team

- Pipelines/Separators design
- Heating, ventilation and air-conditioning (HVAC)
- Fire suppression
- General mechanical design
- Fluid distribution

Power Team

- Thermal generation
- Renewable generation
- Transmission and distribution design
- Load flow studies
- Substation design

Electrical, instrumentation and controls Team

- High-voltage transmission and switchyards
- Low-voltage transmission and reticulation
- Design services, such as schematics, terminations and layouts
- Process and instrumentation design and selection
- Control system design, including PLC, telemetry and DCS
- Earthing and lightning protection
- Street Lighting

Process design Team

- Water gathering system
- Water treatment and waste management facilities
- Gas and water pipelines



Sustainable Design

We have comprehensive design approach to environmental, socio-economic and cultural sustainability. We go beyond the tangible considerations of building performance and energy use, to maximize sustainable value and benefit to the communities and places we design for in real human terms.

We are leaders in sustainability by designing world-class environmental projects. Clients benefit from our specialist consultancy services across the whole project cycle. We advise on implementing sustainable design principles from briefing and master planning to concept design, tender phase to site supervision.





Our Outreach

Our work is always grounded in intensive research and project analysis combined with extensive outreach to clients and the surrounding community.

Our design and public facilitation skills are powerful tools that are sensitive to political and market realities and help achieve consensus among community stakeholders.



Our Transportation Design

The SDT Transportation design section provides engineering consultancy services in the field of roads, highways and bridge designs, subdivision development, drainage, in addition to transportation and infrastructure related services on airport and marina development projects.

SDT's transport structures services include:

- Transport strategic advice and master planning
- Feasibility studies and concept design
- Tender design and detailed design
- Bridge structures designs
- Tunnel structures
- Road furniture and lighting systems





Project and construction management services

Project controls

- Financial control
- System management and integration
- Cost estimating
- Scheduling

Project and construction management

- Project management
- Construction management
- Program management





SERVICES DESIGN TECHNOLOGY International

About SDT

SDT international was established in 1991 as an engineering consulting company that provides comprehensive range of Master Planning and Urban Design services in the Structural, Mechanical, Electrical, Environmental and Infrastructure design.

For the past 22 years, we have been a pioneering force in the planning, design and implementation of development projects in the Middle East and UK.

With five offices in five countries, we employ high caliber specialized engineers capable to apply innovative approaches to design and deliver practical and cost effective solutions.

UK . Lebanon . KSA . Qatar . Dubai

www.sdtconsultant.com



Appendix A – Our Previous Projects



Master Planning Design

AdDirayah Compound

RIYADH, SAUDI ARABIA

The Project

The site, identified in the 2003 AdDirayah Master Plan as El Thoulayma District, is located approximately 20 Km northwest of the center of Riyadh.

The 7.2 million square meter Site is approximately 4km long and 1.5km wide. It is bounded on the north and east by limited access expressways and on the west by Wadi Hanifa. On the southern boundary is a major road separating the site from the rest of AdDirayah. With the exception of some urban development in the south east corner of the site, El Thoulayma District can be considered in relative isolation from the surrounding properties.

The purpose of this initial phase, Site Analysis, is to uncover, understand and document everything we can find out about this property. This includes its physical characteristics as well as any legal and zoning restrictions.

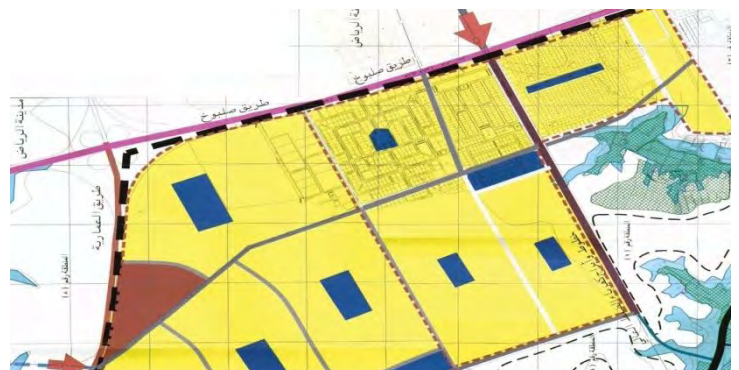
The Results

A master plan solution for the proposed project, which helped in the initial feasibility studies of the development. Our study has helped our client with decision making for future investment purposes.

