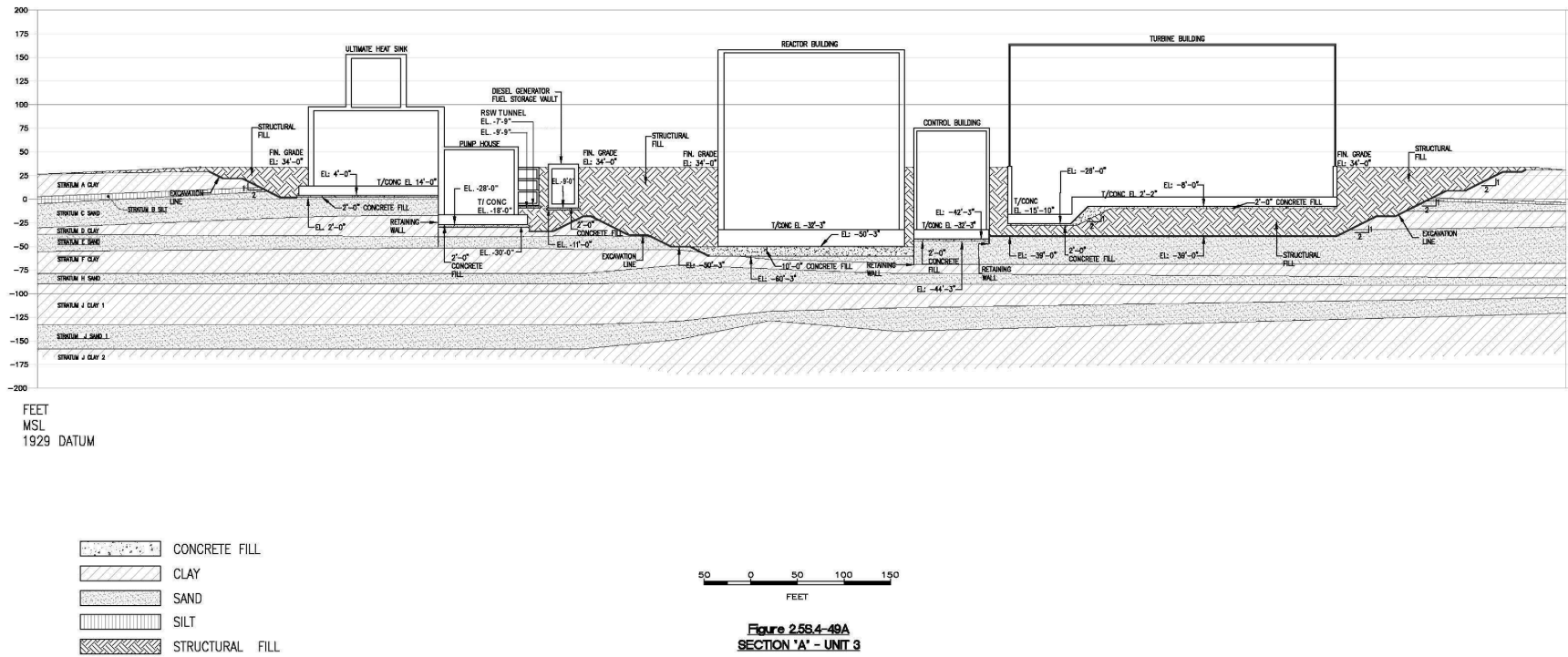


Figure 2.5S.4-48C Enlarged Southern Plan Rev. D

## Stability of Subsurface Materials and Foundations



**Figure 2.5S.4-49A Section "A" - Unit 3 Rev. D**

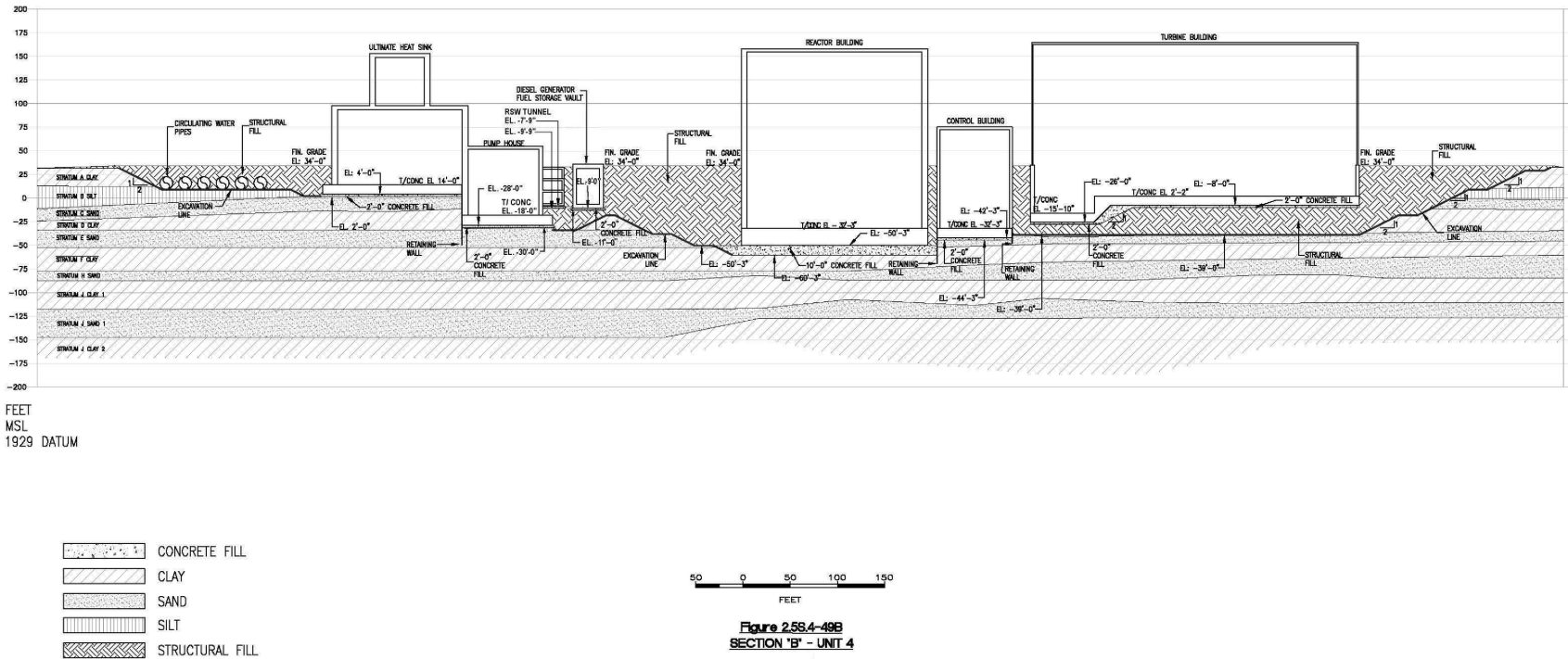


Figure 2.5S.4-49B Section "B" - Unit 4 Rev. D

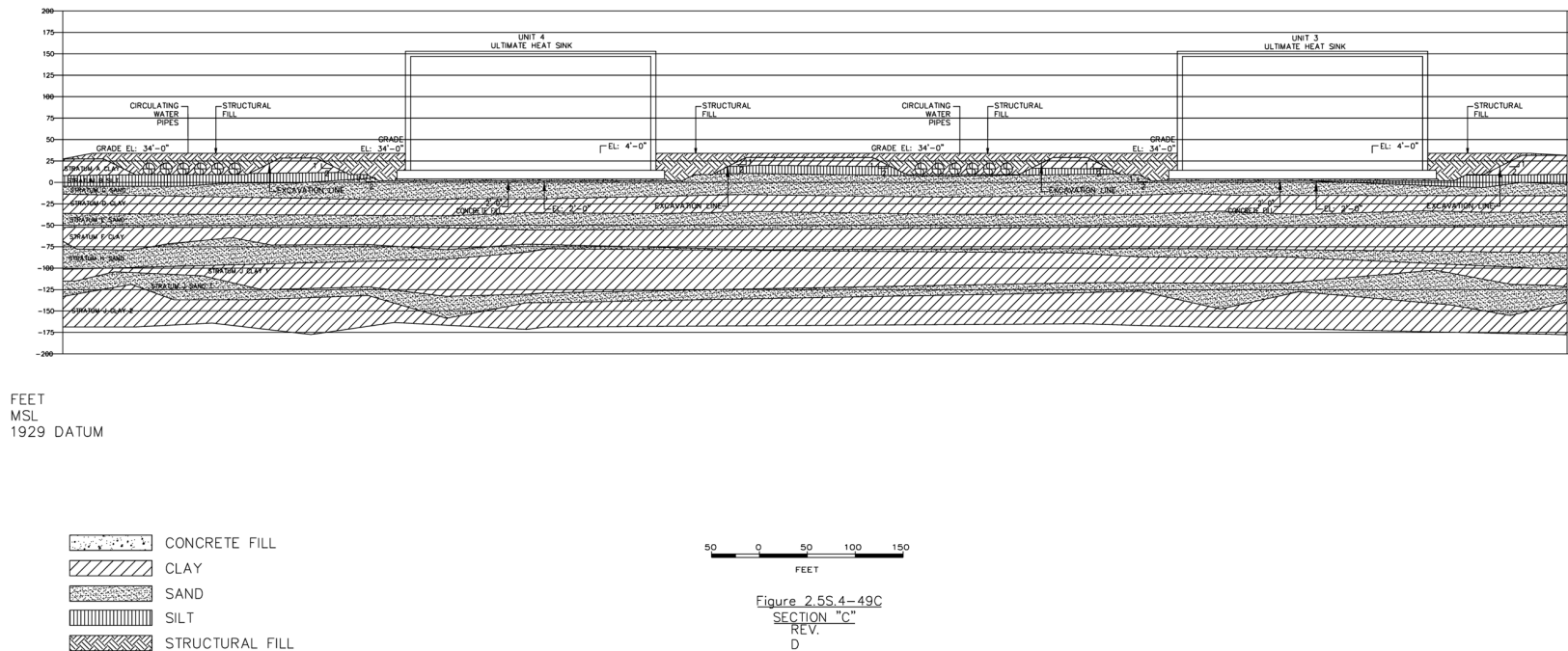


Figure 2.5S.4-49C Section "C" Rev. D



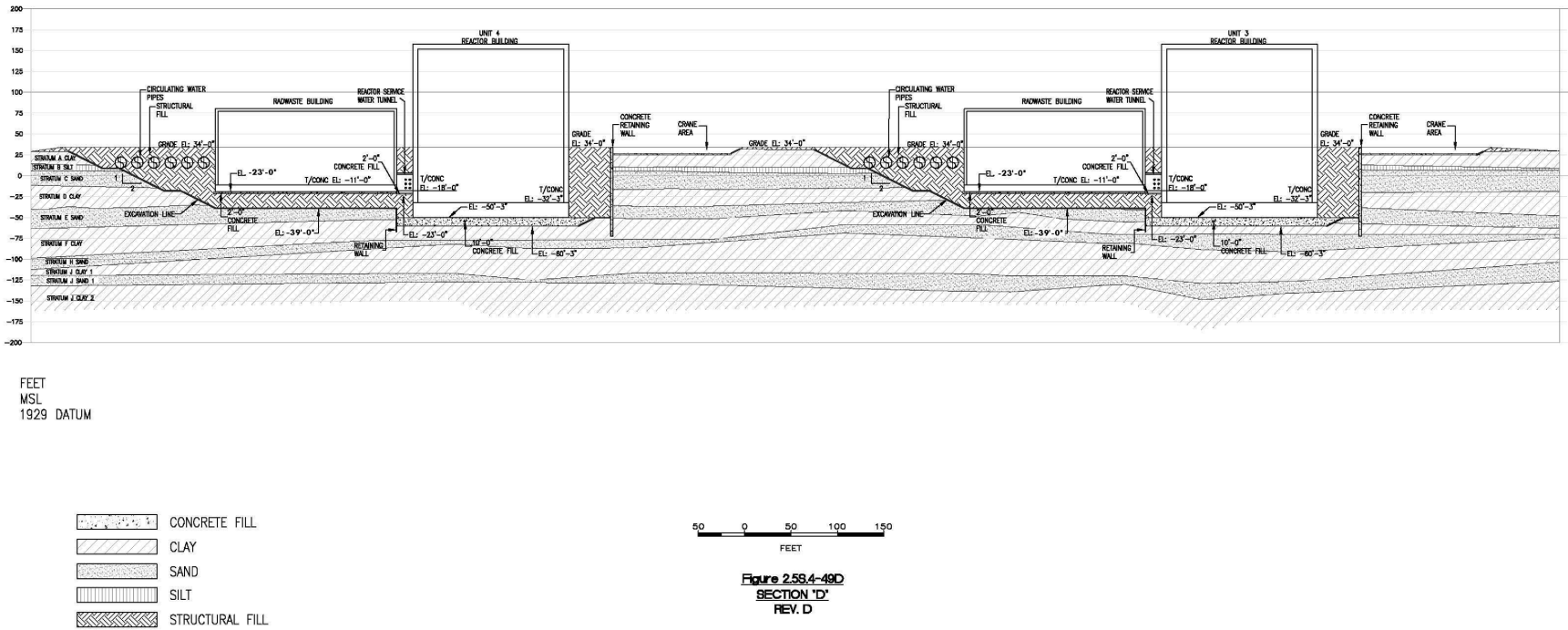


Figure 2.5S.4-49D Section "D" Rev. D

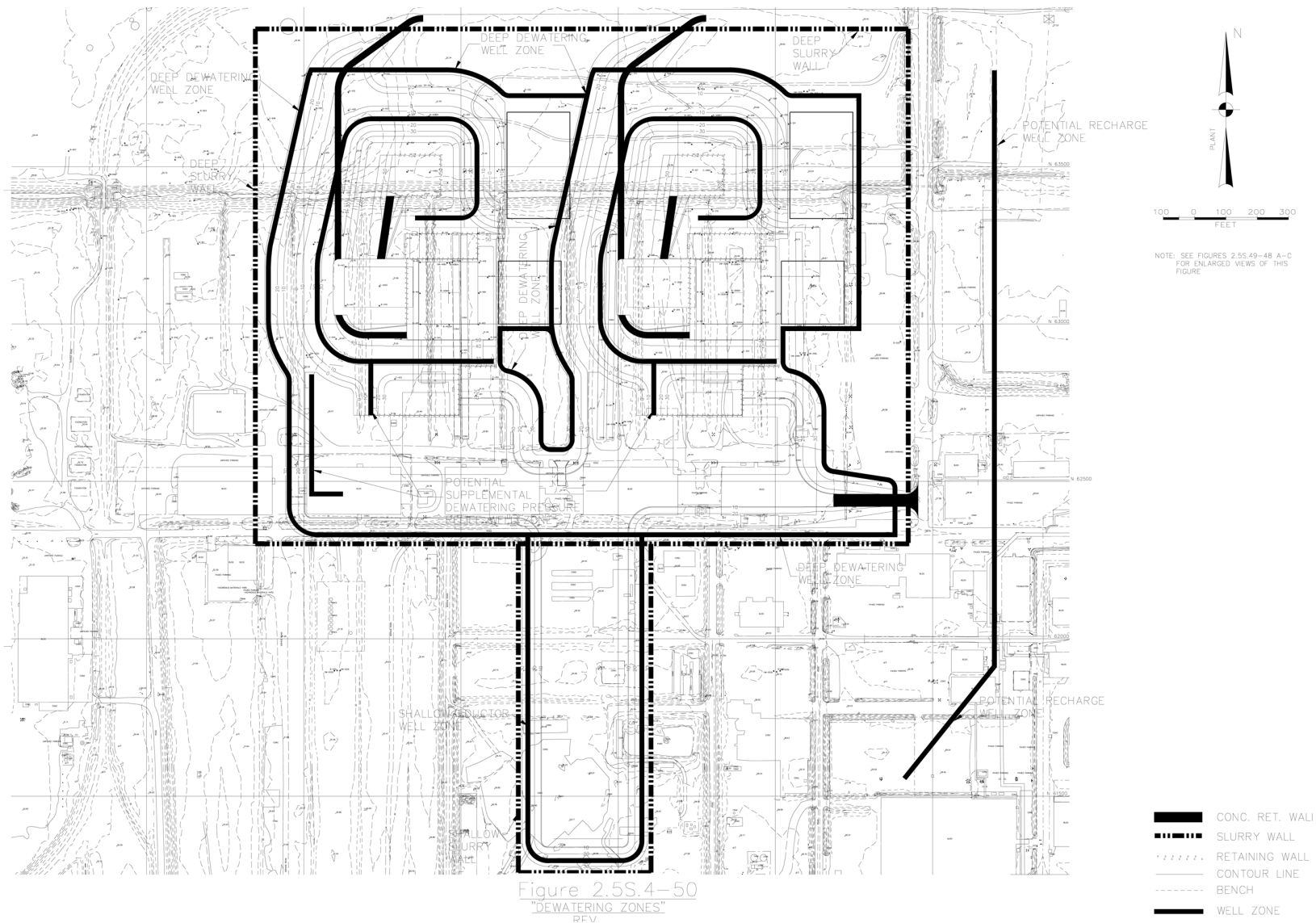
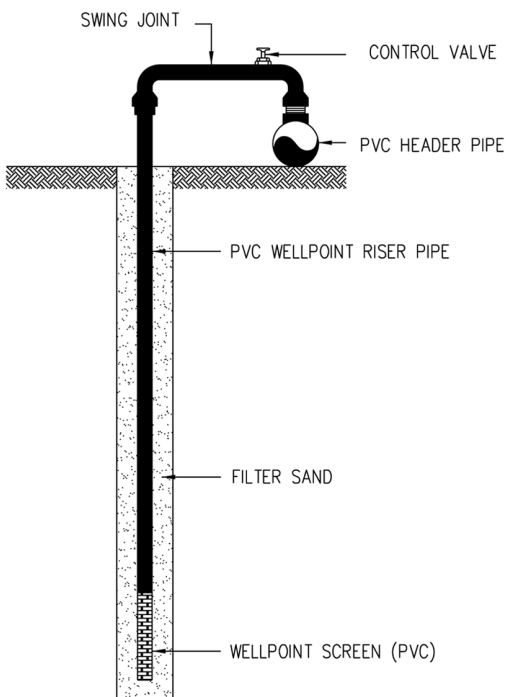
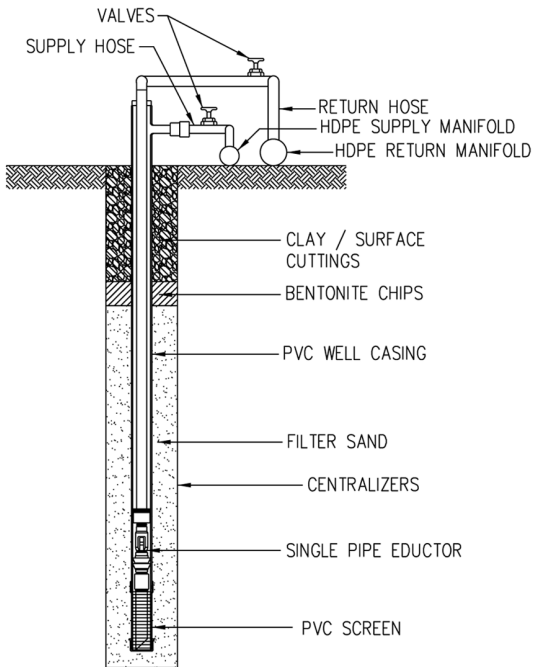


