



BRIDGE PROJECTS

INCREMENTAL LAUNCHING
BRIDGES



Bridge Design & Engineering Services





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INCREMENTAL LAUNCHING BRIDGES

Wiecon Introduction

About Us

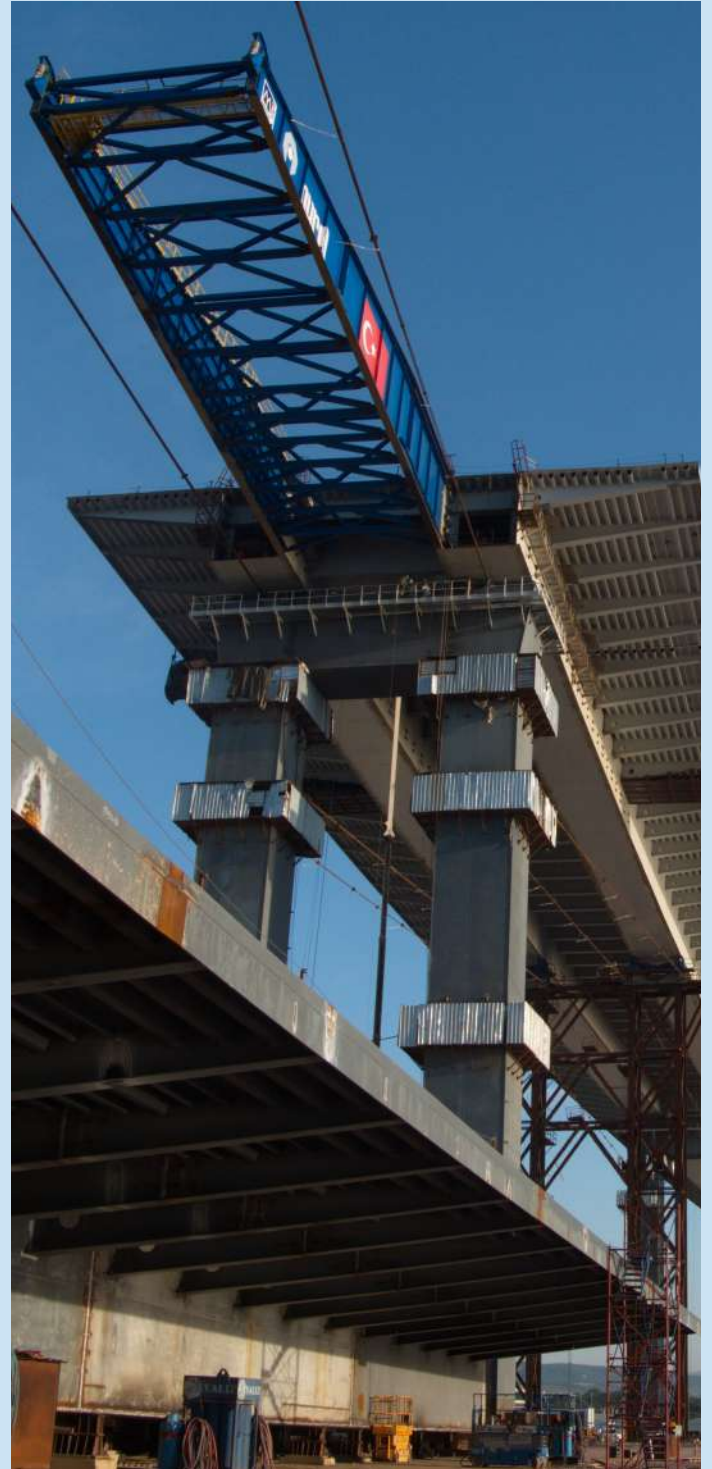
We don't just design bridges; we create engineering benchmarks that stand as testaments to innovation, precision, and excellence. With a legacy spanning three decades, we have emerged as leaders in the field of bridge engineering, driven by an unwavering commitment to pushing boundaries and exceeding expectations.

Our Approach

Our passion for bridge structures is matched only by our dedication to integrating cutting-edge designs and the latest technologies with our vast reservoir of experience and expertise. We provide comprehensive multi-disciplinary engineering consultancy services that encompass every facet of bridge engineering, construction processes, and project management.

30 Years of Excellence

With a rich portfolio spanning over 30 years, WIECON has been at the forefront of bridge engineering projects. Our in-house team of experts offers a diverse range of design services, including precast segmental, full-span erection, balanced cantilever, advanced shoring, incrementally launched, cable stay, suspension, and other specialized bridges. We handle projects from the initial preliminary studies and detailed design stages to the design of bridge construction equipment, major temporary works, and the supervision of the final erection stages.



