

DESIGN OF LARGE-SCALE CIVIL ENGINEERING INFRASTRUCTURE PROJECTS



IN OUR TEAM YOU CAN TRUST



INGENIERÍA DENNIS



Knowledge that translates
into years of experience



30 years of experience in civil engineering.

Engineers with more than 20 years of experience in large-scale projects. Headquarters in Mexicali, Baja California, with alternate offices in Monterrey, Nuevo León; Dennis Engineering has established international alliances that have given its reliability, prestige, and recognition.

Considered as a leading company in the field, for the distinction of having a skilled and trained professional team to make use of high technology in the development of planning, design, and execution of its services.

WHAT WE OFFER...

SUSTAINABILITY

Social responsibility.

We have assumed responsibilities; mitigating the impact on the environment, through the restoration of wetlands of the Dren Collector del Norte, in the city of Mexicali, Baja California, in collaboration with the Sonoran Institute.

On the other hand, we contribute to the integral development for children and young people between 4 and 16 years old, promoting Academia Soles, Basketball School of Club Soles de Mexicali.

SERVICES

PROJECT MANAGEMENT

The core of our services.

We offer innovative and bold solutions for unique projects. We actively participate in the projects. We apply knowledge, skills, tools, and techniques to meet its requirements.

Through experience, we define high-quality processes for the design and coordination of infrastructure projects.

To deliver successful projects, it includes complying with all requirements, codes and regulatory standards.

This is achieved through the Dennis Engineering protocol, developed with precision:

- **Preliminary studies.**
- **Planning.**
- **Design.**
- **Draft.**
- **Administration.**
- **Supervision of civil works construction.**



TOPOGRAPHIC / CARTOGRAPHY

The success of any large or small project depends largely on the quality of the initial survey and mapping studies.

We have extensive experience and knowledge of the requirements for preliminary studies of topographic boundaries, whether by the crew, satellite or aerial support.

Our team manages the projects from conception to completion; providing professional services that include the verification of horizontal alignment and vertical controls, to start and build an important project.

It also includes the establishment of construction elevation benchmarks, site-specific horizontal control points, and the physical location of all necessary construction points, so that the contractor can locate the main improvements proposed for the project.

The experience of our team develops the installation of points for the alignment of the main bridges, streets, roads, drainage facilities, public services (water/sewerage), masterly planned communities and residential subdivisions, commercial developments, pipeline strokes, aqueducts, and entire cities.

AERIAL PHOTOGRAMMETRY

We offer the latest technology so that our staff develop accurate project designs, this provide efficient and multidisciplinary integration for complex modeling information.

We combine the use of aerial photography and ground control using GPS equipment and GIS software, topography and 3D images are obtained, offering an integral solution.

We also use Mapper 1000 DG Trimble drone, one of the most advanced aerial mapping and survey drones, saving time and providing high level precision.



WATER AND WASTEWATER

More than 500 hydrological studies, scour analysis and design for crossings in drains, canals and rivers have been developed.

- **Topographic survey, drain design, earthwork volumes calculation, plan and profile drawings and survey stakeout.**
- **Structural, hydraulic and hydrological design of a reinforced concrete vault for wastewater conduction.**
- **Modernization of channels by contemplating regulatory structures that provide stability and excellent control of water levels in a simple way.**
- **Rehabilitation Design for regulation structures, sliding gates, electromechanical equipment, roadside channels and linings, automatic gates, reservoirs for water storage and intake structures.**



ENERGY

As an experience in the energy industry, we developed natural gas distribution networks for the cities of Mexicali, Monterrey, Torreon, and Chihuahua.

We developed integral Civil Engineering projects, for the construction of all types of power generation plants.

We designed natural gas transportation lines in the state of Baja California, Sonora and Sinaloa. From 30 to 42 inch in diameter for more than 2,000 kilometers.

