

STATEMENT OF QUALIFICATIONS

Transportation Experience



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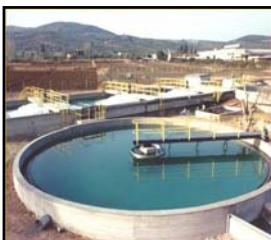
With engineering, construction, management, manufacturing capabilities and broad industry expertise, **aether dbb** brings world class, reliable, cost-effective solutions to our client's air, water, energy, infrastructure, and environmental projects. **aether dbb** specializes in the engineering and installation of sustainable solutions and modular process systems for transportation clientele. Whether we are called upon to manage water resources, design and build a waste water treatment plant, solve storm water retention issues, perform environmental remediation or manage the construction of a new facility, **aether dbb** delivers results with our extensive experience and innovation. Our engineering and construction staff work hand-in-hand to ensure your projects run smoothly from beginning to end. Whether it's initial planning, system and site design, or installation and construction, **aether dbb** makes sure that your projects are completed on-time, within budget. We deliver the results you expect.



**aether dbb** brings the essential elements of people, talent, technology, and action together to deliver value for complex industrial problems. We deliver quality services, minimize costs, accelerate schedule, and work safely. We manage and monitor every item on your project's critical path and orchestrate the hundreds of components, items, suppliers, and services required to complete the job.



Furthermore, our turnkey solutions provide our clients with a single point-of-contact, mitigating subcontractor risks and minimizing field changes. All of which result in greater savings and fewer headaches for you.



Every project **aether dbb** undertakes has environmental impacts. We are diligent in managing ours, our clients, and our earth's resources in an environmentally conscious manner and constantly seek out ways to increase sustainability in every client engagement.



**aether dbb** is flexible with various contract delivery mechanisms and comfortable with traditional, risk-shared, or alternative project delivery contracts. We realize our client's needs are complex and crucial for efficient business operations. It is always our goal to exceed our client's expectations and we invite you to realize success with **aether dbb** on your next critical project.



**Wastewater Pretreatment System, Union Tank Car Company - Marion, Ohio**

Aether personnel acted as the project engineer for design-build of a \$1M industrial wastewater pretreatment plant to treat oily, solids-laden wastes. Developed design drawings and calculations, reviewed equipment shop drawings, assisted in procurement of process and control equipment, obtained building permit, and provided engineering support during construction. The system had a design flow rate of 100 gpm, with processes including pH adjustment, phase separation, flocculation, clarification, and filtration.

**Wastewater Reuse Business Case, Canadian National Railroad -Homewood, Illinois**

Aether personnel acted as the project manager for evaluating the capacity of an existing wastewater treatment system and required modification to treat wastewater for reuse in a locomotive laundry. An Operations and Maintenance Manual for the existing treatment system was also developed to serve as a single document containing the system operating description, monitoring requirements, maintenance recommendations, and spare parts inventory.

**Wastewater Treatment System Upgrades, Canadian National Railroad - Memphis, Tennessee**

Project to evaluate, design, construct, and integrate a biomass mitigation system to prevent the formation of an unwanted biomass at a wastewater treatment system in CN's Johnston Yard in Memphis, Tennessee. An unwanted biomass was forming in the influent equalization tank and oil/water separator of the wastewater treatment system and fouling many of the system's components. The solution consisted of injecting a biocide into the system's influent wastewater stream. The detailed scope of the project included identifying the treatment technology; conducting jar testing to confirm the technology; installation of the chemical metering pump, chemical storage tote, and all required mechanical, electrical, and control systems; and integration of the new equipment into the existing wastewater treatment system.

**Locomotive Laundry Design, Canadian National Railroad - Homewood, Illinois**

Project manager for design of two locomotive laundry systems, including water storage tanks, feed pumps, soap feed systems, spray loops, wastewater collection systems, electrical power distribution systems, and control systems.

