


Build with Us



A historic reputation for  
innovation and excellence







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CEC has extensive experience in tunneling.

Today, CEC's exemplary performance in terms of health, safety and quality is acknowledged by public works authorities in Taiwan, to the extent that the company enjoys a 50% reduction in bid, performance and warranty bonds for all public works.



## Historic Vision, Timeless Value

Founded in the 1940s, Continental Engineering Corporation (CEC) is now a leading civil infrastructure and building construction company in Taiwan. For over seven decades, CEC has built a global reputation for the professional delivery of engineering and construction work, through excellent people guided by the core values of the business which have remained unchanged since the establishment of the company.

Our vision is to expand our reach as a leading engineering and construction company in Asia and beyond by striving for corporate excellence and providing quality and professional services. We are committed to the advancement of new engineering techniques, methods and the highest standards of safety and quality management.

Our core values generate a collaborative environment where our people can use their skills and experience supported by innovation and technology to create maximum value for our customers.

### **The highest safety and quality management standards**

From our earliest beginnings, CEC has adhered to the highest standards of safety and quality management.

We were the first engineering and construction company to receive ISO9001 and ISO45001 certifications for Occupational Safety and Health Management Systems in Taiwan, which we have carried since 1996 and 2006 respectively. CEC's diligence in safety and quality management continues to be recognized by our customers and relevant authorities alike.

We are also committed to providing a healthy working environment and improving the wellbeing of our people. Our wellbeing strategy is an important element of our core values and recognition that CEC's staff are its greatest asset.

Our highly experienced and dedicated workforce

includes extensive technical and engineering management staff members with an average of over fifteen years of professional engineering experience. We implement structured career development programs and continuous professional and management training for all of our people.

### **Extensive expertise in infrastructure, building and environmental engineering**

CEC has completed many major infrastructure projects, especially heavy civil construction work involving viaducts, bridges, and tunnels for major highway, metro, and railway projects. We are a recognized expert at tunneling using New Austrian Tunneling Method (NATM) and TBM methods. Many tunnel projects have been completed or are ongoing using the TBM method, including major projects for the Taipei Metro, the Taoyuan Metro (Taiwan), the Klang Valley MRT (Malaysia), the Delhi Metro, the Jaipur Metro, and the Bangalore Metro (India).

Going beyond civil engineering, CEC is also known as a leader and award-winning partner for building construction, environmental engineering and mechanical and electrical (M&E) projects. Our broad scope of building projects include residential and office buildings, large-scale community developments, hotels, hospitals and industrial plants. Notable Taiwan landmarks that bear the CEC fingerprint include The Grand Hotel, The Village Community, 55Timeless Residential Tower, Min Sheng East Road Office Tower and Yihwa International Hotel and Residential Tower.

In 2005, CEC entered the environmental engineering market and, in the years since, environmental engineering, sewerage and drainage systems have become part of our diverse portfolio. We have completed a number of turnkey projects in water and wastewater treatment plants and sewerage systems projects, including Chinchu Water Treatment Plant, Tamsui Area Sewerage System BOT Project, Baoshan Water Treatment Plant (Taiwan), and Harbour Area Treatment Scheme Stage 2A (HATS 2A) (Hong Kong).





The Yuanshan Bridge (the First Freeway) was completed in 1977.

## Pioneering Construction in Taiwan for Over Seven Decades

CEC was founded in 1945 in China by Glyn T. H. Ing. Following a timely move to Taiwan in 1948, our business has flourished along with the remarkable economic and infrastructural growth of Taiwan over the last seven decades. With limited resources as a private company and competing with state-run construction giants, CEC aspired to be the leader through continuously introducing new construction techniques and methods into Taiwan.

### A concrete past

In 1958, CEC pioneered new concrete technology to build the nuclear reactor for Tsinghua University. A year later, CEC was commissioned to build Tunghai University, designed by world-renowned architect I. M. Pei.

In 1965, CEC designed and built Taiwan's first multi-story apartment complex using a concrete block construction. This was a resounding market success because, for the first time ever, it introduced top-quality residential housing in Taipei.

In 1977, CEC constructed the first and longest span of a balance cantilever bridge in Taiwan – the now famous Yuanshan Bridge. Many more innovative and successful projects followed in the '70s, '80s and '90s.

CEC won the Construction Technology Automation Award in 1992 for the construction of Bih-tan Bridge.

Our development of steel caisson used for deep foundation excavation in the river was recognized as a notable engineering achievement.



One of CEC's most recognized icons is the Chinese palace style Grand Hotel, completed in 1973.





The Bih-tan Bridge, completed in 1997, is a landmark of the Second Freeway.

A year later, in 1993, CEC introduced the CONEX Tunnel Segment System from Austria – another breakthrough for Taiwan’s engineering and construction industry.

Many of CEC’s past projects have made a significant contribution to Taiwan’s social fabric, and stand as landmarks in the recent history of Taiwan. Our more recent projects are helping Taiwan enhance its infrastructure and economy.

### **From the founder**

Our founder’s passion for quality and innovation has been inherited by each engineer and builder at CEC. In the words of Glyn T. H. Ing:

“Construction involves the wisdom and perseverance of those who give birth to a structure to create life into space. The fruits of their labor must withstand the trials of time for the betterment of mankind.”

With our dedication, CEC has set the benchmark in Taiwan’s engineering and construction industry for more than seven decades, and has become a familiar and trusted name.









