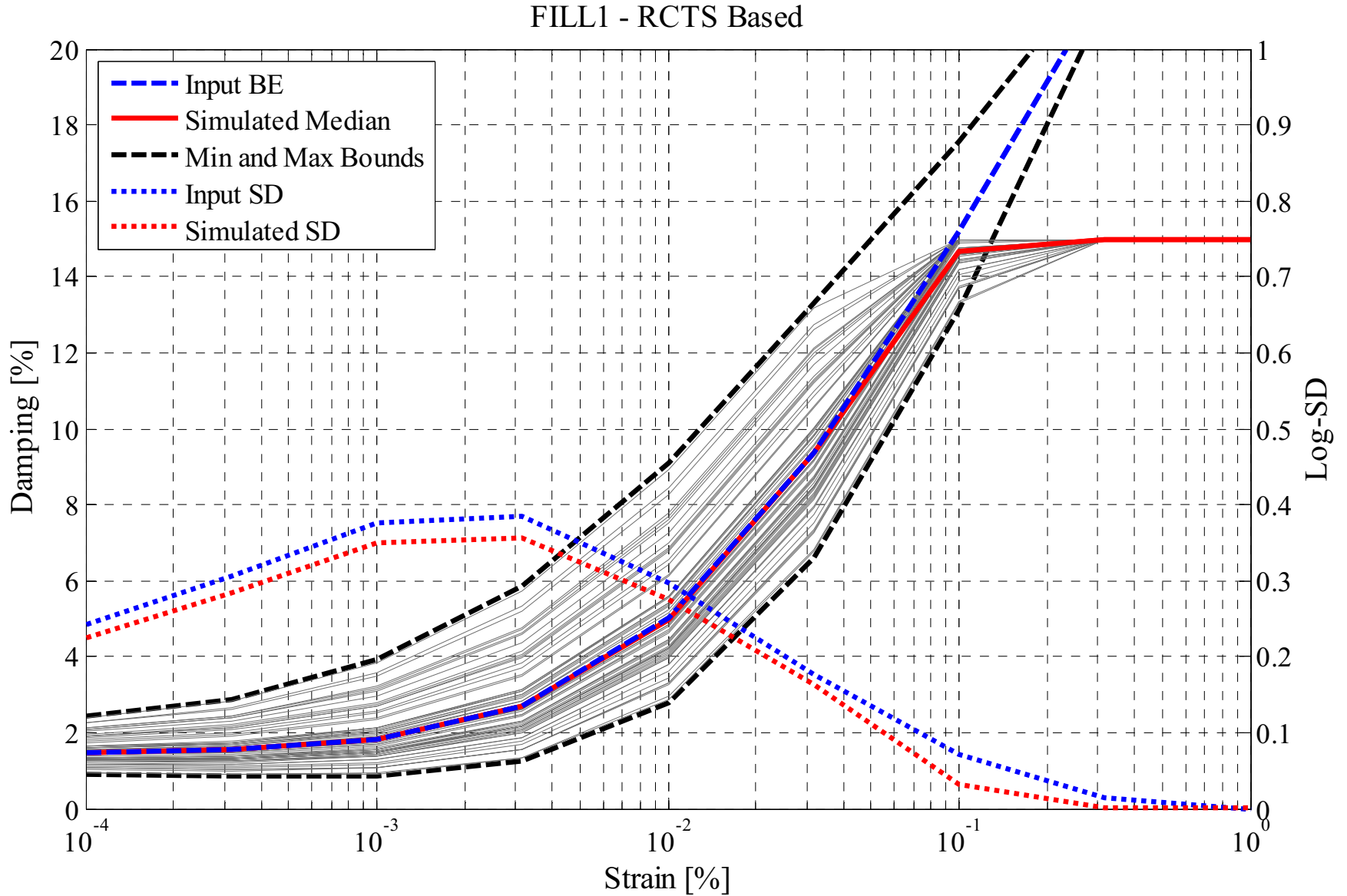


CC3-12-0169

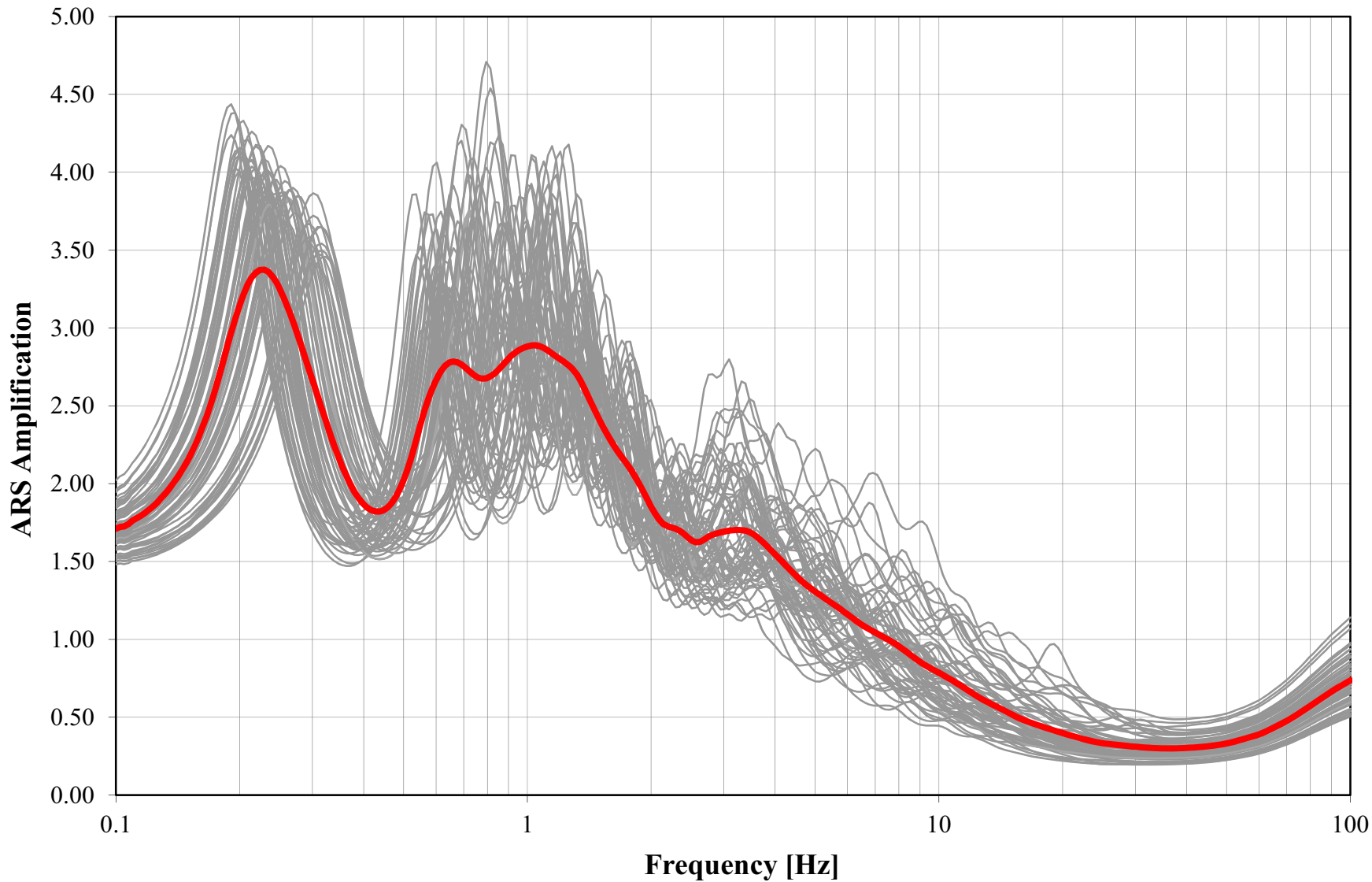
Figure 2.5-71 — {Fill 1 Damping Ratio Curves for 60 Simulated Profiles}



CC3-12-0169

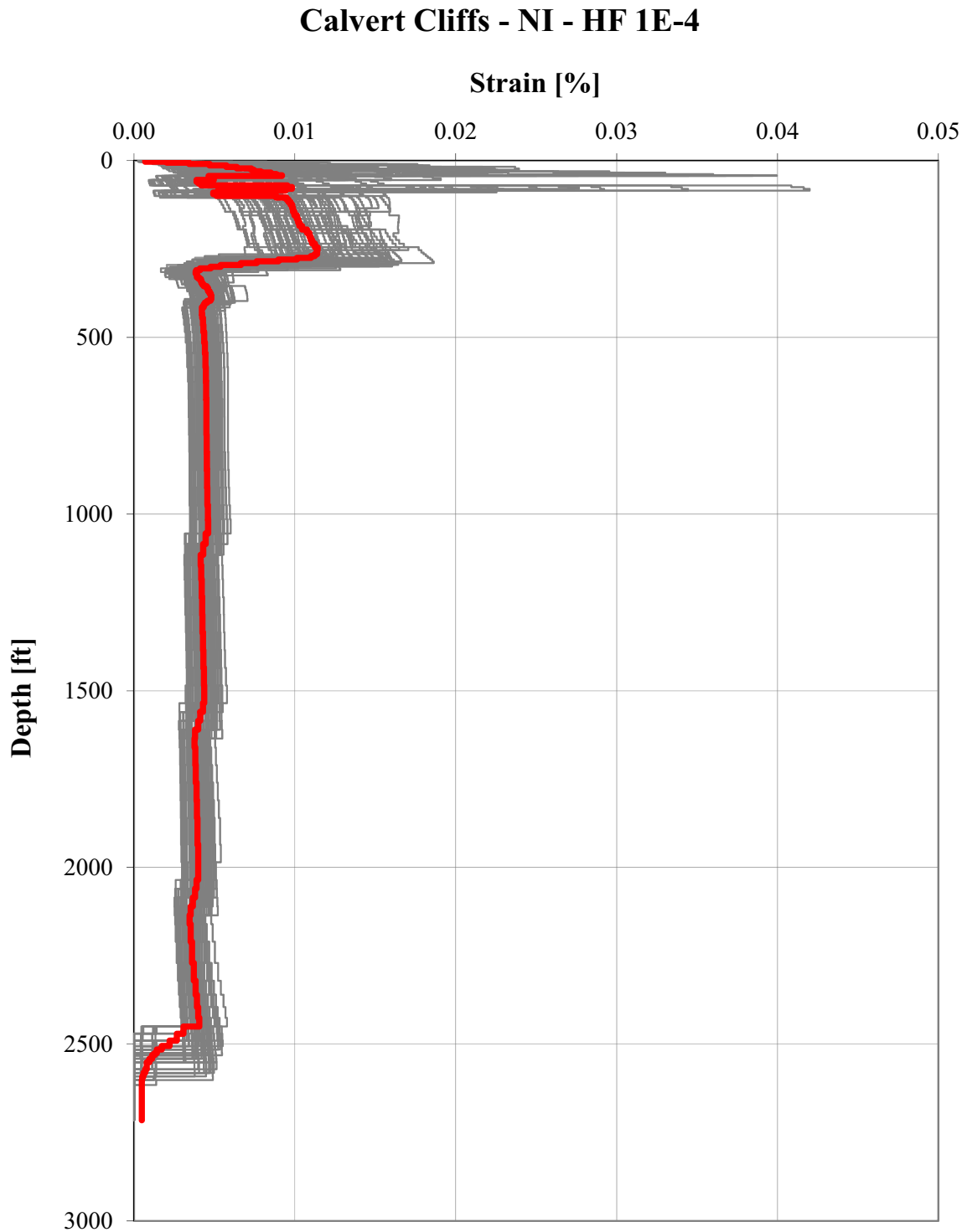
Figure 2.5-72 — {5% Damping ARS Amplification Functions – HF 1E-4}
(Gray curves represent the individual profiles while the red curve represents the mean response)