Projects have been carried out for transmission and natural gas distribution in Monterrey, Saltillo, Nuevo Laredo, San Luís Potosí, Aguascalientes, León, Irapuato, Silao, Salamanca, Celaya, State of Mexico and Mexico City.

These projects consist of developing project engineering for natural gas pipelines; route selection, topographic surveys, special stream crossings, roads and railroad track crossings.

Hydrological, geological, cathodic protection studies and permitting before agencies, such as CNA, PEMEX, SCT and more, where we have made more than 2,000 plans of permitting crossings.



URBAN / TOURIST / INDUSTRIAL DEVELOPMENTS

As a consultancy in urban developments of all kinds, such as: residential, commercial, industrial, etc., we merge the science of city construction, with the art of placemaking, through a collaborative and multidisciplinary approach to Project delivery, covering the fields of planning, engineering, surveying, architecture, landscaping, construction, marketing, finance, among other specialties.

We appreciate the nuances that drive communities such as economic, cultural, political, social, environmental and historical factors. We also understand the basic principles of design, function and sustainable, neotraditional and conventional design philosophies. All to reliably advise our clients and contribute to high quality urban developments.

We divide the process covered in Urban Development at least in seven stages:

- 1 Viability**
- 2 Project site analysis**
- 3 Conceptual design**
- 4 Schematic or preliminary design**
- 5 Final design or executive project**
- 6 Permissions**
- 7 Construction**



CONSTRUCTION SUPERVISION

Professional construction supervision to safeguard the successful completion of any project.

Experienced in construction materials, procedures, time, cost and quality monitoring.

Outstanding preparation to ensure all work conforms to the specified technical documentation and the construction permit.



PORTFOLIO



“BAJANORTE” GAS PIPELINE

Professional construction supervision to safeguard the successful completion of any project.

Experienced in construction materials, procedures, time, cost and quality monitoring.

Outstanding preparation to ensure all work conforms to the specified technical documentation and the construction permit.



“AGUAPRIETA” GAS PIPELINE

Sásabe-Guaymas-El Oro, Sinaloa, Mexico.

840 kilometers of 30” and 36” diameter pipeline in steel.

Route selection, topographic survey with GPS center line and crossings for permits. Management and preparation of plans of crosses to obtain permits.



LIQUEFIED NATURAL GAS PLANT

Ensenada, Baja California, Mexico.

Preliminary studies, topographic survey of the total area of the plant, pipeline alignment, earth-works, civil works and overpass for access to the plant, management before SCT for permits.



NATURAL GAS DISTRIBUTION IN NORTHEAST REGION, CENTRONORTE AND CENTROSUR DE MÉXICO.

Nuevo León - Coahuila - Tamaulipas - Aguascalientes Guanajuato - Querétaro - San Luis Potosi - Zacatecas Toluca - CDMX.

More than 220 kilometers of gas pipeline of various steel diameters, 127 special crossings, 25 hydrological studies and undermining, 5 geological studies and 102 kilometers of cathodic protection design. Topographic survey, design of the line and civil works for gas pipelines, efforts to obtain the rights of way and permits of the CNA, SCT, and Pemex.





CONSTELLATION BRANDS BREWERY CO.

Mexicali, Baja California - Obregón,
Sonora - Nava, Coahuila.

Executive civil works projects of storm drainage, sanitary drainage, drinking water and treated water lines, dirt roads, ground levels, platforms for main buildings, fiber optic exterior network, fire system exterior network, demarcations and property certificates, special crossings for permits before dependencies, access and connections to public roads, aqueducts, environmental impact studies, geotechnical studies



AQUEDUCT "PAPER AND PACKAGING GONDI"

Monterrey, Nuevo Leon, Mexico.

Design and development of infrastructure project with a length of 7.3 kilometers; an 18-inch line of PVC and high-density polyethylene at special crossings to conduct treated water, from a treatment plant to the Gondi Paper and Packaging facilities.

Definition of the route, topographic survey and aerial photography with drone, hydraulic design of the line, a manifesto of environmental impact, plans for crossing permits and marginal facilities and executive project of the line.