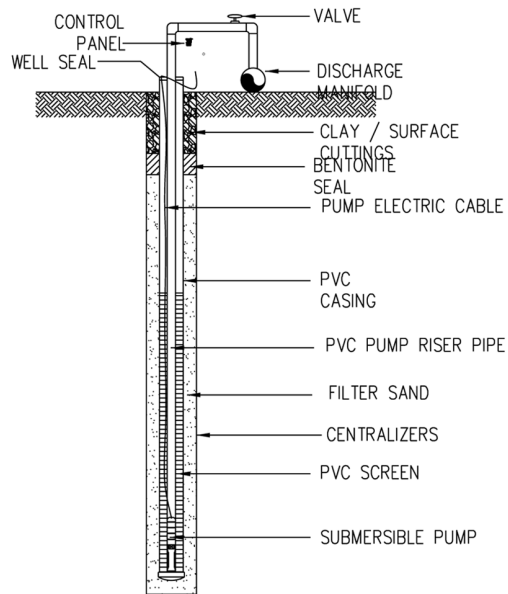
Figure 2.5S.4-50 Dewatering Zones Rev. C



TYPICAL WELLPOINT DETAIL

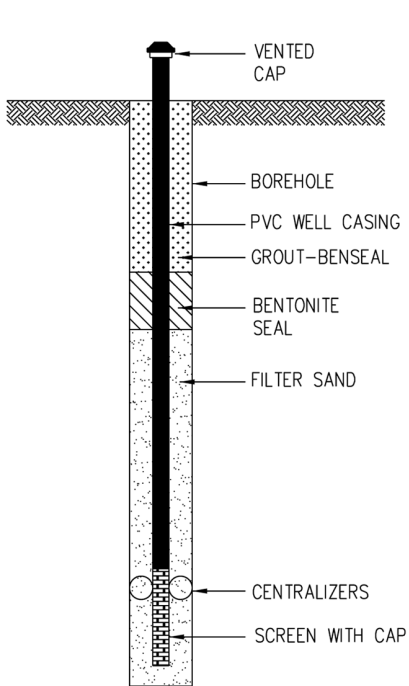


TYPICAL EDUCTOR DETAIL

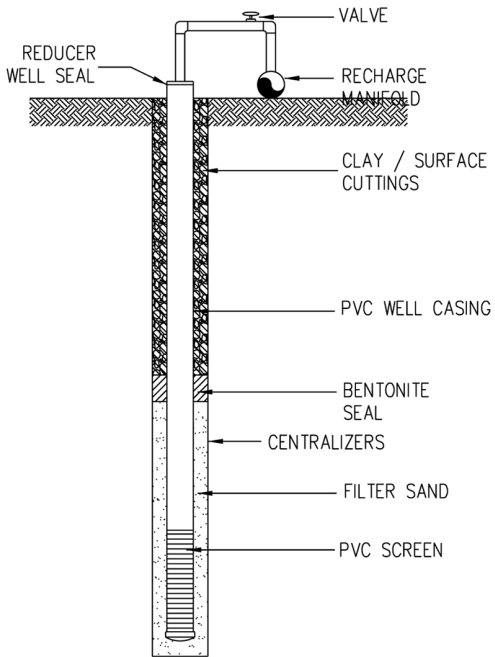


TYPICAL DEEPWELL DETAIL

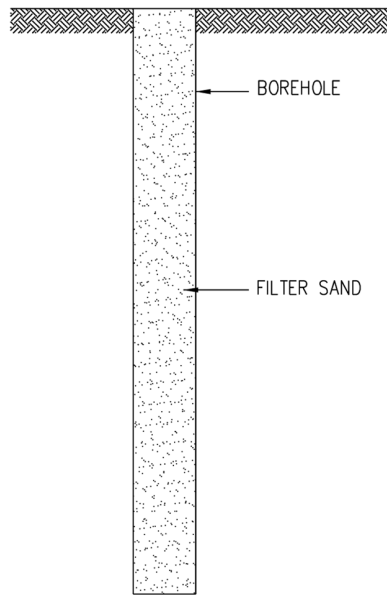
Figure 2.5S.4-51 Dewatering Detail Rev. B



PIEZOMETER  
DETAIL



RECHARGE WELL  
DETAIL



SAND DRAIN DETAIL

**Figure 2.5S.4-52 Dewatering Detail Rev. B**

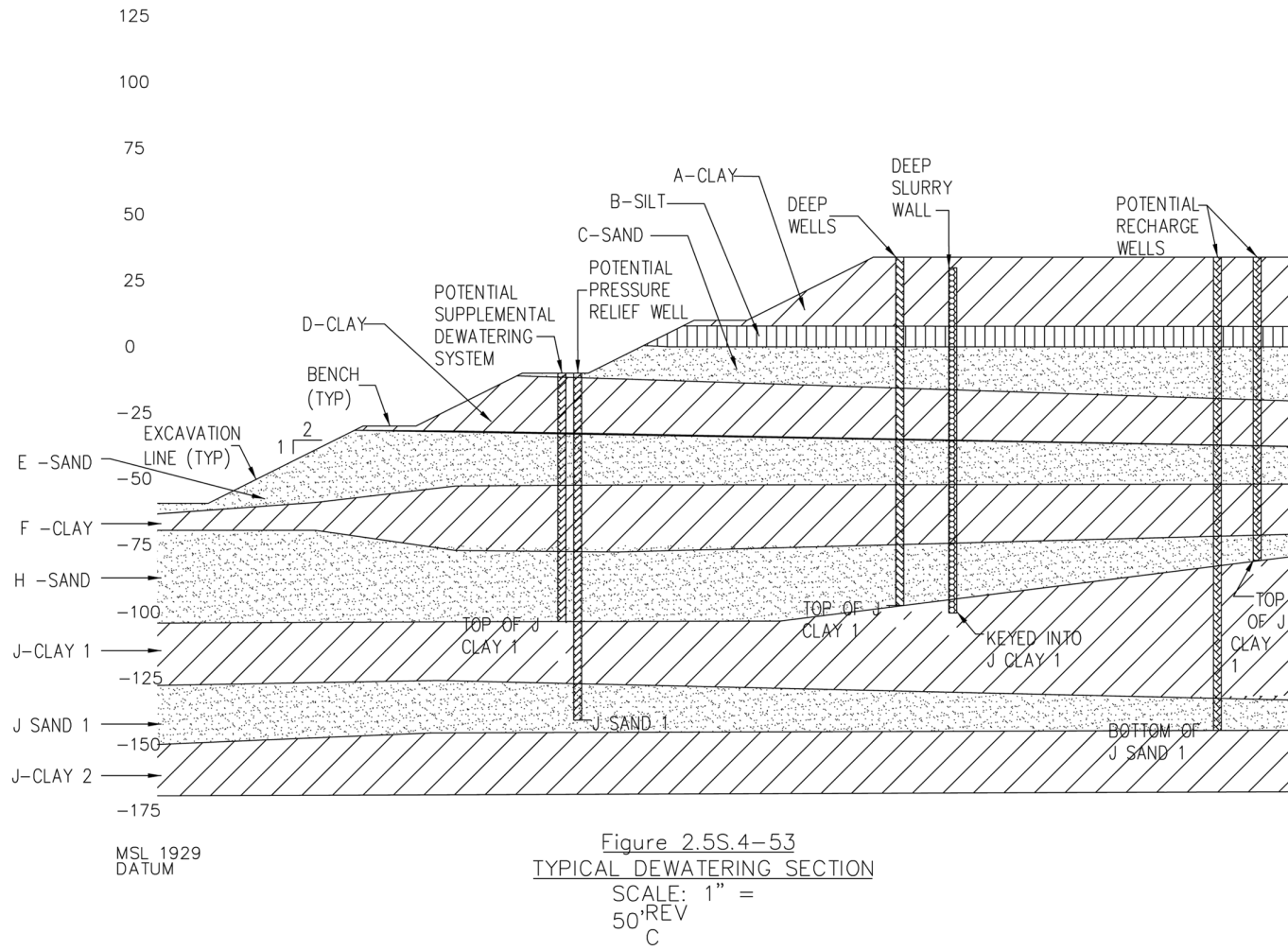
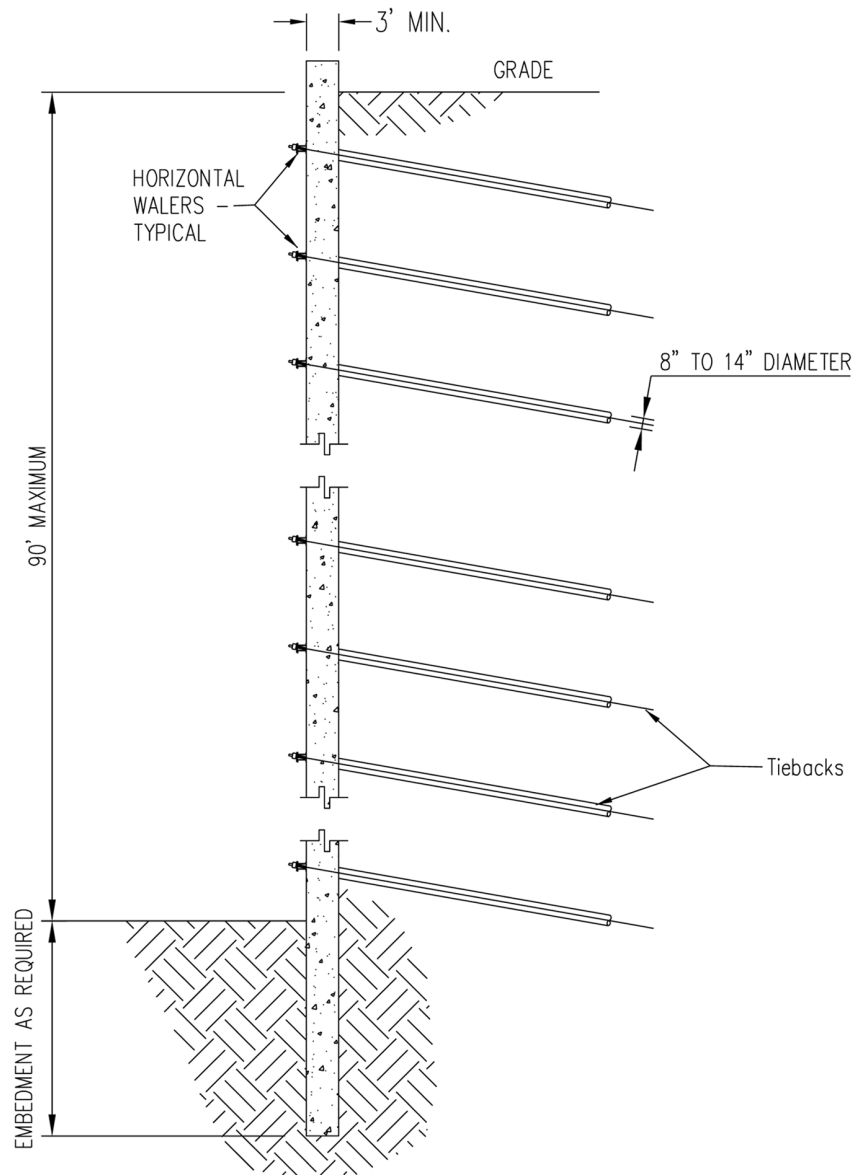


Figure 2.5S.4-53 Typical Dewatering Section



**Figure 2.5S.4-54 Reinforced Concrete Retaining Wall Section Rev. C**

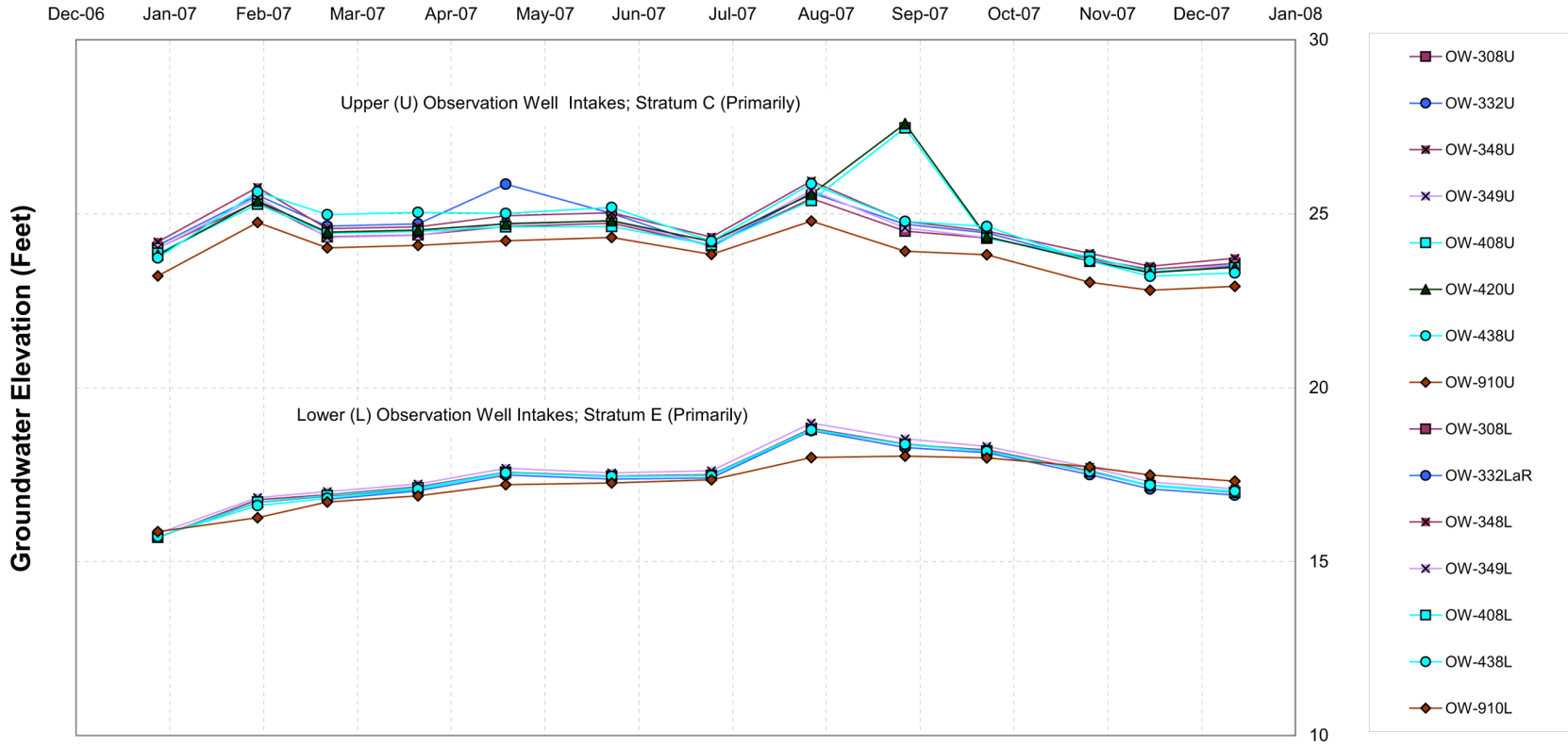


Figure 2.5S.4-55 Measured Groundwater Levels (Inside Power Block)

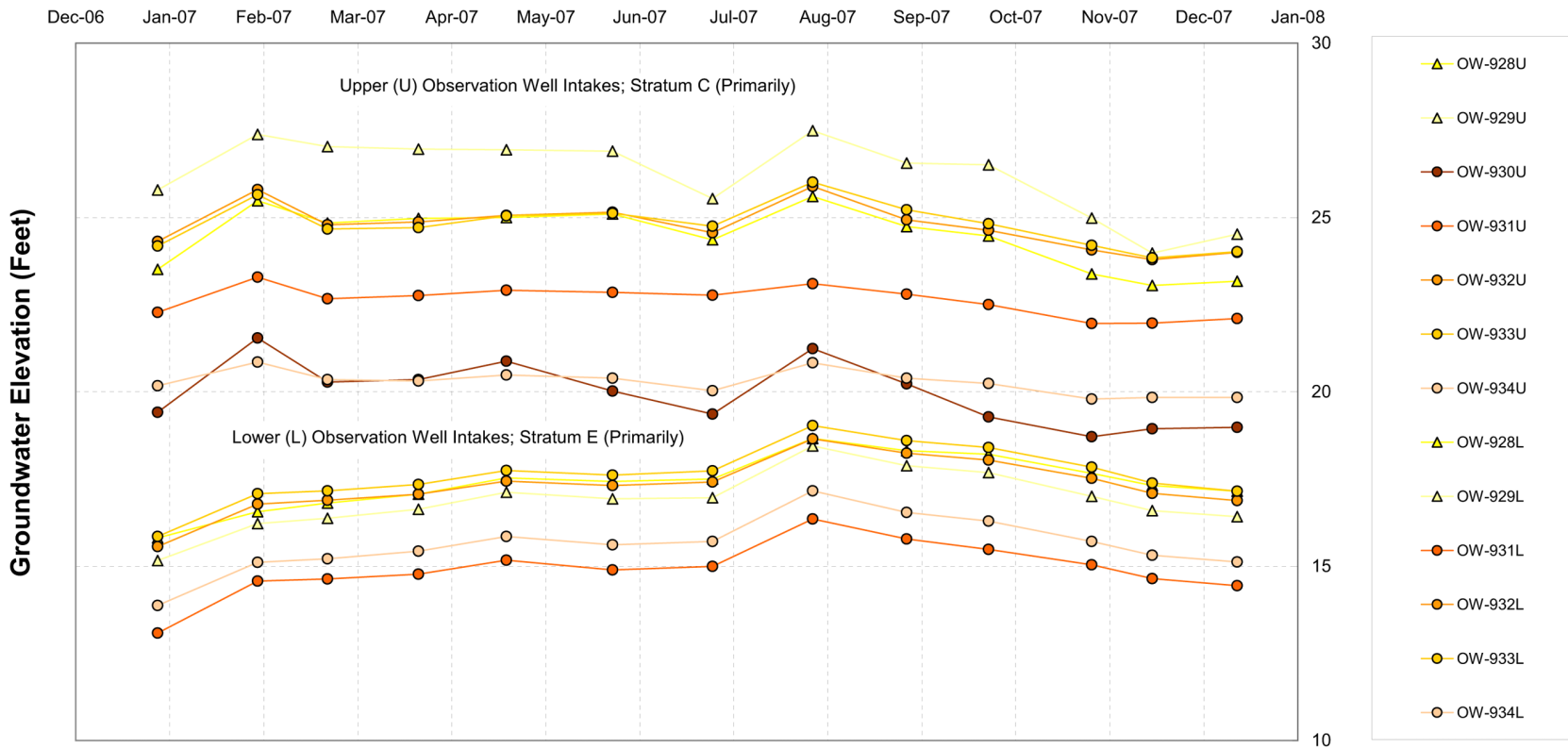


Figure 2.5S.4-56 Measured Groundwater Levels (Outside Power Block)