Calvert Cliffs - GMRS Horizon - HF 1E-4



CC3-12-0169

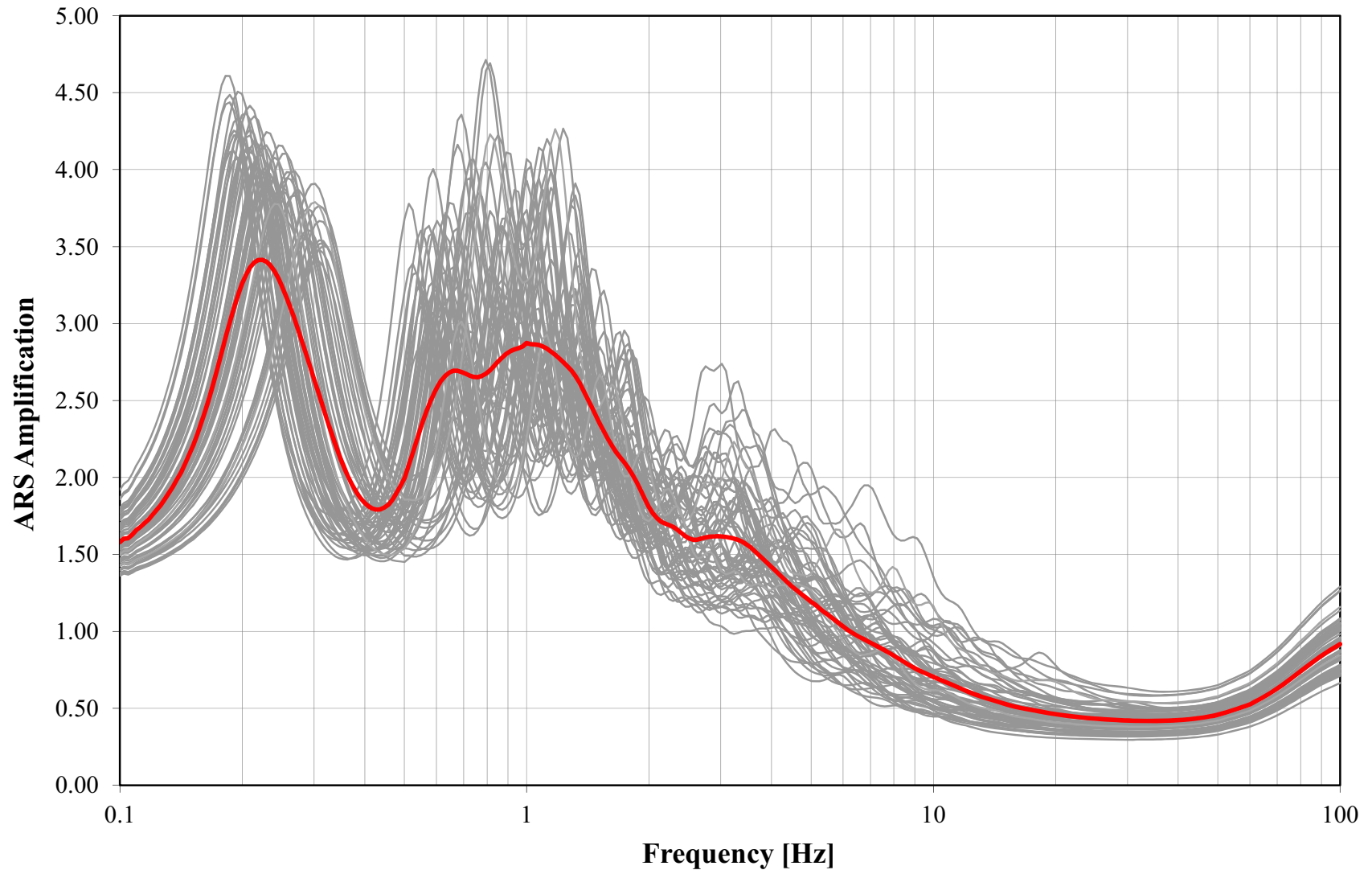
Figure 2.5-73 — {Maximum Shear Strain Profiles – HF 1E-4}
(Gray curves represent the individual profile while the red curve represents the mean response)



CC3-12-0169

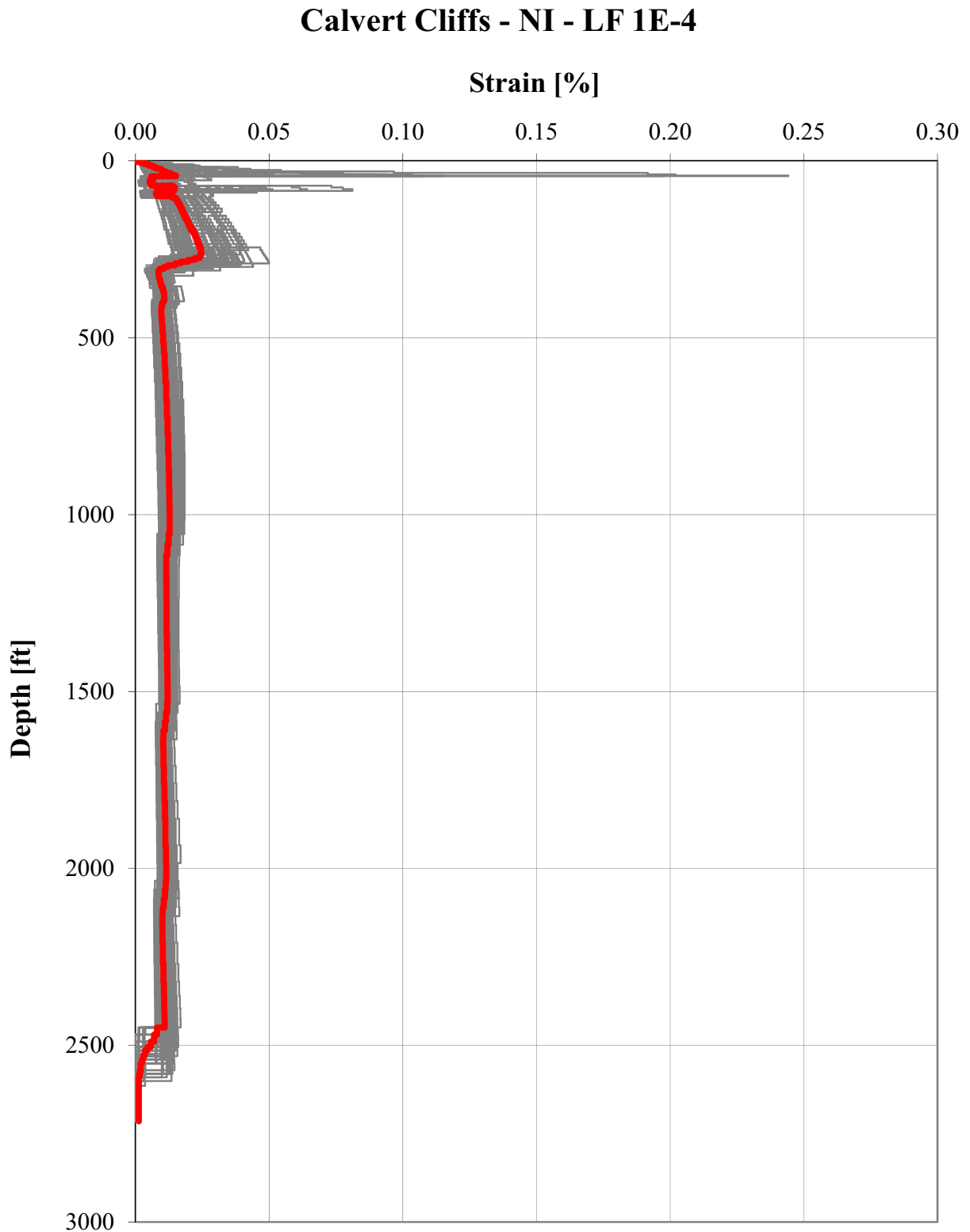
Figure 2.5-74 — {5% Damping ARS Amplification Functions – LF 1E-4}
(Gray curves represent the individual profiles while the red curve represents the mean response)

Calvert Cliffs - GMRS Horizon - LF 1E-4



CC3-12-0169

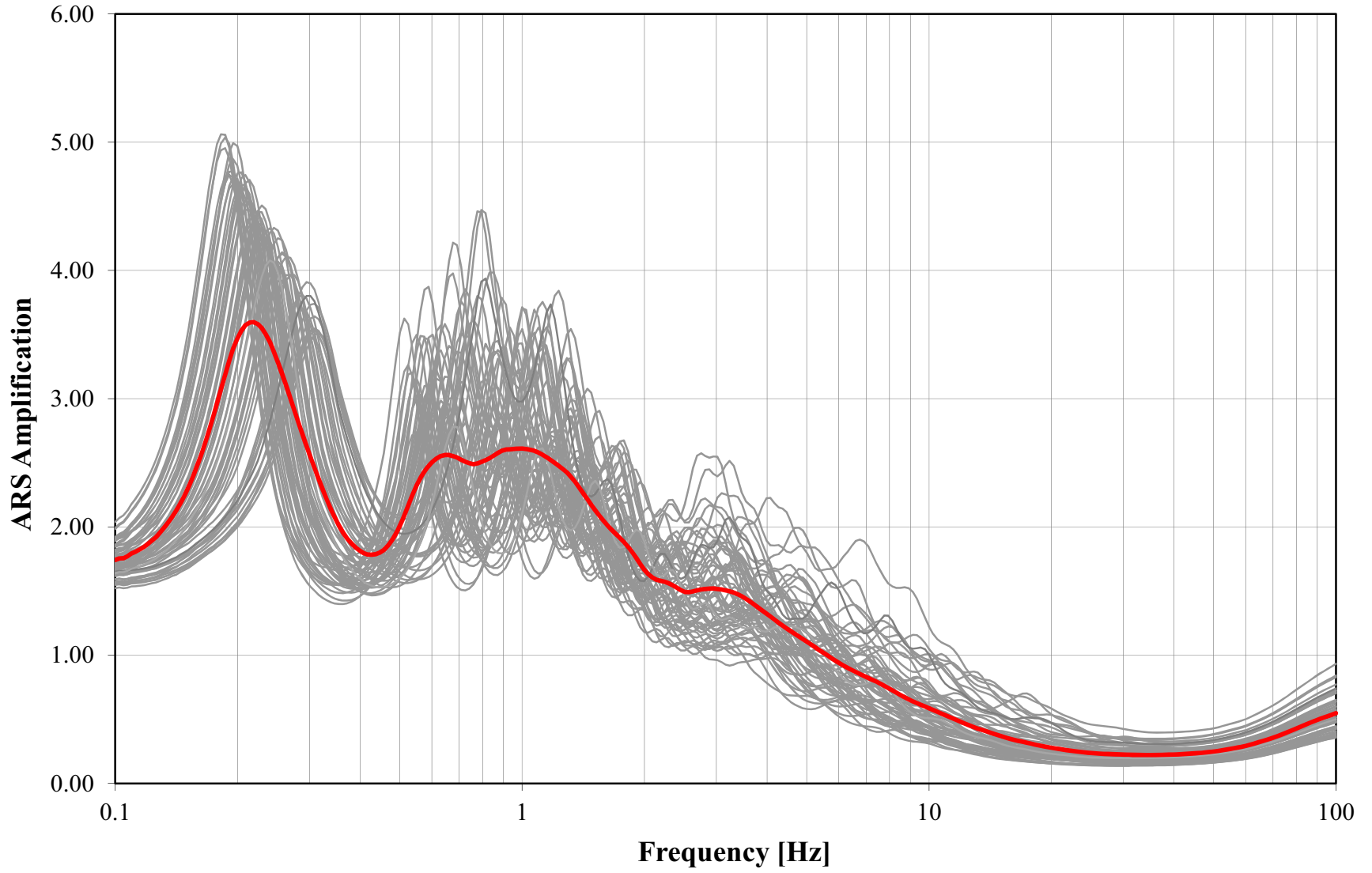
Figure 2.5-75 — {Maximum Shear Strain Profiles – LF 1E-4}
 (Gray curves represent the individual profile while the red curve represents the mean response)



CC3-12-0169

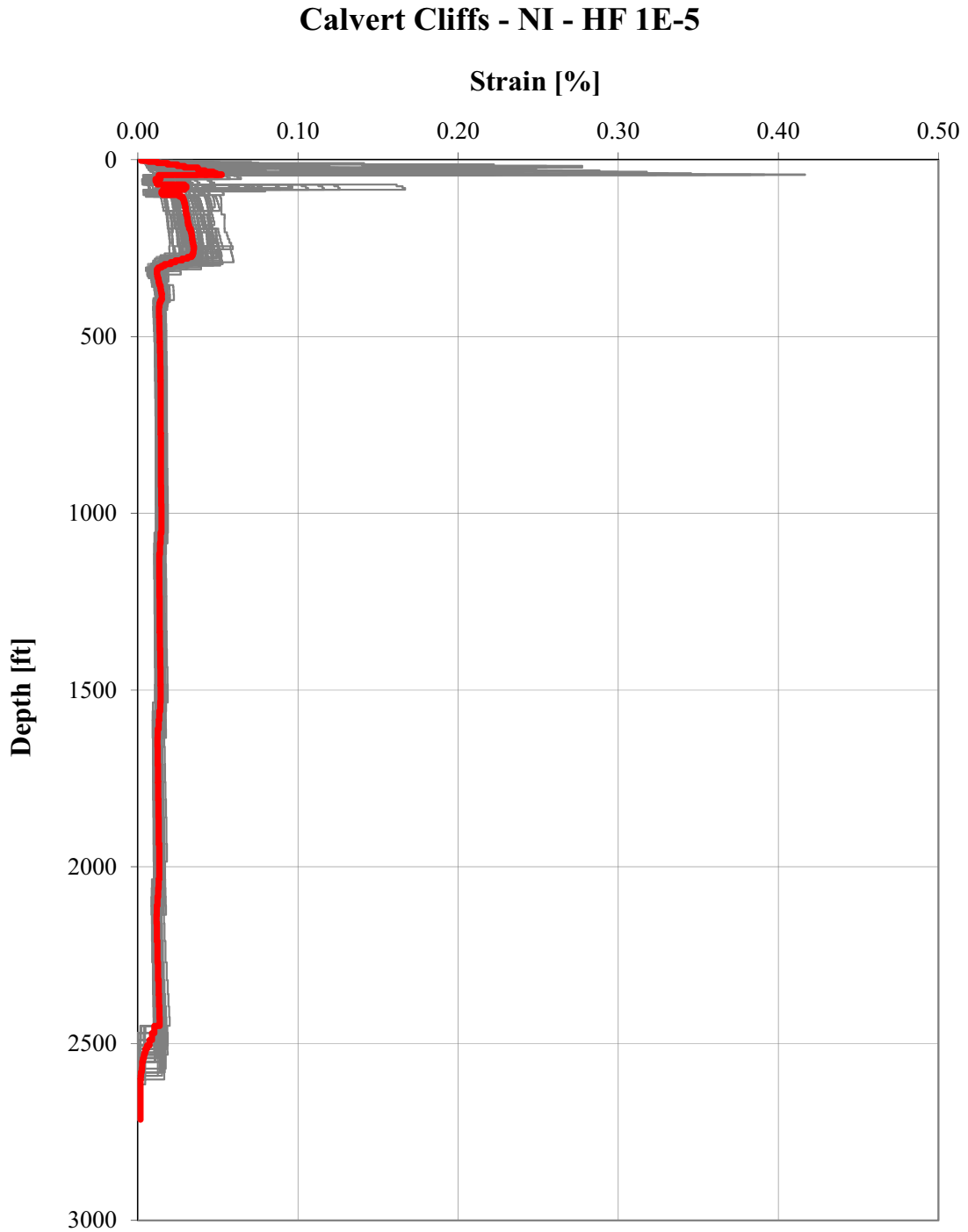
Figure 2.5-76 — {5% Damping ARS Amplification Functions – HF 1E-5}
(Gray curves represent the individual profiles while the red curve represents the mean response)