LOS ANGELES INTERNATIONAL AIRPORT, CALIFORNIA "LAX"

Los Angeles, California, USA.

Design and development of a 23.4-mile-long civil infrastructure project, on a 10" line to drive "Turbosina" fuel, crossing five counties in the Los Angeles area from the Vopak refinery to the "LAX" Los Angeles Airport.



"LA ROSITA" THERMOELECTRIC PLANT

Mexicali, Baja California, Mexico

Land surveying, route design for transmission power lines, pipeline project to bring water to the plants, project to bring natural gas to the city's power generating plants and civil works projects.





DESALINATION PLANT “AGUAS DE ROSARITO”

Rosarito, Baja California, Mexico.

Desalination of seawater. The project also includes the basic engineering services for permits and bidding of the plant that projects a total of 4.2 m³ / s of drinking water; the draft of a 30-kilometer aqueduct from the city of Rosarito, to tank 3, administered by CESPM and to the Florido plant, in Tijuana, Baja California, as the second point of delivery.

Topographic surveys, route selection for plant pick-up and discharge lines, services draft, structural draft of buildings and tanks; for the aqueduct, preliminary draft with route selection, photogrammetric survey, topographic surveys, preliminary hydraulic design, crossing plans, and right-of-way plans

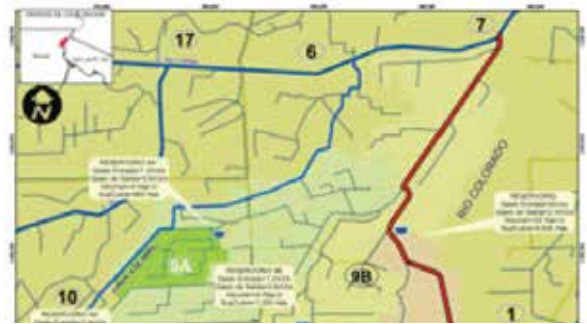


“LA PALMA” DAM

San José del Cabo, Baja California Sur, Mexico.

Supervision of activities and processes. Surveillance, verification, and requirement that the processes and construction of work conform to what is established in the design, to the applicable specifications, standards, and laws, according to the amounts, terms and conditions that are agreed in the contract.

The supervision was responsible for the control bodies for obtaining volumes and quality of work executed, reported and paid in the corresponding estimates, carried out for Conagua



EXTERNAL PROJECT EXECUTING UNIT

Mexicali Valley, Baja California, Mexico.

Design of the “April 4” Channel; with a length of 32 kilometers and with a project expense of 28 m³ / sec and its irrigation area 298 kilometers of canals. And reservoir design in an area of 30,000 hectares.

Topographic surveys, analysis of groundwater controls, design, studies of soil mechanics, geology and geotechnics, cost-benefit study, environmental impact manifesto, design of measurement and control structures, contracting of rights of way, project supervision executive.



WIND FARMS ENERGY

Sierra Juarez, Tecate, Baja California, Mexico.

Topographic survey with GPS, preliminary draft of roads and supervision of civil works construction.





TOURISM DEVELOPMENT “EL DORADO”

Cabo San Lucas, Baja California Sur, Mexico.

Preparation of geometric proposal and division into lots, as well as development of executive infrastructure projects, such as: topographic survey of the area with high-tech GPS equipment, preliminary draft, division into lots project, rainwater solution project, potable water and drainage solution project sanitary, signaling project, stream demarcation, development access project, and generation of necessary documentation for permit procedures before dependencies.



SUBDIVISION “CASA MAYA”

Mexicali, Baja California, Mexico.

Development Casa Maya I and II consists of 400 lots that include three models of residences, in lots of lands from 160, 190 and 200 m2.

Design of executive projects of infrastructure works, construction supervision and permit management.



SAN FELIPE BEACH CLUB

San Felipe, Mexicali, Baja California, Mexico.