For over 70 years,  
Continental Engineering Corporation  
has been constructing roads, bridges,  
tunnels and buildings.

These have become part of the very fabric  
of modern life, critical infrastructure  
ensuring the development of Taiwan as a  
nation and each local community in which  
we operate.

As we look back through our history, each  
achievement serves as a building block  
for a diverse and successful future.





**1945** Established Continental Engineering Corporation (CEC) in Chongqing, China

**1948** Relocated CEC headquarters to Taipei, Taiwan

**1958** Civil construction for the first pool-type nuclear reactor for National Tsinghua University

**1964** Commenced operation in Japan and the United States, the first Taiwan civil engineering company

**1965** Completed Taiwan's first multi-story residential complex, Kuang Wu Villa

**1973** Completed the Grand Hotel, Taipei landmark luxury hotel

**1977** Constructed the world's longest span of a cantilever bridge, the First Freeway Yuanshan B

**1978** Commenced operation in the Middle East

**1989** Invested in American Bridge Company in the United States

**1991** CEC's first MRT tunnel project in Taipei, CN256 contract

**1992** Built Taiwan's first pre-stressed arch bridge, the Second Freeway Bih-tan B

**1994** Public listing on the Taiwan Stock Exchange

**1998** CEC was the concession lead for the world's largest transportation

**1999** CEC's first M&E and civil engineering turnkey project, Taipei Me

**2005** Commenced operation in India

**2005** CEC's first environmental engineering project, Tam

**2007** Nita Ing appointed Chairman of CEC, a position

**2009** Commenced operation in the United King

Commenced operation in Hong Kong

**2010** Restructured CEC to crea

**2011** Comme



# The Building Blocks of a Legacy

to operate outside Taiwan

Bridge

ridge

BOT project (at the time), the Taiwan High Speed Rail Project  
Metro CD550 contract

Sui Area Sewerage System BOT Project  
n she still holds today  
gdom

ate a new parent company, Continental Holdings Corporation (CHC)  
enced operation in Macau

- 
- 2012** Commenced operation in Malaysia
  - 2015** Awarded Kai Tak Development in Hong Kong, the redevelopment of the original HK airport site
  - 2018** Awarded GC01 project, Taoyuan's first MRT
  - 2019** Awarded GC03, Taoyuan underground MRT project  
Awarded Guanci design and build public housing development project
  - 2020** Completed Taichung's first MRT system  
CEC divested in U.S. investment  
Celebrated 75th Anniversary





## Increasing Our Forward Momentum

With over seven decades of construction experience, CEC has a proven track record of high-profile projects here at home in Taiwan. Notably, we crossed a new threshold in 1994, listing on the Taiwan Stock Exchange, which created new opportunities for growth. In the subsequent ten years, CEC's annual revenue surged five-fold.

CEC is proud to have been one of the principle consortium investors and contractors for the US\$17 billion Taiwan High Speed Rail (THSR) – one of the

world's largest Build, Operate and Transfer (BOT) projects. As a key partner in the continued expansion of the Metro Systems in Taiwan, CEC has undertaken numerous complex construction projects including the Taipei MRT Neihu, Tucheng, Nangang, Banqiao, Xinyi, Xinzhuang, Wanda lines; respective Taoyuan and Taichung MRT Green lines, as well as the Taiwan Taoyuan International Airport MRT Link Access. We have completed 12 underground and 10 elevated commuter stations, 4 depots, along with the accompanying tunneling and viaduct works. We look ahead to the continued innovation and application of world-leading construction methods.



**Project Name: Taipei MRT Wanda Line Contract CQ840, CQ842, CQ850A**

**Client:** Second District Project Office, Department of Rapid Transit Systems, Taipei City Government

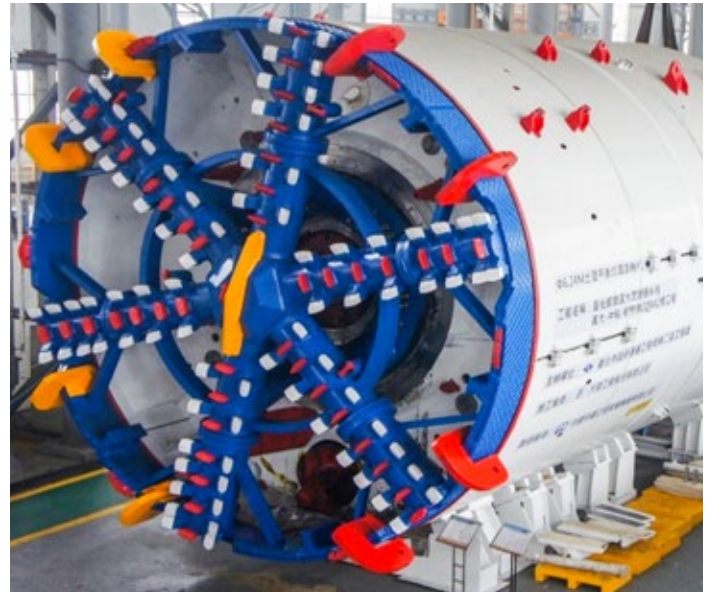
**Location:** Taipei City and New Taipei City, Taiwan

**Duration:** December 2014 to January 2025

**Description:** CEC won three major contracts of the Wanda-Zhonghe-Shulin Line Phase I project. The completion of the 9.5 km medium-capacity route will expand the current Taipei MRT network and offer residents in Taipei and New Taipei cities quicker access to various locations.