Calvert Cliffs - GMRS Horizon - HF 1E-5



CC3-12-0169

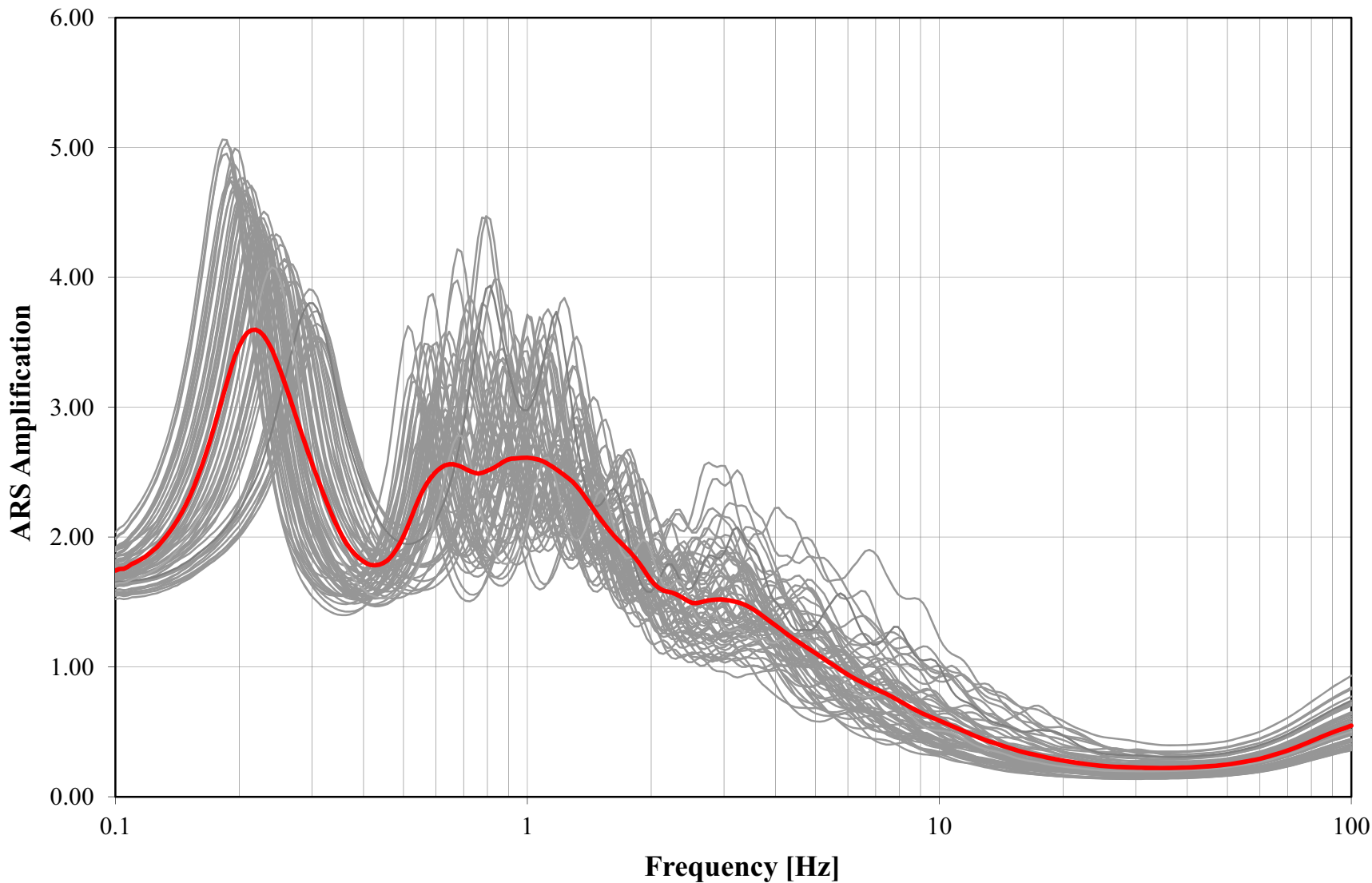
Figure 2.5-77 — {Maximum Shear Strain Profiles – HF 1E-5}
 (Gray curves represent the individual profile while the red curve represents the mean response)



CC3-12-0169

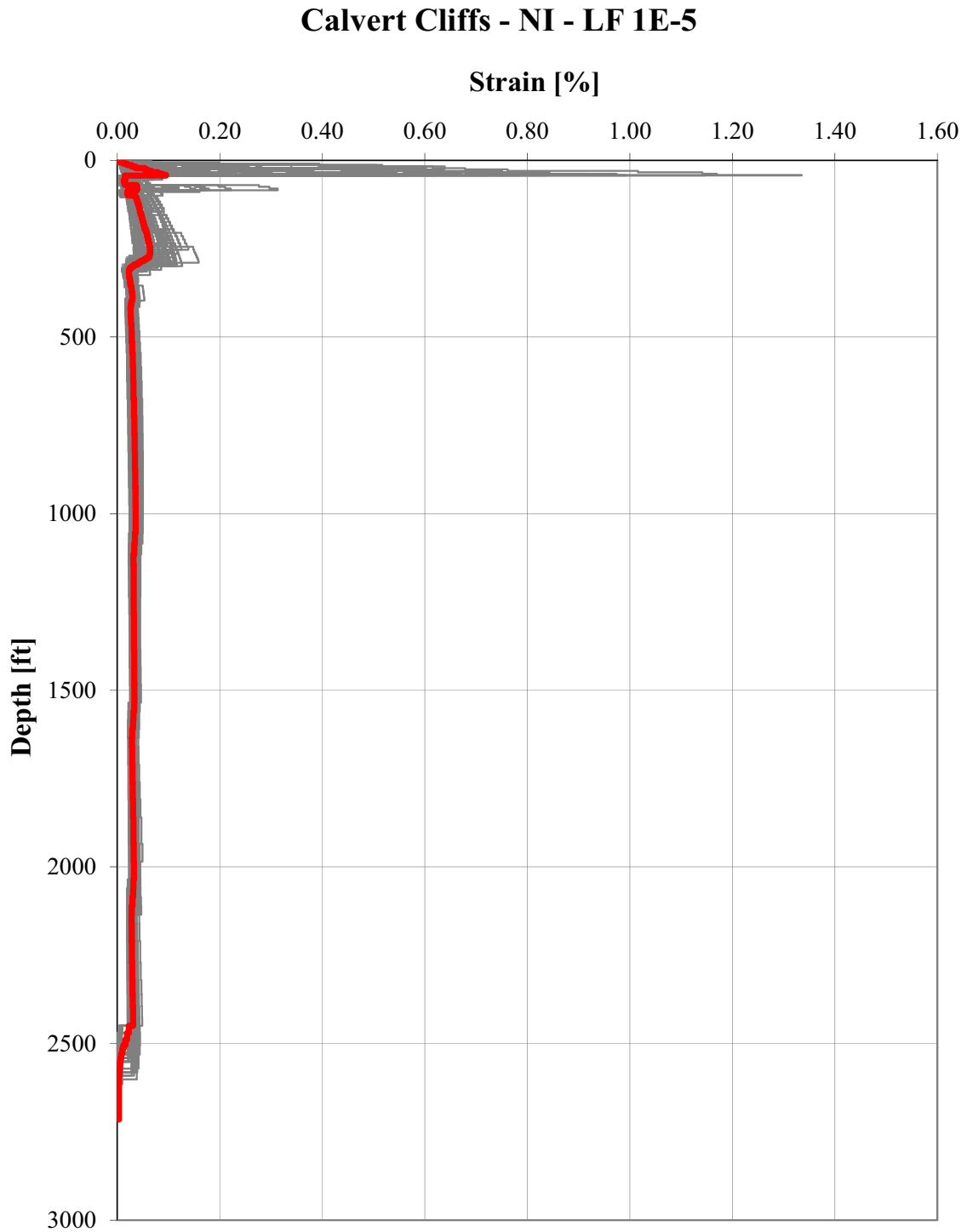
Figure 2.5-78 — {5% Damping ARS Amplification Functions – LF 1E-5}
(Gray curves represent the individual profiles while the red curve represents the mean response)

Calvert Cliffs - GMRS Horizon - HF 1E-5



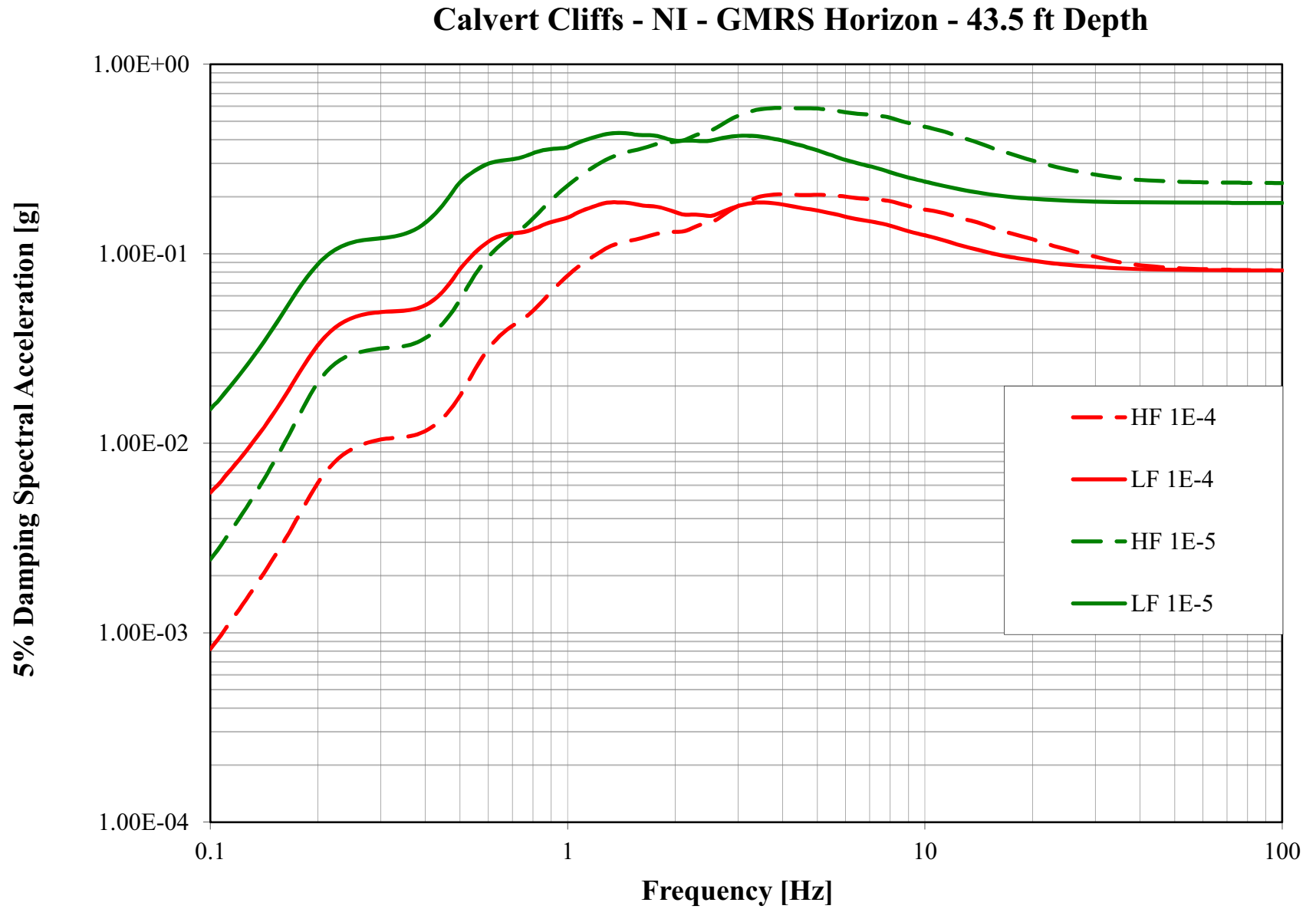
CC3-12-0169

Figure 2.5-79 — {Maximum Shear Strain Profiles – LF 1E-5}
 (Gray curves represent the individual profile while the red curve represents the mean response)