Preparation of a geometric proposal and division into lots, as well as the coordination, development and management of infrastructure projects, such as: topographic survey of the area with high-tech GPS equipment, preliminary draft, division into lots project, rainwater solution project, solution project for drinking water and sanitary drainage, signaling project, demarcation of streams, development access project and the generation of necessary documentation for permit procedures before dependencies.



THE PORTAL SUBDIVISION, VILLAS OF THE DESERT AND RSG HOMES

Calexico, California, USA.

Private residential development, at the executive project level projected in stages. The general estate is close to 150 acres and consists of 4 housing units with a total of 630 residential lots, an area for 17.5-acre apartments. Also, it has recreational areas, roads and lots for public services.

RESUME

Ing. Alan Dennis Gracia

**Civil Engineer, by the Monterrey Institute of Technology and Higher Education (ITESM), Monterrey campus, generation 1984.
Professional ID: 989436**

Managing Director
Ingeniería Dennis S.A. from C.V.

Extensive experience in the advanced management and administration of large-scale projects, coordination, and design of infrastructure projects in areas of energy, hydraulics and urban developments.
Coordinate, assign and supervise projects.
More than 30 years of experience.

Ing. Juan Francisco Prado Osuna

Civil Engineer, from the Autonomous University of Baja California (UABC).

Experience in preliminary studies, route analysis and construction of gas pipelines.

He specializes in the design of pipeline projects and rights of way; management and improvement of georeferenced information.

More than 20 years of experience.

Ing. Norberto Quezada Ayala

**Civil Engineer, from the Autonomous University of Baja California (UABC).
Master in Engineering, specializing in the environment, from the UABC Institute of Engineering.**

More than 15 years of experience.

Ing. Santos Omar Estrada Verdugo

Civil Engineer, from the Autonomous University of Baja California (UABC).

More than 20 years of experience as an engineer in hydraulic infrastructure. Coordinates executive projects of the hydraulic infrastructure of drinking water, sanitary and storm sewer.

Ing. Gerardo Gutiérrez Lugo

**Surveyor Technician.
Chief of Surveyors in Dennis Engineering.**

More than 25 years of experience as a surveyor. 11 years in gas pipelines from 4" dia to 42" dia steel.

Specialty area with GPS trimble 4700, 4800 receivers and TSCI V 7.6 data collector: location and measurement of control points, as well as measurement of ground control points (crossings) to support the control of aerial topography work, survey in real-time (radio trimmark II); post-process in software TSOFFICE, GPSURVEY, TRIMBLE, GEOMATIC OFFICE AND MICRODRON MAPPER 1000 DG TRIMBLE.

Dron pilot licence.

Ing. Antonio Valdéz Rivera

**Civil Engineer, from the Autonomous University of Baja California (UABC). Diploma in Project Management at the Universidad Latinoamericana.
Master in Real Estate and Industrial Valuation from the Technological Institute of Construction A.C.**

Area of specialty in project management; coordination, construction in general and design of infrastructure projects; supervision and control of work.

More than 30 years of experience.

Ing. José Ramón Gutiérrez Moreno

Civil Engineer, from the Autonomous University of Baja California (UABC).

More than 20 years of experience in project management; coordination and development of infrastructure projects.

Architect Adriana Palacios Barrios

Architect, by the Autonomous University of Baja California. Postgraduate in Landscape Architecture.

With more than 30 years of experience in design, interior design, and landscape. Coordination and administration of executive housing projects for medium-high housing, tourism, and building developments, as well as in the design of public parks.



**OUR COMPANY ALWAYS
AT THE HIGHLIGHTS
IN HIGH TECHNOLOGY.**

INGENIERÍA DENNIS
ESTUDIOS Y PROYECTOS DE INFRAESTRUCTURA



INGENIERÍA DENNIS

Calz. Cety's 2799-A, Col. Rivera,
C.P. 21259, Mexicali, Baja California, México.

+ 52 (686) 564 8338

www.indennis.com

idmexicali@indennis.com