Design & Engineering Services



Susha ILM Bridge, Malewice~Chlebczyn, Republic of Poland

Client:

Kolin Construction

Services:

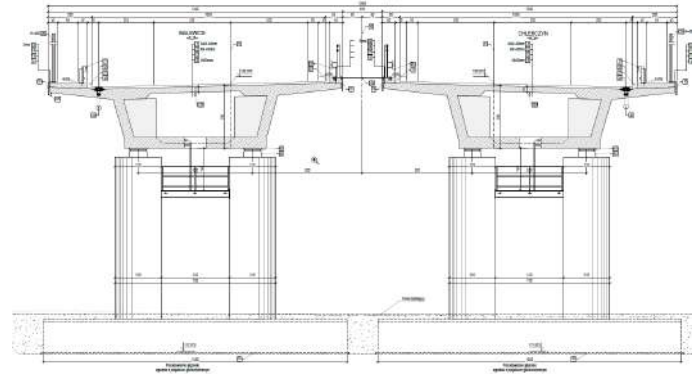
- Construction Engineering
- Major Temporary Works Design
- Contractors Engineer

Specifications:

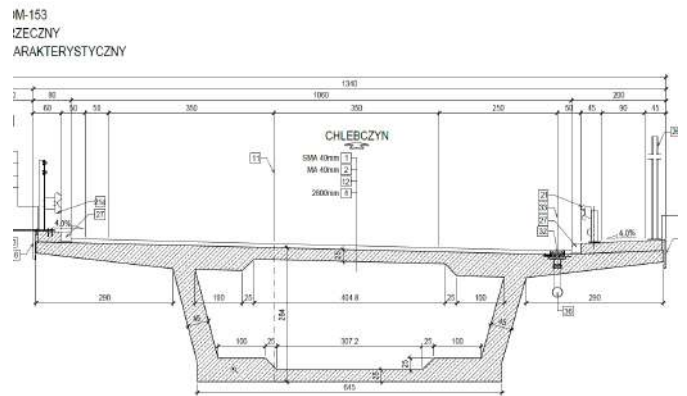
- Incremental Launching Method
- Two Bridges Running Parallel
- Total Bridge Length: 324.3m
- Span Configuration:
37.7m+50m*5+36.6m
- Deck Width: 13.4m
- Total Width (Both Bridges): 28.6m

Project Duration:

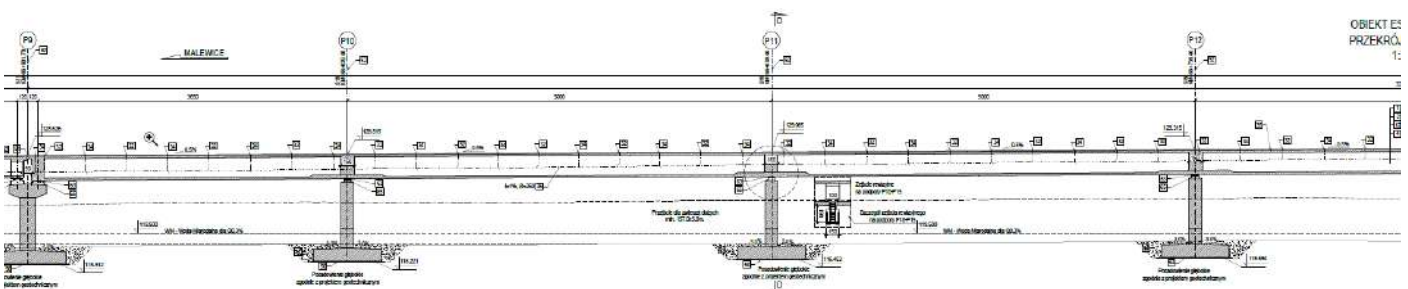
2023-2024



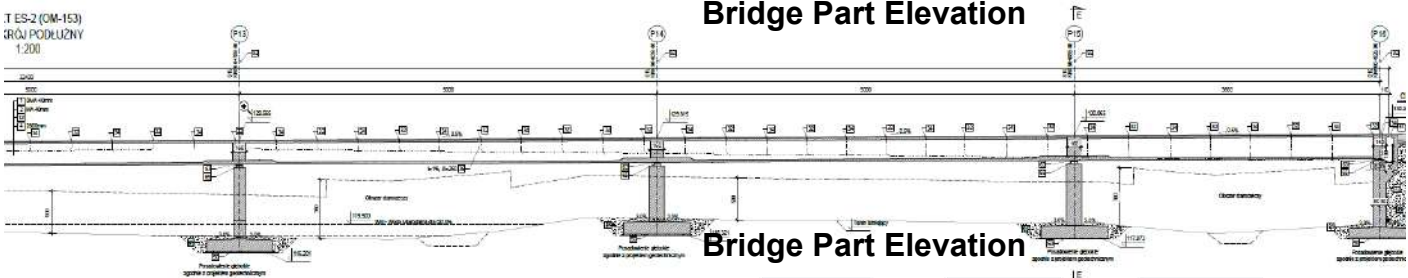
Typical Section at Piers



Typical Deck Section



Bridge Part Elevation



Bridge Part Elevation

N3 Highway Key Ridge ILM Bridge, KZN, Republic of South Africa

Client:

FormScaff South Africa

Services:

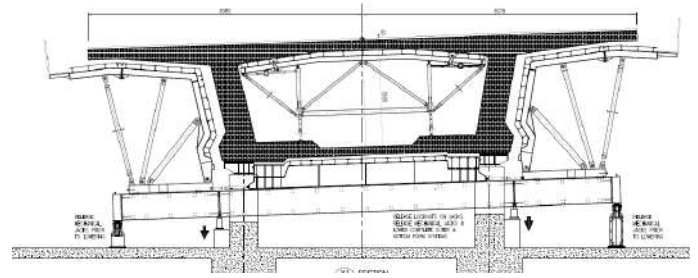
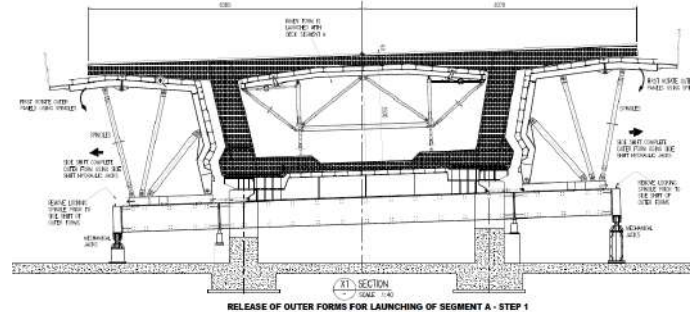
- Deck Formwork System Design
- Temporary Works Design
- Contractors Engineer

Specifications:

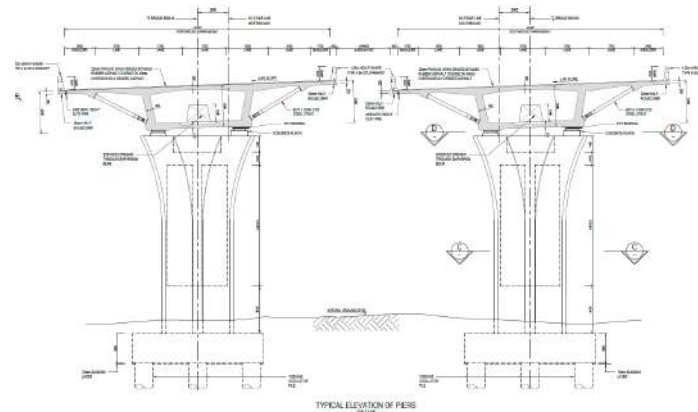
- Incremental Launching Method
- Two Bridges Running Parallel
- Total Bridge Length: 364m
- Span Configuration: 35m+42m*7+35m
- Deck Width: 22.3m
- Total Width (Both Bridges): 46.1m

Project Duration:

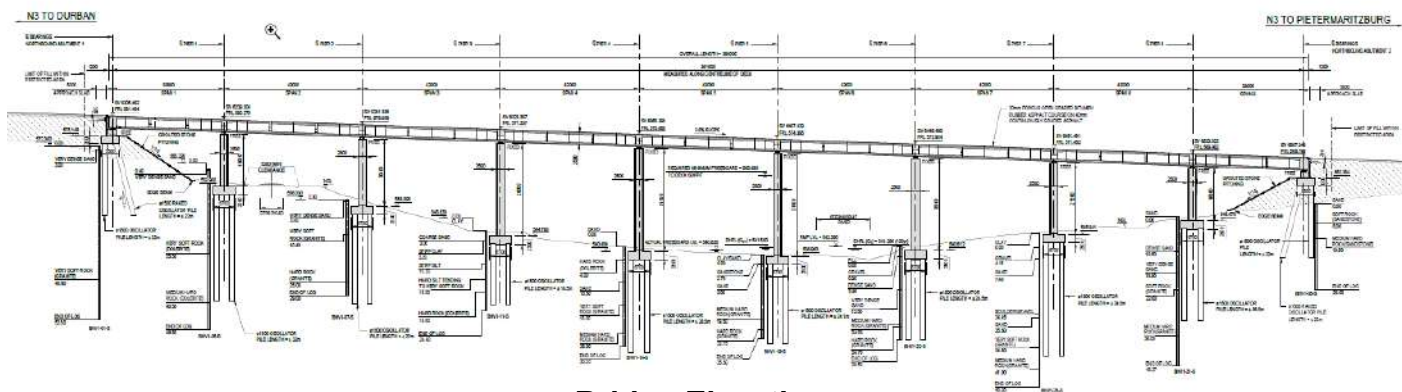
2023-2024



Typical Deck Formwork Section



Typical Section at Piers



Bridge Elevation

Client:

