

# COMPANY PROFILE

ASHA CONSULTING GROUP (ACG) PVT.LTD.

#### 1. ABOUT US

Asha Consulting Group Pvt. Ltd. (ACG) is a leading engineering and consulting company in Nepal, specializing in the development of civil and architectural infrastructures. Our goal is to transform Nepal's infrastructure landscape by addressing gaps in various sectors such as transportation, residential and commercial buildings, hospitals, urban environments, energy, telecommunication, industry, and recreation. We prioritize safety and sustainability, designing infrastructures that are both safe and economically viable. With a team of experienced professionals and advanced technologies, we deliver cutting-edge solutions that are resilient, aesthetically pleasing, and environmentally friendly.

Our mission is to shape the future of infrastructure development in Nepal, building long-term relationships with our clients based on trust, reliability, and professionalism. Through innovation, research, and a commitment to customer satisfaction, we strive to exceed expectations and create a legacy of exceptional engineering solutions. Join us at ACG, your trusted partner in infrastructure development, and let's build a better future for Nepal together.

#### 2. OUR MISSION

Our mission at Asha Consulting Group Pvt. Ltd. (ACG) is to provide high-quality design and consulting services for a wide range of structures, including residential and office buildings, hospitals, public facilities, hydropower infrastructures, highways, urban planning, aesthetic design, and overseas projects. With a focus on quality, safety, and functionality, we strive to be a trusted partner for our clients, contributing to the development of resilient and impactful infrastructure.

#### **ORGANIZATION**

S.N	Details of the Company	
1.	Name of the Firm/ Company	Asha Consulting Group Pvt. Ltd.
2.	Type of Constitution	Private Limited
3.	Date of Registration	09/06/2068 B.S (26th Sep 2011)
4.	Registration Number	86857/068/069
5.	Country of Registration	Nepal
6.	Registration Office/ Place of Business	Pulchowk-3, Lalitpur
7.	Telephone No:	+977 01-5421837,
	Email Address:	ashacgroup@gmail.com
8.	Name of Authorized Contact Person	Name: Dr. Jhabindra Prasad Ghimire
		<b>Designation:</b> Chairperson
		Address: Lalitpur, Nepal
		<b>Mobile No:</b> 9840645788
9.	Number of Regular Professional Staff	12



Dr. Jhabindra Prasad Ghimire

Chairperson

PhD (Structural Dynamics) from Saitama University, Japan in 2008

#### 3. OUR SERVICES

ACG provides quality consulting services, but not limited to the following areas:

#### Engineering Structures

ACG excels in providing top-notch consulting services for engineering structures in Nepal, where infrastructures in sectors like transportation, residential and commercial buildings, urban environment, energy, telecommunication, and industrial facilities need improvement. Nepal's vulnerability to earthquakes was evident during the Gorkha Earthquake in 2015, highlighting the importance of seismic-resistant design. Our experienced engineers are committed to creating safe and durable infrastructures that reflect the engineering and architectural excellence of their time. With a focus on resilience and the concept of Build-Back-Better, we aim to contribute to the reconstruction and development of a stronger and safer Nepal.

#### Hydropower and Renewable Energy Project

Nepal has immense potential for hydropower and renewable energy projects, and ACG is at the forefront of supporting the country's sustainable energy development. We offer specialized consulting services for hydropower projects, leveraging our expertise in site assessment, feasibility studies, design optimization, environmental impact assessment, and project management. Our aim is to help harness Nepal's natural resources and create clean and reliable energy sources that contribute to the country's energy independence and economic growth.

#### Highway and Transportation Engineering

ACG recognizes the importance of efficient transportation infrastructure in Nepal's development. Our consulting services in highway and transportation engineering focus on designing and optimizing road networks, highways, bridges, and

transportation systems. We consider factors such as traffic flow, safety, environmental impact, and connectivity to create sustainable and reliable transportation solutions. By enhancing Nepal's transportation infrastructure, we aim to improve mobility, connectivity, and economic opportunities for communities across the country.

#### • Infrastructure Planning, Development and Management

ACG is dedicated to supporting Nepal's infrastructure planning, development, and management needs. We collaborate closely with government agencies and stakeholders to identify infrastructure gaps, conduct feasibility studies, and develop comprehensive master plans. Our expertise spans various sectors, including urban development, water supply and sanitation, public utilities, and industrial infrastructure. By delivering innovative and sustainable infrastructure solutions, we contribute to Nepal's overall development and improve the quality of life for its citizens.