**Contract CQ840** includes two sections of twin TBM tunnels of 969 m and 705 m in length respectively, and two underground stations. This contract also requires a special switching valve to be installed at the LG01 site without any disruption of water supply when doing the water main diversion.



**Contract CQ842** is a multi-faceted project that incorporates two twin shield tunnels of 390 m and 427 m, and a three-level underground station as a joint structure with an elementary school building. For cultural heritage purposes, an archeological investigation was carried out up to six meters below ground at the site.



**Contract CQ850A** uses a TBM to drill twin tunnels as an underpass beneath the Xindian River, a span of about 1.7 km. One underground station LG04 uses the cut-and-cover method.





## Taichung MRT Green Line Project

Taichung Metropolitan MRT Wuri-Wenxin-Beitun Line is the first MRT project in Taichung City, the fastest growing city in Taiwan. CEC was awarded the two most challenging projects of the MRT line. The planned route passes through six districts of the city at a total length of about 16.7 km. The medium-capacity transit system includes 15.9 km of elevated track and comprises 18 stations, 16 of which are elevated.



**Project Name: Taichung MRT Wuri-Wenxin-Beitun Line (Green Line) Contract CJ910, CJ930**

**Client:** Central District Project Office Department of Rapid Transit Systems, Taipei City Government

**Location:** Taichung City, Taiwan

**Duration:** December 2012 to February 2019



**Contract CJ910** includes the G0 Station, a maintenance workshop, an administrative building, auxiliary facilities such as the sewage treatment plant and substation and track work for the entire Green Line. Regarding the track, the project adopted a floating slab system with movable frog turnouts wherein the nose rail or wing rail is specially designed to reduce abrasion and friction.



**Contract CJ930** includes the construction of viaducts, elevated stations G10-G17 as well as elevator and escalator installation for the entire line (total length 8.69 km). The viaduct section across Huanzhong Road, the highest point along the line at 22.6 m above ground, was made up of three sections of steel beams totaling 51 m that had to be lifted into place by two 500-ton cranes. The construction time was very limited since it could only proceed during off-peak hours. In addition, the construction of the MRT steel truss bridge across Fazi Creek could only proceed during dry season, which required detailed planning and coordination with the related authorities to complete the project on time. The at-grade G17 Xinwuri station is a transit hub connecting three railways (MRT, Taiwan Railway and THSR), making it convenient to transfer.





Project Name: **Taipei MRT Xinyi Line Contract CR580A**

Client: Department of Rapid Transit Systems, Taipei City Government

Location: Taipei City, Taiwan

Duration: April 2005 - November 2013

Description: This project is a prime example of both CEC's expertise in constructing MRT systems and its ability to efficiently engineer the best results. CEC completed more than 4 km of shield tunneling connecting the Da'an Station and Da'an Forest Park Station. An innovative mirror-face design was adopted to improve safety, prevent leakage, and shorten construction time. Balancing aesthetics with functionality, the finished Da'an Forest Park Station has become a new landmark for Taipei.





**Project Name: Taoyuan Int'l Airport MRT Link Project Contract CU02**

Client:	Bureau of High-Speed Rail, MOTC
Location:	Taoyuan City, Taiwan
Duration:	October 2007 to January 2016
Description:	The Taoyuan International Airport MRT Link provides a more complete and convenient transportation network and serves as a commuter rail for thousands of residents of Taipei, New Taipei, and Taoyuan cities. CEC constructed four cut-and-cover underground stations (A12, A13, A14, A14a) and nearly 800 m of cut-and-cover tunnel to help connect northern Taiwan's busiest travel hubs – Taipei Main Station and Taoyuan International Airport.

**Project Name: Taoyuan MRT Green Line Contract GC01, GC03**

Client:	Department of Rapid Transit Systems, Taoyuan City Government
Location:	Taoyuan City, Taiwan
Duration:	August 2018 to December 2026
Description:	As a part of the Taoyuan MRT network, the 27.8 km Taoyuan MRT Green Line will run through Bade and Luzhu in a north-south network and connect two stations of the Airport MRT Link. CEC was awarded two major design & build contracts.



**Contract GC01** includes seven elevated stations and 10.5 km of viaducts connecting a depot and the stations. This project adopts different types of girders to suit local conditions as required by the contract, such as Prestressed Concrete U Girder, Prestressed Concrete Box Girder, Steel Box Girder, and Steel U-Girder.



**Contract GC03** includes six underground stations and 5.8 km of twin shield tunnels as well as M&E and underground utility work. The project includes the first use of an outer diameter 8.2 m TBM for an MRT tunnel in Taiwan. Three of the underground MRT stations also feature the first use of split-level platforms in underground stations in Taiwan as well as Taiwan's deepest underground station (G07) with an excavation depth of 40 m.





## Taiwan High Speed Railway Project

During the construction of one of Taiwan's greatest engineering feats, CEC contributed award-winning work as it executed some of the most difficult viaducts and tunneling along the entire Taiwan High Speed Rail (THSR) line. CEC was responsible for two civil engineering design & build contracts totaling 79.4 km (approximately 25% of the total length) of the THSR and contracts for the two largest stations - Taichung Wuri Station and Kaohsiung Zuoying Station.

The civil engineering contracts included one 65.4 km stretch of continuously-elevated viaduct and a challenging 14 km section of tunnels through the Paghuashan Mountain area.



