

Case Study 30 Inch Augercast Piles

Date: January 2007

Owner: Sound Transit

Job: Sounder Commuter Rail, Reservation Connection, Embankment Remediation Phase 3

Location: Tacoma, Washington

General Contractor: CA Carey Corporation

This project involved supporting an embankment that carried the Sounder rail tracks over the soft Tacoma valley sand and silts. The embankment was settling at an alarming rate and the embankment base was expanding. There were augercast piling under part of the embankment, but they had not stopped the settlement or base expansion.

Pile Contractors installed 30" diameter augercast piles in temporary casings on the sides of the embankment. The casings contained the grout in the soft soils and helped maintain pile integrity.

The completed piles supported cast in place retaining walls which confined the embankment and controlled settlement.

The casings were installed with a Vulcan 1150 vibro hammer to minimize damage to the existing embankment. The augercast piles were drilled with A.P.E. model 75 drill motor mounted in 32" leads and carried by a Manitowoc M80s crawler crane.

Vibrations were monitored with an Instatel MiniMate Plus with a Triaxial Geophone.



Concrete and site work was performed by C.A. Carey Corporation of Issaquah, Washington.