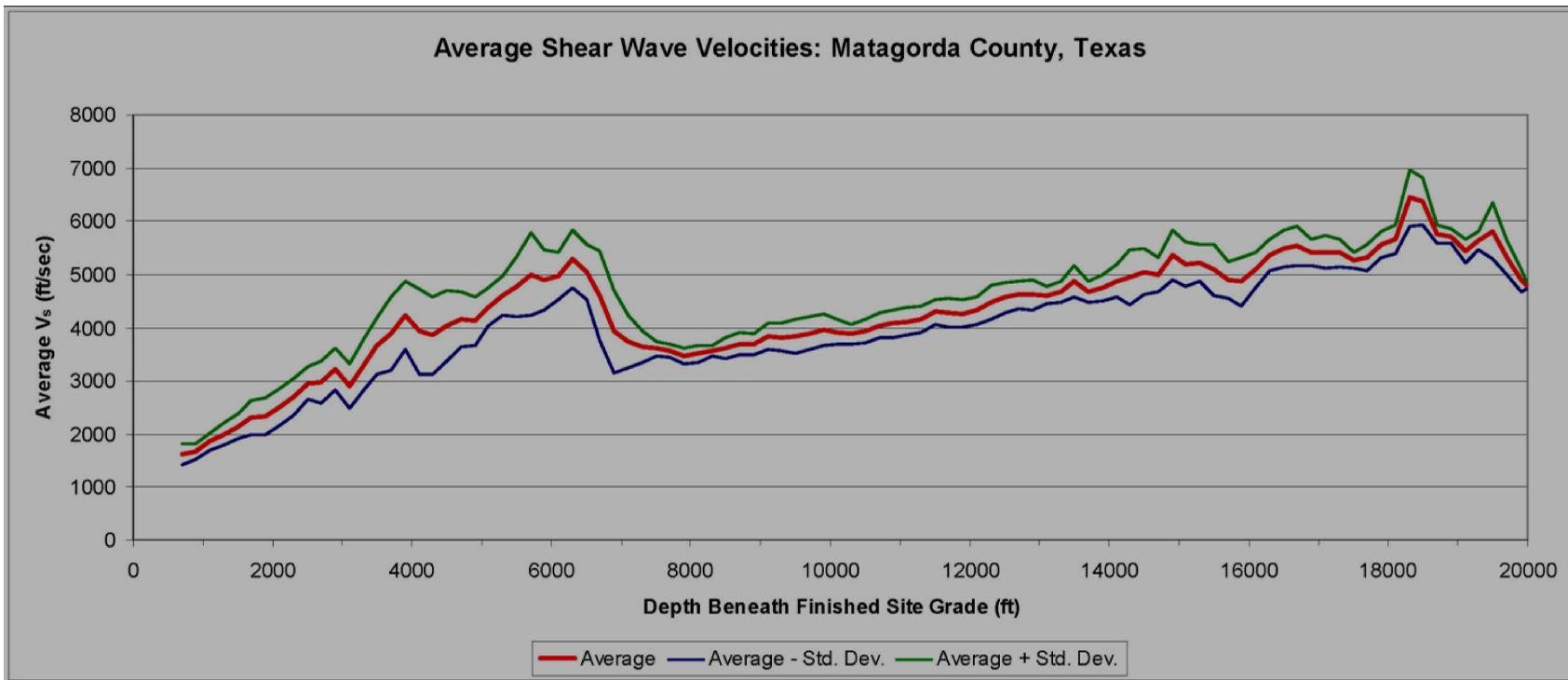


Figure 2.5S.4-57 Deep Shear Wave Velocity Profile for the STP Site

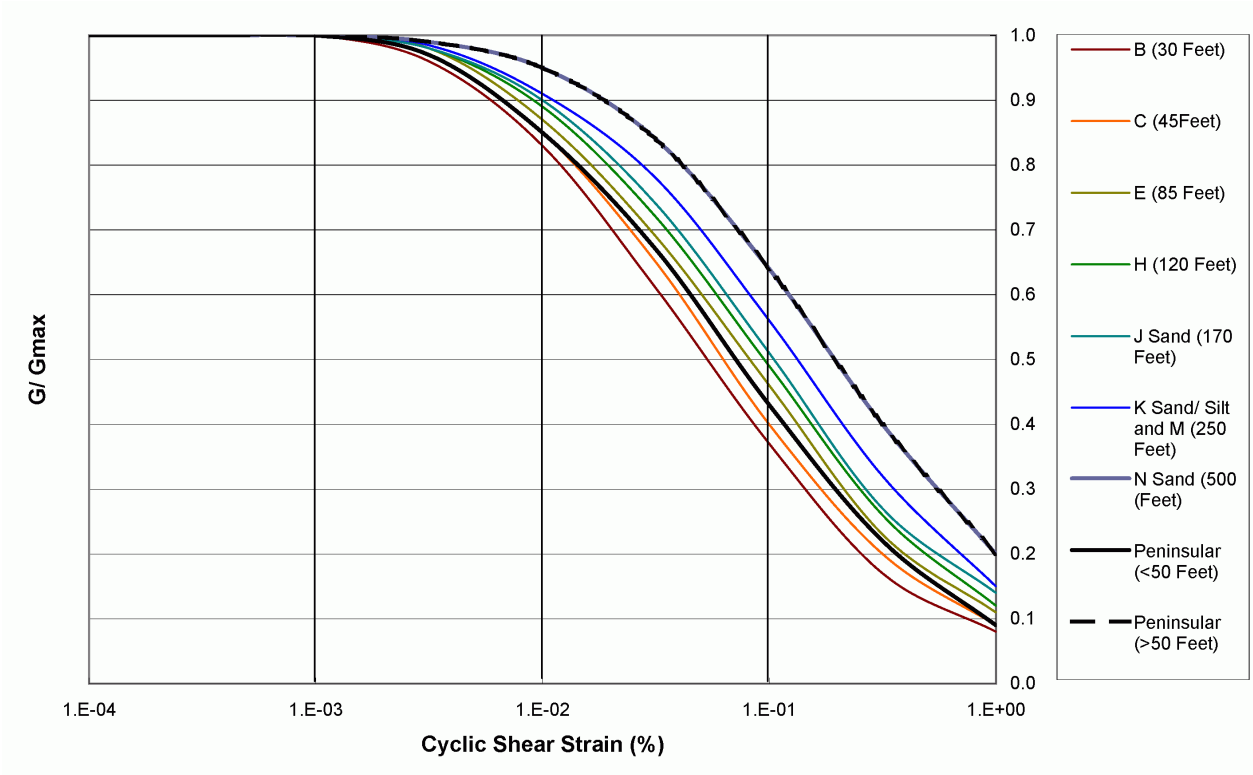


Figure 2.5S.4-58 Selected Shear Modulus Degradation Curves for Cohesionless Soil Strata

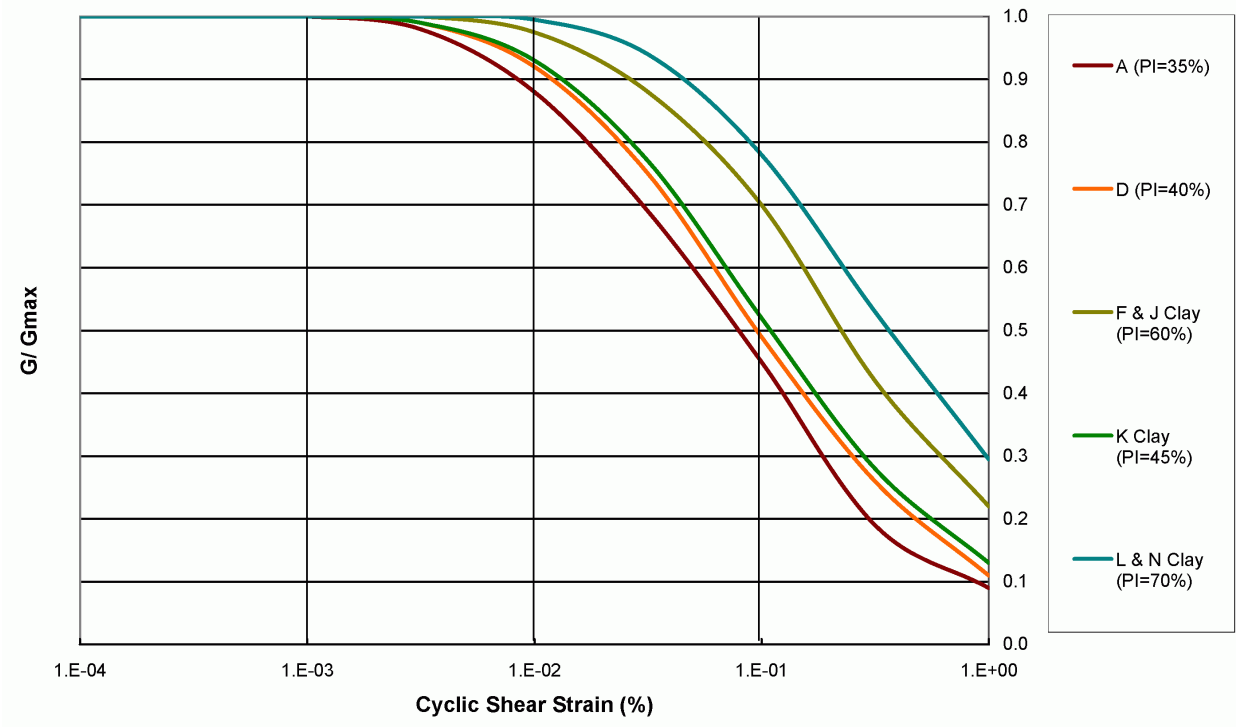


Figure 2.5S.4-59 Selected Shear Modulus Degradation Curves for Cohesive Soil Strata

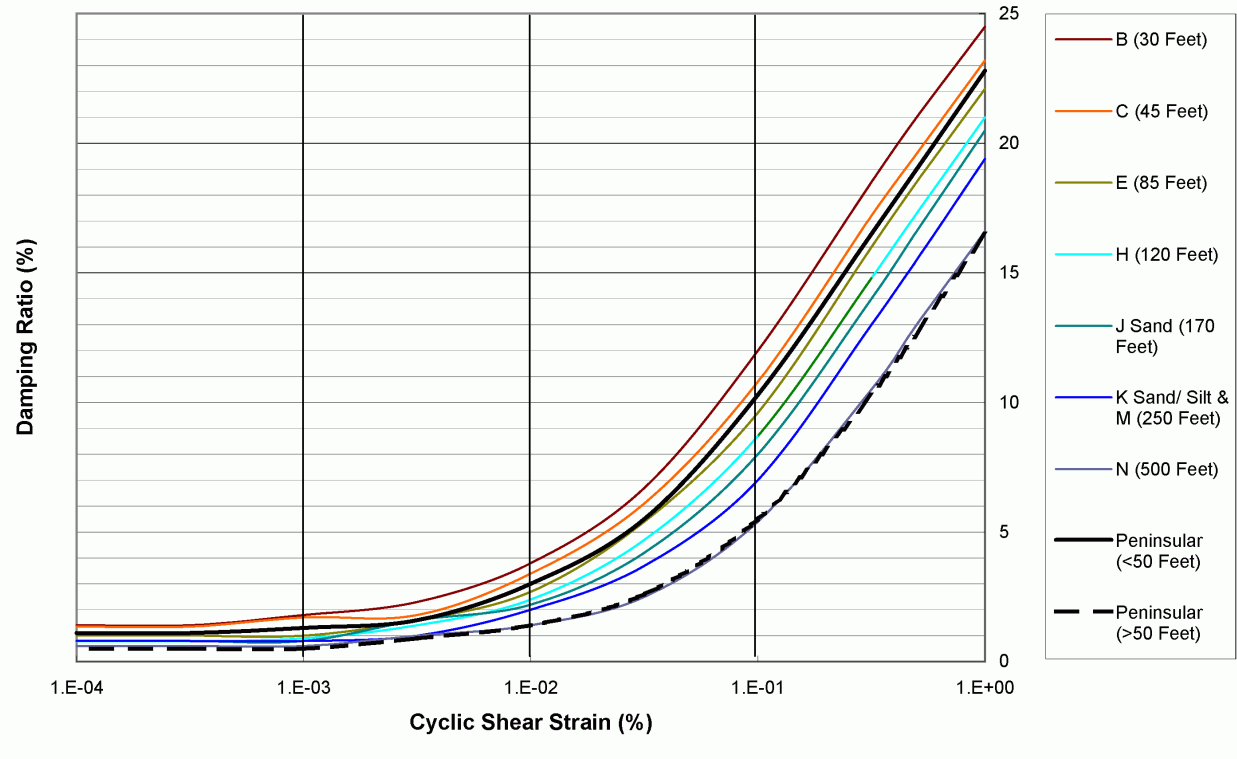


Figure 2.5S.4-60 Selected Damping Ratio Curves for Cohesionless Soil Strata

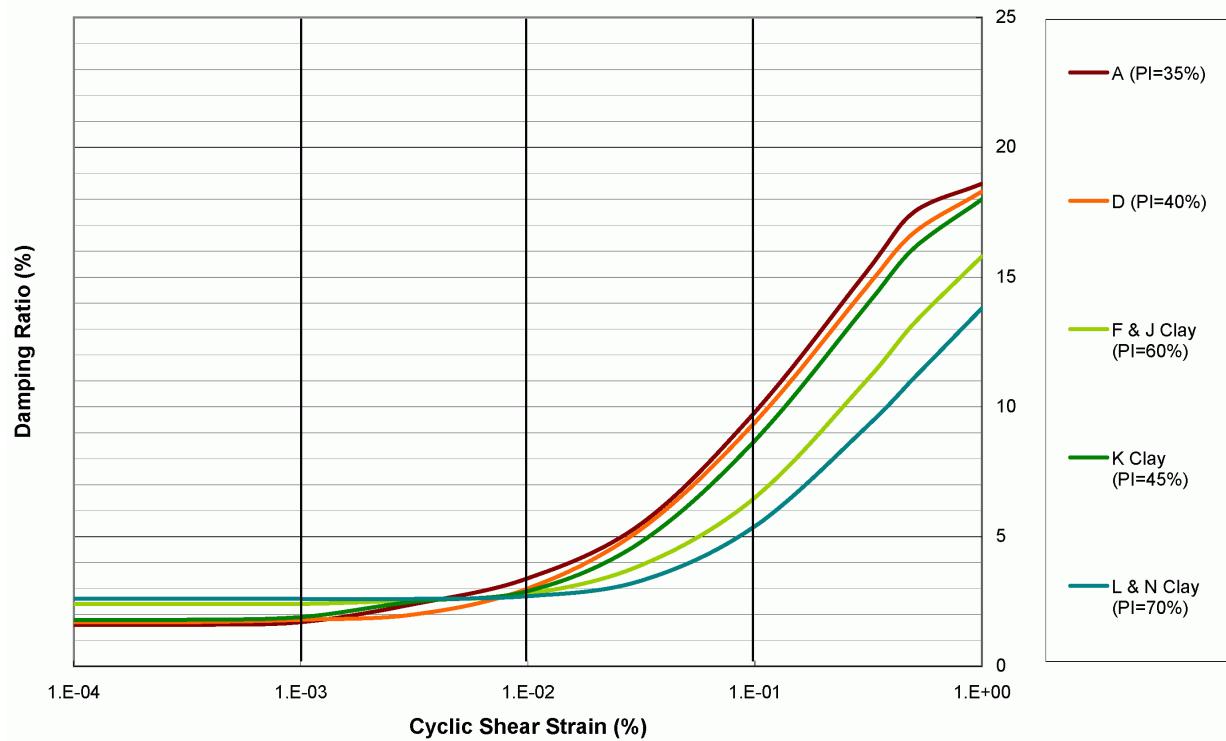


Figure 2.5S.4-61 Selected Damping Ratio Curves for Cohesive Soil Strata

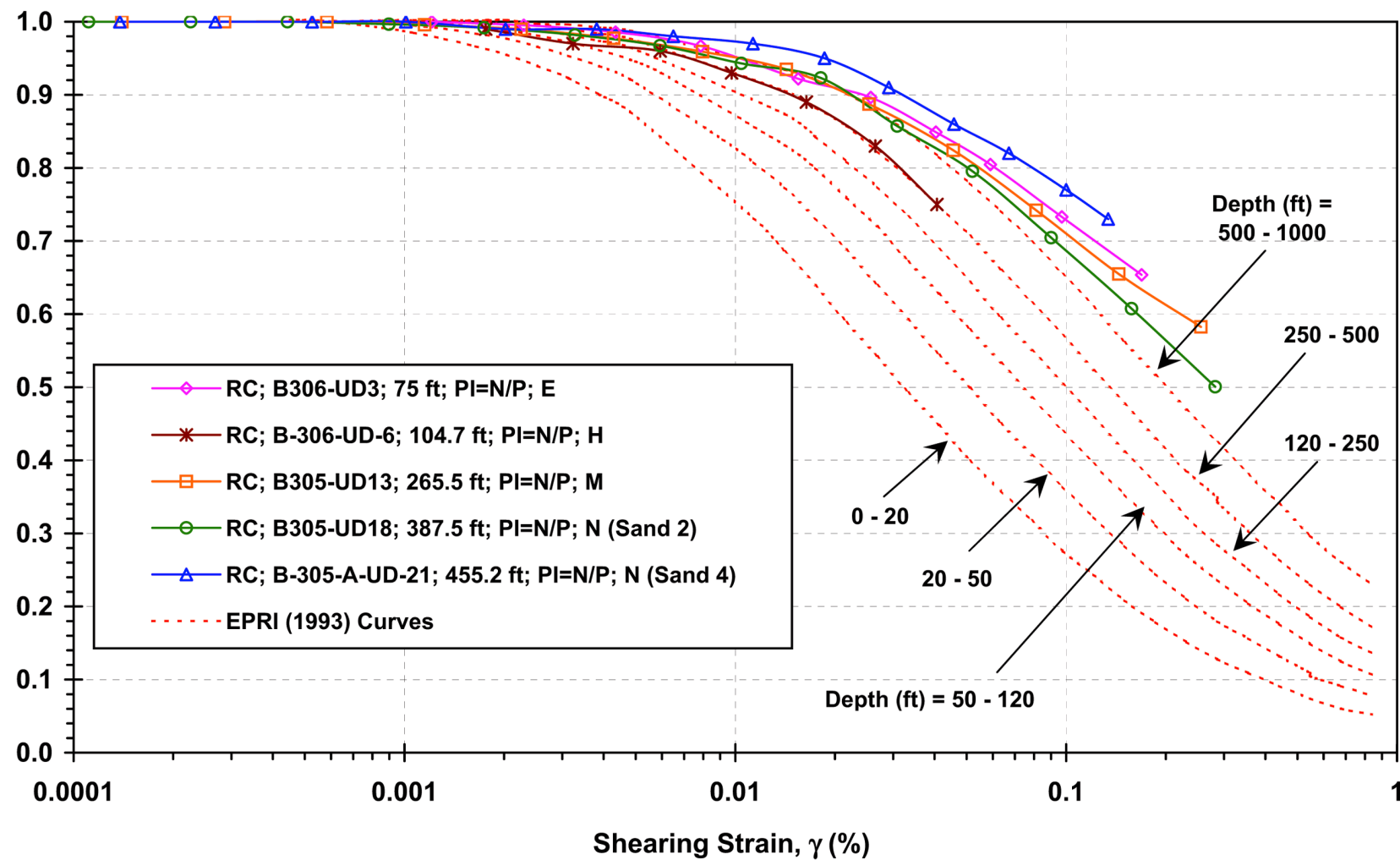


Figure 2.5S.4-62 Shear Modulus Degradation Based on RCTS Testing – All Sand Samples