Our Role

Preparation of this Master Plan is divided into 4 main phases:

- Site Analysis
- Land Use Study
- Preliminary Master Plan
- Final Master Plan



SERVICES DESIGN TECHNOLOGY INTERNATIONAL



Master Planning

Al Ahsa National Park
AL HOFUF, KSA

The Project

The North Beach Development Project (32kmq) include 10 new hotels, 12,000 apartments, 2 golf course, 8,000 villas, 4 marines and commercial sites.

Our Role

This project called for the development of over 2.5 million square meters of stabilized sand dunes within the Al Ahsa National Park located in the Al Ahsa oasis.

Working closely with the developer, we developed a vision and group of compatible uses that fit both the developers requirements and fulfilled the requirements of the Ministry of Agriculture.

A separate marketing package was prepared for each parcel including its proposed use, a building program for its development, design guidelines, a construction cost estimate and a feasibility study for each parcel.

Our Services

- Master Plan
- Program Guidance
- Construction Cost estimate
- Feasibility study
- Design guidelines

The Result

We assisted our client in verifying their master plan with our feasibility studies to meet the requirements of the Ministry of Agriculture.





Master Planning

Baku Gateway

BAKU, AZERBAIJAN

The Project

Baku White City will be one of the largest modern projects in the world, built entirely on ecologically reclaimed industrial zone.

Baku City will encompass 244 ha, making it largest development in Caucasus region - 11 times the size of Icheri Shahar in Baku and more than Monaco

Our Role

Our client was approached by a group in Azerbaijan and asked to participate in the development of a large piece of property in Baku. We were retained to investigate the market and the property and to propose an investment and development plan for the property.

After researching the opportunity, we prepared a master plan, preliminary budget and development strategy.

The project includes a hotel, office building, apartment complex, shopping mall and mixed use district adjacent to and blending with adjacent existing buildings.

Our Services

- Master Plan
- Budget Strategy
- Development Strategy





Program Management

Barwa Residential Development

DOHA, QATAR

The Project

The Barwa City Project is a residential housing project with a planned ultimate population of about 40,000 in a self-contained development. Barwa City consists of 128 residential buildings varying from G+1 to G+6 floors approx. 6,000 apartments, 2 amenities areas providing recreation facilities, nurseries and convenience shopping for residents.

Our Role

We were hired as Program Manager to help Barwa implement Phase I and prepare the tender documents for an international competition for the planning of phase II. Working together with the client, we created a vision and program guidelines for the competition. Part of our responsibility was to re-plan the amenities and municipal support areas within the project.

Our Services

- Master Plan
- Program Guidance
- Budget Strategy
- Development Strategy

The Project is under construction.





Master Planning

North Beach

DOHA, QATAR

The Project

The North Beach Development Project (32kmq) include 10 new hotels, 12,000 apartments, 2 golf course, 8,000 villas, 4 marines and commercial sites.

Our Role

An initial request from the Emiri Diwan to investigate the possibility for the development of an entertainment venue for Doha evolved into a master plan for a 24 sq Kilometer parcel located north of Doha West Bay District.

Envisioned as a logical extension of the city of Doha it was planned for a series of high-end resort properties located along the beach. At the center of the property, an entertainment village was proposed.

Since the original presentation, this concept has evolved into the mega-development now known as Lusail.

Our Services

- Master Plan
- Program Guidance
- Budget Strategy
- Development Strategy

The Result

We worked closely with the client in a 'best for project' arrangement that ensured a high-quality organised and sustainable outcome and timely delivery.

Combined with our Engineers and Urban Designers expertise, this resulted in a well planned development.

This project is currently under construction.





Program Management

Sahara Lake City
LANOVELA, INDIA

The Project

The world's largest chain of integrated townships ranging from approx. 80-300 acres each, offering amenities superbly matched to international standards, being developed in a number of Tier-I, Tier-II & Tier-III cities across India. A Sahara City Homes Integrated township typically consists of a gated community with residential units in the form of apartment towers, townhouses and individual houses.

Our Role

Our teams were retained by the investor as Program Manager to create and lead a management organization capable of managing the design and construction of a new city with an eventual population of 100,000.

This project is located in a remote valley in the mountains between Mumbai and Puna. Enabling works included the construction of 40 km of access roads, opening of two quarries, construction of 3 water reservoir dams and installation of over 60 km of electrical transmission lines, an airport and some 70km of highway through mountain terrain.

Our Services

- Program Management
- Program Guidance
- Feasibility studies

The Result

The program ran as planned and successfully achieved the target demand requirements. The program yielded the following key results:

- 40 km of access roads
- 70km of highway through mountain terrain
- 3 water reservoir dams
- 60 km of electrical transmission lines
- An airport