CC3-12-0169

Figure 2.5-80 — {5% Damping HF and LF Spectra for 1E-4 and 1E-5}



CC3-12-0169,
CC3-10-270

Figure 2.5-81 — {Recommended Horizontal and Vertical GMRS}

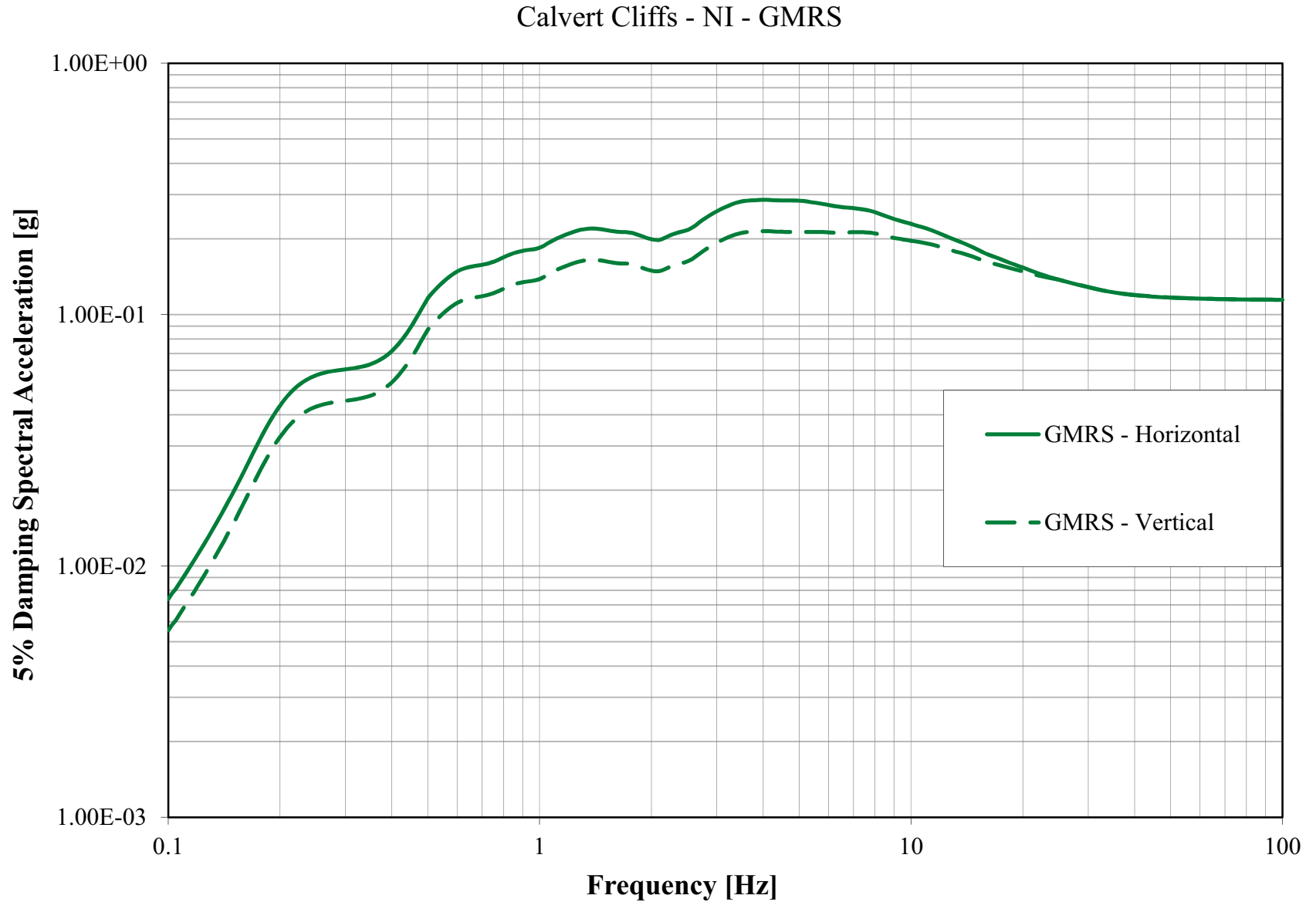
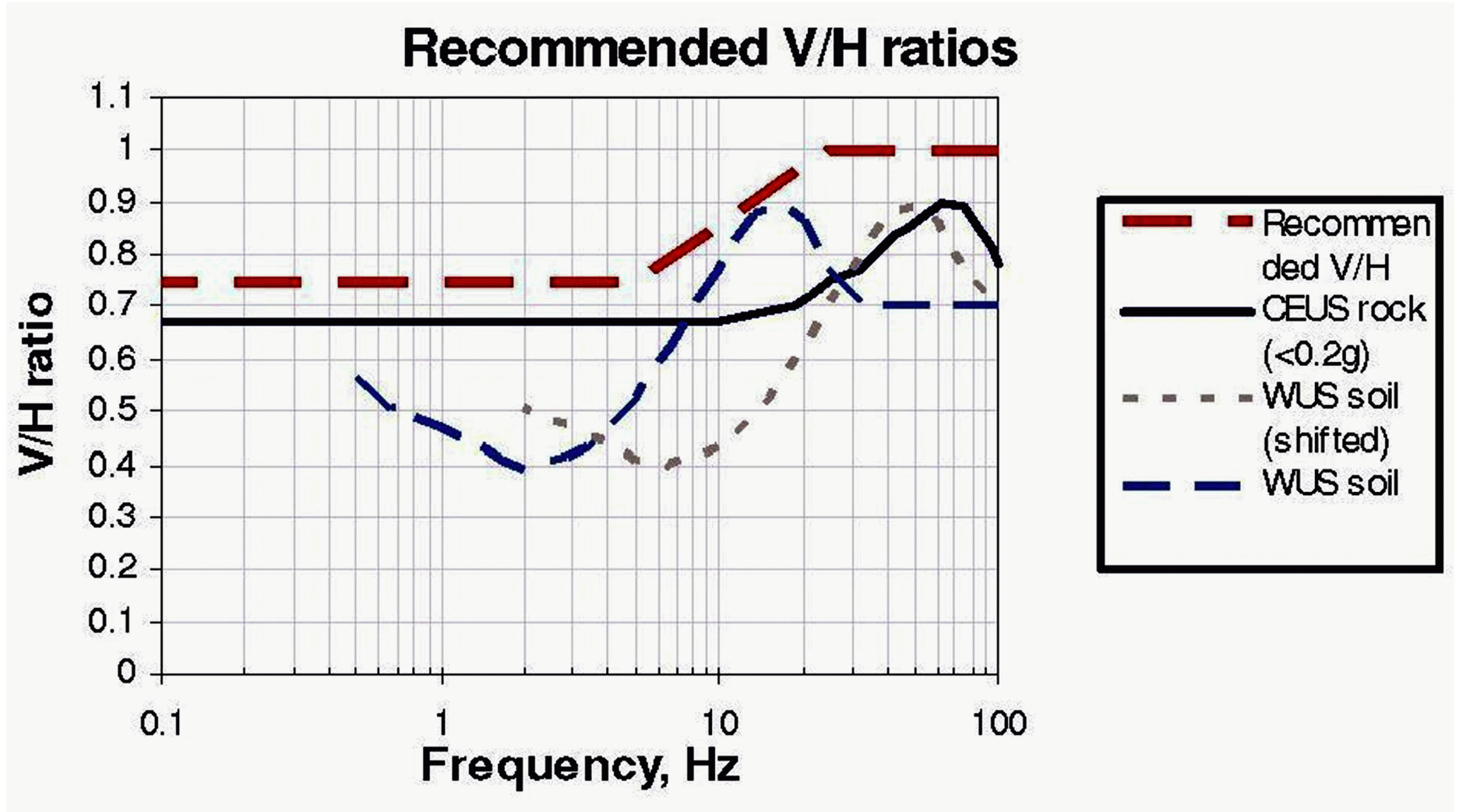
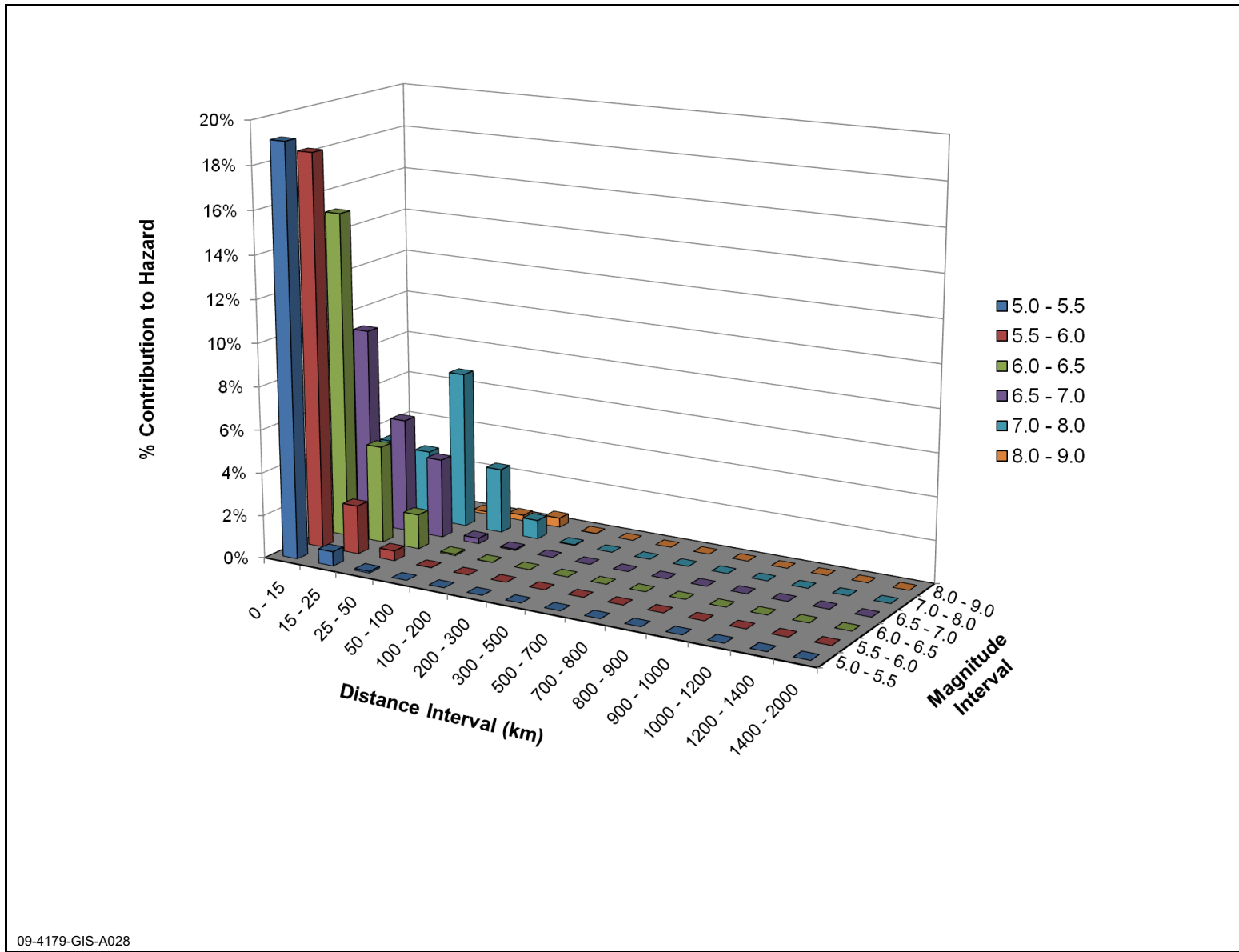


Figure 2.5-82 — {V/H Ratios from Several Publications and Recommended V/H Ratios}



CC3-12-0169

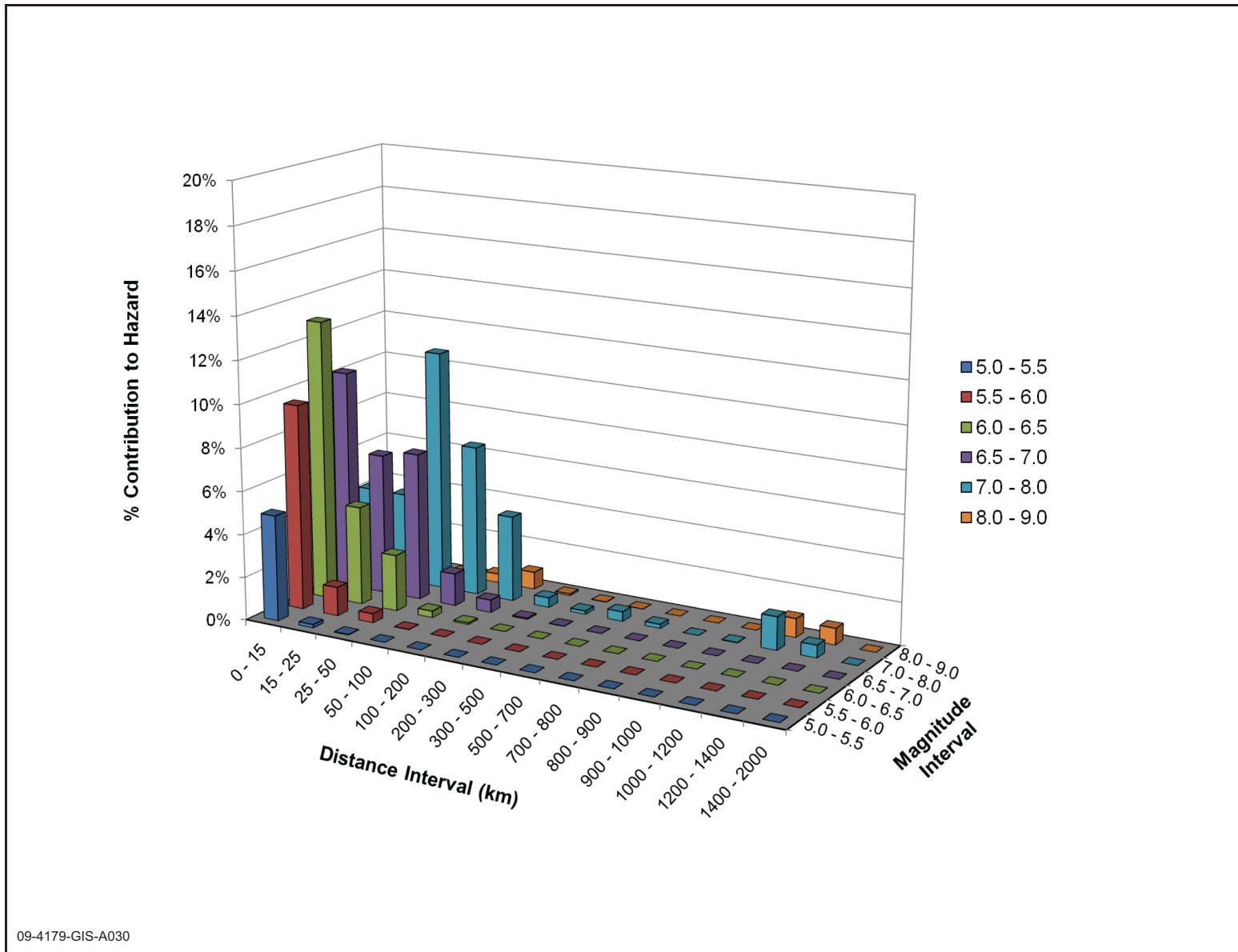
Figure 2.5-83 — {Mean 10-6 Rock Deaggregation Plot for 5 and 10 Hz}