#### Town Planning and Urban Development

ACG recognizes the importance of sustainable urban development in Nepal's growing cities. Our consulting services in town planning and urban development aim to create livable and resilient communities. Our goal is to shape Nepal's cities and towns into vibrant and inclusive spaces that offer a high quality of life and preserve the country's unique cultural heritage.

#### Valuation of the Properties

ACG provides reliable property valuation services to support real estate transactions and decision-making in Nepal. Our team of valuation experts applies thorough market analysis, property inspections, and robust methodologies to determine the fair value of properties. With a deep understanding of Nepal's real estate market, we assist

clients in making informed decisions regarding property investments, financing, insurance, and asset management.

#### • Aesthetic Design

ACG understands the importance of aesthetics in Nepal's architectural and urban landscape. Our design services prioritize integrating aesthetic elements that reflect the country's rich cultural heritage and natural beauty. We collaborate closely with clients to understand their vision and create visually appealing and functional spaces that resonate with Nepal's unique context. Whether it's architecture, landscape design, bridges or highways, we strive to enhance the built environment in Nepal with designs that inspire, celebrate local culture, and promote sustainable practices.

## 4. OUR WORKS/ EXPERIENCE

Our firm, driven by an efficient and enthusiastic team, excels in various engineering fields. We optimize our manpower, expertise, and resources for success. Our capable team has successfully completed projects in various sectors. With extensive experience, we're committed to quality and innovation. In Nepal, there's ample room for development, and we're proud to contribute. Below are some notable domestic and international projects we've undertaken.

#### **DOMESTIC PROJECTS**

#### **ENGINEERING & DESIGN WORKS**

♣ Design of Infectious Disease Hospital Building (100 Bed), Pokhara, Kaski (2021)

This project is located in Pokhara Metropolitan City, Ward No. 30, Lekhnath, Mohariya, Kaski. The site is approximately 1.5 km from Prithvi Highway (Talchowk). We were involved in the preparation of the Master Plan, detailed architectural and engineering (A/E) designs and drawings, detailed cost estimation, and tender documents.

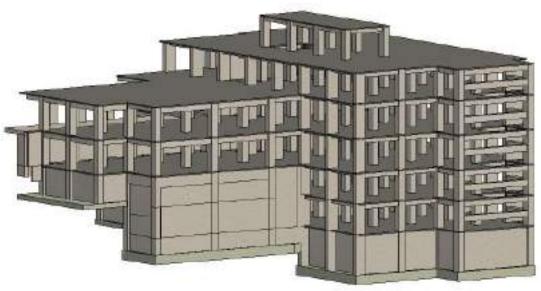


# ♣ Trauma and Emergency Medical Centre at Dulhikhel Hospital, Dhulikhel, Kavre (2023/2024)

This Trauma and Emergency Center Construction in Dhulikhel Hospital is one of the largest health projects in Nepal, worth around 30 million USD, and supported by the Government of Japan.

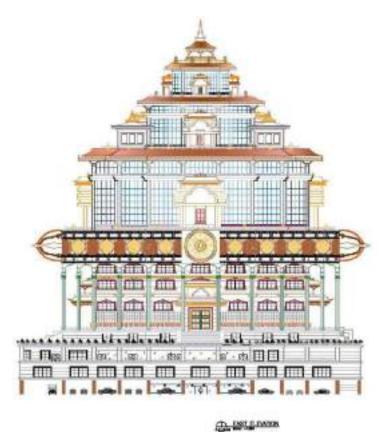
Under JICA, we were involved in the preparation of detailed design of this Trauma and Emergency Center.





#### **100**-meter-tall Buddhist Monastery Building, Pharping, Kathmandu (2021)

This project is located in Dakshinkali Municipality, Pharping, Kathmandu, approximately 20 km from the Kathmandu Valley. Our involvement included the detailed structural design of both the superstructure and foundation.