Project Name: **Taiwan High Speed Railway Contract C260, C270**

Client: Taiwan High Speed Rail Corporation

Location: Changhua County and Yunlin County, Taiwan

Duration: April 2000 to June 2004

Description: The Full Span Precast Launching Method (FPLM) was successfully employed in both C260/C270 projects to increase construction speed and maintain quality. Completing all the design and construction work on-time – in a record four years – was a considerable feat in itself. The tremendous effort earned CEC the International Award from the British Construction Industry Awards and a shared distinction with other contractors for the Asia Civil Engineering Coordinating Council’s Outstanding Civil Engineering Project Award (2010).



**Contract C260** in Changhua County, CEC constructed more than 36 km of the THSR, comprised almost entirely of elevated viaduct except at the Paghuashan Mountain area. The section through Paghuashan comprised a series of seven tunnels of a total 9.4 km length. This stretch of THSR includes the single longest tunnel on the whole line, the 7.4 km Paghuashan Tunnel, which was broken through in just 22 months. The excavation of top heading at a rate of 254 m per month is the fastest ever achieved in Taiwan to date.



**Contract C270** in Yunlin County, CEC constructed nearly 43 km of the THSR, including bridges spanning four rivers for a combined length of 5 km. In addition to utilizing Full-Span Precast Launching Method (FPLM) to increase safety and construction speed of viaducts at up to two spans per day, Balanced Cantilever Method (BCM) was also used for non-typical bridges that cross over obstacles like provincial roads and railways where longer spans are required.





**Project Name: Provincial Road No.9 Suhua Highway – C2 Renshui Tunnel Contract**

**Client:** Suhua Highway Improvement Engineering Office, Directorate General of Highways, MOTC

**Location:** Hualien County, Taiwan

**Duration:** June 2014 to December 2019

**Description:** The iconic C2 Renshui Tunnel is regarded as one of the most challenging tunnel projects in Taiwan. It runs through the pristine nature reserve of Taroko National Park. The overall length of the bore is over 2.9 km. To minimize environmental impact, the tunnel was designed as single tunnel with two-way traffic, which makes Renshui Tunnel the largest provincial highway tunnel in Taiwan. The tunnel excavation area was over 200 m<sup>2</sup>, 60% larger than general double lane one-way tunnel. Challenging geological strata and seismic activity necessitated careful planning of the work. The weak geological belt on one of the tunnel flanks required a special monitoring system. Advanced geological exploration using Tunnel Seismic Prediction (TSP) was applied to detect geological conditions during the entire excavation process.





**Project Name: Hushan Reservoir Project**

Client: Ministry of Economic Affairs

Location: Yunlin County, Taiwan

Duration: June 2007 to July 2014

Description: The Hushan Reservoir project in Yunlin County included construction of an earth dam with a central core zone of clay and an embankment volume of 14.8 million m<sup>3</sup> as well as an 88,124 m<sup>2</sup> underground slurry wall. The completed dam is 1.7 km long and 75 m high with a water storage capacity of 56.7 million m<sup>3</sup>. The construction of Hushan Reservoir not only resolves water shortage problems to reduce use of ground water, but also improves water quality.



**Project Name: Widening Project of National Freeway No.1 Contract C910**

Client: Ministry of Transportation and Communication (MOTC)

Location: Taoyuan City, Taiwan

Duration: November 2009 to July 2013

Description: CEC completed the widening of a 12.3 km section of National Freeway No.1, predominantly a two-lane viaduct along the existing freeway. Work included adjustments to the main carriageway and ramps, bridge sections, drainage works, noise barriers, lighting, ecological engineering work, communications and an emergency telephone system. Precast segmental construction using Launching Gantry Method was adopted for the viaduct superstructure and the girder is single-chamber pre-stressed concrete box with a deck width of 11.3 m.

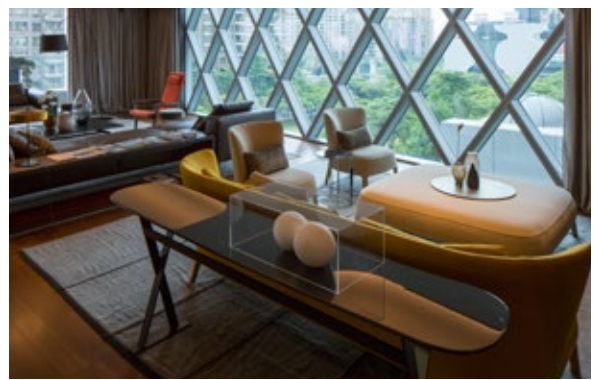




## Taichung Residential Projects

For CEC's projects in Taichung, Taiwan's second-largest metropolitan area, the company envisioned the creation of a landmark that would further enhance Taichung's most prestigious district – the 7th Redevelopment Zone. Treasure Garden and La Bella Vita, our very first luxury residential projects in the area, were the work of celebrated Italian architect and designer, Antonio Citterio. Located in central Taichung near the National Taichung Theater and Park Lane, the projects display Italian style and character. Both projects are different than other luxury residential buildings in the neighborhood thanks to their shared idea of coexisting with nature.