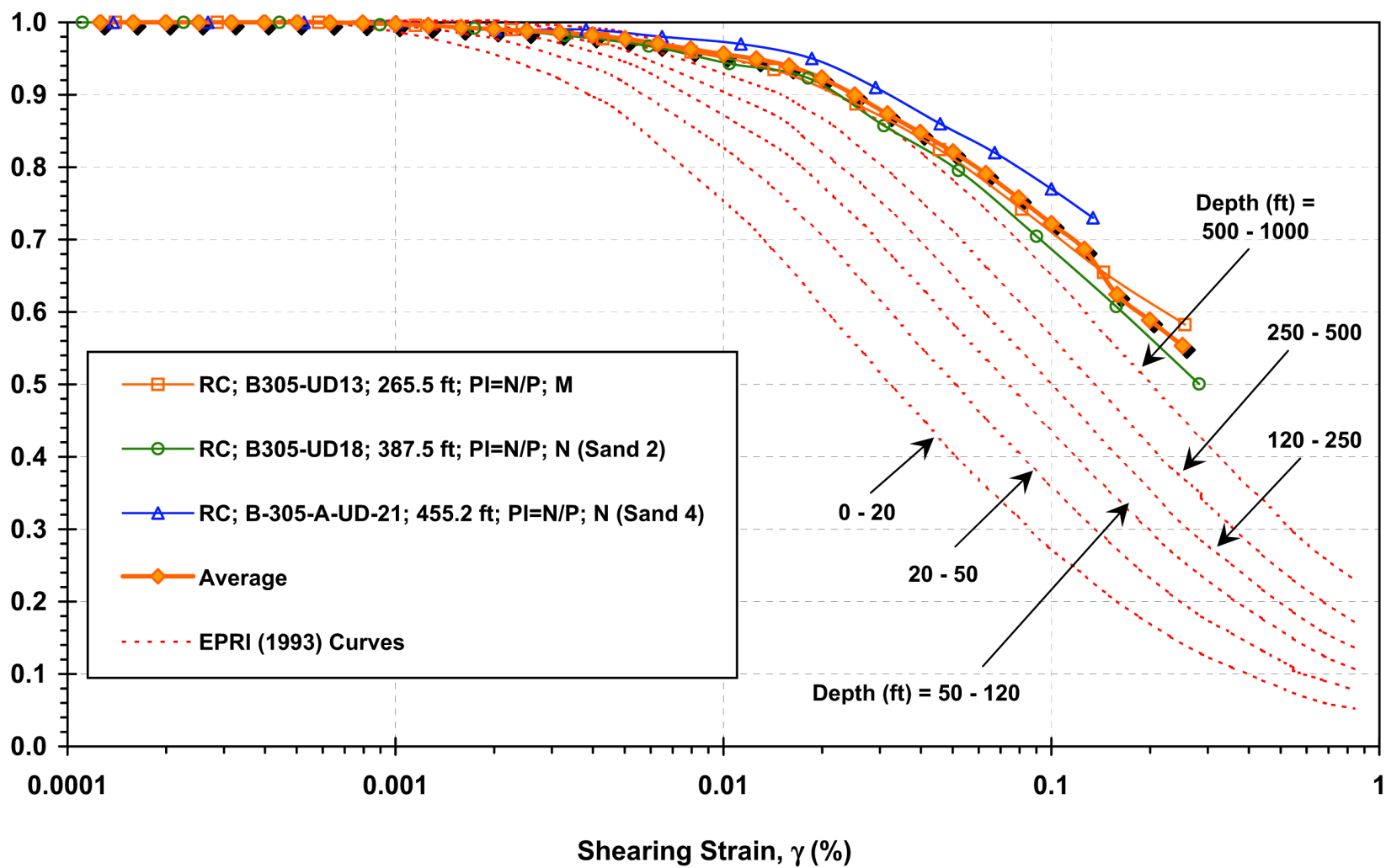


Figure 2.5S.4-63 Shear Modulus Degradation Based on RCTS Testing - Deep Sand Samples

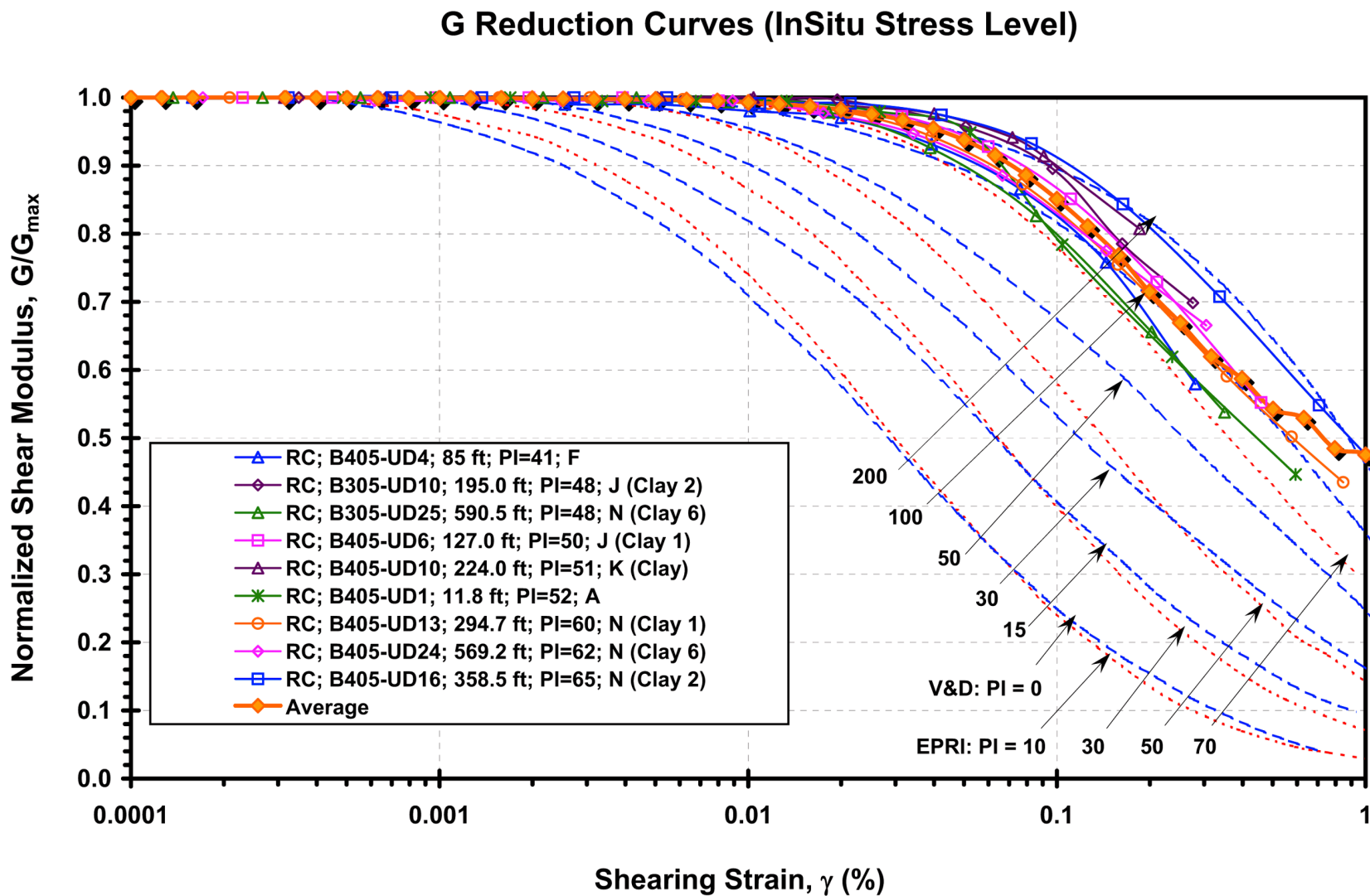


Figure 2.5S.4-64 Shear Modulus Degradation Based on RCTS Testing - High PI Clay Sample



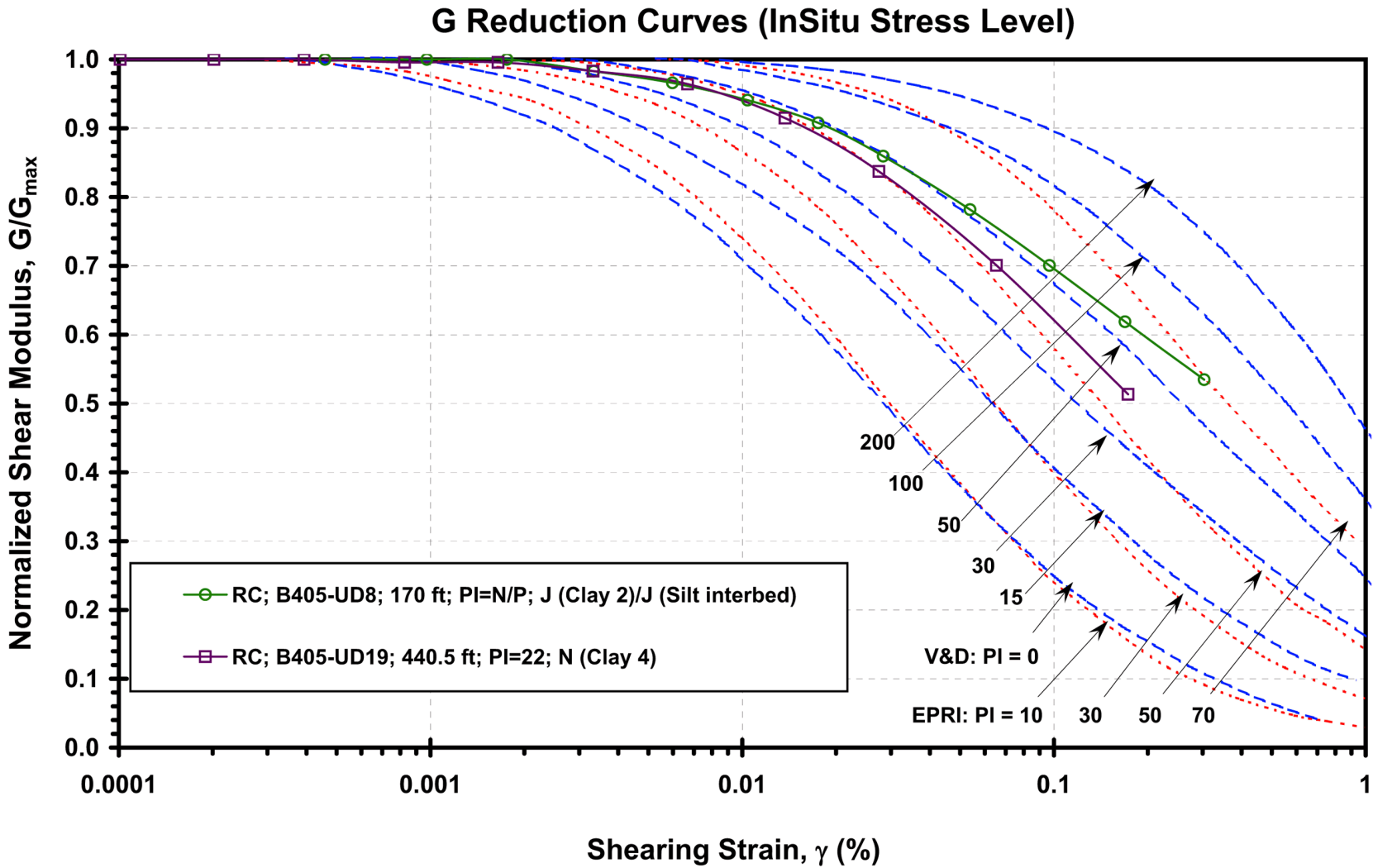


Figure 2.5S.4-65 Shear Modulus Degradation Based on RCTS Testing - Low PI Clay Sample

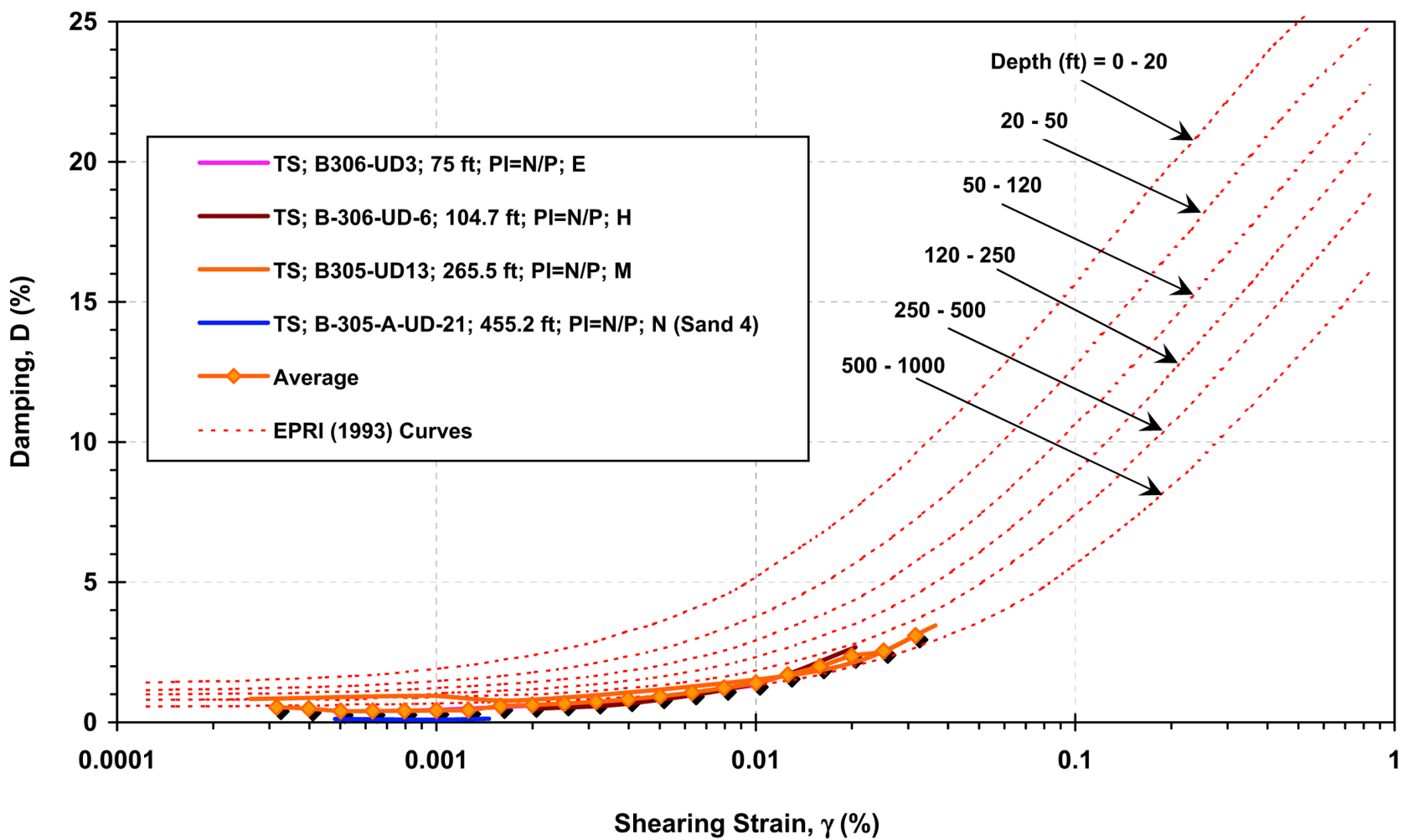


Figure 2.5S.4-66 Damping Curve Measurements Based on RCTS Testing - Sand Samples

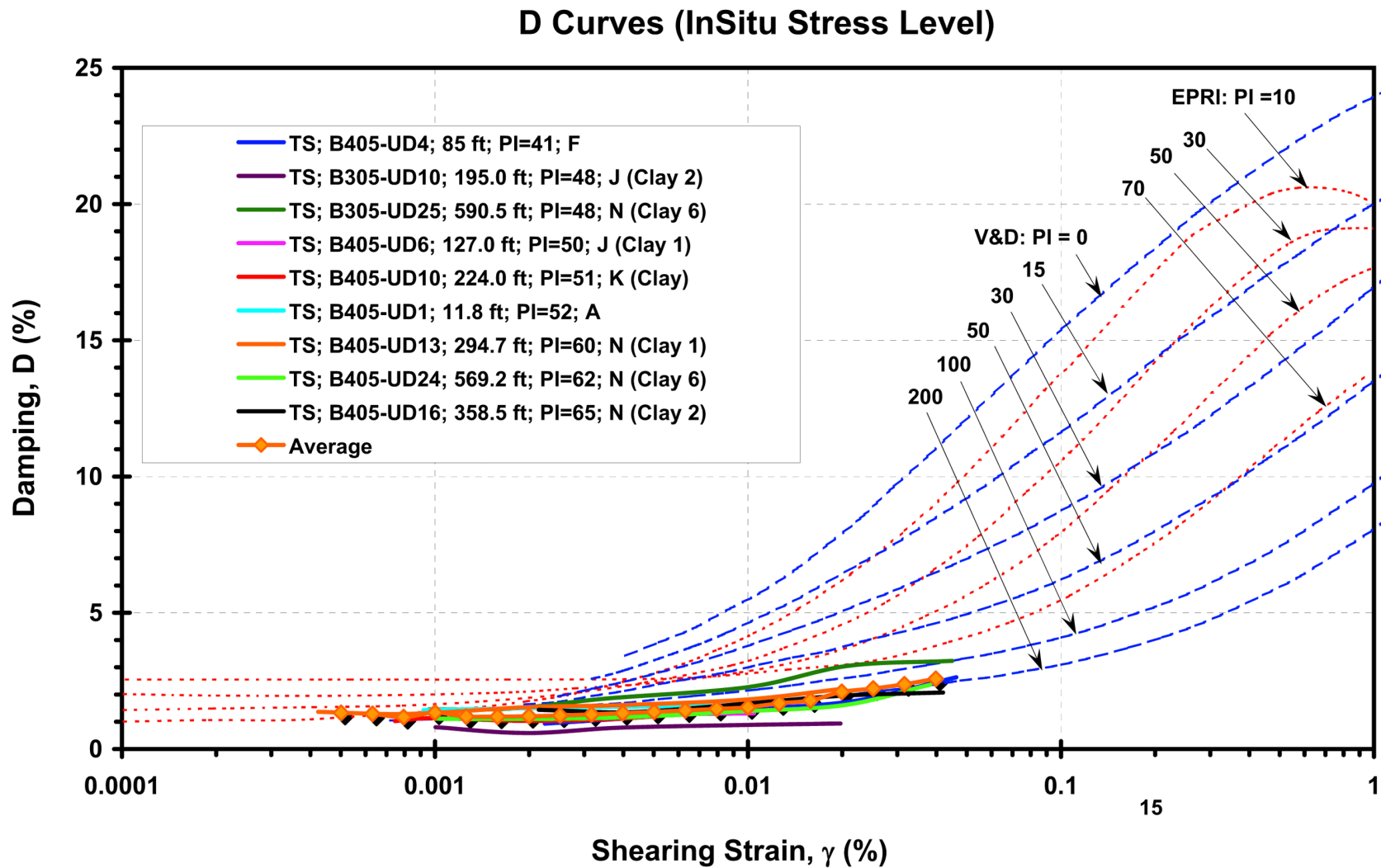


Figure 2.5S.4-67 Damping Curve Measurements Based on RCTS Testing - High PI Clay Samples

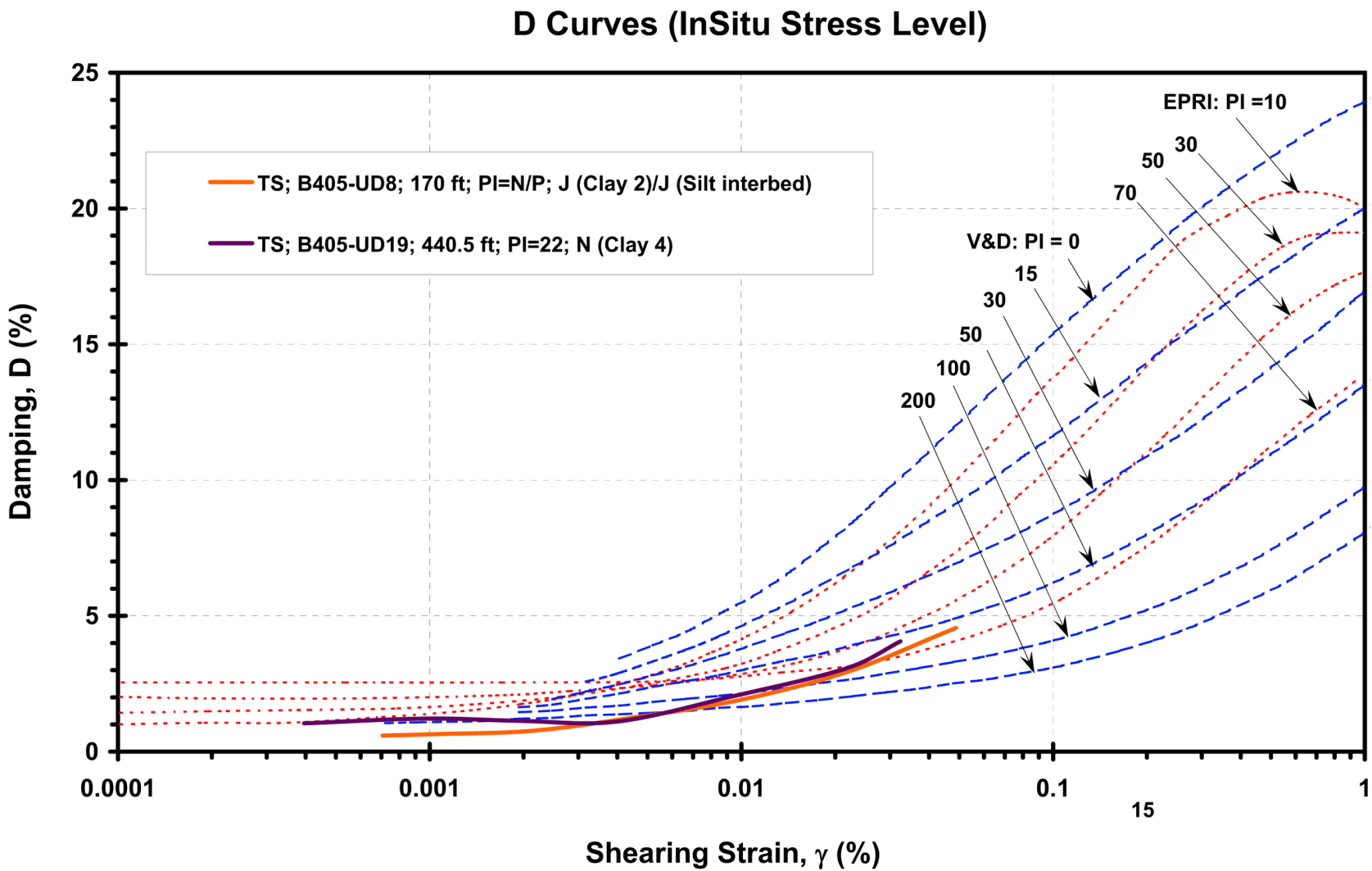


Figure 2.5S.4-68 Damping Curve Measurements Based on RCTS Testing - Low PI Samples