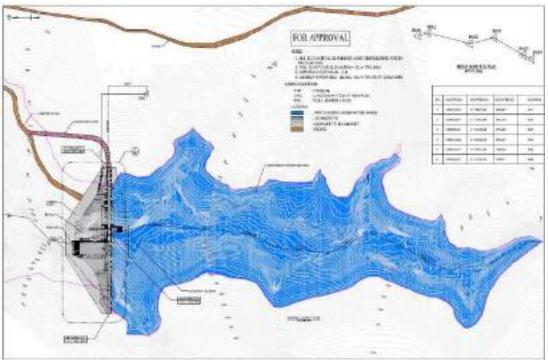
## Chaudhary Group (CG) Head Office Expansion (2024)

The CG Head Office is situated in Sanepa, Lalitpur. Our involvement encompassed the detailed structural design for the construction of the new parking building and the expansion of the office building.

## **Kanke Deurali Water Impounding Reservoir, Gulmi (2024)**

This project is situated in the Gulmi District of Nepal. Our role included the detailed design and drawing production for a 40-meter high and 153-meter long concrete gravity dam, intended for impounding water to supply drinking water.





# Impounding Reservoir for Water Supply at Mahadevkhola, Bhaktapur (2024)

This project is located in Mahadevkhola, Bhaktapur, Nepal. Our involvement included the dynamic analysis and design of a 48-meter high Concrete Face Rockfilled Dam (CFRD).

#### Summit Hotel Apartments, Kupondole, Lalitpur (2024)

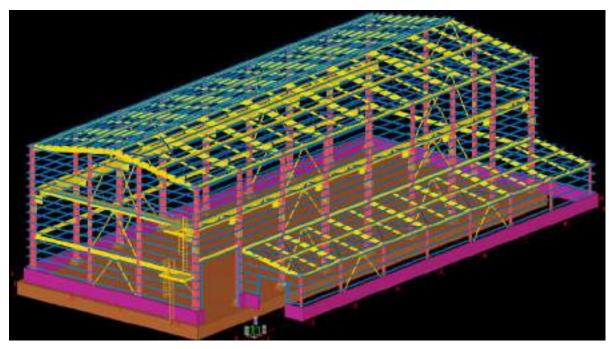
This project is located in Kupondole, Lalitpur, and consists of two 16-storey Apartment Towers. We were involved in detail structural design of the buildings and temporary protection works.

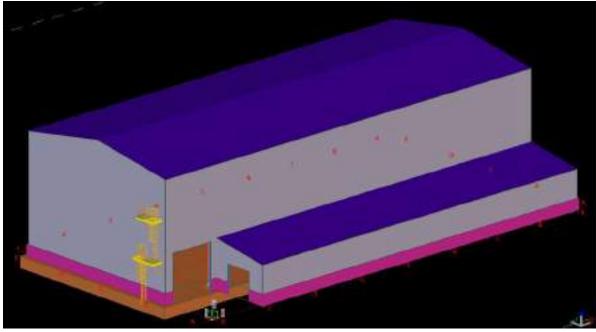


## Madame Khola Hydroelectric Project Powerhouse (24MW), Kaski (2024)

Madame Khola Hydropower Project is located within the Annapurna Conservation Area in Madi Gaupalika of Kaski District, Gandaki, Nepal. The project boasts a capacity of 24 MW.

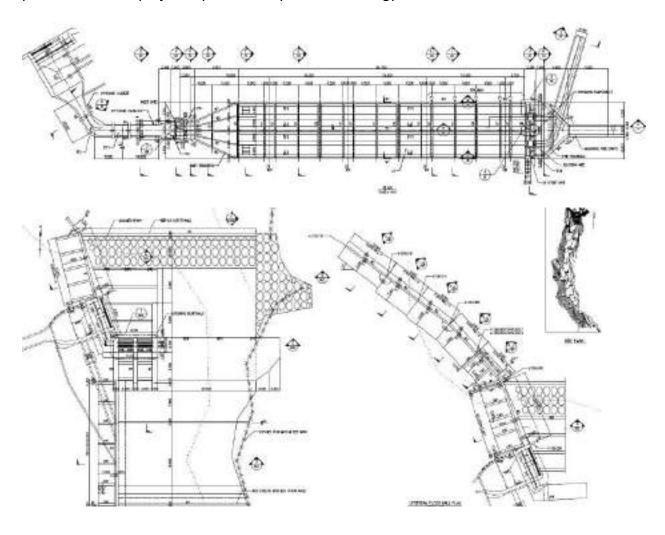
Our involvement in this project centered around the detailed design of the Powerhouse, which houses both the generator and turbine.

