



**Mueser Rutledge
Consulting Engineers**



*Above: Construction of Sheds 4 and 5.
At Right: 1984 view of the Port of Albany waterfront.
MRCE has since completed numerous
rehabilitation projects for the Port.*



Port of Albany Waterfront Rehabilitation, Albany, New York

Mueser Rutledge Consulting Engineers (MRCE) has performed various structural and geotechnical services for the rehabilitation of the Port of Albany since 1984. MRCE first performed a rehabilitation study for over one mile of existing wharf structures, including over 4000 feet of 50 year old relieving platform wharf structures supported on timber piles. The scope included a condition survey, review of available information, a subsurface investigation, analysis of existing wharf structures, preparation of preliminary design, and cost estimates for repair and future development. The condition survey also included the inspection of over 1500 feet of sheet pile cell and anchored steel sheet pile bulkhead, and 1700 feet of caisson supported wharf. The study resulted in the development of a number of concepts that utilize the existing timber piles in modified or renovated wharf structures. The firm also prepared final design and contract documents for remedial measures to the relieving platform wharfs. This work was completed on schedule, and the project was successfully bid within the engineer's estimate and project budget. As part of a new port revitalization program, MRCE was retained to develop contract documents for the improvement of upland drainage facilities. Since that time, MRCE has completed numerous projects, including:

- **Maintenance Dredging:** Assisted Port with obtaining the required Army Corps of Engineers, NYSDEC and NYSDOS CZM permits. Performed pre-dredging bathymetric survey in order to estimate quantities. Prepared documents for clamshell bucket dredging with upland disposal.
- **Heavy Lift Rail Installation Estimates and Extension:** Rail with direct affixation system supported by the existing high level concrete platform dock structure with supplemental intermediate steel pipe piles.
- **Wharf Modification:** Existing wharf modified to carry rail cars with loads up to 1,000,000 lbs. for heavy lift operations. The work involved pile bents below the existing wharf, the installation of new track, and paving and drainage modifications. MRCE provided both design and resident engineering services for this work.
- **Wharf Analysis:** Analyzed the existing high level and low level wharfs for various crane loadings. These include special setups for handling heavy lifts and general guidelines for the Port in operating their "American 9310" crane on the wharf.
- **Modification of Transit Sheds Nos. 4 and 5:** Stabilization and reconstruction of existing timber pile supported low-level platform with geogrid soil reinforcing. Installation of new surface drainage system and asphalt pavement. Partial demolition and reconstruction of the transit sheds to accommodate a wider dockside open area.
- **Rail Replacement at Sheds Nos. 1 to 4:** Trackwork on timber ties with relayer track switches and new at grade rail crossing. Includes utility relocations, sitework, drainage and paving.
- **Maintenance Building Expansion:** Pre-Engineered building with concrete slab on grade, spread footings and miscellaneous sitework. Detailed connection between existing brick masonry and new metal building.

Owner: Albany Port District Commission



Completion Date: 1994-1995 (Dredging work only)

Project value: \$750,000 (Dredging work only)