Project Name: **Treasure Garden**

Client: Continental Development Corporation

Location: Taichung City, Taiwan

Duration: January 2014 to June 2017

Description: The Treasure Garden is a 39-story high-rise residential tower built as a series of thin and light blades that define residential areas, public spaces, terraces and landscaping. Modular diamond-shaped geometry dominates both the facade and the interior of public areas. An enormous steel sphere Tuned Mass Damper (TMD) is specially attached to the top of the structure to reduce the amplitude of vibrations caused by the wind and earthquake, which is the first such application in a luxury residential building. The building is designed by the famous Milan-based studio, Antonio Citterio Patricia Viel.





**Project Name: La Bella Vita**

Client:	Continental Development Corporation
Location:	Taichung City, Taiwan
Duration:	February 2016 to January 2020
Description:	Featuring the famous Milan-based studio Antonio Citterio Patricia Viel's architectural and interior design, the 33-story residential tower La Bella Vita comprises two separate buildings with a clear relationship of separation between its public and private areas. The tower is characterized by a crystalline facade and bold horizontal contours framing landscaped balconies that complement the interiors designed along sleek lines. The signature look comes courtesy of a unitized metal curtain wall that forms a hexagonal honeycomb shape.



**Project Name: Keishen Shengkai**

Client:	Kei Shen Construction
Location:	New Taipei City, Taiwan
Duration:	July 2016 to April 2020
Description:	CEC is proud to have been involved in this magnificent urban renewal project in New Taipei City. Keishen, Shengkai is a 29-story residential tower standing nearly 100 m tall and featuring a classical facade, erected using the top-down construction method.





**Project Name: 55Timeless**

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Client: Continental Development Corporation

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Location: Taipei City, Taiwan

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Duration: October 2014 to November 2018

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Description: Designed by Pritzker Prize-winning architect Richard Meier and erected by CEC, 55Timeless stands proudly in the heart of downtown Taipei, flanked on all sides by multinational offices and premium residential towers. Spearheaded by Meier, 55Timeless represents a collaboration between architects and maestros from the U.S., the U.K., Germany, and Japan who together applied modernist concepts to the building's façade, interiors, landscaped garden, and works of art in order to bring the original design to life. 55Timeless is a 31-story residential tower standing nearly 120 m tall.





**Project Name: Kuo Yang Kuo-Yan Condominium**

Client: Kuo Yang Construction

Location: Kaohsiung City, Taiwan

Duration: September 2010 to September 2013

Description: Constructed by CEC, the 41-story Kuo Yang Kuo-Yan Condominium is the tallest residential skyscraper in Taiwan. The building features an iconic yacht-shaped roof top, a 5-level basement and comprises three buildings with 82,527 m<sup>2</sup> of total floor area.





Project Name: **Arranging Asia New Bay**

Client: Fanlu Construction Industry

Location: Kaohsiung City, Taiwan

Duration: January 2020 to November 2023

Description: Designed by Yasui Architects & Engineers, Inc., the 29-story Arranging Asia New Bay is one of the major development projects located in the center of the Asia New Bay, Kaohsiung. The building will connect to the nearby Hotel Nikko Kaohsiung with a sky bridge on the 8th floor, allowing residents to access hotel facilities.





Project Name: **Min Sheng East Road Office Tower**

Client: Metacity Developments Corporation

Location: Taipei City, Taiwan

Duration: January 1996 to November 1999

Description: Min Sheng East Road Office Tower – home of CEC headquarters from 1994 to 2004 – was awarded the Excellence in Structural Engineering Award in 2000 by the Structural Engineers Association of Southern California (SEAOSC). The building is a compounded fair-faced concrete and steel structure. CEC employed an innovative design with a large span floor beam system supported by eight SRC columns at the perimeter up to the 13th floor, eliminating interior columns to maximize usable space. A steel structure was used above the 13th floor to reduce weight.





**Project Name: Dun Hua South Road Office Tower**

**Client:** Continental Engineering Corporation, TSRC Corp., Pacific Electric

**Location:** Taipei City, Taiwan

**Duration:** October 1998 to August 2003

**Description:** Designed by Kohn Pedersen Fox Associates (KPF), the 31-story Dun Hua South Road Office Tower is a deluxe office building in the heart of the Dun Hua business district of Taipei. Completed in 2003, the tower showcases advanced structural, environmental and office management techniques. The Energy Use Intensity (EUI) of this building is just 72% of the standard average commercial building energy consumption. The building features six levels of basement of S.R.C. structure and diaphragm wall with an excavation depth of 23 m. A steel structure houses the 31 floors reaching a total height of 135.5 m, with a total floor area of 46,643 m<sup>2</sup>. In 2005, the building was listed as one of Taipei's top ten office towers and is CEC's current headquarters.



**Project Name: CTBC Taichung HQ**

**Client:** Continental Development Corporation

**Location:** Taichung City, Taiwan

**Duration:** July 2015 to December 2017

**Description:** CEC undertook the China Trust Bank Corporation (CTBC) Taichung HQ construction project. Spanish architecture studio EMBT (designers of the Spanish Pavilion at Expo Shanghai 2010) designed the building, incorporating multiple-curtain wall design to form a huge pine tree to commemorate the late CTBC Holdings founder Jeffrey Koo Sr.'s passion for the brand's spirit. The CTBC tagline "We are family", is represented by numerous pine cones hanging from the tree's branches. CTBC Taichung HQ is a 28-story office tower standing nearly 125 m tall.