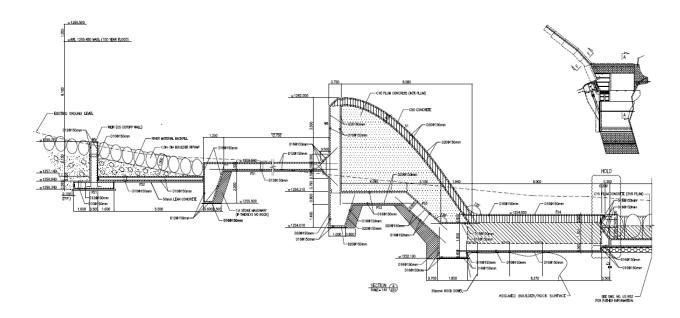




## Chepe Hydroelectric Project (8.836 MW), Gorkha (2020)

This project is located in Gorkha District and utilizes the water from the Chepe River. The project has an electricity generation capacity of 8.836 MW. Our involvement encompassed the detailed design of the project, including the design of the headworks, penstocks, and powerhouse. The project is promoted by Aasutosh Energy Pvt. Ltd.





## Seti Nadi-3 Hydroelectric Project (87 MW), Bajhang (2020)

This project is situated in Bajhang District and harnesses the waters of the Seti River, boasting an electricity generation capacity of 87 MW. Our involvement in the project encompassed consulting services for earthquake-resistant design and serving as structural engineering specialists for the overall civil engineering design. The project is promoted by Chilime Jalavidhyut Company Limited.



FEASIBILITY STUDY OF SETLINABLE HYDROELECTRIC PROJECT.

## **↓** Upper Syange Hydroelectric Project (2.4 MW), Lamjung (2019)

This project is situated in Lamjung District and utilizes the waters of Syange Khola, a tributary of the Marsyandi River. The project has an electricity generation capacity of 2.4 MW. Our involvement included detailed design work for the power house and control building. The project is promoted by Upper Syange Hydropower Limited.



## Upper Trishuli-1 Hydroelectric Project, Rasuwa (2023)

The Upper Trishuli-1 Hydroelectric Project is a run-of-river (ROR) scheme located in the Trishuli River, boasting an installed capacity of 216 MW. We were actively involved in the structural analysis and design of both the dam and powerhouse for this Hydroelectric Project, situated in Rasuwa District.

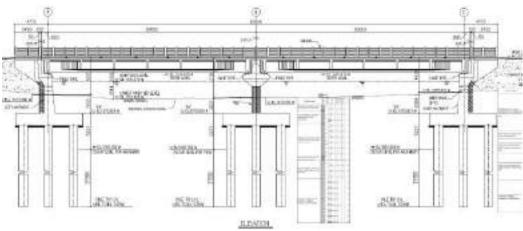
#### 🖶 Dhaubadi Iron Plant Project, East Nawalparasi, 2020-2021

This project is situated in East Nawalparasi, Gandaki Province, Nepal. Our scope of work included the preparation of the scope of work, manpower involvement, and evaluation criteria required for ICB bidding through EOI and RFP for the feasibility study with a detailed project report (DPR) of an iron plant based on the Dhaubadi Iron Deposit in East Nawalparasi, Gandaki Province, Nepal. The client for this project was Dhaubadi Iron Company Limited.

#### 🕌 Jaisikuna Bridge, Pokhara, Kaski (2023)

This project is located in Pokhara, Kaski. It comprises a two-span, 60-meter-long prestressed concrete motorable bridge. Our involvement encompassed the feasibility study, detailed engineering survey, soil investigation, hydrological study, design, and detailed cost estimation. The client for this project is the Government of Nepal.





#### **1050** meters-long Steel Pedestrian Bridge, Pokhara, Kaski (2023)

We were engaged in the detailed structural design of 1050-meters long Steel Pedestrian Bridge at Pame, Pokhara, Kaski.