**Wastewater Treatment System, Canadian National Railroad - Homewood, Illinois**

Conducted an inspection of an existing wastewater treatment system to document current components and conditions and developed an updated Operations and Maintenance Manual.

**Stormwater/Wastewater Upgrades/Fueling System Upgrades/Remediation, Canadian National Railroad - Gladstone, Michigan**

Project Manager for the design and construction of upgrades to the yard's stormwater system and locomotive fueling system and excavation, collection, and disposal of petroleum-impacted soil and groundwater. The stormwater system upgrades generally con-



sisted of replacing select sections of stormwater pipe and manholes, installing a Stormceptor stormwater treatment system, upgrading the oil pumping system for an existing oil/water separator, and installing a collected oil storage tank. The fueling system upgrades generally included demolition and disposal of the yards fixed fueling system and installation of a direct-to-locomotive (DTL) fueling system including track pans. The remediation work included removal and replacement of yard tracks and utilities and excavating impacted soils and pumping impacted groundwater for off-site disposal.

### **Stormwater/Wastewater Upgrades, Canadian National Railroad - North Fond du Lac, Wisconsin**

Project Manager for the design and construction of upgrades to the yard's stormwater system, sanitary sewer system, and fuel unloading system. The stormwater system upgrades generally consisted of replacing select sections of stormwater pipe and manholes, installing a new oil/water separator, improving to the yard's outfall structure, installing Stormceptor stormwater treatment system, installing a new lift station, and abandoning unnecessary stormwater sewer connections. The sanitary sewer upgrades included replacing or abandoning select sanitary sewer pipes and manholes to reduce infiltration and installation of sanitary sewer lift stations. The fuel unloading improvements included installing a concrete unloading pad with trench drain, grit chamber, lift station and for-cemain convey collected stormwater to the storm sewer system and installing a new fuel unloading arm.

### **Outfall Ditch Modifications, Canadian National Railroad - Memphis, Tennessee**

Project Engineer for the design of improvements to a stormwater outfall flow control ditch to minimize standing water during dry periods. Improvements included regarding the ditch to improve drainage to the outfall, replacing the HDPE liner, and changing inverts of the outfall structures.

### **Stormwater/Wastewater Upgrades, Canadian National Railroad - Proctor, Minnesota**

Project Engineer responsible for identifying necessary improvements to the Yard's stormwater sewer system, sanitary sewer system, surface water management, and locomotive and truck wash systems, identifying corrective alternatives, and recommending the most technically and cost effective option (a total of 25 in all).

### **Stormwater/Wastewater Upgrades - P&C Docks, Canadian National Railroad - Conneaut, Ohio**

Project Manager for the design and construction of improvements to the dock's stormwater sewer system, stormwater treatment system, and surface water management system. The improvements consisted of upgrading ten existing lift stations, installing one new lift station, installing a gabion erosion control wall along a site creek, replacing select storm sewer pipes and manholes, dredging and enlarging multiple stormwater retention ponds, installing a series of erosion control measures along an unloading dock to keep coal from entering the harbor, installing a series of erosion control measures to keep coal fines from



a belt tensioner from entering a site creek, and process and instrument and control to automate operation of dock's stormwater treatment system.

**SRP Closure of Rail & Truck Distribution Facility - Aurora, Illinois**

Prepared and submitted a Site Investigation Report, Remedial Objectives Report and Remedial Action Plan to Illinois Environmental Protection Agency (IEPA) for a 15-acre rail and truck distribution facility for wood products. Contaminants of Concern (COCs) identified in soil and groundwater consisted of volatile organic compounds (VOCs) associated chlorinated solvents. A review of environmental reports submitted to the IEPA for the northern-abutting property indicated that their facility had historically used and stored chlorinated solvents and that they were the likely source of the soil and groundwater contamination. Based upon STS's findings, the IEPA approved the use of an "area background" concentration as the remedial objective for groundwater contamination. Substantial cost savings were achieved for the client by eliminating any requirement to remediate the Site; the client's liability associated with the off-site migration of chlorinated solvents was also substantially reduced.