**Project Name: Yihwa International Hotel and Residential Tower**

Client:	Yihwa International Co., Ltd.
Location:	Taipei City, Taiwan
Duration:	April 2011 to August 2014
Description:	Utilizing a top-down construction approach, the Yihwa International Hotel and Residential Tower reaches great heights – 42 stories of residential and 36 stories of hotel – and boasts a total floor area of 205,784 m <sup>2</sup> . The S.R.C. structure also features a unitized metal curtain wall.



**Project Name: The Village - Town Community**

Client:	Continental Engineering Corporation
Location:	New Taipei City, Taiwan
Duration:	1997 to 2013
Description:	Situated in the hills just outside Taipei, The Village is a large community development – the first such project CEC took on – consisting of 860 residential villas spread over 76 ha. A five-story, 4,400 m <sup>2</sup> recreation center overlooks Qingshan Lake and features a driving range, swimming pool, spa, and entertainment facilities. In 2006, The Village was awarded the FIABCI Taiwan Real Estate Excellence Award for Best Construction Quality for a New Community from The Real Estate Association of the Republic of China. Great care was taken to make the entire development compatible with its natural environment, including water and land sustainability, green spaces, lakes and forest, and an environmentally-friendly wastewater plant.







**Project Name: Tamsui Area Sewerage System BOT Project**

Client:	New Taipei City Government
Location:	New Taipei City, Taiwan
Duration:	May 2005 to 2040
Description:	As a pilot BOT project, the Tamsui Sewerage System established a crucial sewerage network that services more than 56,000 households. CEC established an operating and managing model for the network*, which is comprised of 52,666 m of pipeline and operates at a capacity of more than 56,000 m <sup>3</sup> per day to accommodate more than 160,000 people.

\*The project is currently operated by CEC's sister company HDEC (formerly CEC's subsidiary).



**Project Name: Tongluo Science Park Wastewater Treatment Plant Phase II Turnkey Project**

Client:	Science Park Administration, Hsinchu Science Park
Location:	Miaoli County, Taiwan
Duration:	November 2020 to 2026
Description:	This project encompasses basic and detailed design as well as construction of a sewerage system capable of handling a total of 4,500 m <sup>3</sup> per day (CMD) average flow of high conductivity wastewater. Phase 1 of the project covers 2,500 CMD, with the remaining 2,000 CMD added in the expansion planned for Phase 2. The system includes conventional secondary processes plus Reverse Osmosis (RO) and brine treatments as well as a wastewater collection pipeline system including pumping stations.





## Accomplishments in International Markets

CEC first set sights on international expansion in the 1960s, acquiring projects across Asia and the Middle East. We expanded into the U.S. by making investments beginning in the 1980s, and broadened our reach to Europe afterwards. Since the turn of the century, we have developed new markets in India and Southeast Asia. Now, CEC is one of the leading construction companies in the region, with business operations in Taiwan, Hong Kong, Macau, Malaysia and India.





**Project Name:** Hong Kong - Kai Tak Development - Stage 2 Infrastructure Works for Developments at the Southern Part of the Former Runway

**Client:** Civil Engineering and Development Department,  
The Government of the Hong Kong Special Administrative Region

**Location:** Kowloon, Hong Kong

**Duration:** November 2015 to September 2020

**Description:** CEC was the project lead on this high-profile design-build contract for Stage 2 of the Kai Tak Development. As a large-scale infrastructure venture, the work involved landscaping, road construction, sewerage and drainage work, drainage outfalls, water mains and utilities installation. The development of the former runway area provides safe pedestrian crossings, new stretches of access road and a 1,400 m landscaped deck structure integrated with noise barriers.





**Project Name:** Hong Kong - Liantang/Heung Yuen Wai Boundary Control Point – Site Formation and Infrastructure Works – Contract 6

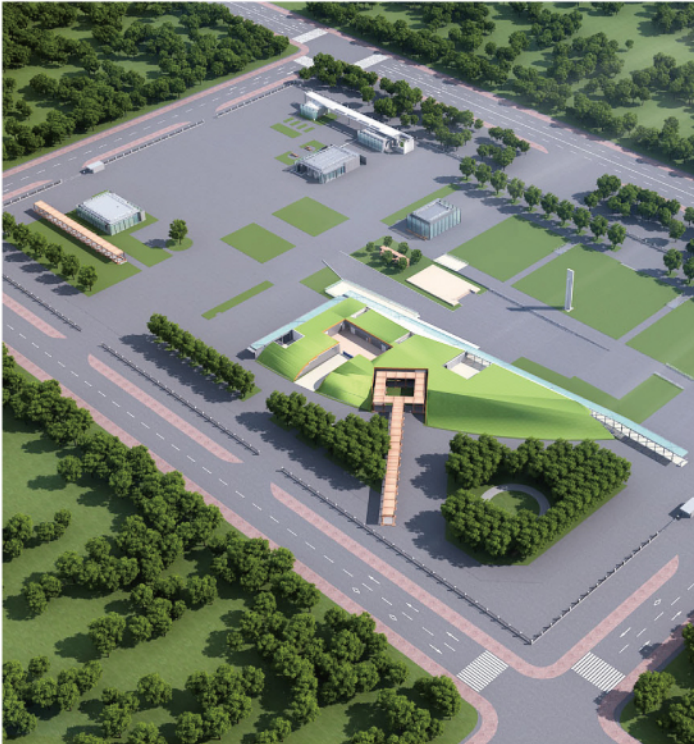
**Client:** Civil Engineering and Development Department,  
The Government of the Hong Kong Special Administrative Region

**Location:** New Territories, Hong Kong

**Duration:** June 2015 to December 2019

**Description:** With a clear project goal of improving the high-traffic span between Hong Kong and eastern Shenzhen, this project showcases CEC’s extensive viaduct and tunneling experience. A key focus for the project was the main carriageway leading to the Boundary Control Point (BCP) and its connecting roads, resulting in construction of a 4.6 km dual two-lane trunk road (including 3.3 km viaducts, and a 700 m tunnel) connecting Sha Tau Kok Road Interchange to the BCP. The project employed techniques such as drill & blast tunneling and pre-cast segmental erection of viaduct girders.