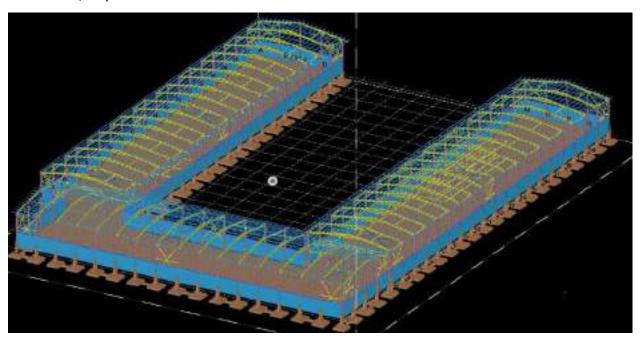
## Biratnagar and Birgunj Dry Port (2023)

We were engaged in the detailed design of warehouses, inspection sheds, weighing bridges, and road culverts for the Strategic Road Connectivity and Trade Improvement Project (SRCTIP) at both the Biratnagar and Birgunj dry ports.



## Nebico Biscuit Factory, Hetauda (2022)

We designed a Biscuit Factory for biscuits and confectioneries manufacturer NEBICO Pvt. Ltd. in Hetauda, Nepal



## Lasuri Khola Prestressed Concrete Bridge, Dang

We redesigned the pile foundations of Lasuri Khola Concrete Bridge along Hulaki Rajmarga at Dang District.

## Chaudhary Group (CG) Palpa Cement Factory

"We were responsible for designing the retrofit of structures at the Chaudhary Group (CG) Palpa Cement Factory."

#### Design of Schools

We have designed and retrofitted schools in various parts of Nepal following the major earthquake in 2015.

#### Residential and Office Buildings

We have designed residential and office buildings across Nepal, adhering to the Nepal National Building Code (NBC) and relevant international codes.











#### **REVIEW WORKS**

## ♣ Planning, Design and Construction Practice Review of Civil Engineering Infrastructures in Nepal (2023)

We were selected by the Office of the Auditor General Nepal (OAGN) to conduct a comprehensive review and investigation of the current planning, design, and construction practices in civil engineering infrastructures across Nepal. The objective was to minimize failures, enhance quality, and optimize the use of the country's limited resources. Our investigation covered a range of projects, including bridges, national highways, irrigation projects, building projects, and railway projects. Through detailed investigations, we identified the potential causes of failures and inefficiencies in several projects. Subsequently, we provided various recommendations to the respective government departments to improve current practices.

#### Design Review and Redesign of Several Highway Bridges (2021 to 2023)

Design reviews and redesigns were conducted for several bridges in different parts of the country. These include an 85-meter-long Prestressed Concrete T-Bridge in Bheri River, Jajarkot; a 170-meter-long Prestressed Concrete Bridge in Lasuri Khola, Dang; a 72-meter-long steel arch bridge in Seti River, Kaski; a 200-meter-long Prestressed Concrete Box Girder Bridge in Dudhkoshi River, Khotang; a 25.4-meter-long RC Girder Bridge in Bijaypur Khola, Kaski; a 60-meter-long through-type Truss Bridge in Marsyangdi River, Lamjung; a 60-meter-long prestressed concrete bridge in Kolphu Khola, Nuwakot; and a 90-meter-long Arch Type Steel Truss Bridge in Arun River, Sankhuwasabha.

Structural Condition Assessment of Golbajar Municipality Building at Siraha District, Nepal (2023)

#### **TRAINING PROGRAMS**

# Training of Trainers (ToT) on National Building Code Compliance to Engineers in Koshi Province

We conducted ToT on National Building Code Compliance to Engineers from selected Local Governments in Koshi Province. The program spanned over two weeks, with a focus on providing comprehensive knowledge on the seismic hazards in Nepal, earthquake-resistant design and construction techniques, and capacity enhancement for compliance checking of structural designs and drawings as per the NBC. This project was under the Provincial Support Program (PSP), supported by Swiss Agency for Development and Cooperation (SDC), and implemented by the Office of the Chief Minister and Council of Ministers (OCMCM) in Koshi Province.



## Engineers' Training on Pushover Analysis of Buildings

We conducted training on Pushover Analysis of Buildings to Engineers using Nepal National Building Code (NBC) and other International Design Codes over the two days. It was organized by Department of Urban Development and Building Construction (DUDBC).



#### Training Programs at different Educational Institutions

We conducted training programs at United Technical College in Bharatpur, Chitwan, and Himalayan White House International College in Putalisadak, Kathmandu. The training program focused on 'Basin Design Principles and International Design Practices of Civil Engineering Structures.' Dr. Jhabindra Prasad Ghimire, the company's president, shared his 19 years of experience in civil engineering structure design, including 5 years of research experience in both Japan and Nepal. Other company staff members assisted in preparing the training materials.