Gulsan Construction & Nurol construction Joint Venture

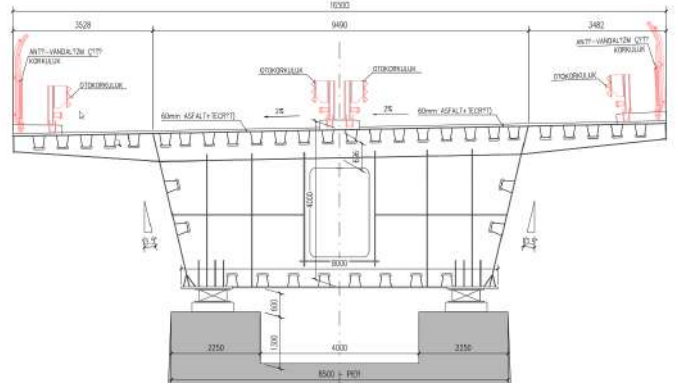
Services:

- Construction Engineering
- Superstructure Detail Design
- Substructure (IPC) Independent Checking Engineering
- Contractors Engineer

Specifications:

- Incremental Launching Construction Method
- Total Bridge Length: 685m
- Span configuration:
37.5m+82.5m*7+70m
- Deck Width: 16.5m

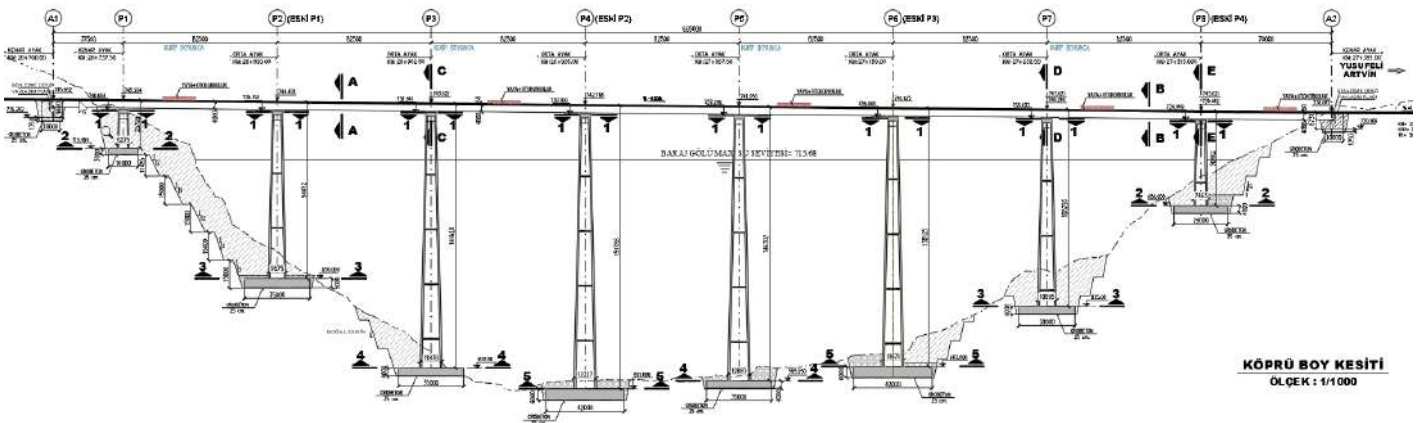
Project Duration: 2021-2023



Typical Deck Section



ILM Deck Launching



Bridge Elevation

Mtentu River Bridge, Wild Coast, Republic of South Africa

Client:

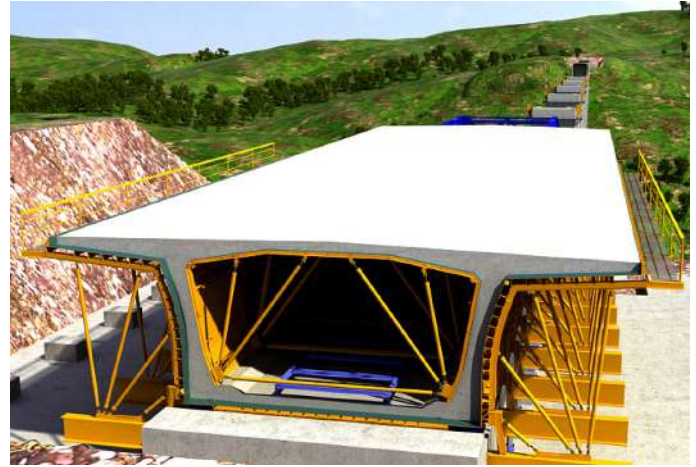
Aveng Strabag Joint Venture

Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork Design
- Contractors Engineer
- (IPC) Independent Check Engineering

Specifications:

- Total Bridge Length: 1.13km
- Span Configuration:
53.7m+66m*5+150m+260m+150m+66m*2+53.7m
- Deck Width: 22.8m
- **Highest Bridge in Africa: 223m**
- ILM Spans: 53.7m+66m*7+53.7m
- Total ILM Section: 569.4m
- FCC Spans: 150m+260m+150m
- Total FCC Section: 560m



Project Duration: 2018-2019



Cayirkoy Kuzey Mamara ILM Bridge, Republic of Turkey

Client:

Kolin Construction

Services:

- Construction Engineering
- Detail Design
- Shop Drawings
- Contractors Engineer

Specifications:

- Incremental Launching Bridge
- Two Bridges Running Parallel
- Total Bridge Length: 748m (Each Bridge)
- Span Configuration:
44m+55m*12+44m (Each Bridge)
- Deck Width: 21.5m (Each Bridge)
- Total Length for Both Bridges: 1.496km

Project Duration:

2016-2019



Suao ILM Bridge, Freeway No.9, Ilan County, Taiwan

Client:

KSECO

Services:

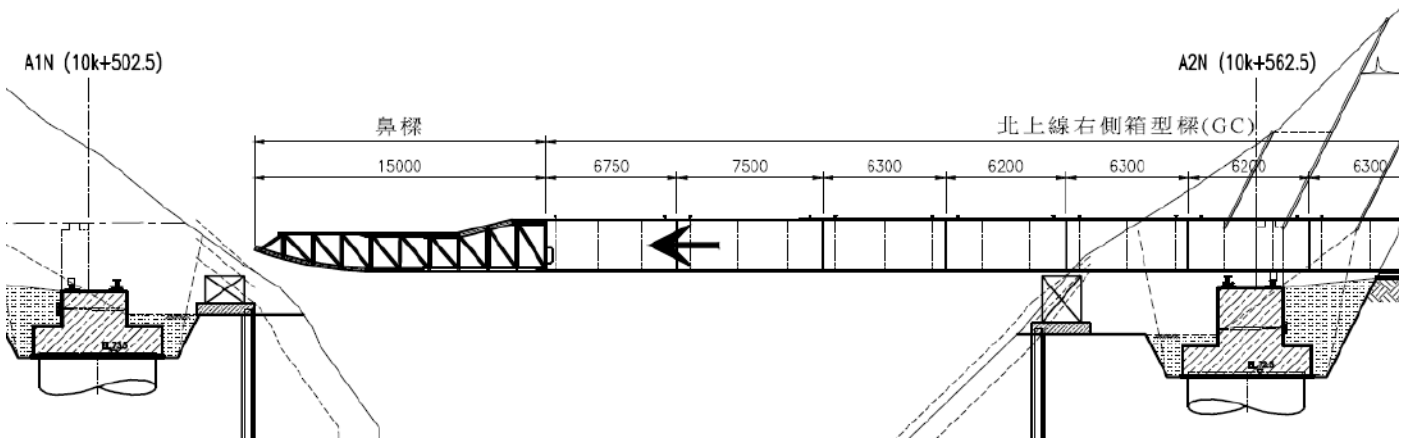
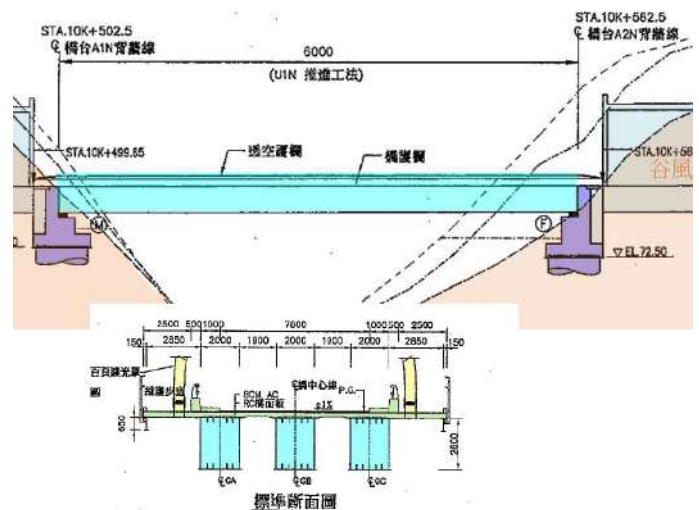
- Construction Engineering
- Deck ILM Launching Equipment Design
- Contractors Engineer

Specifications:

- Total Bridge Length: 60m
- Max span: 60m
- Deck Width: 15.8m

Project Duration:

2015-2016



Elevation on Deck ILM Launching Nose

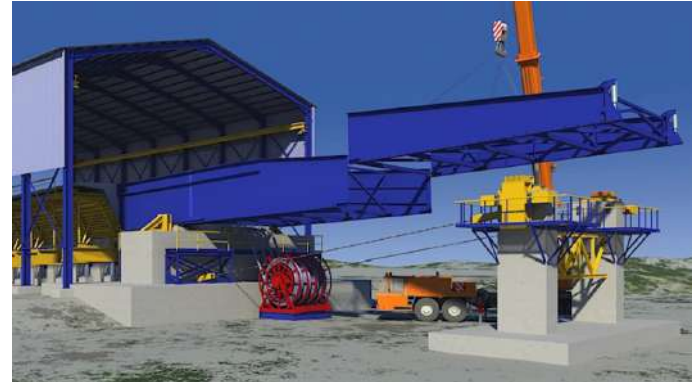
Bangkot River Crossing Approach Bridge, Republic of India

Client:

Supreme Infrastructure India, Ltd

Services:

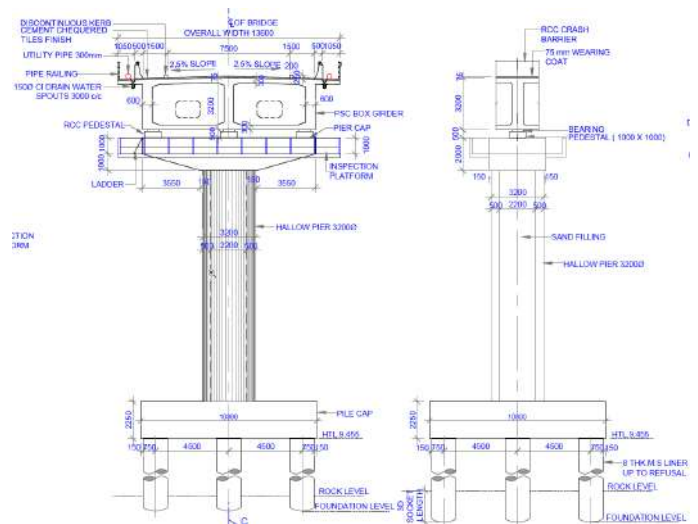
- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design



Installation of Deck ILM Launching Nose

Specifications:

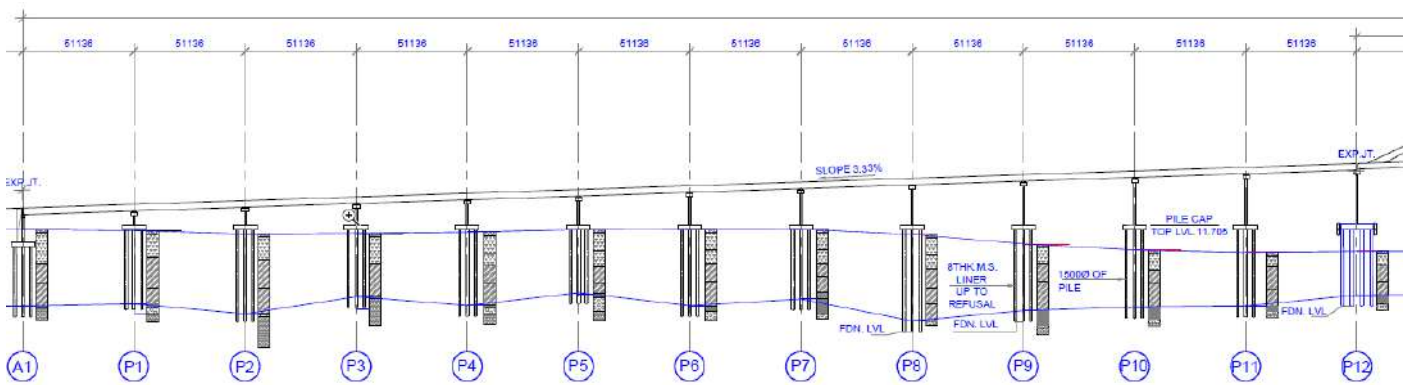
- ILM Approach Bridge to Main Cable Stay Bridge
- Total Bridge Length: 614m
- Span Configuration: 51.136m*12
- Deck Width: 13.6m
- Upward Slope of 3.33%



Typical Pier & Deck Section

Project Duration:

2015-2016



Bridge Elevation

Izmit Bay Crossing South Approach Viaduct, ILM Bridge

Client:

Nurol Insaat ve Ticaret AS.
MegaYapi Const & Trading Co.

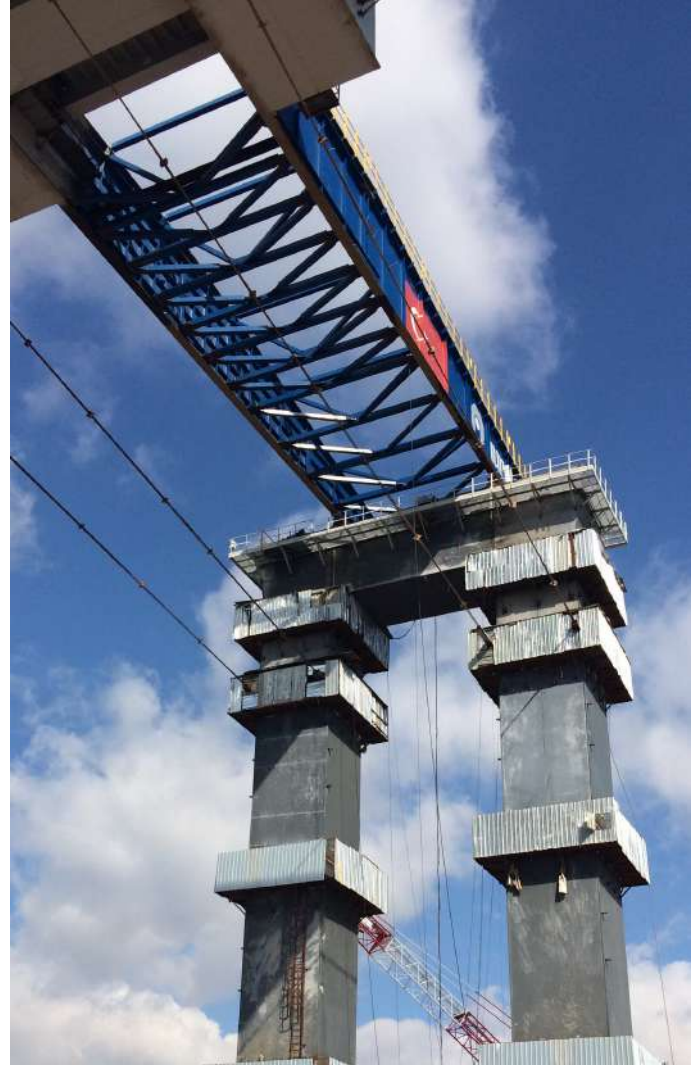
Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Detail Design
- Shop Drawings
- Contractors Engineer
- Major Temporary Works Design

