

S.T. MAITLAND, P.E.

Senior Project Manager of Civil and Waste Management



Years of Experience: 25+

Education

Member of the Institution of Civil Engineers U.K. through direct examinations and attendance at Queen's University, Belfast North Ireland

Active Registrations

Registered Professional Engineer – Pennsylvania

Experience and Qualifications

Mr. Maitland has experience in the engineering design and construction management of large industrial projects such as road and rail terminus facilities, integrated steel making facilities, coal handling and refining plants, housing and commercial, developments and waste management facilities including landfills.

Representative Projects:

Project Management:

- Coordination of the engineering and construction of a road/rail tunnel under the Welland Canal and four multi-span bridges over the approaches. The work, costing \$40 million, included 18 million cubic yards of excavation.
- Trumbull Corporation – Pennsylvania Turnpike Commission. Design review for replacement of Bridge No. WB-112 and the Reconstruction of SR-0168.
- Coordination and supervision of the civil/structural design of a 200,000 square-foot cable manufacturing plant in Missouri, including site selection, earthworks, drainage, water supply, sewage disposal and road and rail transportation.
- Manager of Engineering, Acres American Inc. Responsible for direction and coordination of engineering design, proposal preparation, procurement and construction.
- Head of Civil/Structural Department, Acres American Inc. Responsible for supervision of civil/structural design, coordination with other disciplines, staff assignments and monitoring of project progress. Established and for two years directed operations of construction management, estimating, scheduling and procurement department.
- Project Manager for the design of a 108-mile-long transmission line with a nine-mile-wide river crossing in East Pakistan. Piers for the river crossing had to accommodate 90 feet of river scour.
- Design and construction liaison of site works for three coal preparation plants in West Virginia, Virginia, and Kentucky, including the design of earthworks, roadworks, rail loading facilities, drainage, waste disposal areas and sedimentation basins.
- Supervised a Dutch consulting engineer/contractor in Saudi-Arabia who was investigating the ground water availability and local salt deposits for use in a chloroethylene plant.

Environmental Studies

- Pennsylvania and Ohio – Investigation of soil contamination from underground storage tanks for compliance with DER and EPA regulations.
- West Virginia, Virginia, Pennsylvania and Ohio – Design and permitting for landfills.
- Northern United States – Environmental investigation of industrial sites for acquisition as landfills or waste handling sites.
- Western Pennsylvania – Extension of existing MSW landfills.

- Pennsylvania – Closure design for MSW & C&D landfills.
- Pennsylvania and Virginia – Planning, design and construction of Material Recycling Facility in Pittsburgh.

Site Development

- Conducting Feasibility Studies for an integrated steelmaking facility for the government of Nigeria
- Preliminary design of Transfer Station (road & rail) in Illinois, Ohio, Virginia, and New Jersey.
- Environmental Evaluations of twenty coal and coke refuse sites in Fayette and Cambria Counties, PA, for potential use of carbonaceous material for energy production. Evaluation of ground-water chemistry from acid mine water, leachate, PCB and oil contamination.
- Site Selection, Permitting and Construction Services for a new ash disposal site at Hunlock Creek, PA.
- Design, Permitting and Construction Supervision of an ash/coal refuse disposal sites in Pennsylvania, including design of the liner system, underdrains, leachate collection drains, energy dissipating structures and retention ponds.
- Coal Ash Disposal Site Studies including evaluations of existing disposal facilities, identification and rating of additional potential disposal sites and cost analyses in Ohio.
- Ground Water and Geotechnical Analysis of the existing Beckjord Ash Disposal Site, including the development of concepts for long-term ash disposal and the design and supervision of remedial work to stabilize existing ash piles.
- Site Development and Permitting of a new facility for Allegheny Metal Working Corporation in Cranberry, PA.
- Site Development for steel decking manufacturing facility for I.K.G. in Allegheny County, PA.

Structural Design

- Design of Temporary Works for replacement of Duncan Avenue Bridge, Allegheny County, Pennsylvania.
- Design and Construction of road bridge over Norfolk & Southern railroad track in Canton, Ohio.
- Design and Construction of a greenfield 550,000/tpy \$500 million steel-making complex at Canton, Ohio, including an electric furnace melt shop, rolling mills, conditioning and finishing facilities, extensive earthworks, drainage, water supply, sewage, power supply, road/rail transportation, bridges, solid waste disposal and wastewater treatment.
- Civil and Structural Design for ore processing plants in Colorado and California, and an LNG shipment manufacturing facility in South Carolina.
- Investigation of the Condition of the Rideau Canal from Ottawa to Kingston, Ontario. Responsible for evaluation of safety of locks, lock gates, water control equipment, dams and buildings. Recommended plans for upgrading, rehabilitation and estimated cost of repair.

Bridge Monitoring

- Investigation and evaluation of a deteriorated steel lift bridge over the Rideau canal in Ottawa, Canada.
- Coordinator of engineering team investigating the collapse of the prestressed concrete Heron Road bridge, which collapse killed nine workmen in Ottawa, Canada.
- Trumbull Corporation – Pennsylvania Turnpike Commission. Design review for replacement of Bridge No. WB-112 and the Reconstruction of SR-0168.