**Project Name: Hong Kong - Construction of Station Square at Kai Tak (Phase 1)**

**Client:** Architectural Services Department, The Government of the Hong Kong Special Administrative Region

**Location:** Kowloon, Hong Kong

**Duration:** February 2019 to November 2020

**Description:** This redevelopment of the old Kai Tak airport is one of Hong Kong's largest ever urban planning undertakings. CEC is responsible for building the station square and adjacent metro station area as a multi-functional center for the local community while establishing an iconic new entrance to the heart of Kai Tak as an urban hub. The site, spanning approximately 38,000 m<sup>2</sup>, also accommodates a park which consists of a leisure lawn, sheltered seating areas, soft landscaping, covered walkways, restrooms, a park management office, plant rooms, store rooms and drainage work.



**Project Name: Hong Kong - Mui Wo Sewage Treatment Works**

**Client:** Drainage Services Department, The Government of the Hong Kong Special Administrative Region

**Location:** Lantau Island, Hong Kong

**Duration:** July 2012 to May 2019

**Description:** CEC Hong Kong Office was awarded this complex project, requiring upgrades to an existing treatment plant as well as construction of extensive new pipelines. The Mui Wo Sewage Treatment Works on Lantau Island needed upgrades across civil, structural and mechanical and electrical (M&E) engineering. In addition to these upgrades, CEC built 2.9 km of new deep pipeline to connect previously unsewered areas in Wang Tong and Yue Kwong Chun and a further 2 km of trunk sewers in Mui Wo town center.





Image of the Stonecutters Islands area where the project takes place.



**Project Name: Hong Kong - Stonecutters Island HATS 2A**

Client: Drainage Services Department,  
The Government of the Hong Kong Special Administrative Region

Location: Kowloon, Hong Kong

Duration: June 2011 to January 2017

Description: In conjunction with a local partner, CEC won this contract as part of the Harbor Area Treatment Scheme Stage 2A (HATS 2A). The scope of work included the construction of an effluent tunnel and disinfection facilities in Kowloon. The teams constructed an 880 m long effluent tunnel with an inner diameter of 8.5 m at 95 m below ground level using the drill and blast method. The tunneling plays a key role in connecting disinfection facilities and other work facilities.





**Project Name: Macau - Cotai Section of Macau Light Rail Transit Phase 1 (C360)**

**Client:** Transportation Infrastructure Office of the Macau Special Administrative Region

**Location:** Taipa, Macau

**Duration:** June 2012 to September 2019

**Description:** CEC Macau Project Office was the lead contractor for construction of the central section of the new Macau Light Rail Transit (LRT) in Taipa. The project comprised 3.5 km of precast segmental viaduct construction and four elevated LRT stations between Rua do Pai Kok and Cotai East. Both launching gantry and scaffolding methods were adopted for the precast segmental construction of the superstructure. The completed LRT section services residents in Taipa, and allows people in the area easy access to the facilities and cultural events in and around the Macau East Asian Games Dome.



**Project Name: Malaysia - Kuala Lumpur Metro KVMRT SBK Line Package C**

**Client:** MMC Gamuda KVMRT (T) Sdn Bhd

**Location:** Kuala Lumpur, Malaysia

**Duration:** January 2013 to November 2016

**Description:** CEC's first project in Malaysia, the Metro KVMRT SBK Line Package C Project is part of the Klang Valley Mass Rapid Transit Project in Kuala Lumpur. The package featured a five-level underground R.C. structure at Merdeka Station, utilizing cut and cover construction with an excavation depth of 31.5 m. Another highlight of the project is the efficient planning of a 35 m deep shaft at Pudu that was first used as the EPB TBM launch shaft – into a twin bored tunnel through Merdeka to Pasar Seni Station, total tunnel length 2.3 km - and later converted to an escape shaft.





Project Name: **India - Noida-Greater Noida Metro Corridor**

Client: Delhi Metro Rail Corporation Ltd.

Location: Noida and Greater Noida, Gautam Buddha Nagar, Uttar Pradesh, India

Duration: May 2015 to August 2018

Description: Three contracts associated with Noida & Greater Noida Metro were awarded to CEC-SAM India JV. The scope of work of the fast track construction consists of 30 km of elevated viaducts and 21 stations. As a key part of the New Delhi Metro network, the project set an Indian national record by erecting 200 U-girders in a single month and has also entered the Limca Book of Records.



Project Name: **India - Jaipur Metro (Phase 1B)**

Client: Jaipur Metro Rail Corporation Ltd.

Location: Jaipur, India

Duration: September 2013 to March 2020

Description: The Jaipur Metro Railway project in Rajasthan, India, involved the design and construction of 1.4 km twin tunnels between Chandpole and Badi Chouper employing EPB TBM. Underground metro stations at Choti Chouper and Badi Chouper were constructed using cut and cover method and top-down construction over a total span of about 400 m.