Specifications:

- Total Bridge Length: 1.378km
- Span Configuration:
126.92m+136m+132m+128m+124m+1
20m+116m+112m+108m+104m+100m
+72m
- Max Span: 136m / Min Span: 72m
- Deck Width: 35.93m
- Max Pier Height: 50m

Project Duration: 2012-2017



Basmenj ILM Bridge, Tabriz County, Islamic Republic of Iran

Client:

APS Pty Ltd, Ghasem Safari

Services:

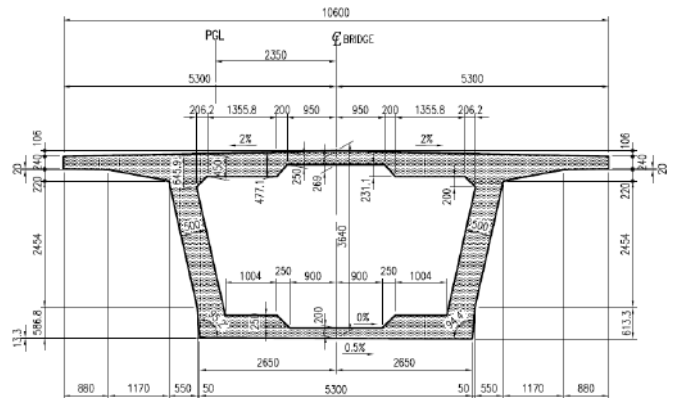
- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design

Specifications:

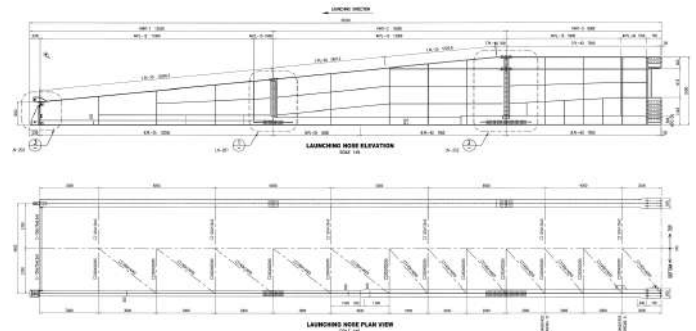
- Total Bridge Length: 980.58m
- Span Configuration:
39.473m+18*49.86m+39.473m
- Deck Width: 10.6m

Project Duration:

2011



Typical Deck Section



ILM Launching Nose





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Bali ~ Hsintien Expressway, C805, Taiwan

Client:

Hwang Chang Construction

Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Site Supervision
- Value Engineering

Specifications:

- Total Bridge Length: 900m
- Span Configuration: All spans 45m
- Deck Width: 22.8m

Project Duration:

2006-2008



Taiwan High Speed Rail, Contract C260 ILM Bridges, Taiwan

Client:

THSRC / Black Stone Construction

Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design

Specifications:

- Total High Speed Length: 345km
- C260 Contract Total Length: 37km
- Max Span: 80m
- Min Span: 30m
- Deck Width: 13m

Project Duration:

2001-2003



Second Freeway, Contract C345, Taiwan

Client:

Stone Construction

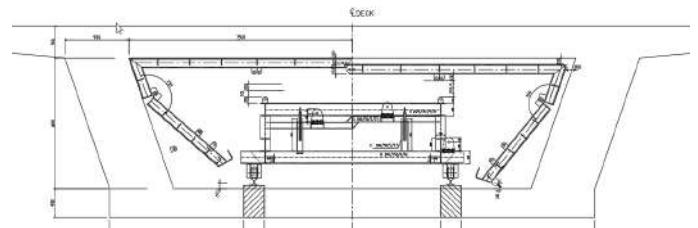
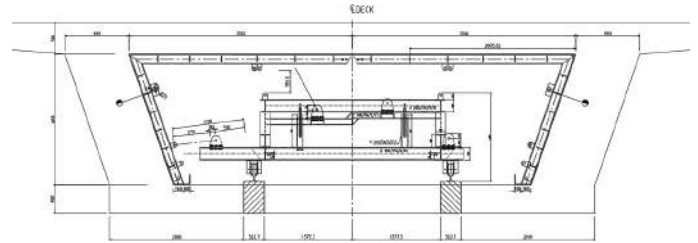
Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design