09-4179-GIS-A028

CC3-12-0169

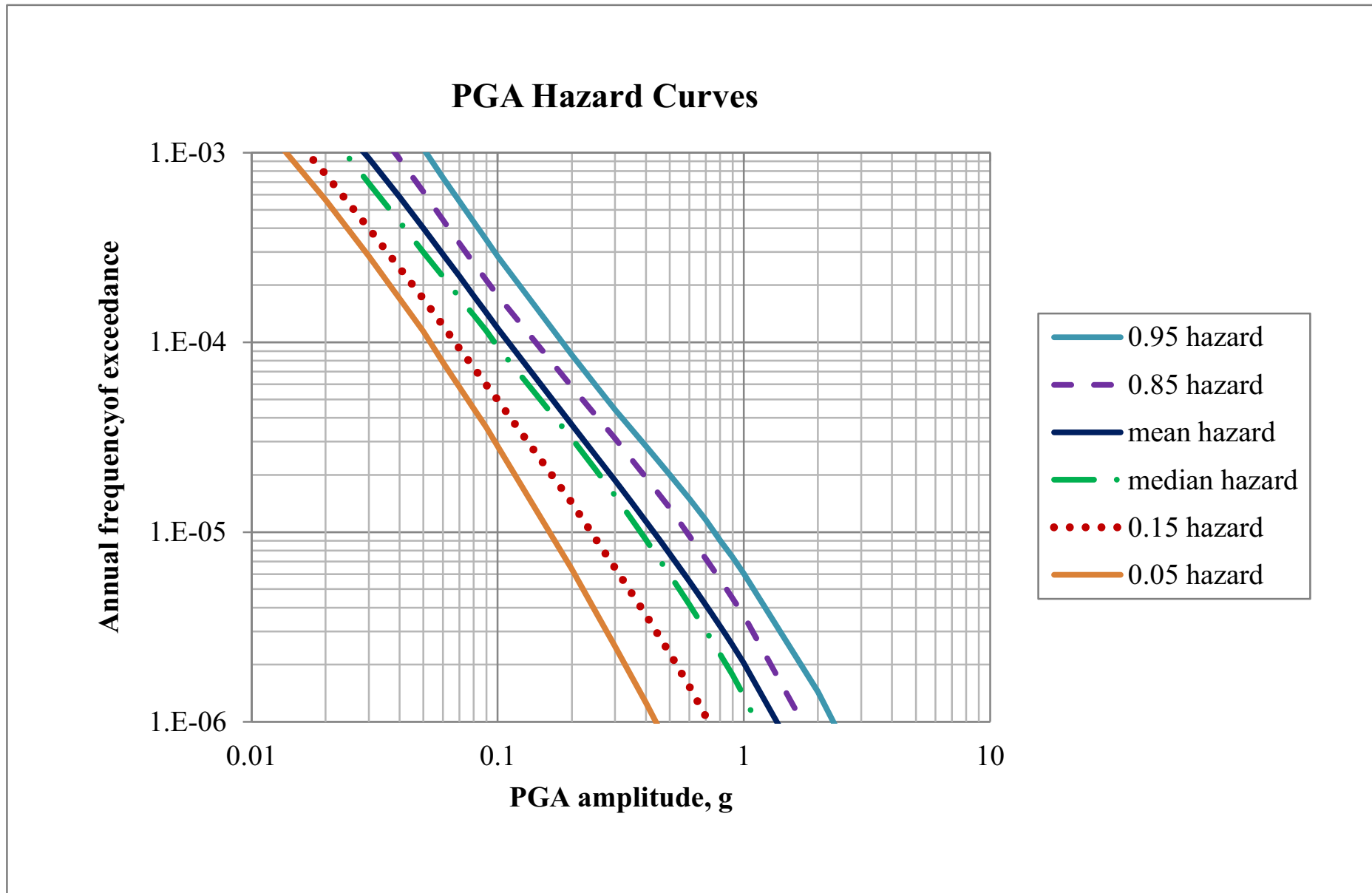
Figure 2.5-84 — {Mean 10-6 Rock Deaggregation Plot for 1 and 2.5 Hz}



09-4179-GIS-A030

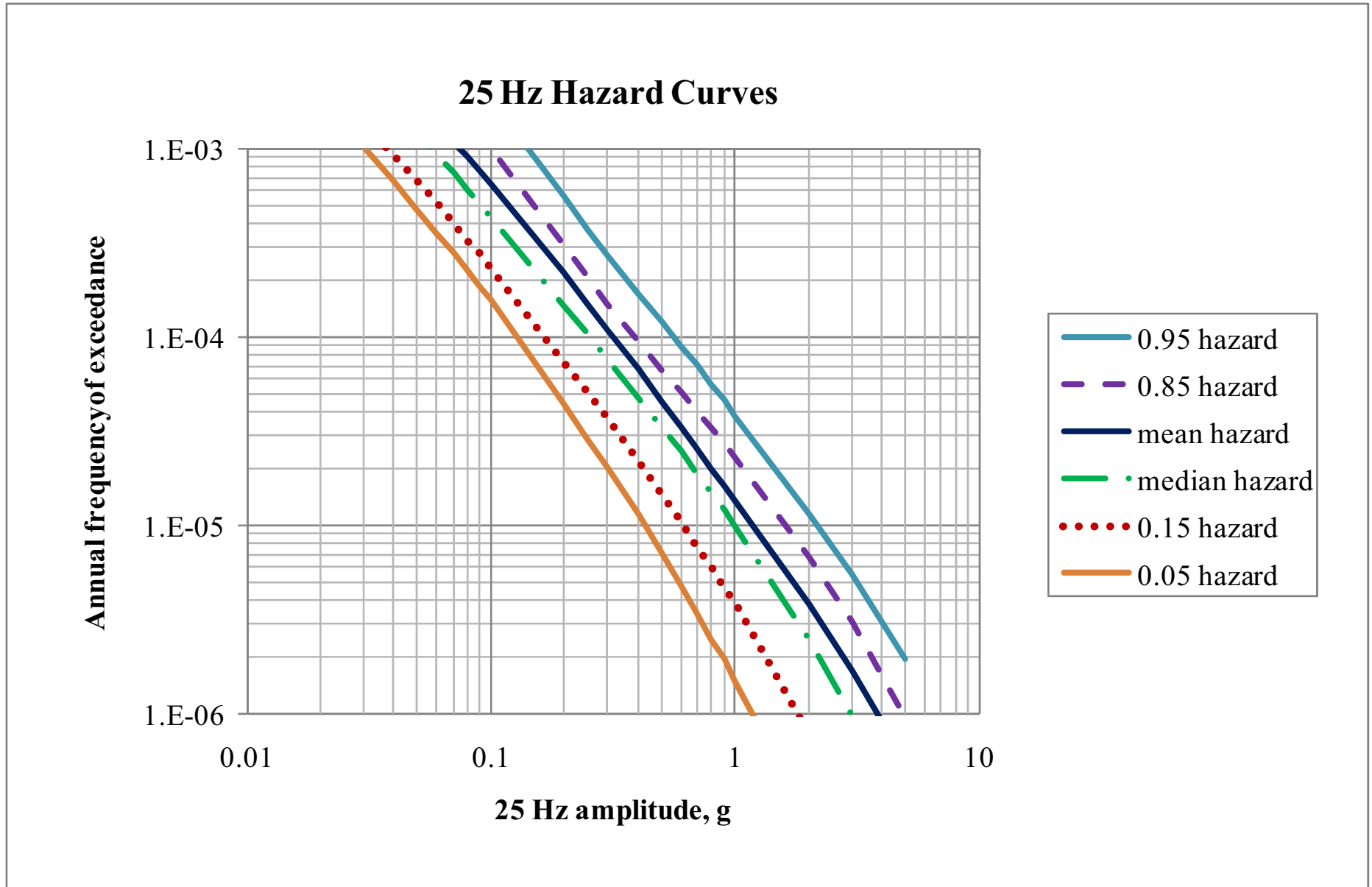
CC3-13-0127

Figure 2.5-85 — {Mean and Fractile Rock Hazard Curves for Peak Ground Acceleration}



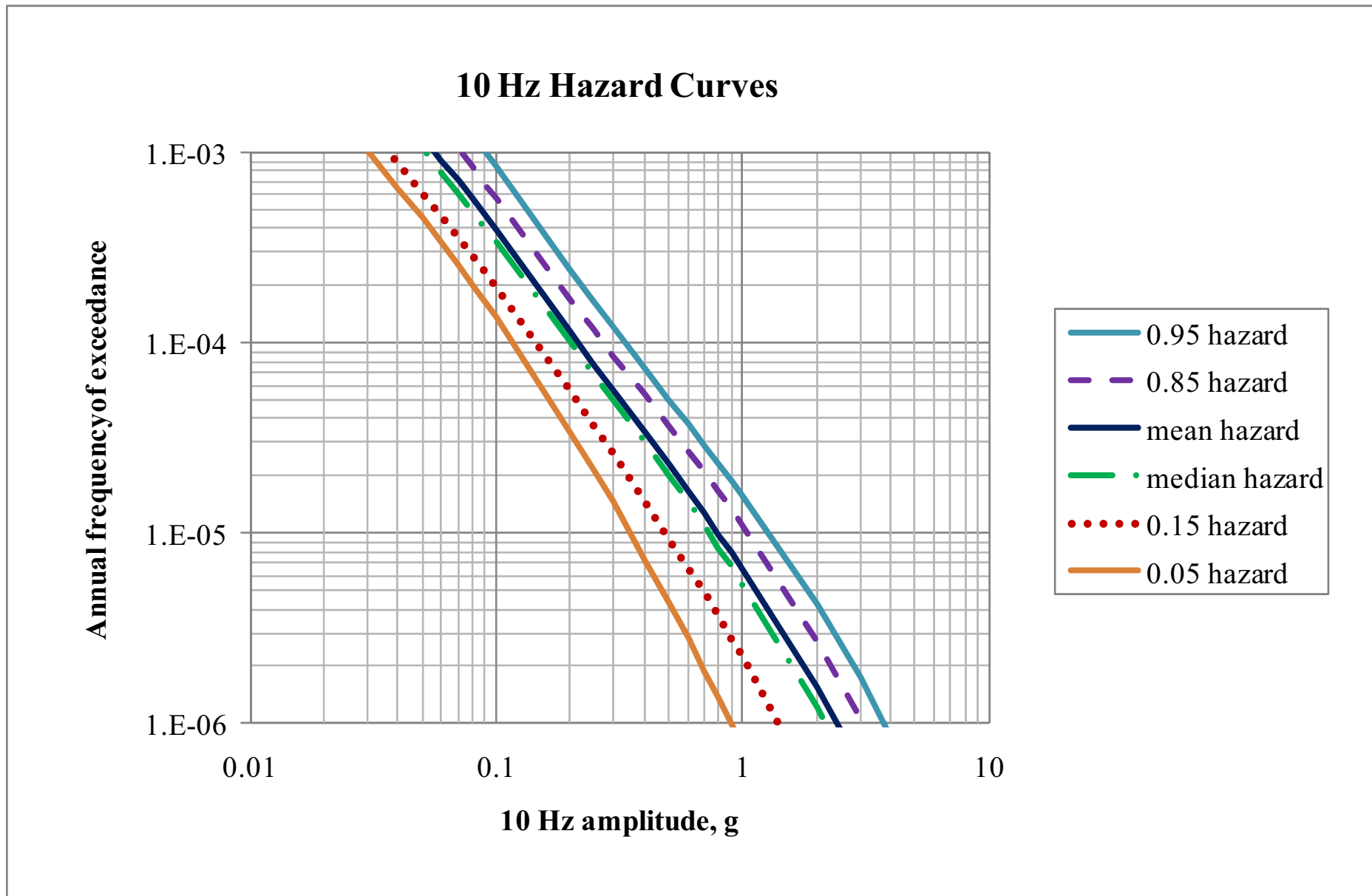
CC3-13-0127

Figure 2.5-86 — {Mean and Fractile Rock Hazard Curves for 25 Hz Spectral Acceleration