The headquarters of Continental Holdings Corporation and Continental Engineering Corporation

## Restructuring for Greater Operational Focus and Growth

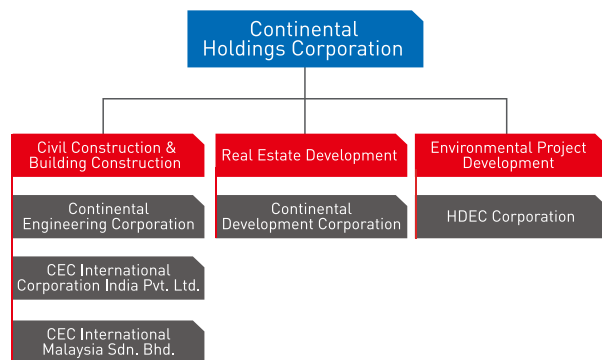
To meet the diverse, growing demands of our domestic and international markets, CEC has been continuously refining our corporate structure since 2006, spinning off several individual companies that focus on specialized fields of expertise or markets. These efforts resulted in the creation of a new parent company, Continental Holdings Corporation (CHC), incorporated in April, 2010. CHC is listed on the Taiwan Stock Exchange – TSE3703.

### Build with us for advanced engineering solutions

With CHC as a holding company positioned to integrate and manage diverse resources, CEC is better situated than ever to focus on its core

construction business to achieve further advancement in innovation, technical capabilities and growth of our domestic and international market share.

CEC will continue to provide optimum customer value as we expand our horizons in the years ahead.



Distinct business units with specialized expertise.



## Clients - Civil



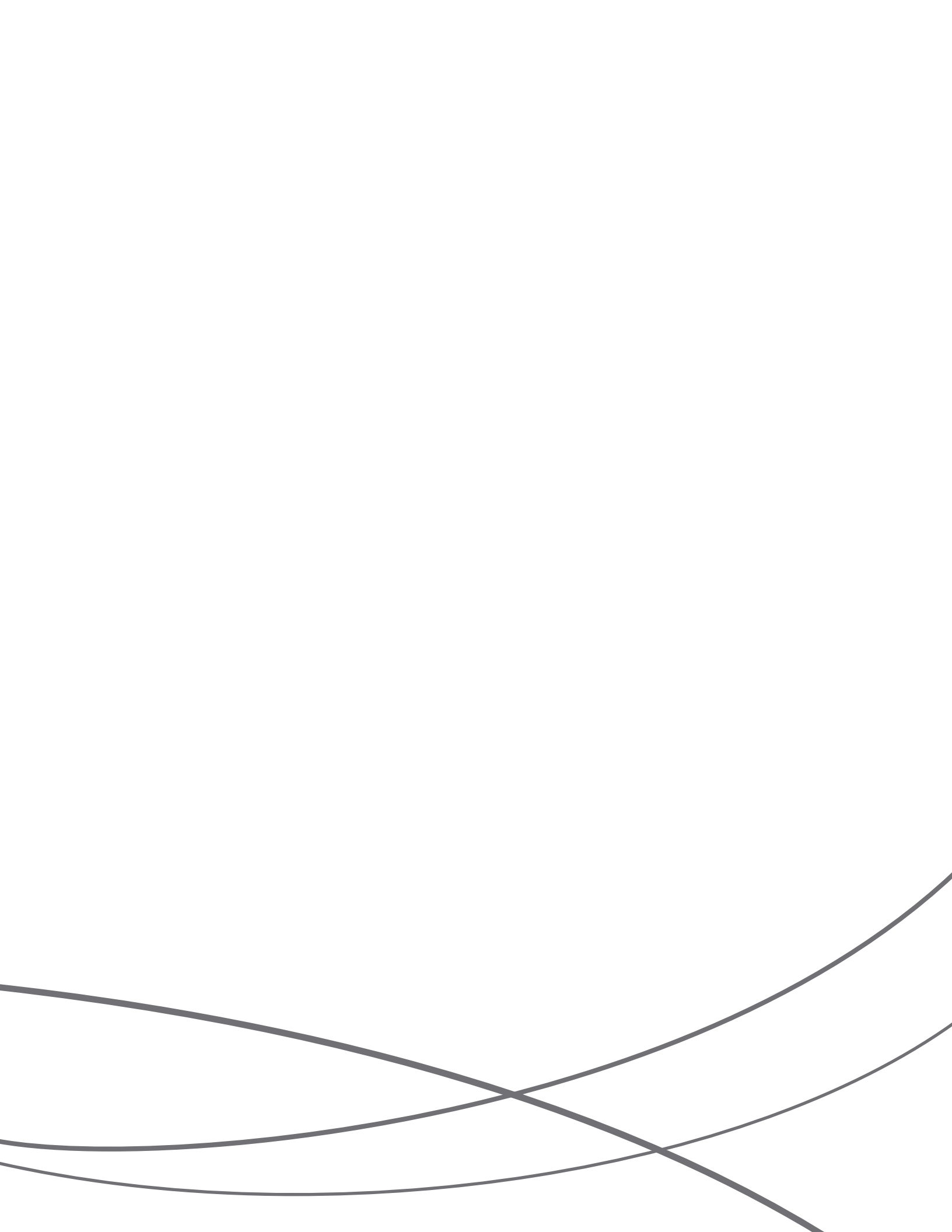
## Clients - Building



## Partners









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