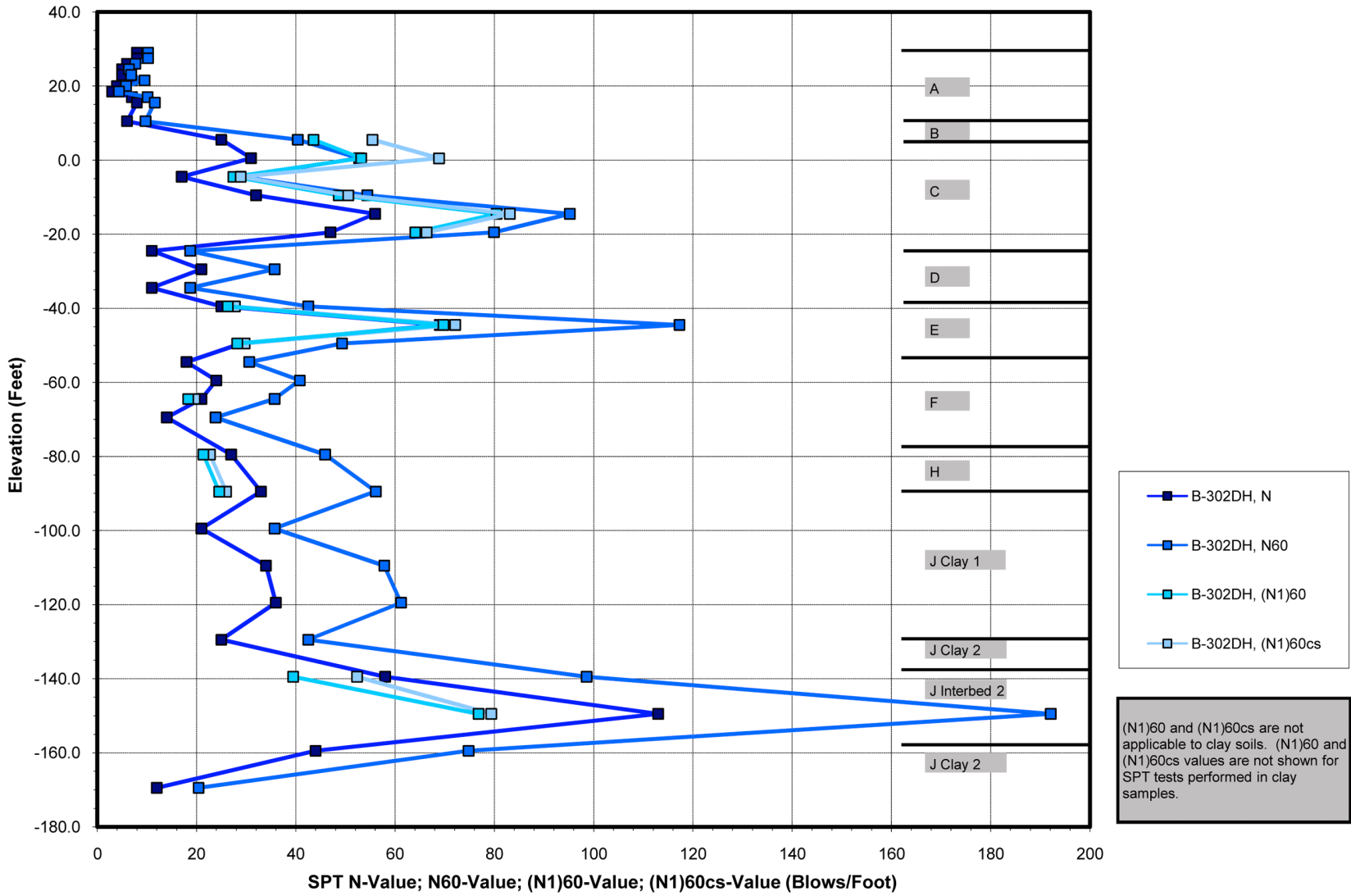


Figure 2.5S.4-69 STP 3; Example (SPT N-Value N -to- N60 -to- (N<sub>1</sub>)60 -to- (N<sub>1</sub>)60cs)

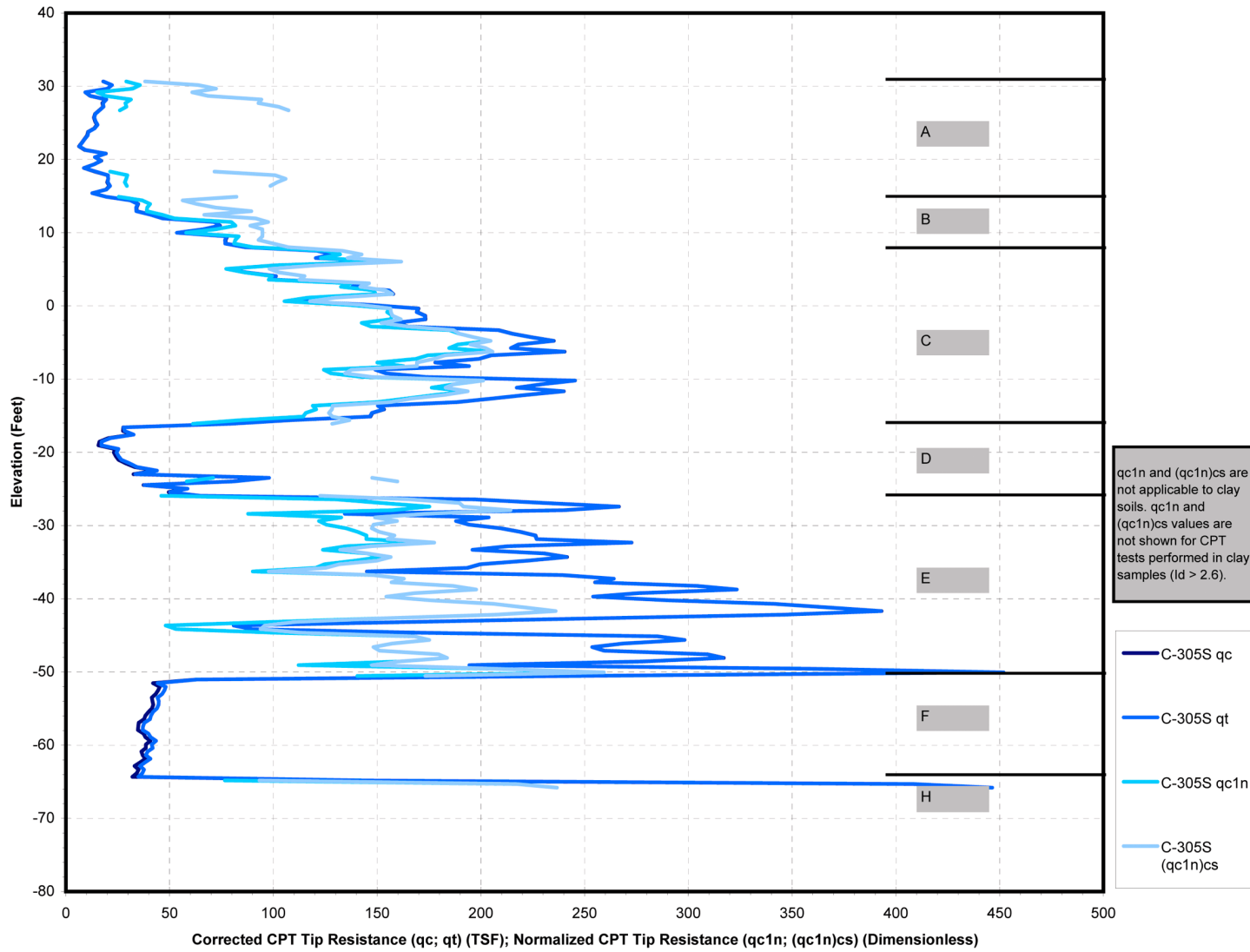


Figure 2.5S.4-70 CPT C-305S (CPT 3; Example; CPT Tip Resistance  $q_c$  -to-  $q_t$  -to-  $q_{c1n}$  -to-  $(q_{c1n})_{cs}$ )



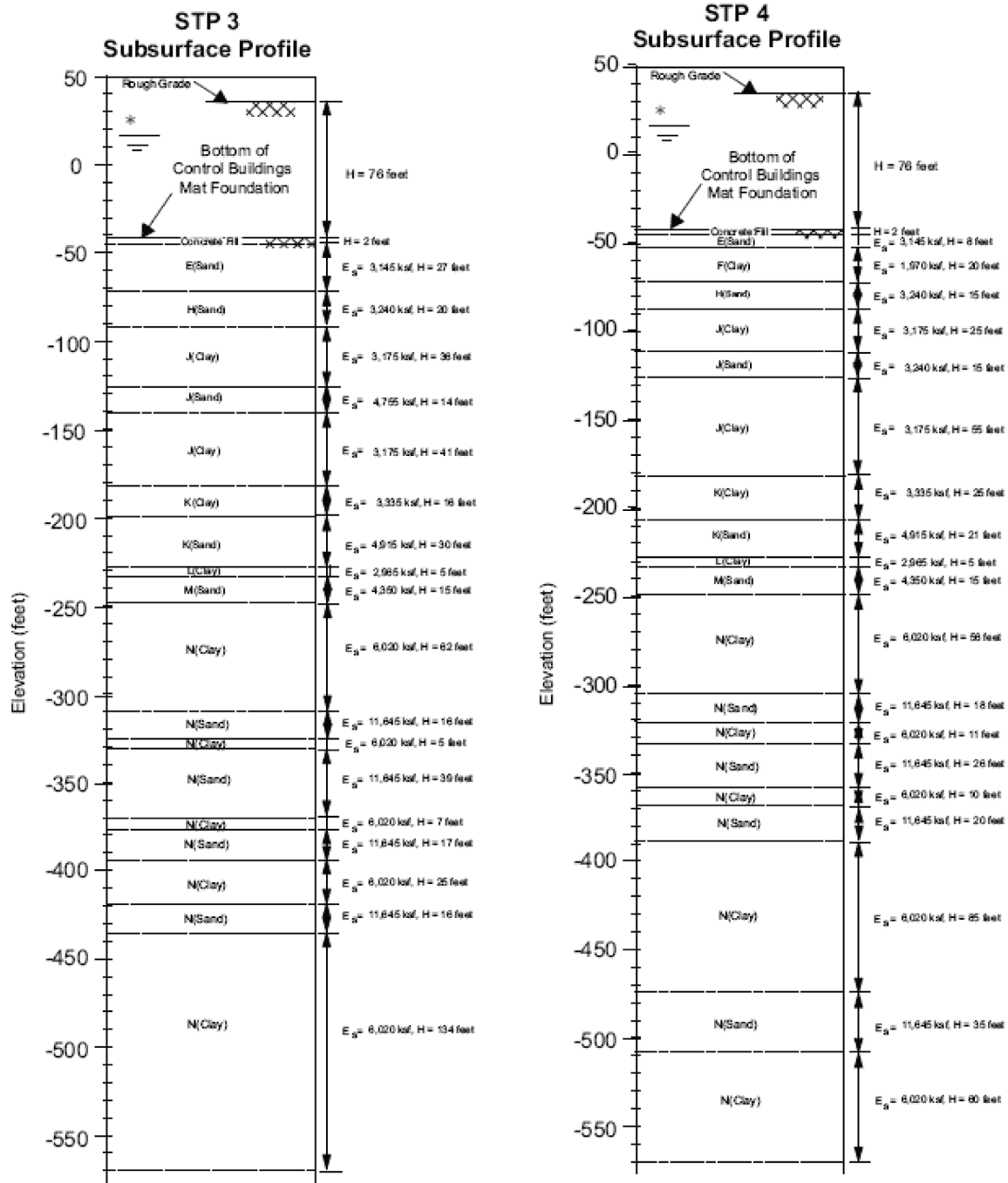


Figure 2.5S.4-72 Adopted Subsurface profiles for the STP 3 &amp; 4 Control Buildings



**Figure 2.5S.4-73 Not Used**

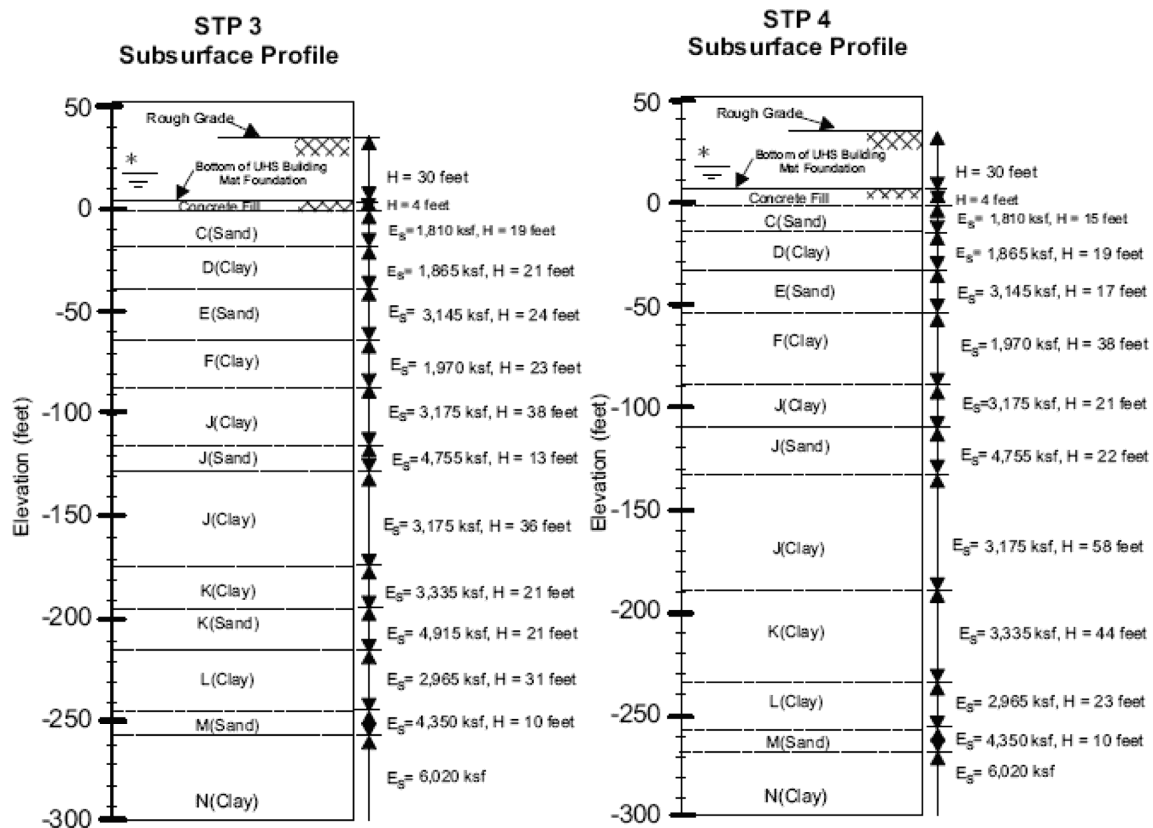


Figure 2.5S.4-74 Adopted Subsurface profiles for the STP 3 &amp; 4 UHS Basins

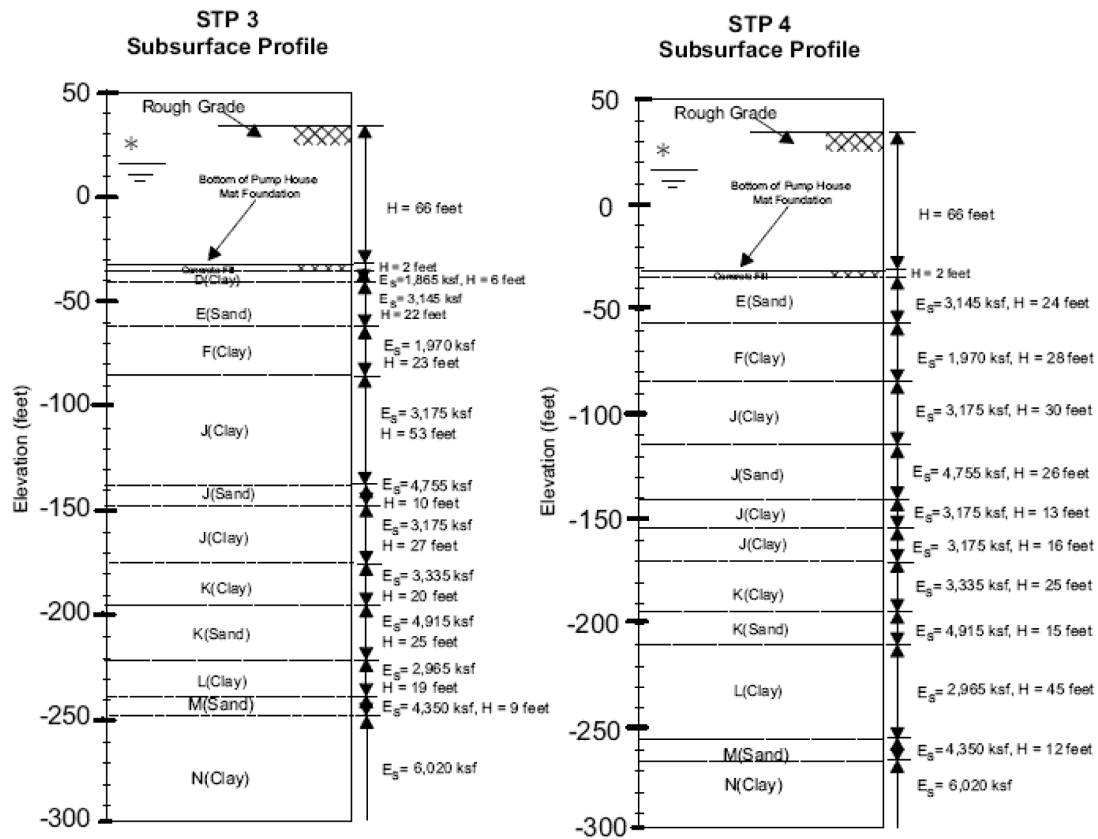
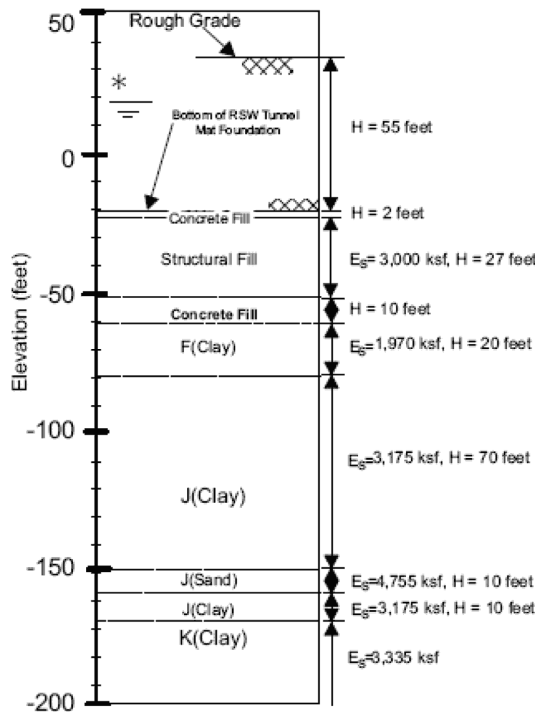
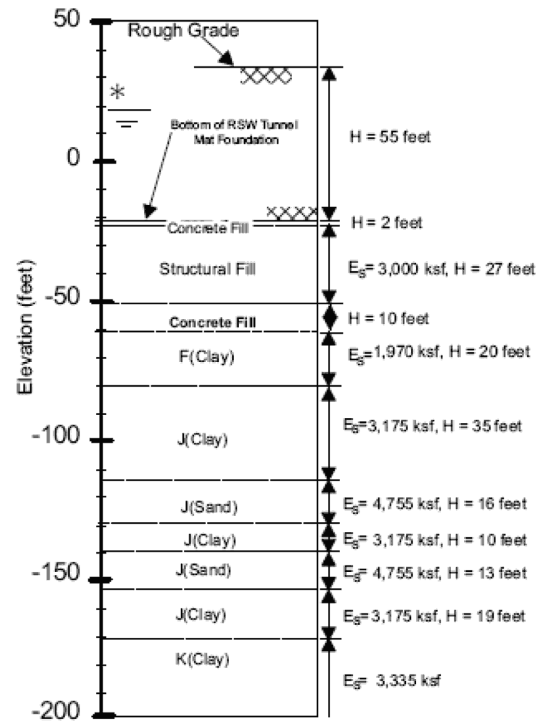