The primary emphasis of the training course was on seismic-resistant building design, compliance with building design codes, including the Nepal National Building Code (NBC), Indian Standard Codes (IS Codes), and Japanese Design Codes such as the Architectural Institute of Japan (AIJ) and Japanese Society of Civil Engineers (JSCE). Additionally, it covered United States Design Codes such as the American Society of Civil Engineers (ASCE 7-10), American Concrete Institute (ACI 318), American Institute of Steel Construction (AISC 360), and AISC 341. Dr. Ghimire also shared his extensive experience in designing modular building structures, various types of highway bridges, industrial structures, storage tanks, towers, and more.

#### **INTERNATIONAL PROJECTS**

Our mission is to engage in overseas projects while delivering high-quality services. We firmly believe that exposure to the global market enhances our competitiveness. ACG specializes in the development of civil and architectural infrastructures, with expertise in designing structures to withstand extreme events such as earthquakes and strong winds.

The major projects we were involved in the past are:

**♣** Muara Karang Project (January 2019 to October 2020)

Thermal Power Plant, Indonesia (500 MW capacity)

**Scope:** Design of civil & architectural structures, roads, Bridges & drainages.

**Location:** Indonesia



## **GCGV** Project (January 2019 to September 2019)

Petrochemical Plant, Texas, USA

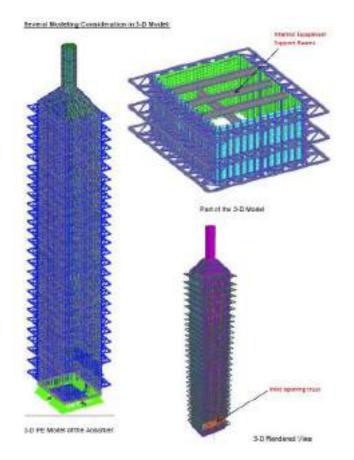
**Scope:** Design of modular steel structures & their foundations

Location: USA



#### PNC Project (Carbon Capture from Flue Gas)

This is the world's largest project for capturing carbon from the flue gas of a coal-fired thermal power plant. The project is located in Texas, USA. We were involved in the structural design of the Absorber Tower (height exceeding 100 meters) and the Quencher Tower (height exceeding 30 meters). Finite element analysis of the towers was conducted, and the design was carried out.









Absorber and Quencher Towers in Carbon Capture Project in Texas, USA

#### GSRC Project (April 2019 to October 2019)

Thermal Power Plant, Siracha, Thailand (2500 MW Capacity)

**Scope:** Planning, Architectural and Structural Design of Concrete & Steel Buildings and Equipment Foundations



## GPD Project (December 2019 to October 2020)

Thermal Power Plant at Pluak Daeng, Rayong Province, Thailand (2600 MW Capacity)

Scope: Planning, Architectural and Structural Design of Concrete & Steel Buildings and Equipment Foundations

## Shintech Project (December 2018 to July 2020)

Plaquemine Plant, Louisiana, USA

Scope: Planning, architectural and structural design of steel and concrete structures, as well as steel fabrication detailing.

## **GPUFP Project (September 2019 to November 2021)**

Urea and Ammonia Fertilizer Plant, Bangladesh

**Scope:** Planning, architectural and structural design of concrete and steel buildings, including equipment foundations. We utilize TEKLA modeling to create 3D models of buildings and generate architectural and structural drawings. Our modeling encompasses foundations (piles, direct footing) to superstructures, staircases, openings, and more.