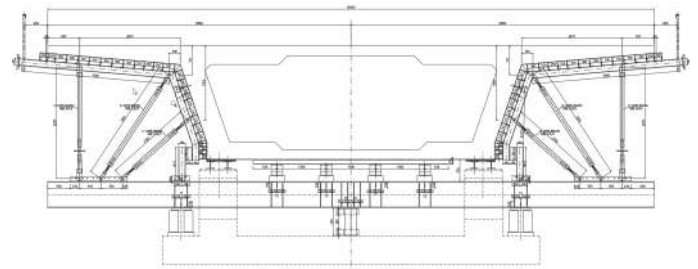
Specifications:

- Total Bridge Length: 560m
- Span Configuration:
34m+44m*11+42m
- Deck Width: 16.1m

Project Duration: 1999-2001



Typical Inner Form Sections



Typical Outer Form Section



Second Freeway, Contract C323, ILM Bridge, Taiwan

Client:

TANEEB

Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design
- Site Supervision

Specifications:

- Total No.2 Highway Length: 20.4km
- Max Span: 40m
- Deck Width: 21.1m

Project Duration: 1997-2000



Second Freeway, Contract C360, ILM Bridge, Taiwan

Client:

Kung Hsin Construction

Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design
- Site Supervision

Specifications:

- Total No.2 Highway Length: 20.4km
- Max Span: 40m
- Deck Width: 16m

Project Duration: 1996-1999



2nd Freeway, Taoyuan Intl Airport Interchange, Taiwan

Client:

TANEEB

Services:

- Construction Engineering
- Contractors Engineer
- (IPC) Independent Checking Engineering of Problem Located at Pier No.7
- Provide Alternative Solution To the Design and Correct the Problems at Pier No.7

Specifications:

- Total No.2 Highway Length: 20.4km
- Total Interchange Length: 300m
- Max Span: 56m
- Deck Width: 8.6m
- Bridge Radius: 500m

Project Duration: 1996



First System Interchange, Taiwan

Client:

TANEEB

Services:

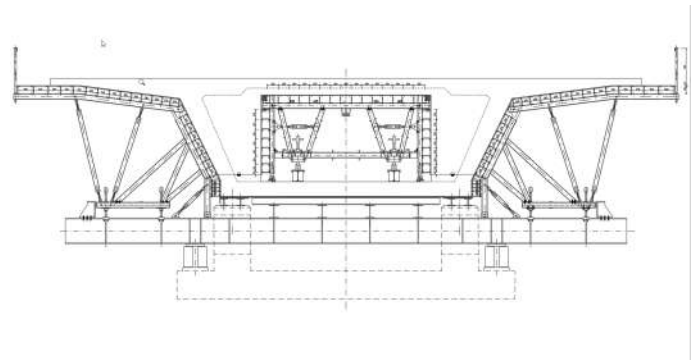
- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design

Specifications:

- Total Bridge Length: 915m
- Deck Width: 16.4m
- Average Span: 40m

Project Duration:

1991-1995



Typical ILM Deck Inner & Outer Form System



Chang Shu Li ILM Bridge, Second Freeway, Taiwan

Client:

TANEEB / Sinotech Engineering consultants

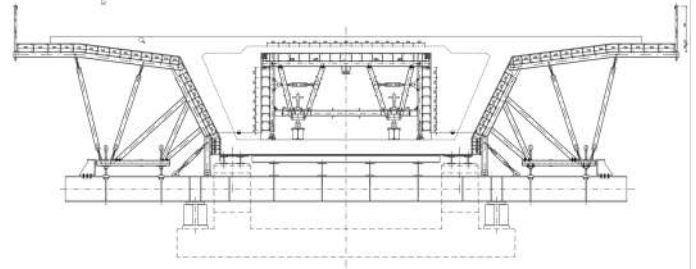
Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Detail Design
- Contractors Engineer

Specifications:

- Total Bridge Length: 372m
- Deck Width: 16.4m
- Max Span: 50m

Project Duration: 1991-1993



Typical ILM Deck Inner & Outer Form System





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Tou Chien ILM Bridge, Second Freeway, Taiwan

Client:

TANEEB

Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Deck Formwork System Design
- Contractors Engineer
- Casting Yard Design
- Site Supervision

Specifications:

- Total Bridge Length: 793m
- Deck Width: 16.5m
- Max Span: 46.5m
- Total Spans: 18

Project Duration:

1990-1992



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BRIDGE PROJECTS

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Tou Chien ILM Bridge, Second Freeway, Taiwan

Client:

TANEEB

Services:

- Feasibility Study
- Project Planning Stage Only

Specifications:

- Total Bridge Length: 793m
- Deck Width: 16.5m
- Max Span: 46.5m
- Total Spans: 18

Project Duration:

1986-1987



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