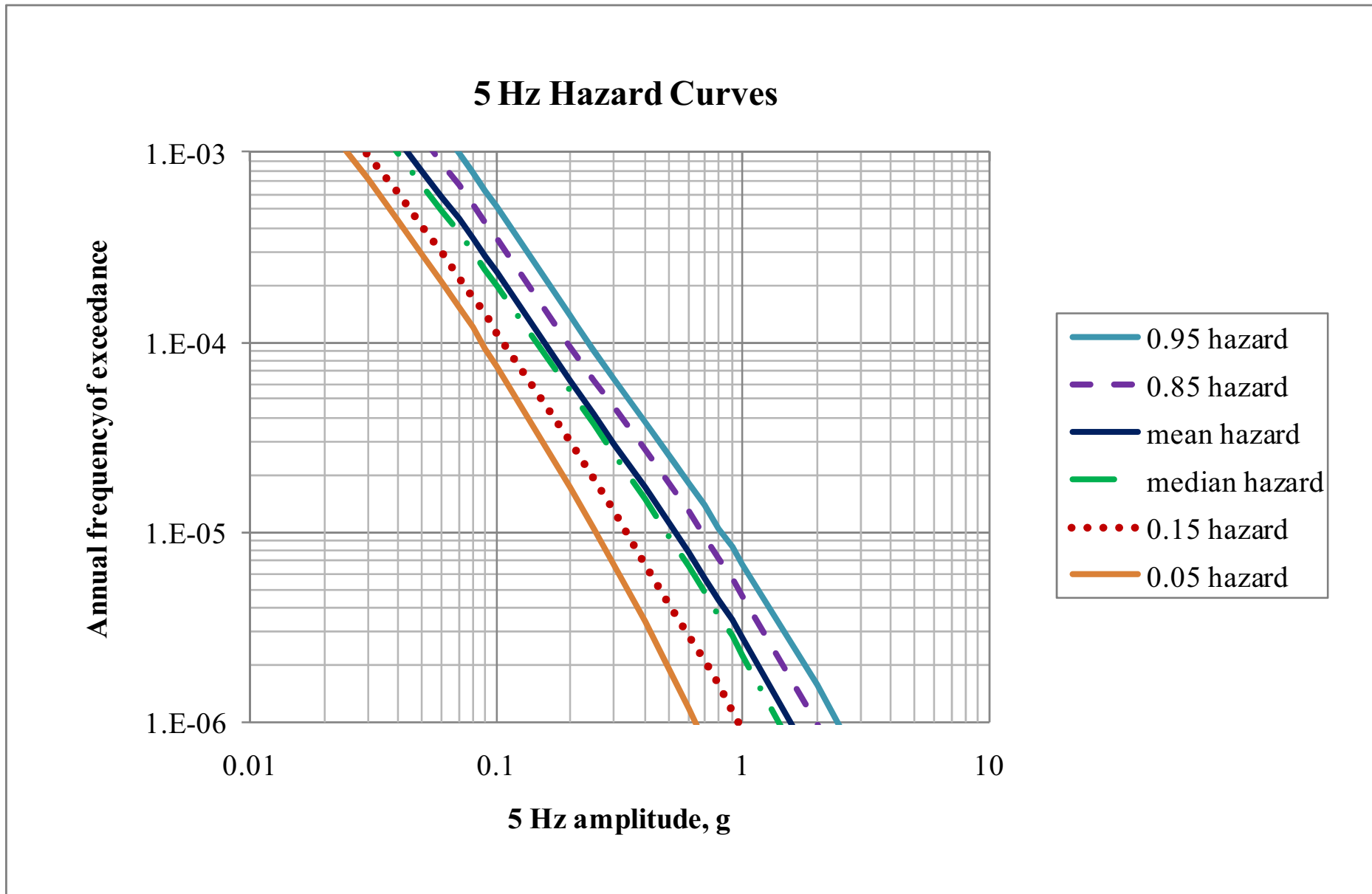
CC3-13-0127

Figure 2.5-87 — {Mean and Fractile Rock Hazard Curves for 10 Hz Spectral Acceleration



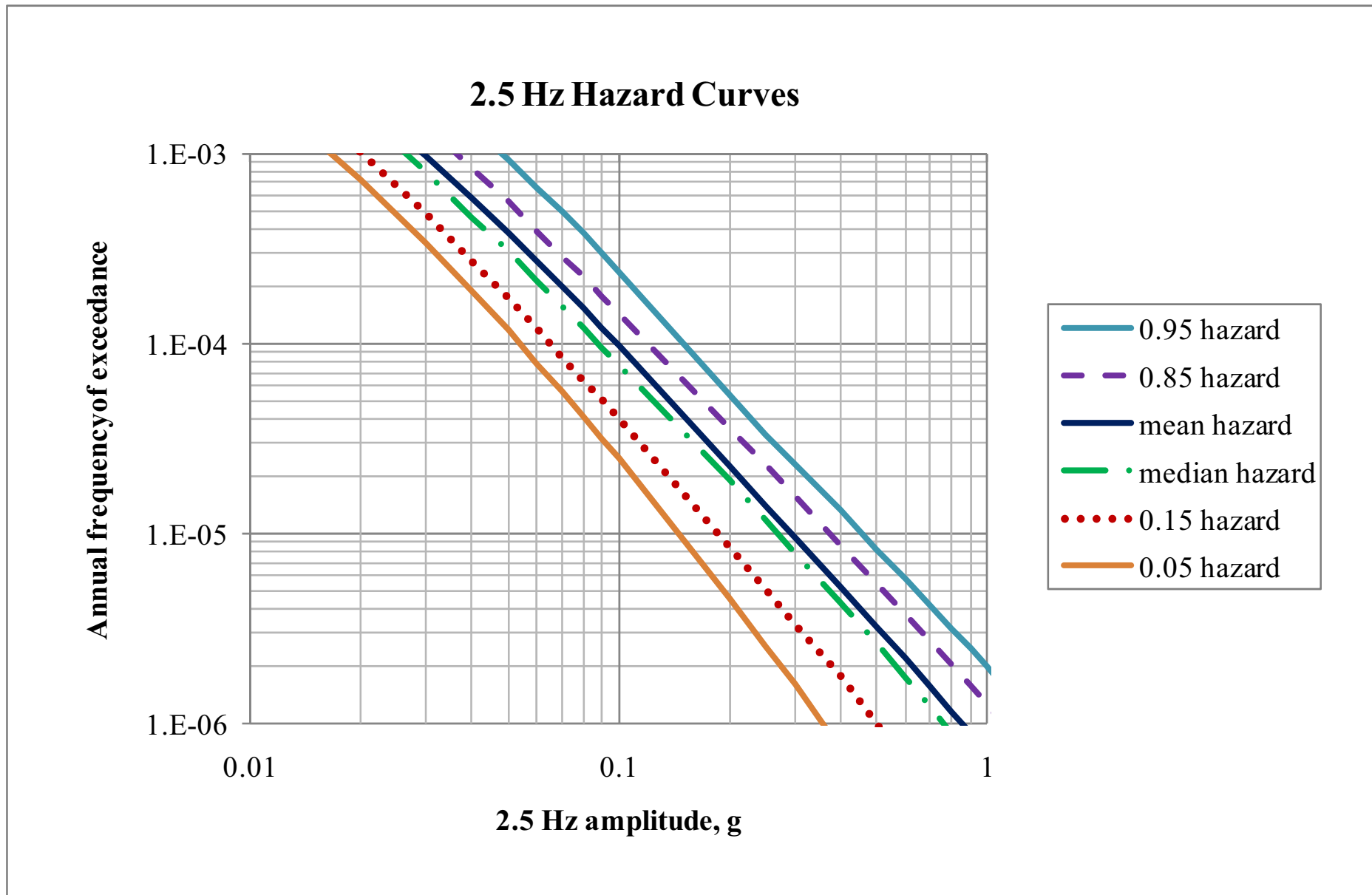
CC3-13-0127

Figure 2.5-88 — {Mean and Fractile Rock Hazard Curves for 5 Hz Spectral Acceleration



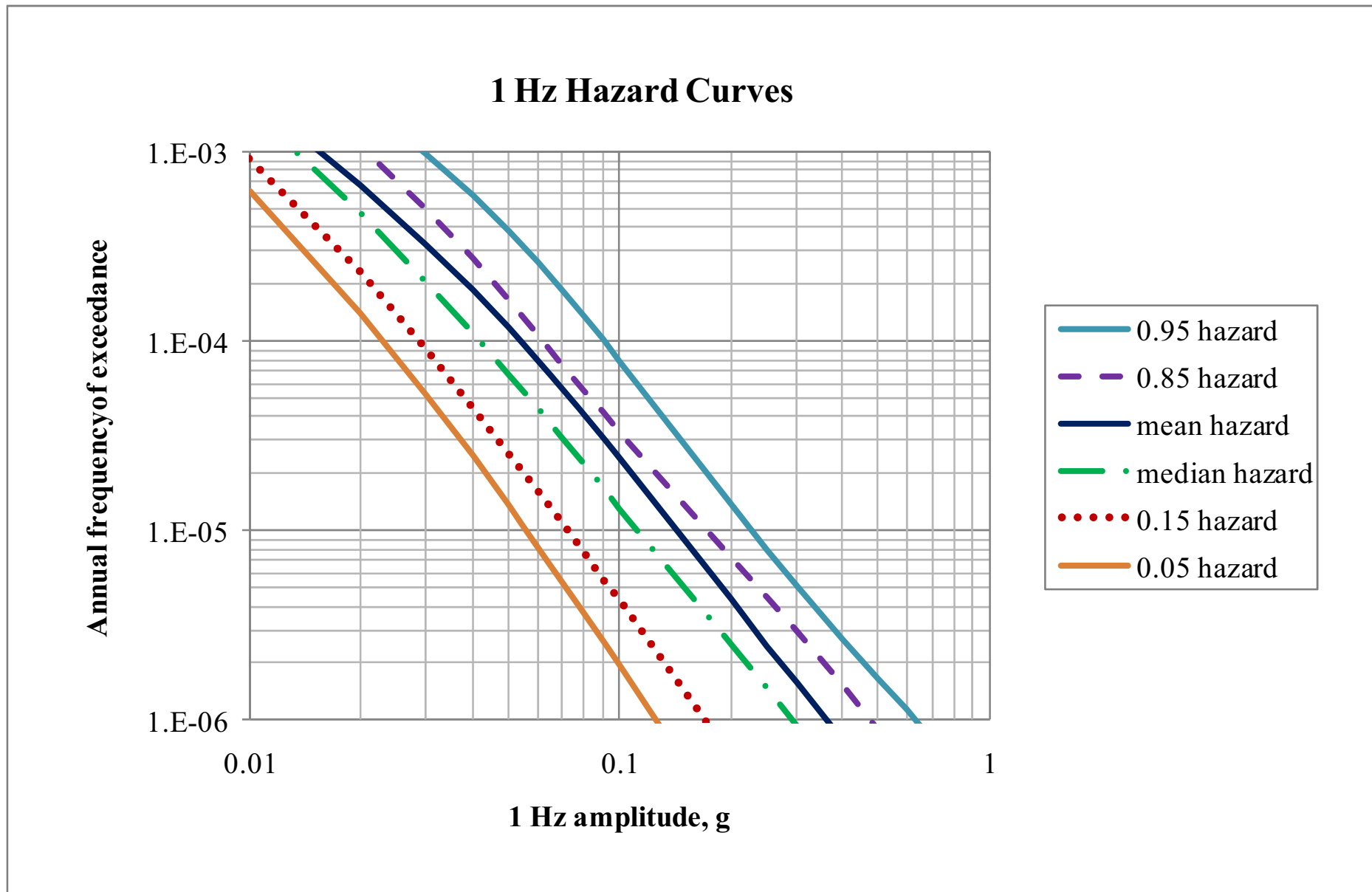
CC3-13-0127

Figure 2.5-89 — {Mean and Fractile Rock Hazard Curves for 2.5 Hz Spectral Acceleration