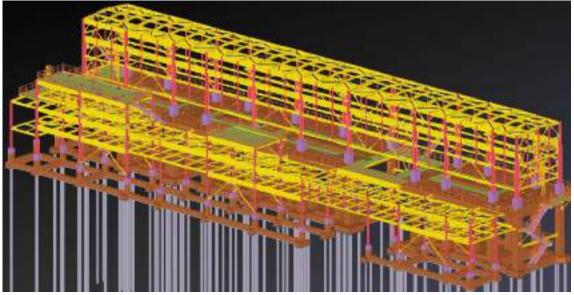


Figure: 3D Model of the Building including Pile Foundation

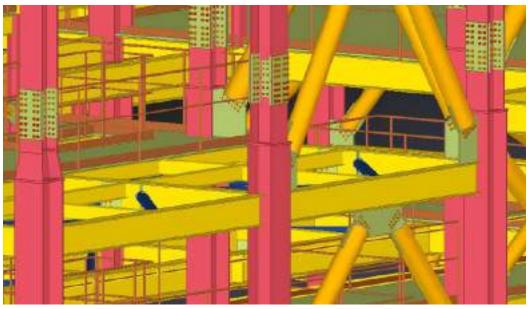


Figure: Detailing of Steel Parts in the Building

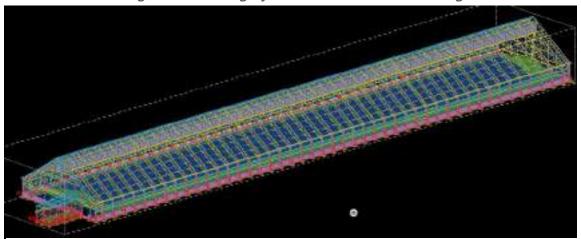


Figure: Bulk Urea Storage House

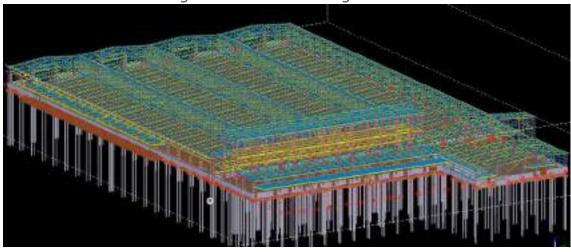


Figure: Urea Bagging and Storage House

#### HKP Project (September 2021 to March 2023)

Thermal Power Plant at Rachaburi, Thailand (1400 MW Capacity)

**Scope:** Planning, Architectural and Structural Design of Concrete & Steel Buildings and Equipment Foundations

## Sakaide Biomass Project (May 2022 to March 2023)

Biomass Power Plant at Kagawa Prefecture, Japan (75 MW Capacity)

**Scope:** Planning, Architectural and Structural Design of Concrete & Steel Buildings and Equipment Foundations

## Karatsu Biomass Project (May 2021 to January 2023)

Biomass Power Plant at Saga Prefecture, Japan (49.9 MW Capacity)

**Scope:** Planning, Architectural and Structural Design of Concrete & Steel Buildings and Equipment Foundations

## **Tomatoh Biomass Project (May 2019 to January 2021)**

Biomass Power Plant at Hokkaido, Japan (50 MW Capacity)

**Scope:** Planning, Architectural and Structural Design of Concrete & Steel Buildings and Equipment Foundations

#### ♣ Motorable Bridge at the Woodlands, Texas, USA (2022)

24-meter-long motorable steel girder bridge inside the premises of Houston Methodist, Hospital

**Scope:** Detail Structural Design

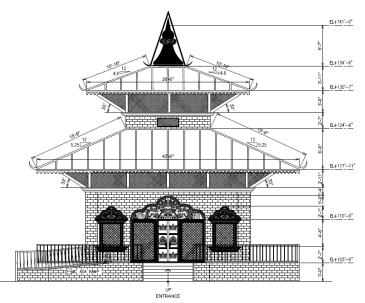
#### Canola Processing Facility at Regina, SK, Canada (2022)

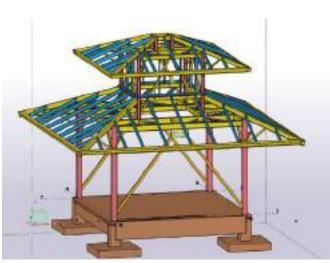
Scope: Detail Structural Design

## **Austin, Texas Hindu Temple (March 2022 to September 2022)**

Hindu Temple located at Austin, Texas, USA

Scope: Detail Architectural and Structural Design of Hindu Temple





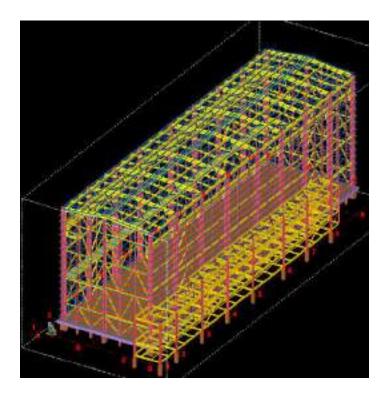




San Juan Generating System (SJGS) Carbon Capture Project (October 2021 to February 2022)

