

1. Report No. WPI 0510699	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Deep Foundations Databases, Phase III		5. Report Date November 2000	
		6. Performing Organization Code	
		8. Performing Organization Report No. 4910-4504-561-12	
7. Author(s) Dr. J. L. Davidson and R. Fernandez		10. Work Unit No. (TRAIS) 99700-7603-119	
9. Performing Organization Name and Address University of Florida Department of Civil and Coastal Engineering 345 Weil Hall / P.O. Box 116580 Gainesville, FL 32611-6580		11. Contract or Grant No. BA-527	
		13. Type of Report and Period Covered Final Report August 29, 1996 - August 31, 2000	
		14. Sponsoring Agency Code	
12. Sponsoring Agency Name and Address Florida Department of Transportation Research Management Center 605 Suwannee Street, MS 30 Tallahassee, FL 32301-8064			
15. Supplementary Notes Prepared in cooperation with the Federal Highway Administration			
16. Abstract The University of Florida Geotechnical group has over the years developed a number of deep foundation databases. These used the spreadsheet application Lotus 123, which provided excellent data manageability but had limited storage capacity. As part of this phase of the research, a completely new database was designed, combining previous driven pile and drilled shaft databases into a single database, capable of storing and managing the data more efficiently. Microsoft Access 97, a database application, was chosen as the design tool. The database which contained 213 piles and 222 shafts was intended for data storage exclusively. Data could be exported to Microsoft Excel and it used to create input files for capacity programs, graphs, etc. The database was structured after the earlier Lotus pile and shaft databases, which were designed for evaluation of foundation capacities. Only piles or shafts with static load tests were included and only the closest (or most representative) SPT boring was included. Each record consisted of a single pile or shaft and a single SPT log. A second database has been developed, using Microsoft Access 2000, which is instead based on Projects. Any record can now include multiple piles and/or shafts and multiple insitu tests. Since an important future use of the database will be to query based on location, a major effort of the current project has been to locate all piles, shafts and insitu borings. These are referenced (x and y, East and North) to a single identifiable point, e.g., the center of the bridge. Later it is expected that these reference points will be accurately located as to latitude and longitude. The database currently contains 189 projects, 441 piles, 419 drilled shafts and 1063 insitu tests.			
17. Key Words Database, Piles, Drilled Shaft, Insitu test, Load test		18. Distribution Statement No restrictions. This document is available to the public through the National Technical Information Service, Springfield, VA, 22161	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 259	22. Price