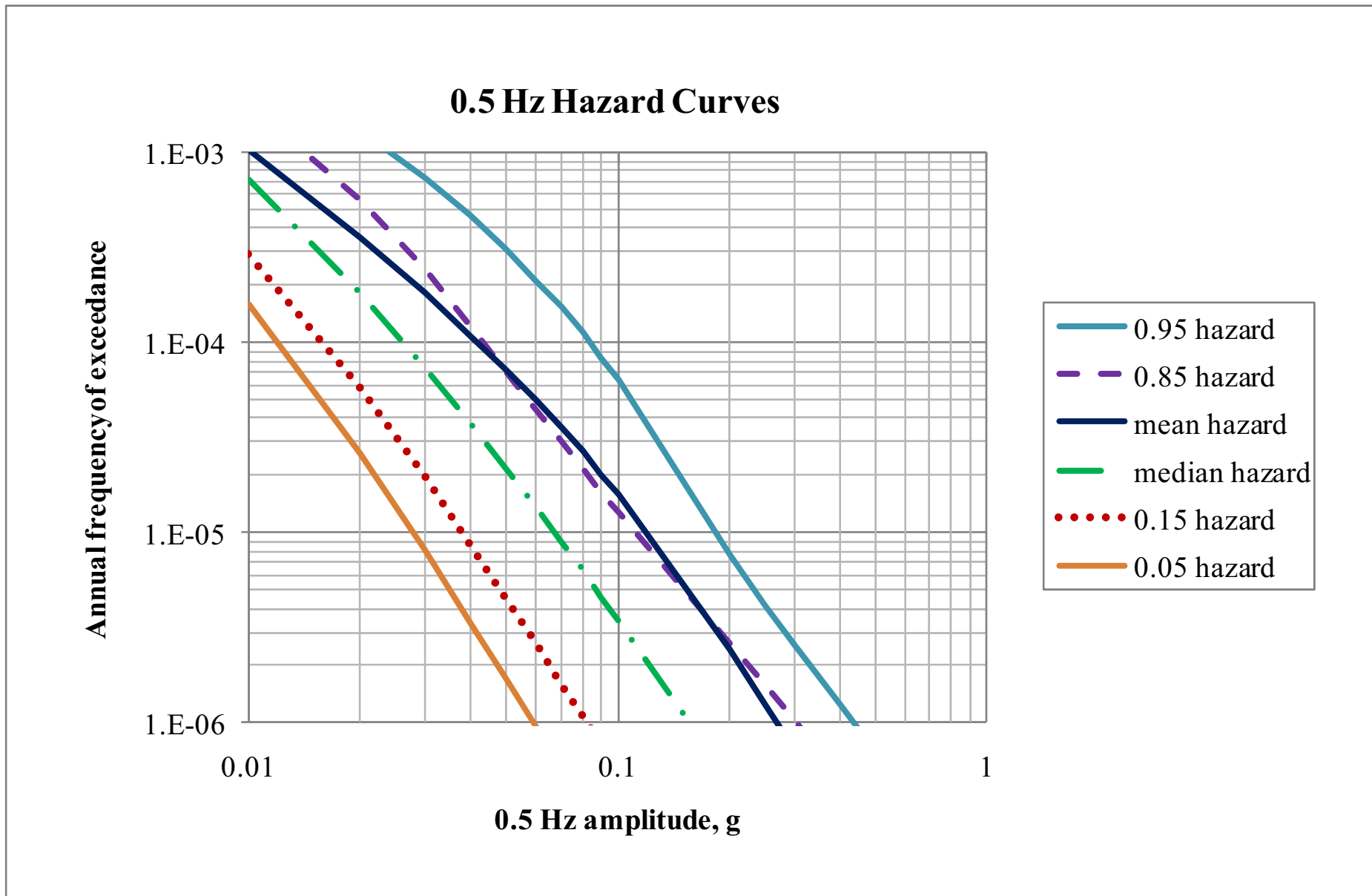
CC3-13-0127

Figure 2.5-90 — {Mean and Fractile Rock Hazard Curves for 1 HZ Spectral Acceleration



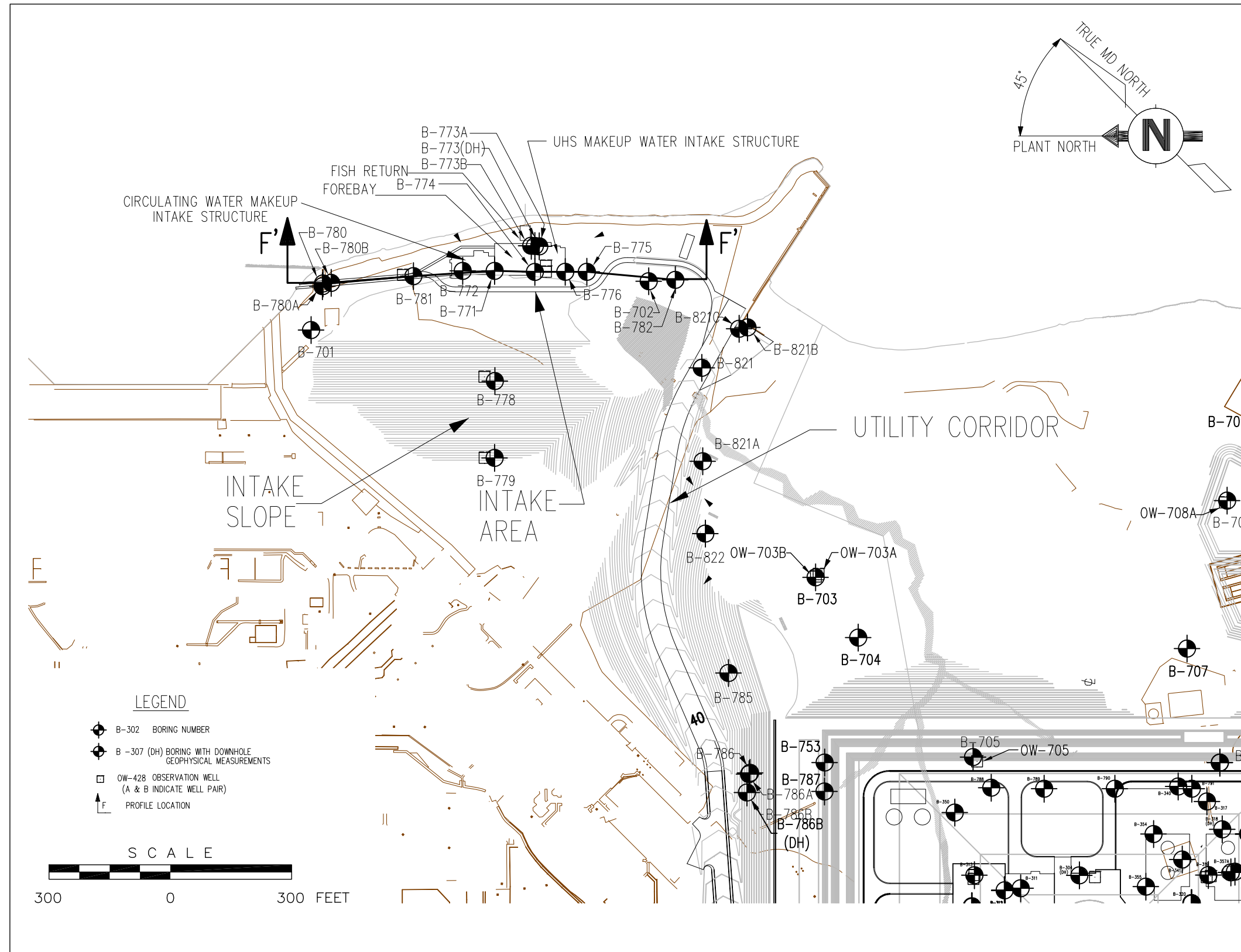
CC3-13-0127

Figure 2.5-91 — {Mean and Fractile Rock Hazard Curves for 0.5 Hz Spectral Acceleration



CC3-10-0270,
CC3-10-0302

Figure 2.5-94 — {Intake Area Profile Location}



CC3-10-0270

Figure 2.5-95 — {Generalized CCNPP Soil Column}

UNIT	THICKNESS [ft]		
	MIN	MAX	AVG
STRATUM I - TERRACE SAND	1	68	28
STRATUM IIa - CHESAPEAKE CLAY/SILT	4	36	19
STRATUM IIb - CHESAPEAKE CEMENTED SAND	3	69	24
	2	3	55
	3	4	39
STRATUM IIc - CHESAPEAKE CLAY/SILT (FROM B-301 AND B-401)	190	195	193
INTERBEDDED SAND LAYERS			
STRATUM III - NANJEMOY SAND (FROM B-301 and B-401)	>101	>115	>108