Figure 2.5S.4-74A Adopted Subsurface Profiles for the STP 3 &amp; 4 RSW Pump Houses

**STP 3**  
Subsurface Profile  
(Shallow Structural Backfill Case)



**STP 4**  
Subsurface Profile  
(Shallow Structural Backfill Case)



**Figure 2.5S.4-74B Adopted Subsurface Profiles for the STP 3 & 4 RSW Tunnels**

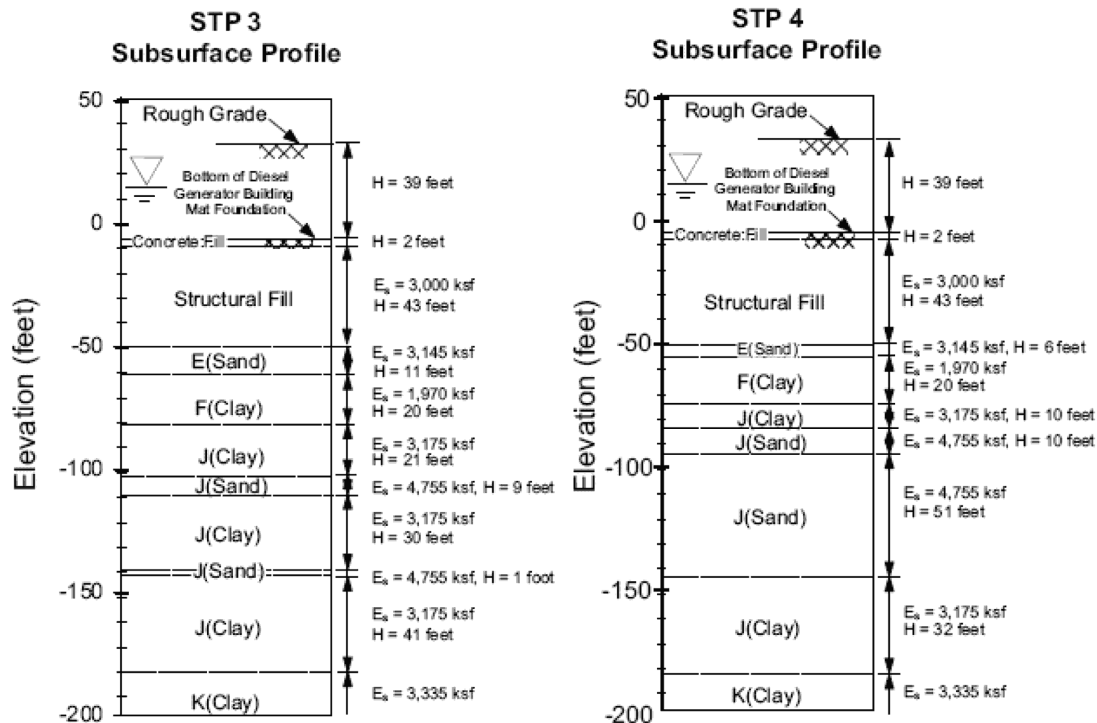


Figure 2.5S.4-74C Adopted Subsurface Profiles for the STP 3 & 4 Diesel Generator Fuel Oil Storage Vaults (No. 1 of 3)

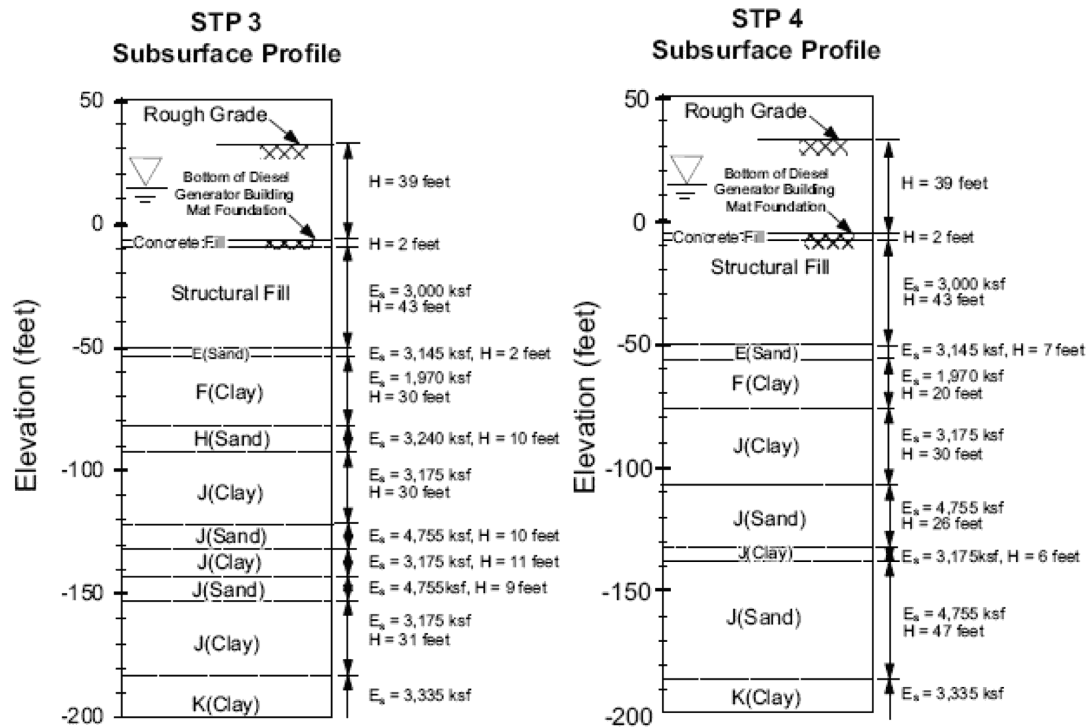


Figure 2.5S.4-74C Adopted Subsurface Profiles for the STP 3 & 4 Diesel Generator Fuel Oil Storage Vaults (No. 2 of 3)

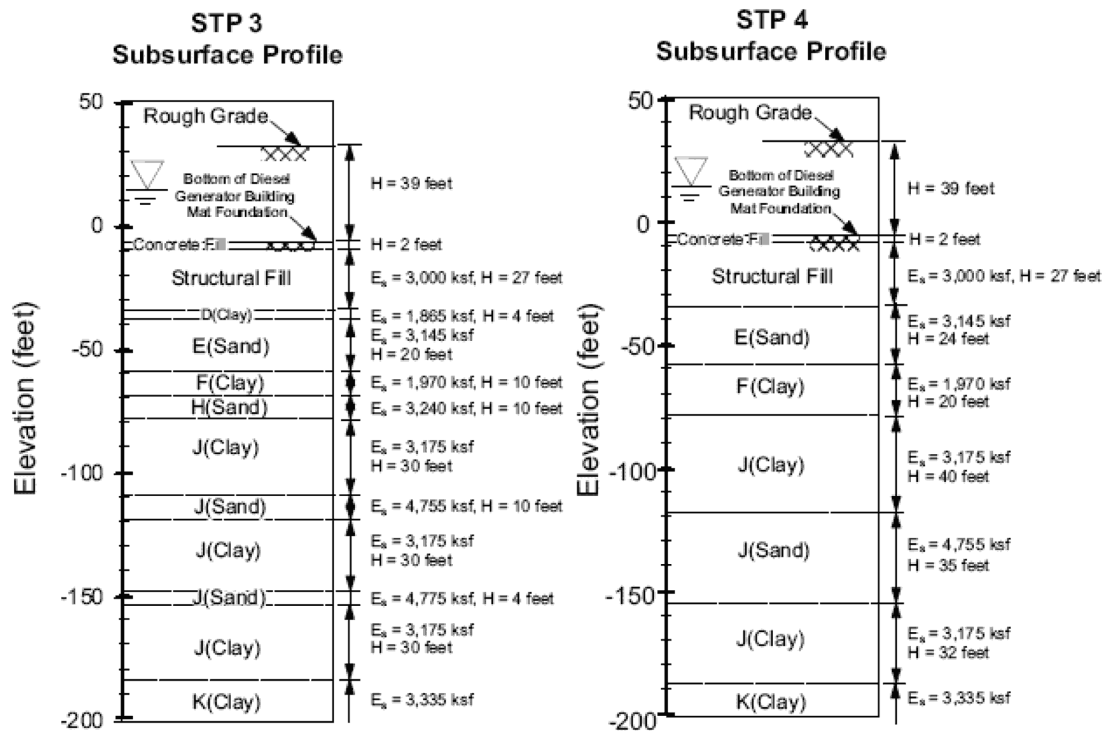


Figure 2.5S.4-74C Adopted Subsurface Profiles for the STP 3 & 4 Diesel Generator Fuel Oil Storage Vaults (No. 3 of 3)

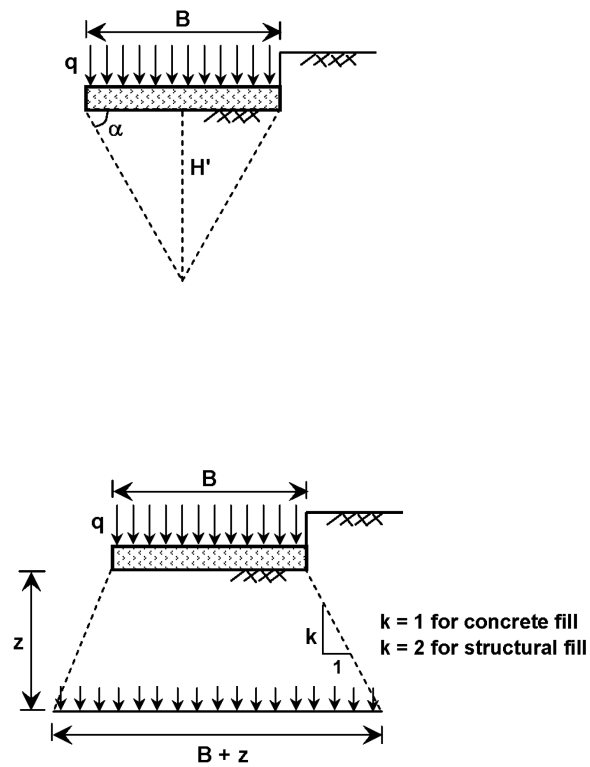


Figure 2.5S.4-75 Nomenclature for Foundation Wedge and Pressure Distribution Diagrams