Carbon Capture Project

**Scope:** Structural design of Equipment Support Building Structures, Pipe Racks, Storage Warehouse, Compressor Shelter, etc



Carbon Capture Facilities of Milton R. Young Power Station (Project Tundra), North Dakota, US (2023)

**Scope:** Detail Structural Design of Absorber Tower, Compressor Shelter, Pipe Racks, etc.

LNG Facilities and Other Structures of US Army at Iwakuni, Yamaguchi and Okinawa, Japan

**Scope:** Detail Design

Several Biomass Thermal Power Plant Projects

**Scope:** Design of Building, Turbine Foundations, Pipe Racks, etc. in Japan, such as KRBPG, NPBG, HIMEJI, GBBPG, and IBPG.

#### 5. GLOBAL NETWORK

We specialize in plant design, particularly in electrical power plants and chemical plants, and have a strong track record of collaboration with renowned Japanese companies. Our key clients include Mitsubishi Heavy Industries (MHI), Mitsubishi Hitachi Power System (MHPS), TOSHIBA, HITACHI, JGC Corporation, Chiyoda Corporation, Toyo Engineering Corporation, and leading construction firms such as KAJIMA Corporation, OBAYASHI Corporation, TAISEI Corporation, HAZAMA ANDO Corporation, Tokyo Electric Power Services Co. Ltd (TEPSCO), Sinetsu Engineering, Shintech, and Toyo Kanetsu K.K.

Furthermore, ACG operates under its parent company, Commonwealth Engineers Co. Ltd., located in Tokyo, Japan. The time zone advantage of Japan, which is 3 hours and 15 minutes ahead of our location, allows for efficient workflow. Our work completed by the end of each day can be reviewed in the early hours of the next day in Japan, facilitating timely progress. This time difference acts as a supportive element, and we look forward to expanding our collaboration with other international companies in the future.

#### 6. OUR POTENTIAL

In our company, our engineers and architects boast extensive experience in designing infrastructures resilient to extreme events such as earthquakes, floods, and high winds. Our expertise extends to a wide range of projects, including hydropower infrastructures, high-rise buildings, industrial structures (hydro, thermal, nuclear, solar), petrochemical facilities, processing plants, cement plants, chimneys, silos, liquid storage tanks, hospitals, residential and office buildings, roads, bridges, and underground structures.

We are well-equipped to perform numerical computations using the latest computer tools. Our seasoned team excels in conducting Finite Element Analysis (FEA) for various structures, including buildings and foundations, as well as non-building structures like

steel and concrete storage tanks, silos, and tunnels. We offer a spectrum of analyses, including Pushover analysis, Dynamic Analysis, Fatigue Analysis, Nonlinear-Time History Analysis, and Seismic Ground Response Analysis, all of which align with the design requirements of today's international building codes for both new designs and the evaluation and retrofitting of existing structures.

Additionally, we specialize in Vibration Control of Machine Foundations, providing comprehensive vibration analysis using simplified approaches and finite element analysis, offering effective solutions to mitigate vibration concerns.

Our toolkit includes industry-standard software such as STAAD Pro, the MIDAS IT Software Series (MIDAS GEN, MIDAS CIVIL, MIDAS FEA, MIDAS GTS, MIDAS Soilworks, MIDAS Design Plus), SAP2000, ETABS, SHAKE, K-SHAKE, ANSYS, and DIANA for analysis and design purposes. We leverage AutoCAD and ArchiCAD for drawing and 3D modeling, with extensive use of TEKLA Structures and Revit for 3D modeling and Material Take Off (MTO), particularly vital for industrial structure design. Furthermore, we employ sound and vibration simulation software like LMS Virtual Lab for noise control design.

Our team's vast experience encompasses compliance with various design codes, including Nepalese Design Codes like NBC and Nepal Road Standard, American Design Codes such as IBC, ACI, ASCE, AISC, API, AASHTO, Japanese Design Codes like AIJ and JSCE, EuroCodes, and Indian Codes.

#### **CONTACT US**

Our team is always ready to assist you with new solutions.

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