Paradip International Cargo Terminal (PICTPL – JM Baxi Group)

DEVELOPMENT OF CLEAN CARGO TERMINAL AT PARADIP PORT, ODISHA, INDIA

Overview:

The **J M Baxi Group**, Mumbai, India, through a special purpose vehicle (**PICTPL**) under a concession agreement with Paradip Port Trust, developed a green-field Multipurpose Clean Cargo Terminal for containers, steel products and specific clean bulk cargo at Paradip Port, India..

[Year Completed: 2018]

Project Features:

- Berth : 450 m Length
- Berth : 450m Length with 200m expansion provision
- Container Yard : 48535 sq.m.
- Hazardous Area : 5140 sq.m.
- Fertilizer Warehouse : 2100 sq.m.
- Rail Siding : Four full rakes to handle unitised cargo and bagged cargo
- Steel Yard : 12200 sq.m.
- Gate Complex
- Power Distribution System:
- Fire Fighting and Services
- Functional Buildings, Roads, Drainage and boundary structures

The Assignment

- Preparation of Master Plan.
- Preparation of DPR.
- Preparation of Tender Documents and assisting Client to appoint Suppliers / Contractors.
- Coordination with Independent Engineer.
- Coordination with Railway Consultants.
- Planning of reclamation, filling & consolidation.
- Preparation of Construction Drawings, review of submittals, etc.
- Assisting Client in discussions with the Port Authorities and other agencies.

Key Challenges and Bespoke Engineering

A virgin dock arm was dredged at the existing harbour to locate a new berth with an isolated low lying undeveloped backup area. The entire infrastructure, including berth, rail track, electricity, etc., needed to be created in a wedge shaped limited space with presence of clay in the subsoil. A clean environment was mandatory under the Concession Agreement.

Grafix introduced appropriate solutions to suit the site within the space constraints.

a. Berth size and alignment was firmed up to maximize efficacy within the available waterfront.
b. The dead ends at the railway siding were planned to eliminate locomotive track switching.
c. The gate complex was split to accommodate railway, warehouse, offices, and operational logistics.
d. Systems and equipment were planned in detail to address a wide mix of discrete and continuous cargo handling needs.

e. Basic and Detailed Engineering of civil works, MEP and Cargo Systems were undertaken with Independent Engineer's approval at relevant stages.

① **A Panoramic View**
② **Berth under construction**
③ **Berth Return Wall under construction**
④ **Container Yard, etc., under preparation**
⑤ **Gate Complex**
⑥ **Mobile Harbour Crane after LoLo**
⑦ **Mobile Harbour Crane after LoLo**
⑧ **Container Yard & Back-up Area**
⑨ **Warehouse**