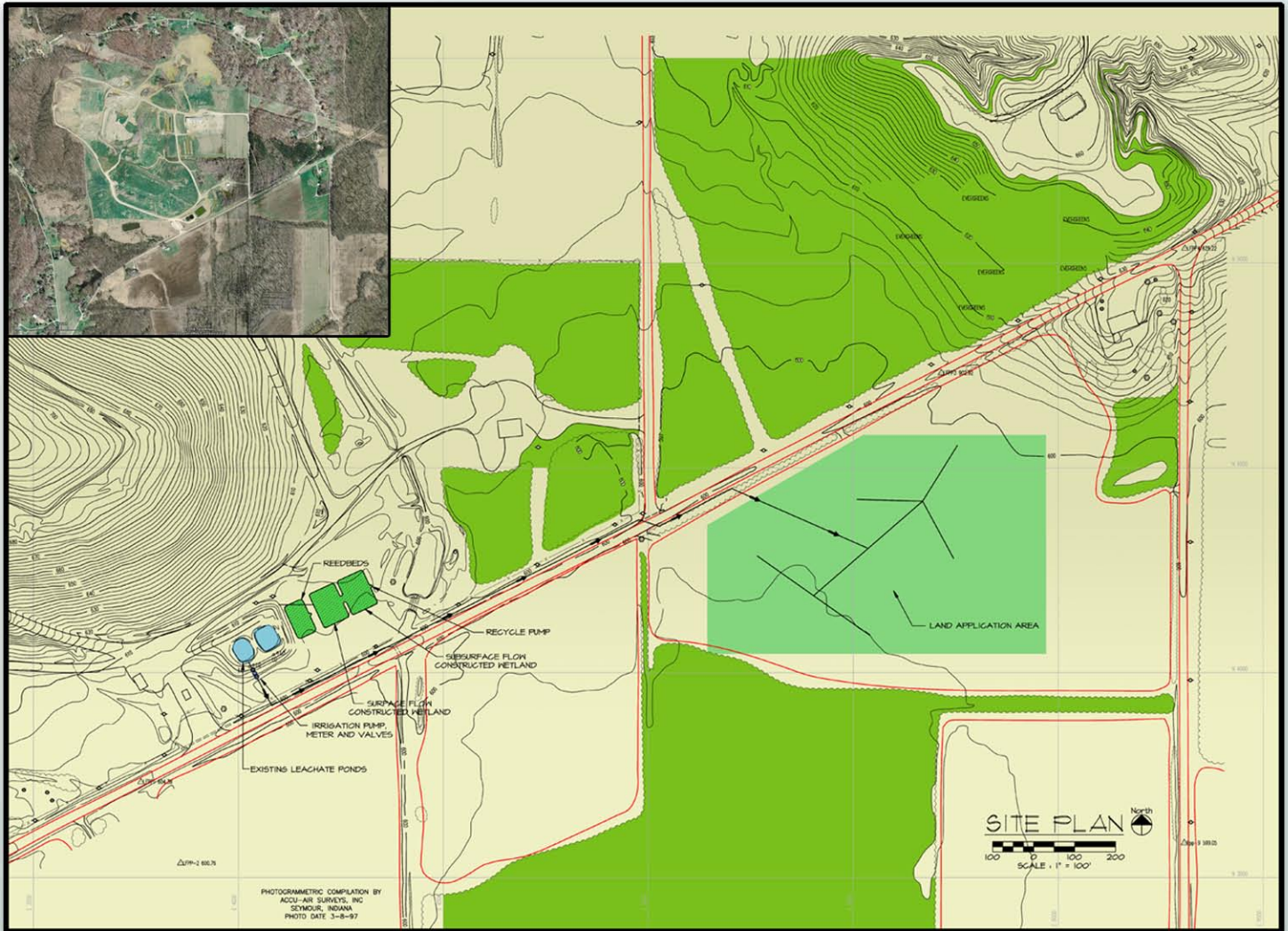


the Monroe County Landfill, Bloomington, IN



The Monroe County Landfill is located at 7740 N. Fish Road. The facility originally opened in 1971 and was owned by Monroe County and operated by a private corporation. Ownership of the facility was transferred to the Monroe County Solid Waste Management District after its formation in 1991. The facility consists of a 50 acre municipal solid waste landfill (MSW) and a 7 acre construction and demolition debris (C/D) landfill. The facility is permitted by the Indiana Department of Environmental Management (IDEM). The original MSW landfill footprint of approximately 37 acres operated under permit number SW-46, and was closed in 1998.

NSI designed a landfill leachate treatment system for leachate from the facility. The design flow for the project was 5,000gpd. Temperatures from January average 1C and reach 23C in July. The average annual precipitation is 35 inches.

NSI design objectives were to meet Indiana water quality standards for BOD, TSS, nitrogen, and heavy metals; the system also had to be capable of treating leachate for fifty years. Treated effluent could no longer be discharged into surface waters. To meet the design objectives NSI proposed a system that included reed beds designed for the removal of leachate solids and in-situ treatment. Some of the benefits of the proposed design were extremely low O&M Costs, a self maintaining and self regulating system with the exception of recycling pumps, an expansion capacity, low capital cost, the ability to handle variations in design flows and loading rates, the ability to remove metals from leachate, and to biologically degrade priority pollutants.