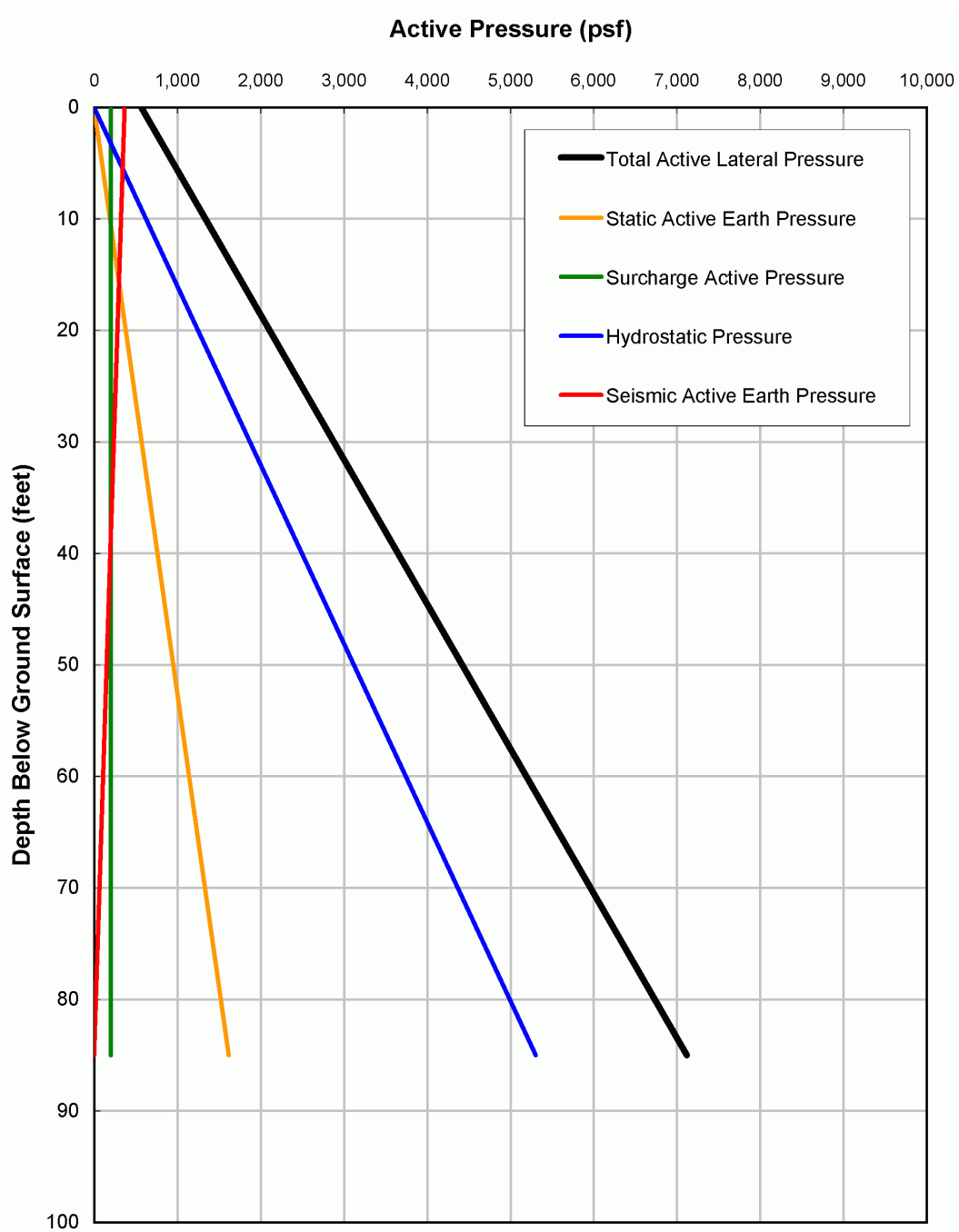


Figure 2.5S.4-76 Sample Active Lateral Earth Pressure Diagrams

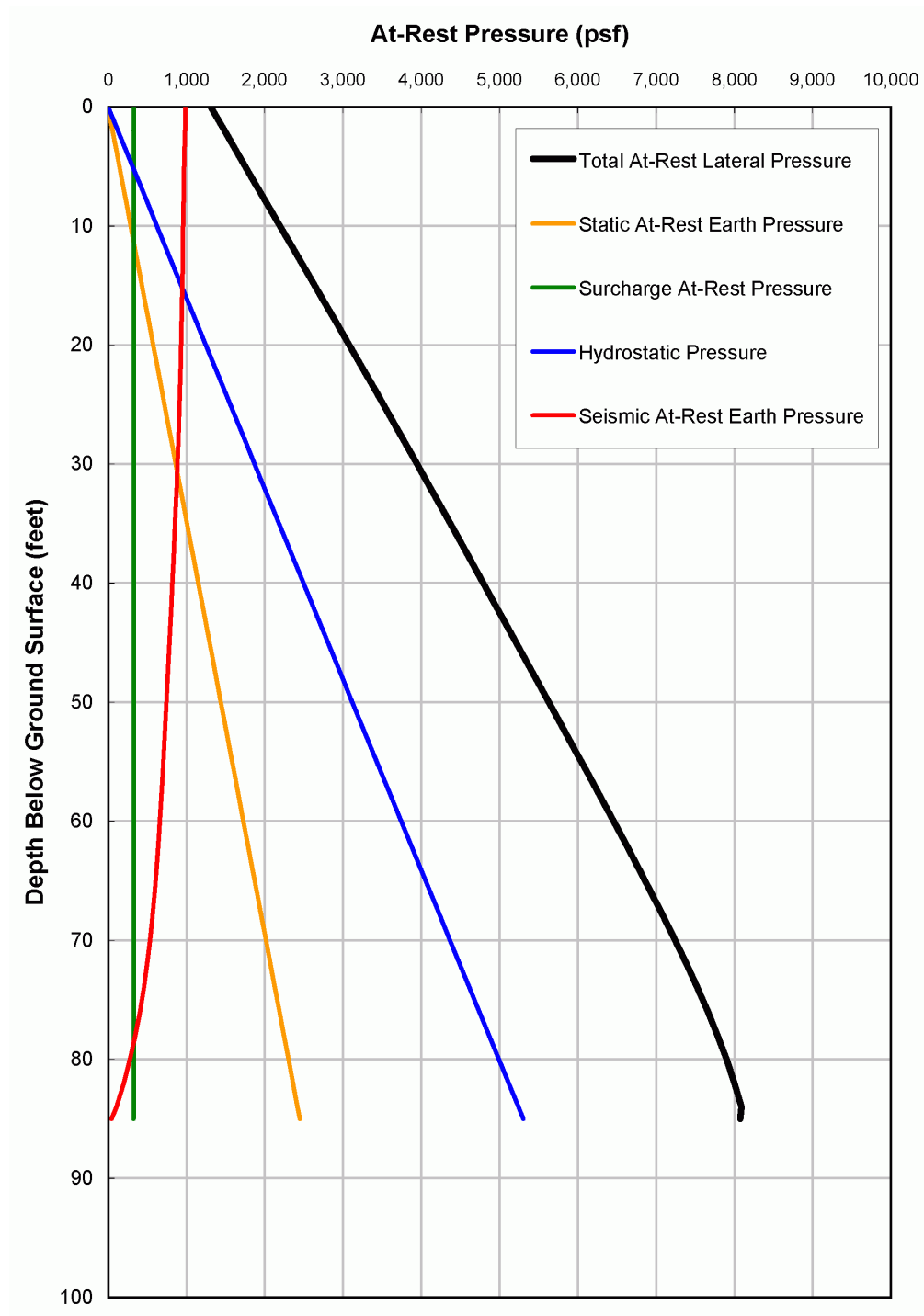


Figure 2.5S.4-77 Sample At-Rest Lateral Earth Pressure Diagrams

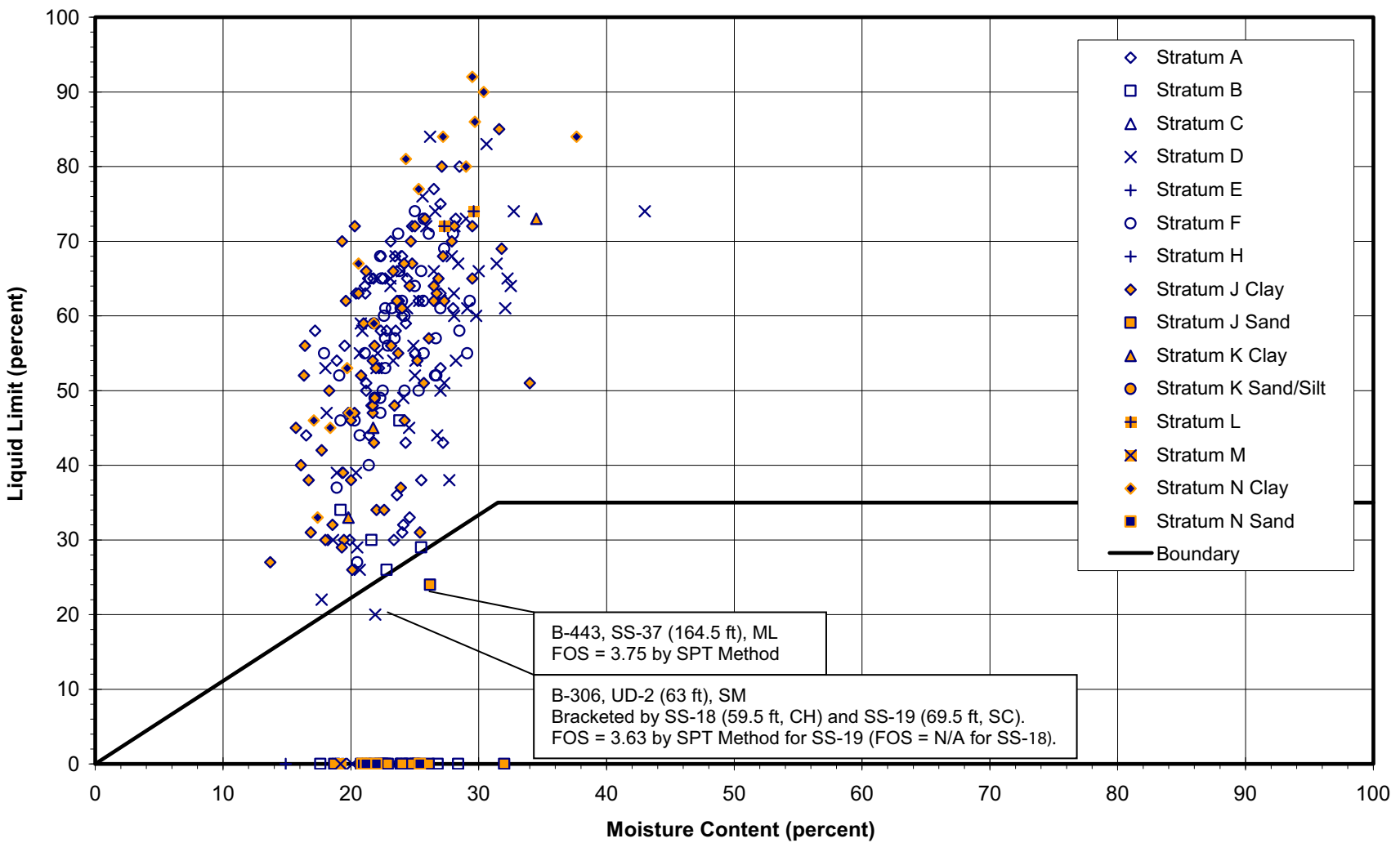


Figure 2.5S.4-78 Liquefaction Evaluation of Clayey Soils

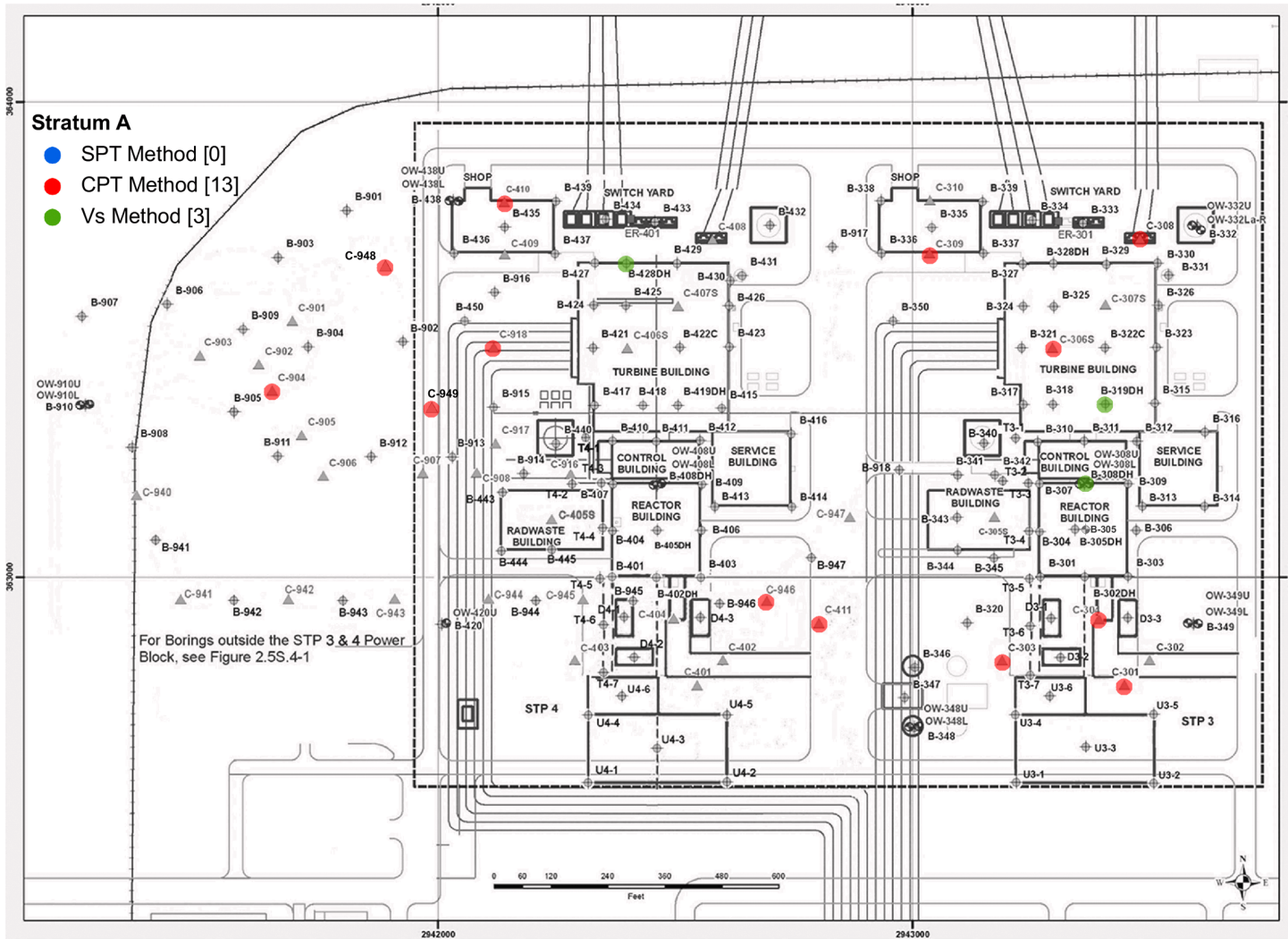


Figure 2.5S.4-79A Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum A

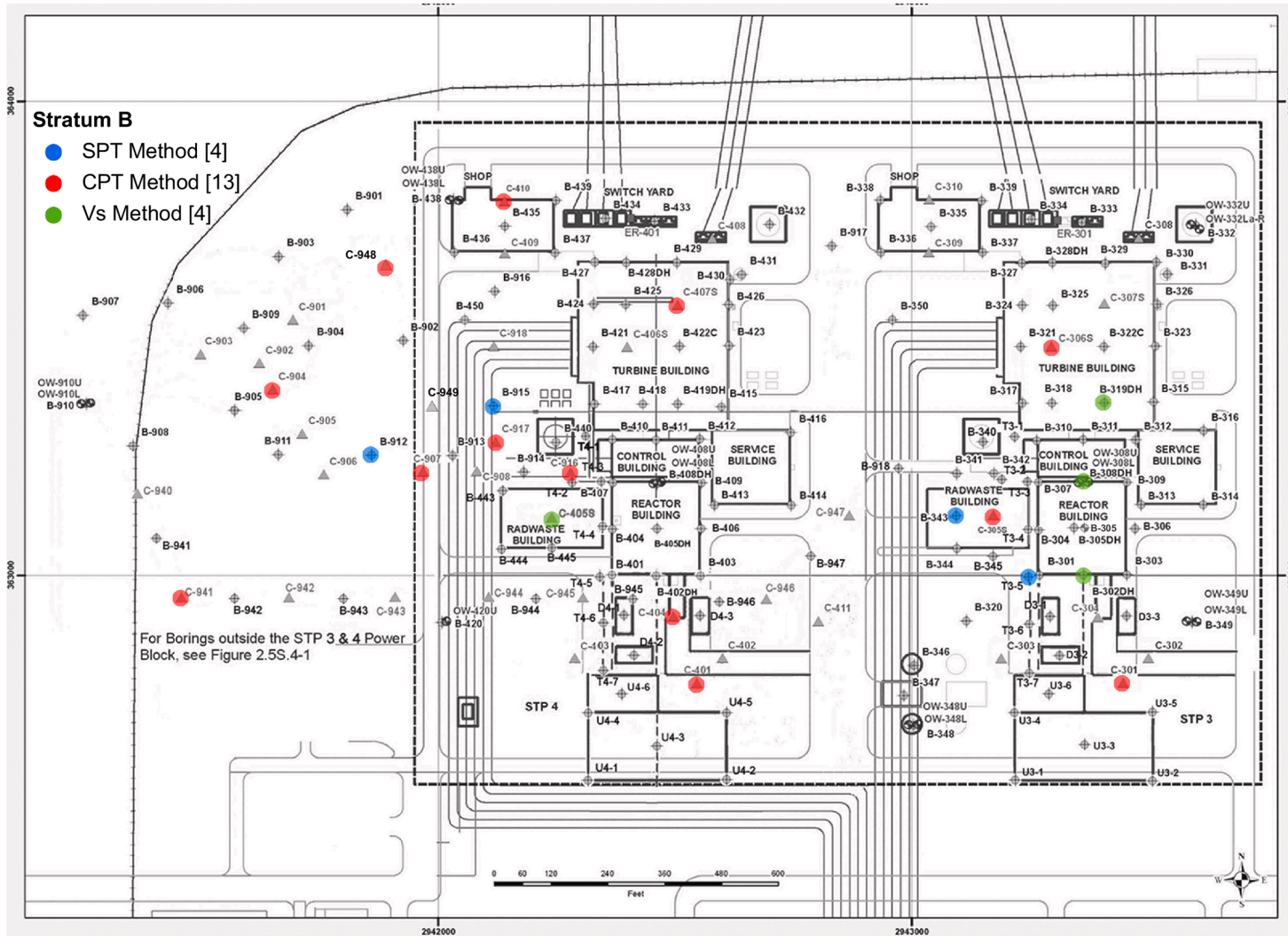
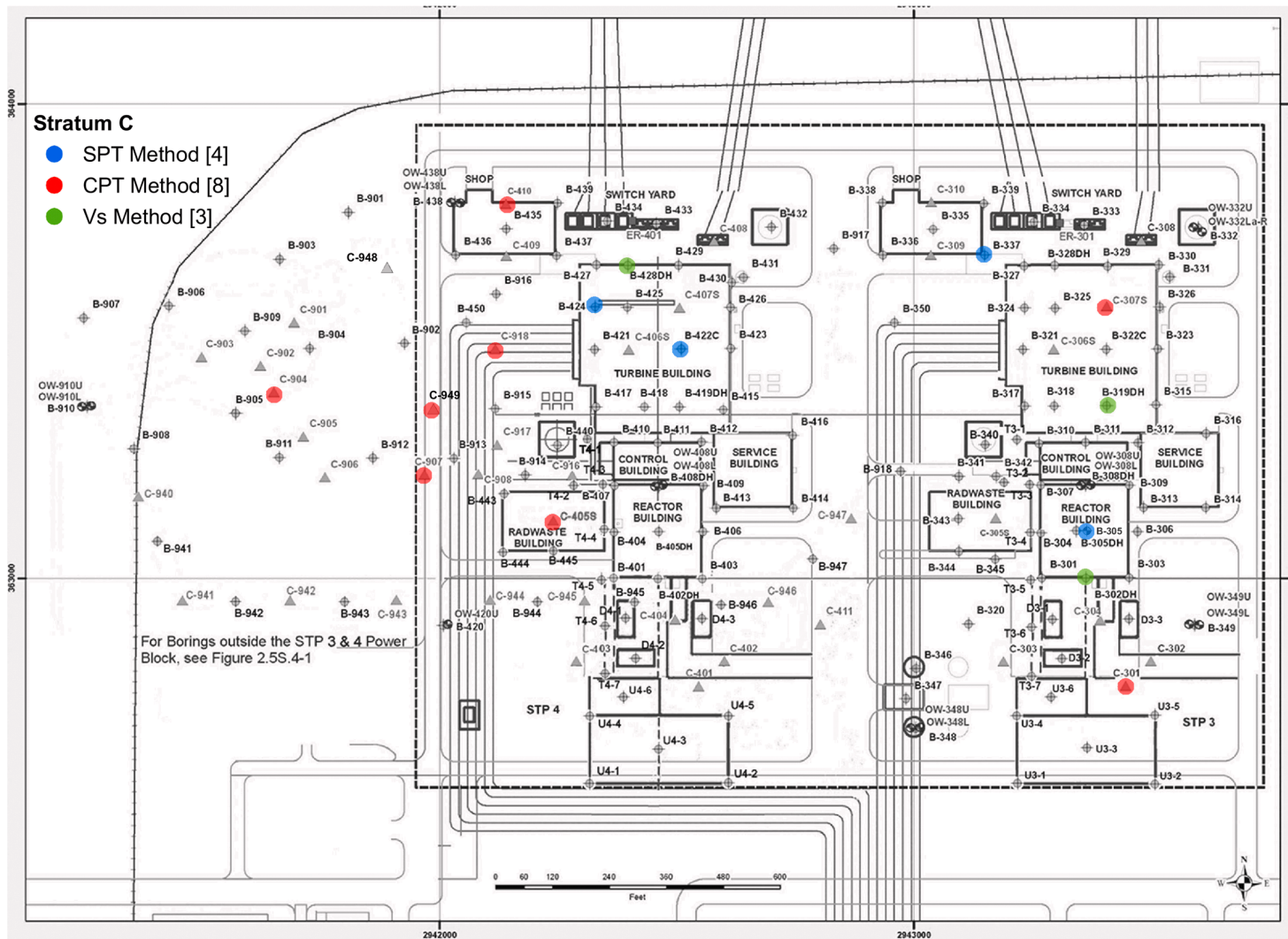


