



CUY-90-14.90

PID 77332/85531

APPENDIX GE-09

**Demonstration Drilled Shafts
(Contract Document)**

State of Ohio
Department of Transportation
Jolene M. Molitoris, Director

**Innerbelt Bridge
Construction Contract Group 1 (CCG1)**

Drilled Shafts: Demonstration Drilled Shafts

DBT's Installation Plan shall be submitted for acceptance by the Engineer in accordance with the requirements of C&MS 524.03. The DBT will construct at least one demonstration drilled shaft in accordance with the written installation plan submitted to the Engineer for acceptance. Upon successful construction of the demonstration drilled shaft a letter will be issued by the Engineer accepting the installation plan for the construction of the Contract drilled shafts. Modifications to the DBT's Installation Plan will result in additional demonstration shafts constructed in accordance with the modified DBT's Installation Plan at no additional cost to the Department. The diameter and rock socket length of the demonstration shaft(s) shall be the same as the Contract drilled shafts proposed by the DBT for the main spans of the Viaduct Structure.

The demonstration drilled shaft(s) shall be located:

- Such that no interference with the foundations of the proposed Viaduct Structure occurs.
- Where excavation of the slope to the final grade will expose not less than 25 feet of uncased drilled shaft measured from the bottom of any casing to the final grade.
- The demonstration shaft(s) shall be constructed prior to the excavation of the west bank slope between the Cuyahoga River and Abbey Road, and tested by Cross Hole Sonic Logging and by Gamma-Gamma Testing according to GE-08 Drilled Shaft Testing. The west bank slope around the demonstration drilled shaft(s) shall be removed without damaging the shafts for visual inspection of concrete integrity by the Engineer.

The DBT may, at its own expense, conduct an Osterberg Cell Load Test on the demonstration drilled shafts to establish or confirm side and end bearing geotechnical resistance design parameter that will be employed for the design of the Contract shafts. The load testing shall be performed in general compliance with ASTM D 1143 Standard Test Method for Piles under Static Axial Load using the Quick Load Test Method for Individual Piles.