

# Geotechnical Engineering Investigation Northeast C-17 and C-130 Landing Zone Naval Air Engineering Station, NAES

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## Client Challenge

The Naval Air Engineering Station, NAES, Lakehurst, New Jersey required the performance of geotechnical engineering investigations for use to support and develop a *Requirements Documents* for the construction of a Landing Zone to conduct aircrew training for Northeast C-17 and C-130 aircraft units, the Air Mobility Warfare Center, and the United States Air Force, USAF Weapons Instructor Course Flight Operations at Lakehurst, New Jersey. The work demanded compliance with Lakehurst NAES and Federal Aviation Administration requirements concerning work near active airfield areas, security clearances required for airfield entry and several other security clearances for work in national security facilities. The objective of the investigation was to prepare a single report that would include a site plan showing boring locations, boring logs, and laboratory test results. The report would also describe field and laboratory activities, area geology, the existing pavement sections, and onsite soils, groundwater conditions, presence of contaminated materials, recommendations for subgrade treatments and earthwork, the suitability of onsite soils for construction purposes, and recommendations for the use of existing pavement materials for use in an onsite fill.

## Scope of Work

This project involved an assessment and evaluation of the subsurface conditions relating to the foundation investigation for a proposed landing zone to conduct aircrew training for Northeast C-17 and C-130 units, of the Air Mobility Warfare Center, and the USAF Weapons Instructor Course Flight Operations. The investigation provided the data necessary to support and develop a *Requirements Documents* for the construction of the landing zone.



Landing Zone Pavement Cross-Section



Drill Rig

The assessment and evaluation was based on a two-phase geotechnical engineering investigation conducted by Multi-Lynx in 2005. Following the assessment, Multi-Lynx defined the subsurface conditions at the project site, and, based on those conditions, derived conclusions and recommendations regarding possible impacts on the proposed construction of the landing zone.