Figure 2.5S.4-79B Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum B





**Figure 2.5S.4-79C Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum C**

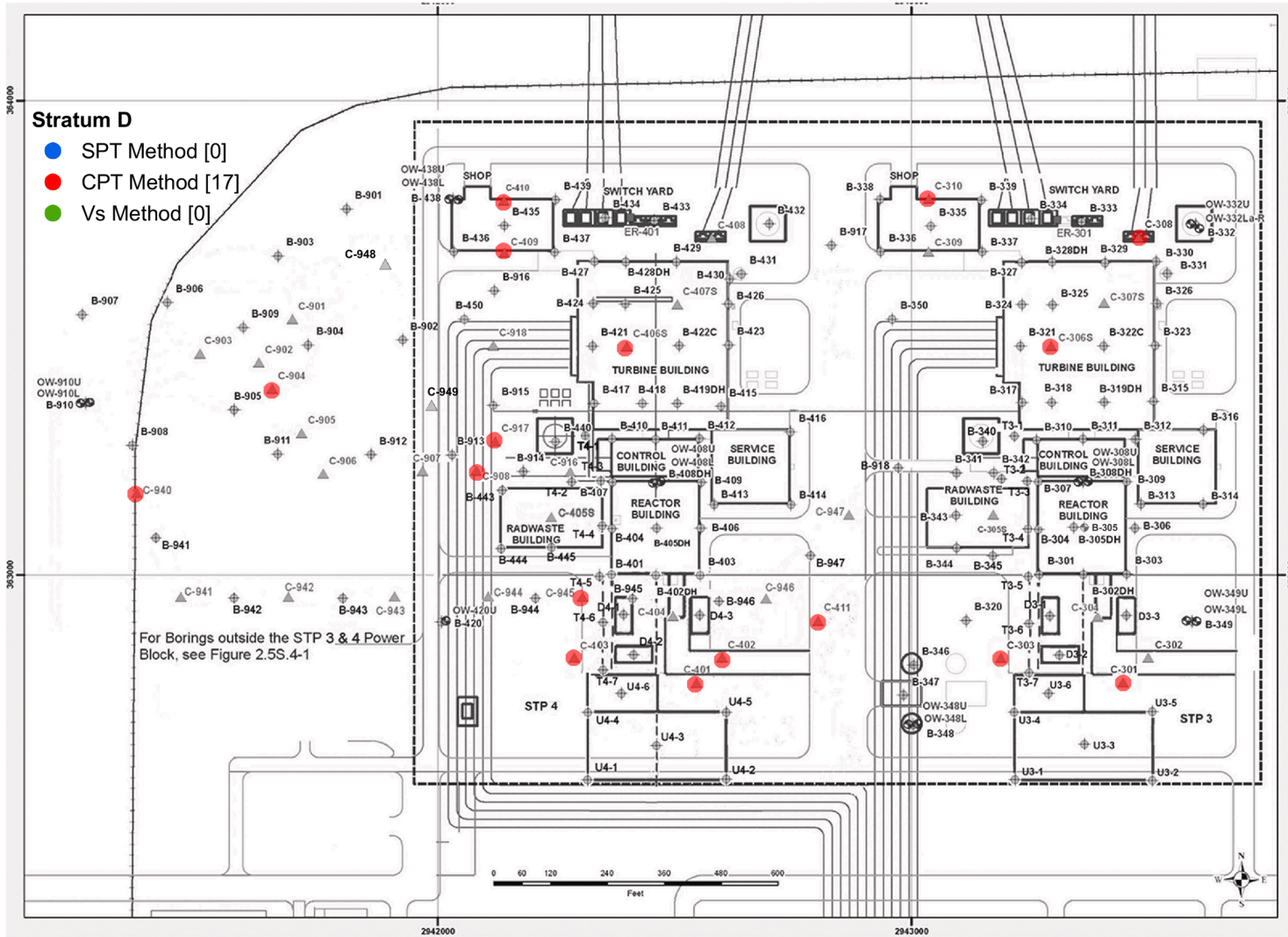


Figure 2.5S.4-79D Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum D

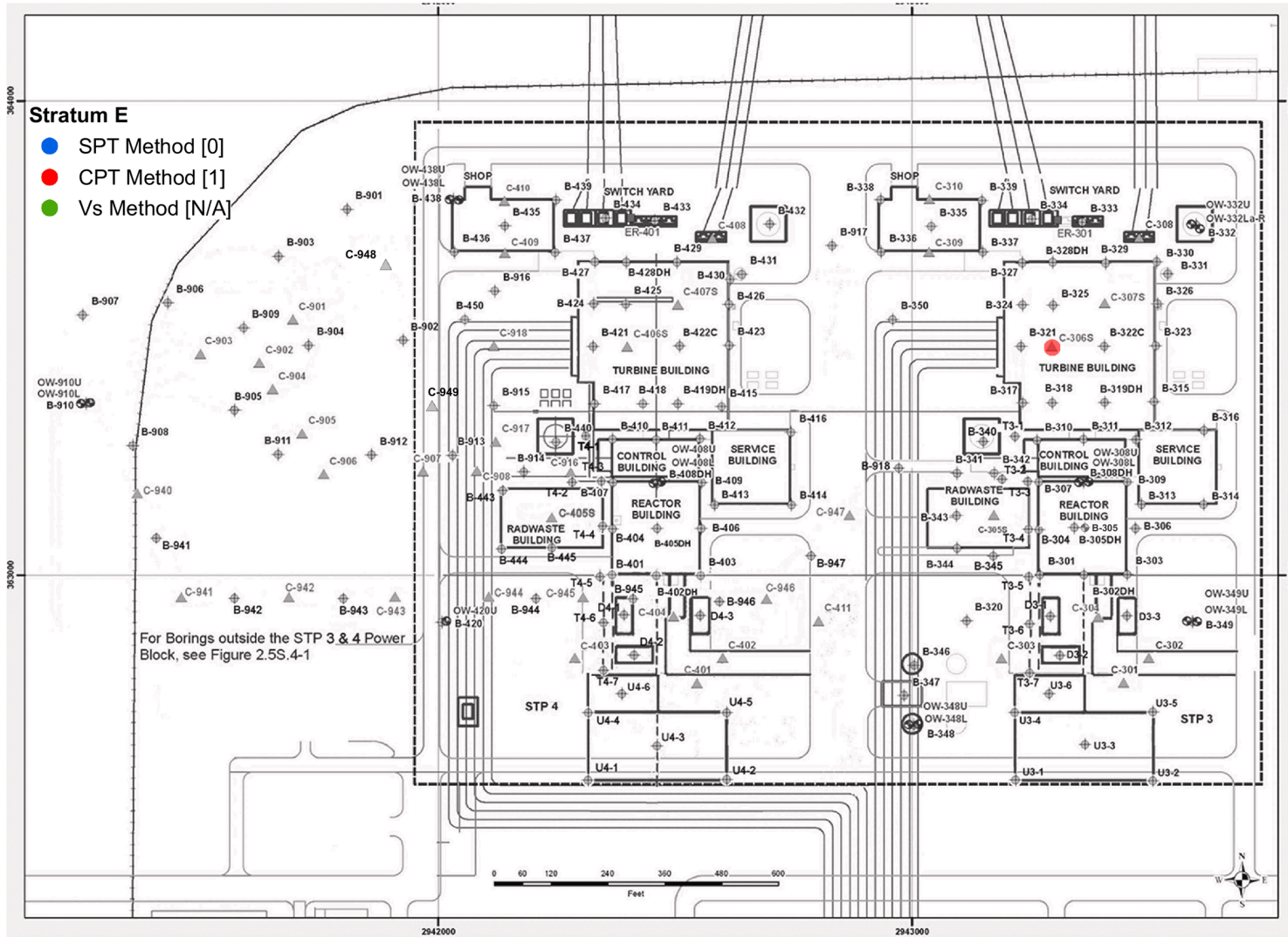


Figure 2.5S.4-79E Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum E



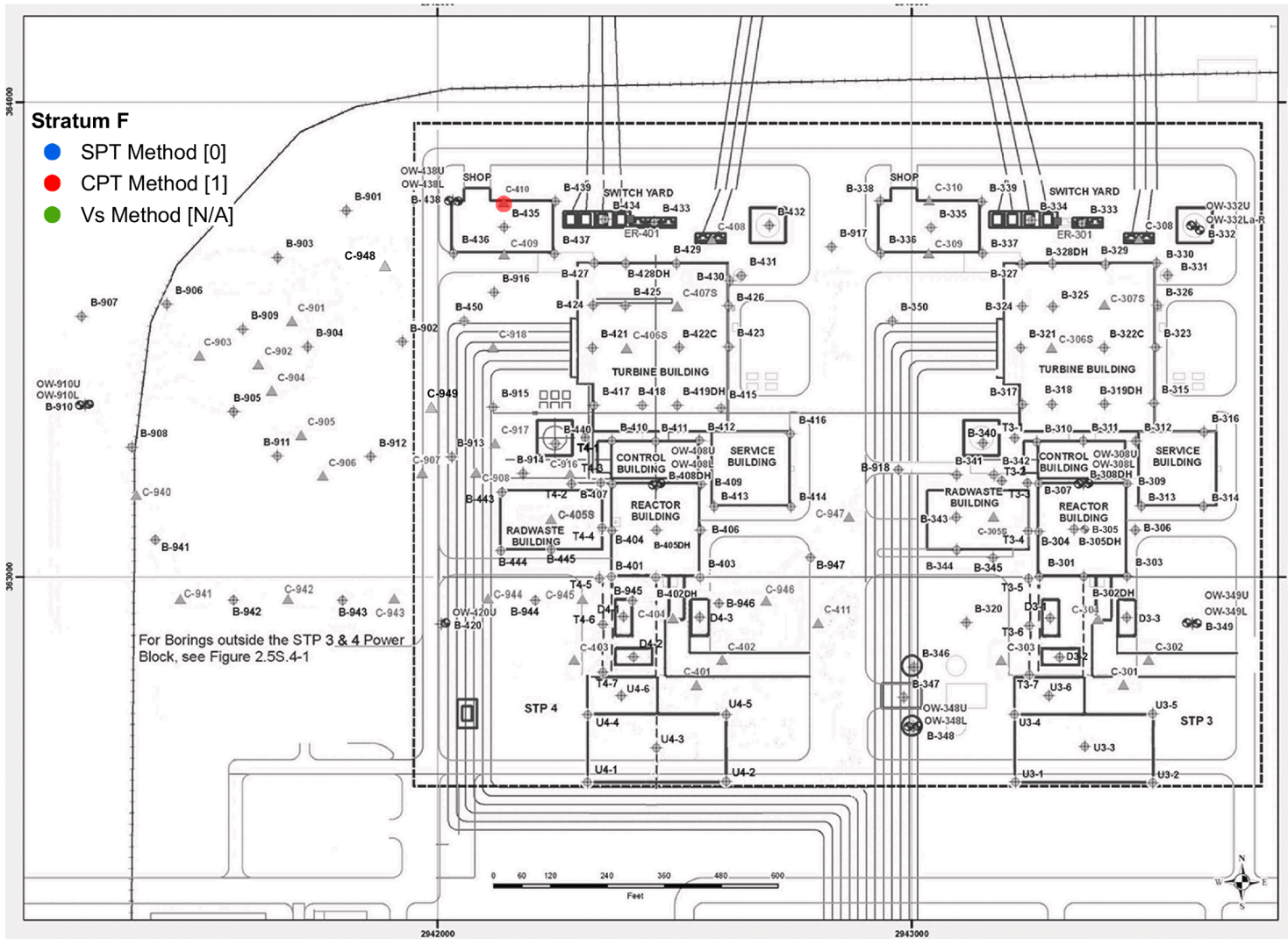
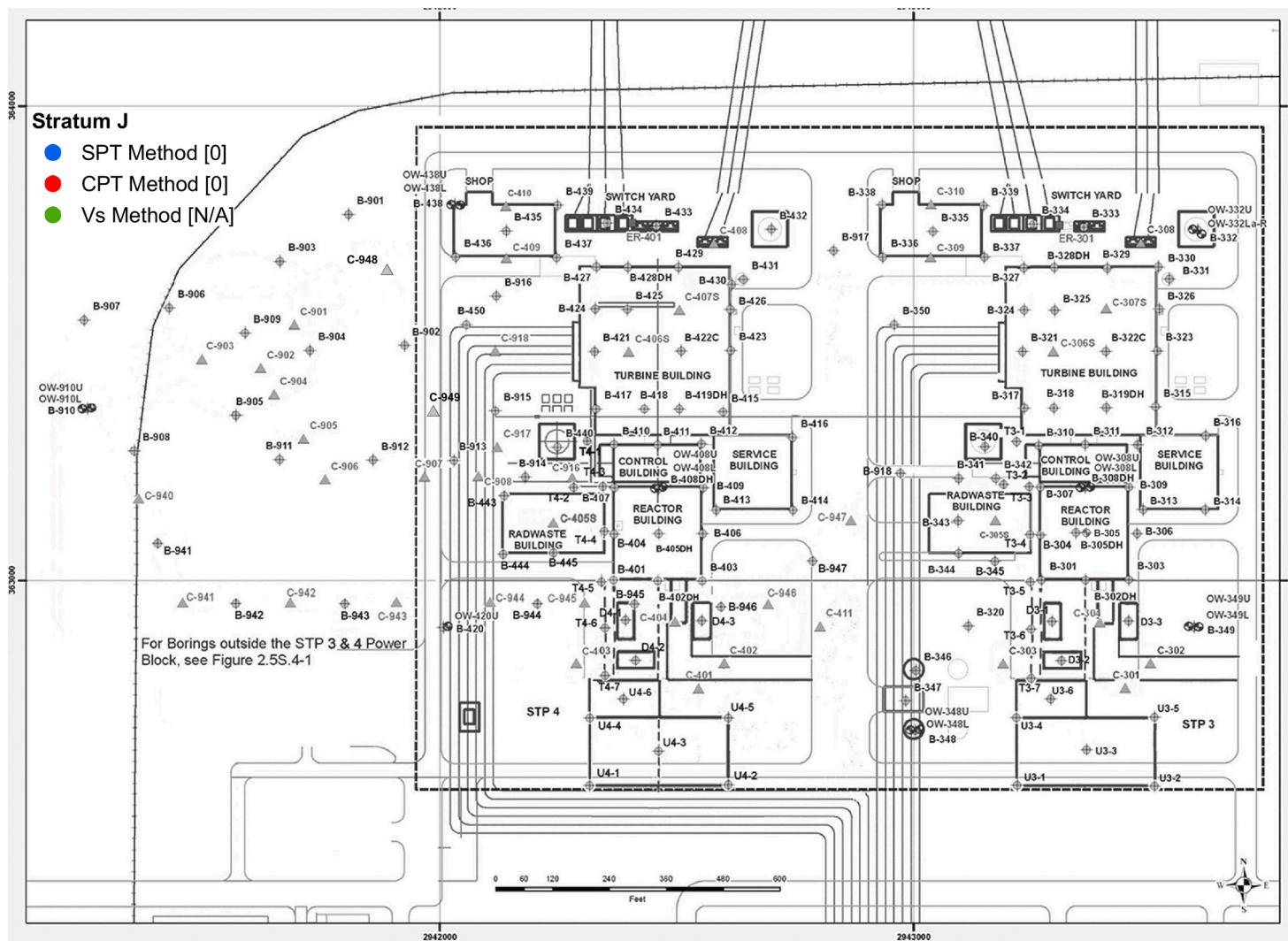
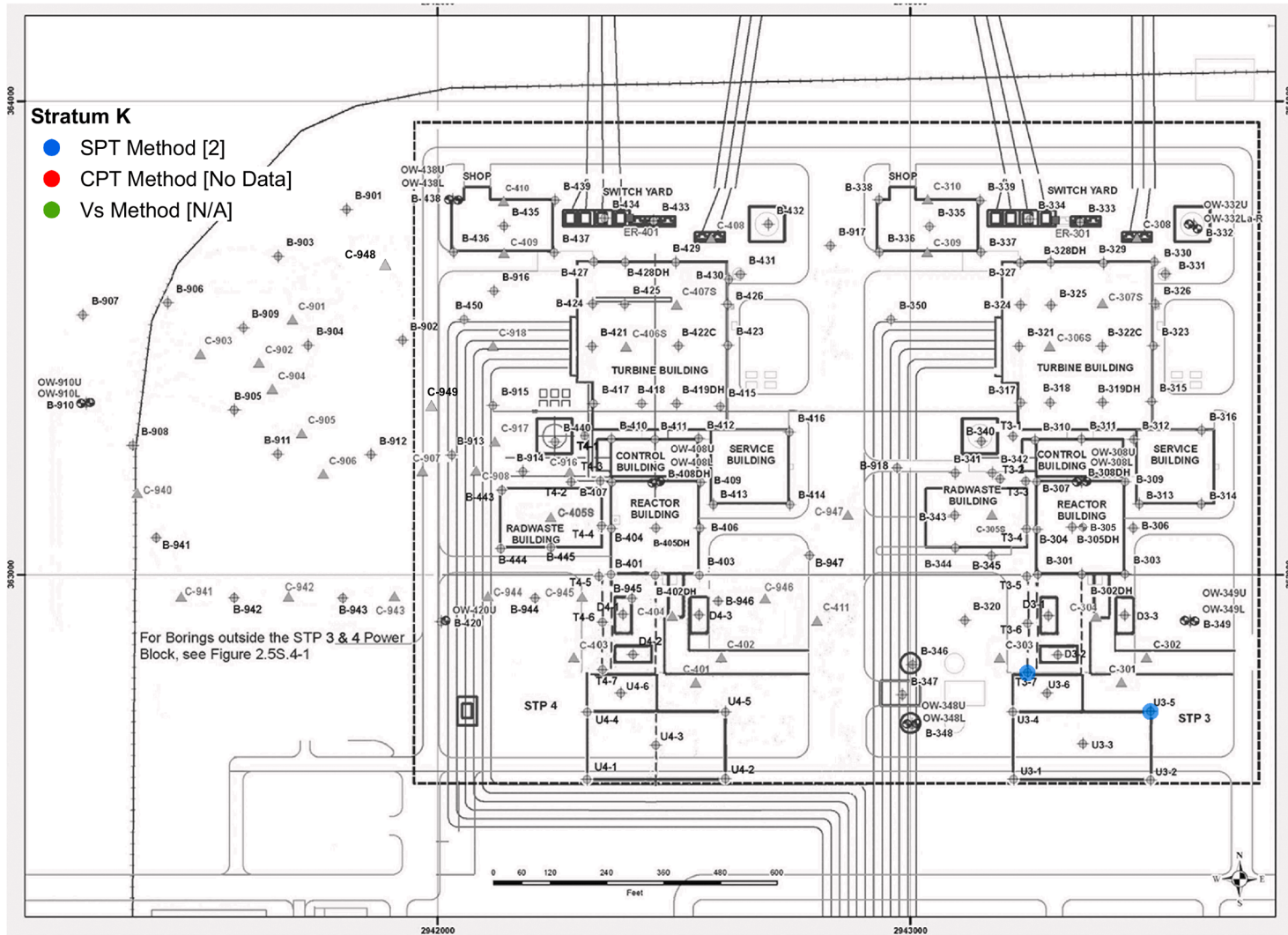


Figure 2.5S.4-79F Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum F



**Figure 2.5S.4-79J Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum J**



**Figure 2.5S.4-79K Spatial Distribution of Low Liquefaction Factor of Safety Values, Stratum K**



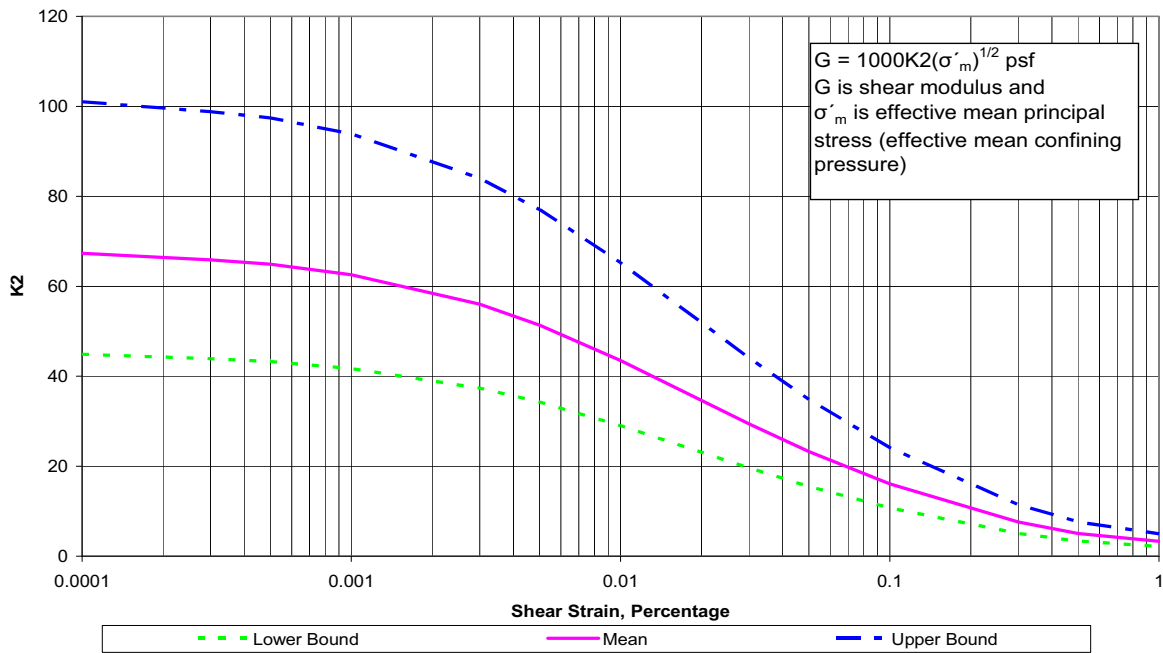


Figure 2.5S.4-80 Dynamic Engineering Parameters for Backfill (85% Relative Density) Shear Modulus Parameter, K2

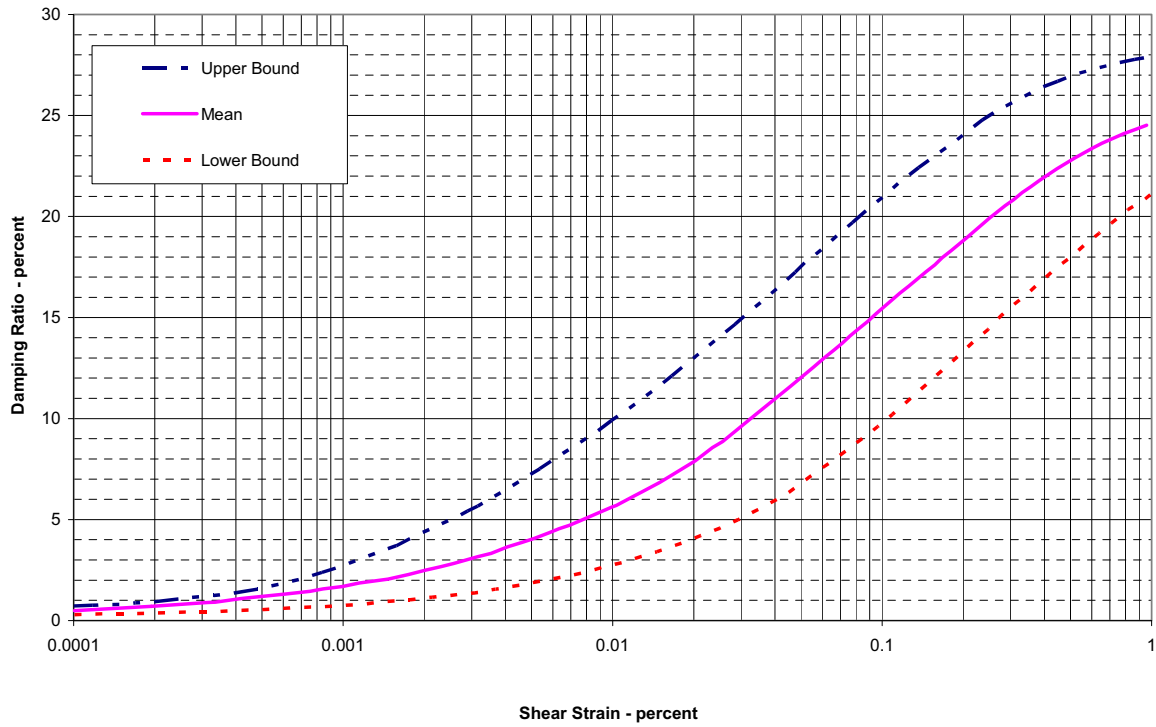


Figure 2.5S.4-81 Dynamic Engineering Parameters for Backfill (85% Relative Density) Damping Ratio