Figure 2.5-96 — {Subsurface Profile A-A'}

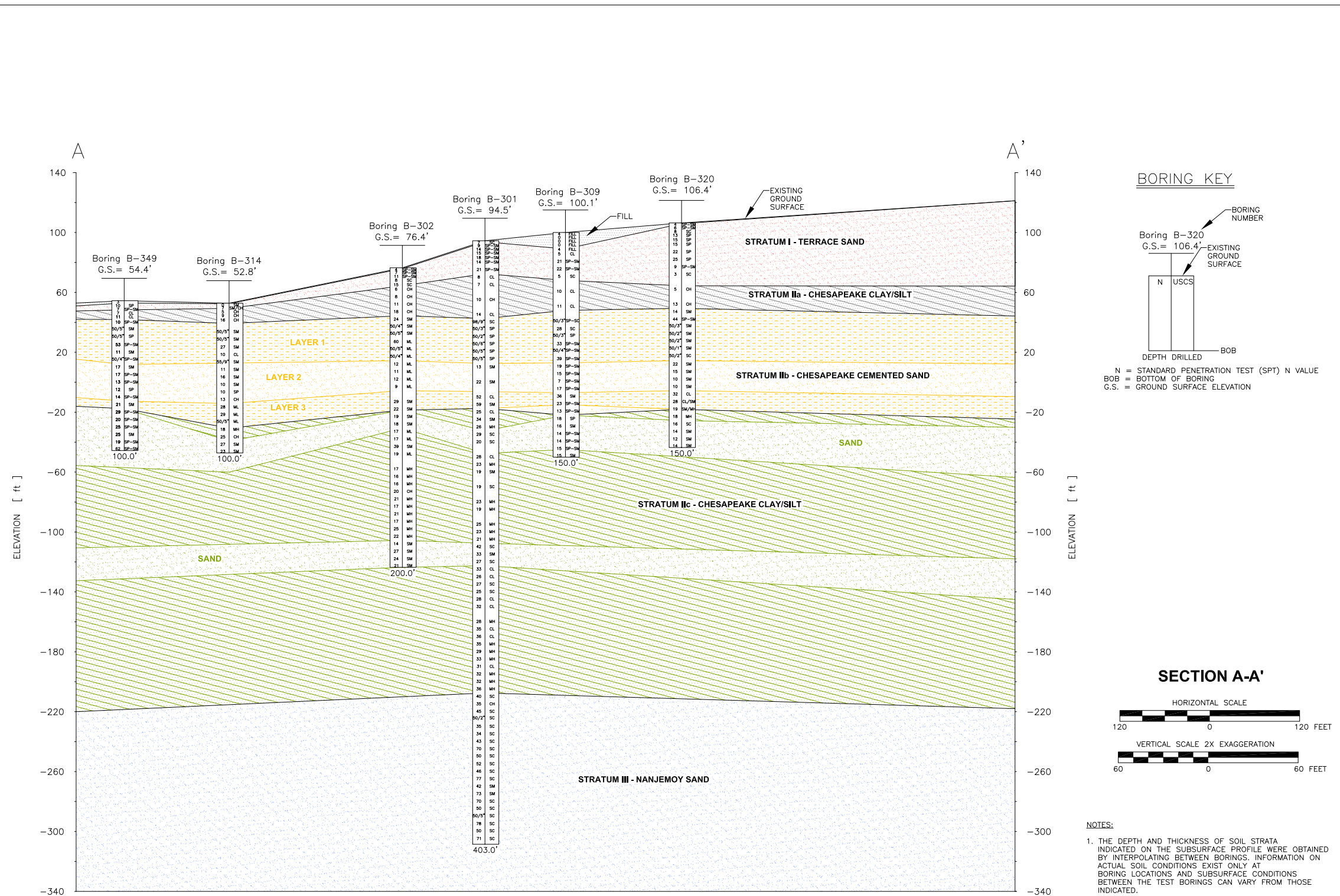


Figure 2.5-97 — {Subsurface Profile B-B'}

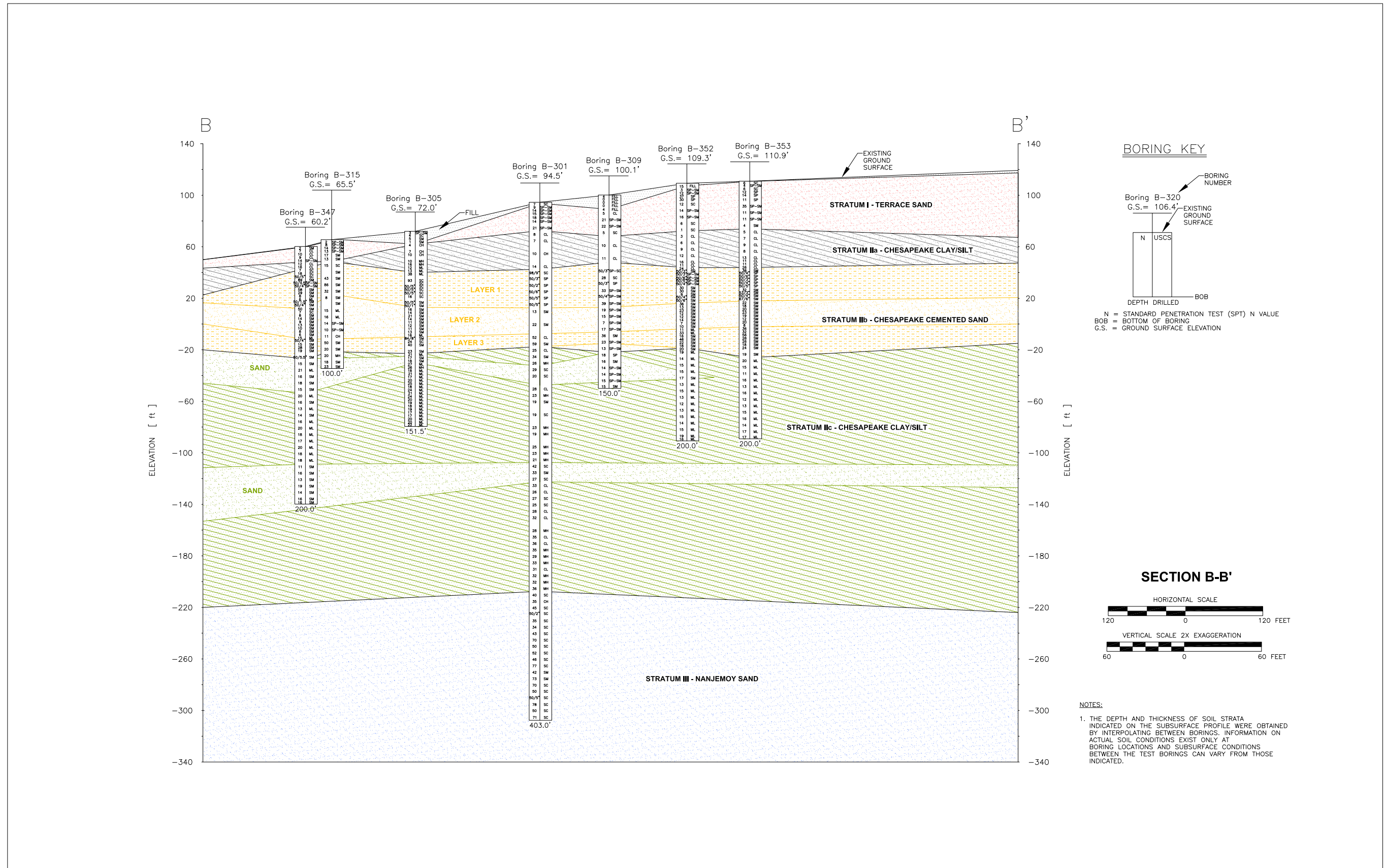


Figure 2.5-98 — {Subsurface Profile C-C'}

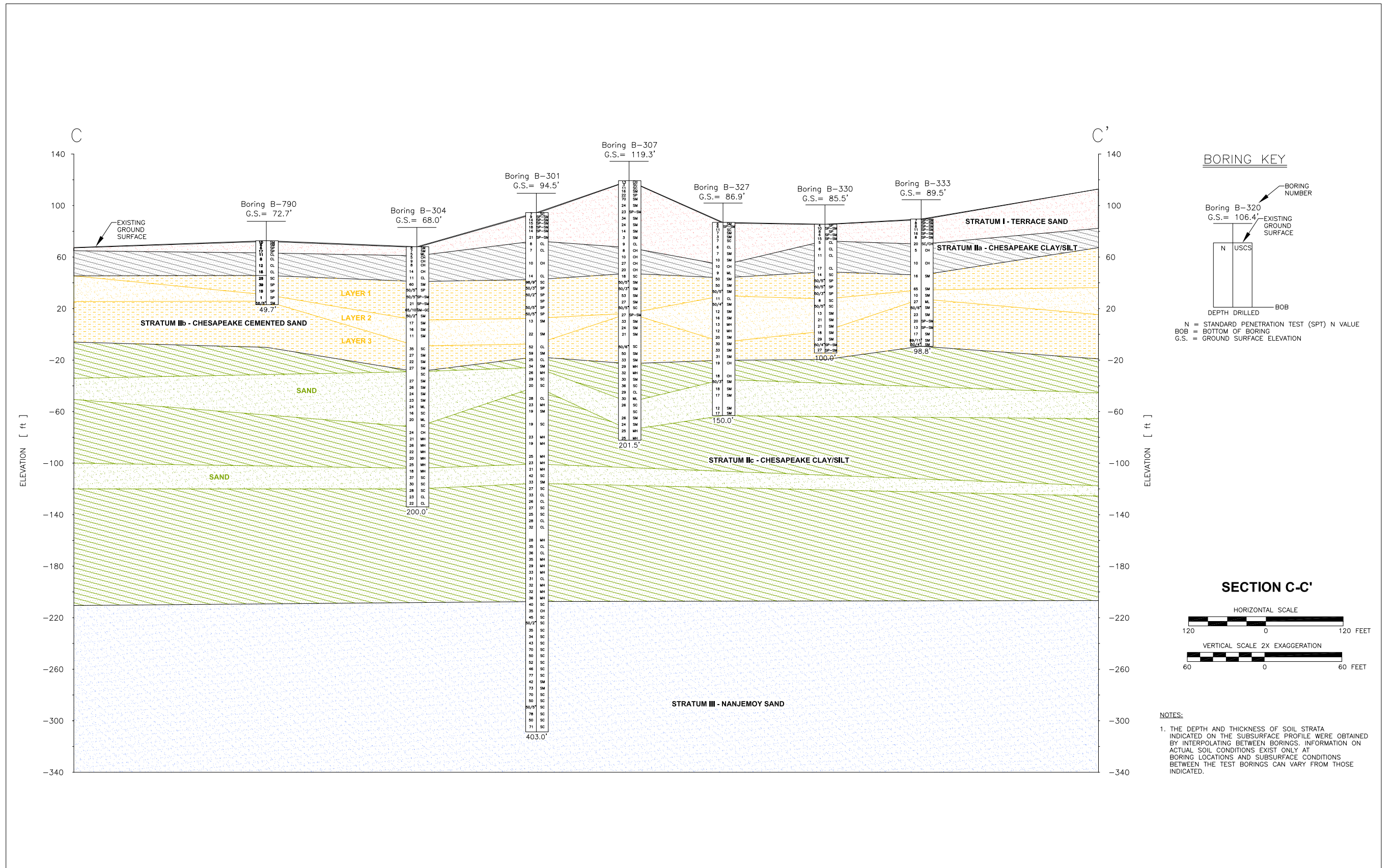


Figure 2.5-99 — {Subsurface Profile D-D'}

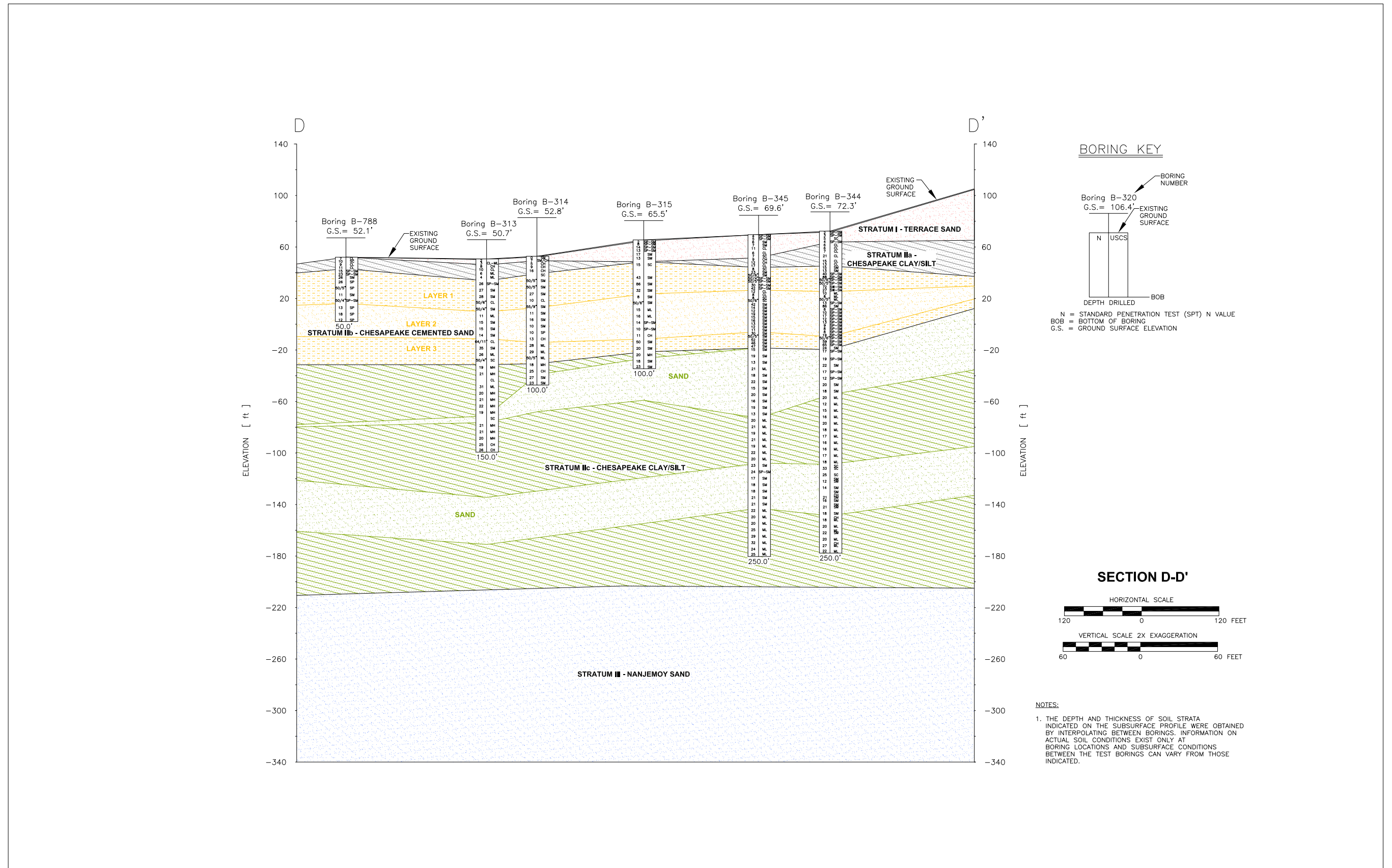
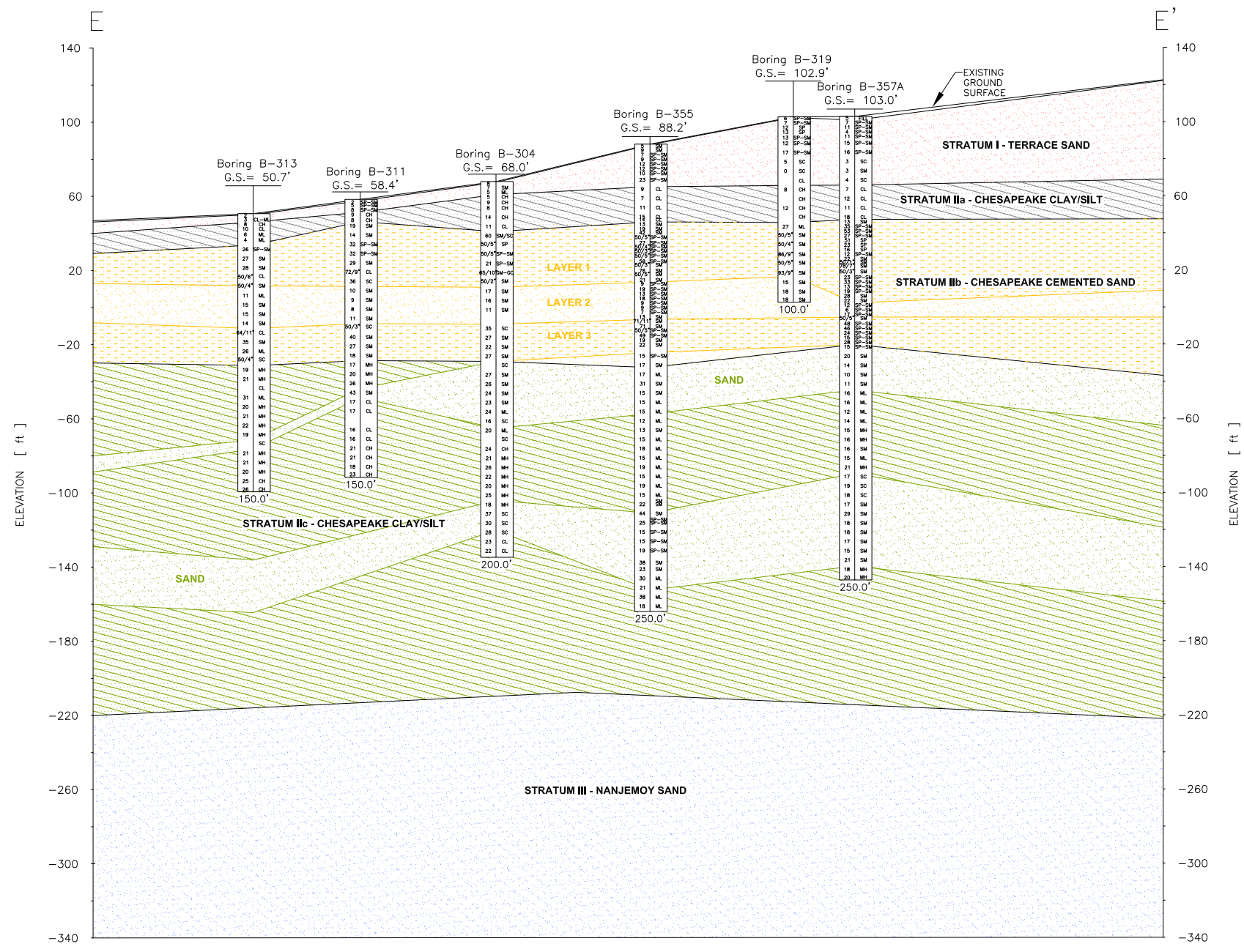
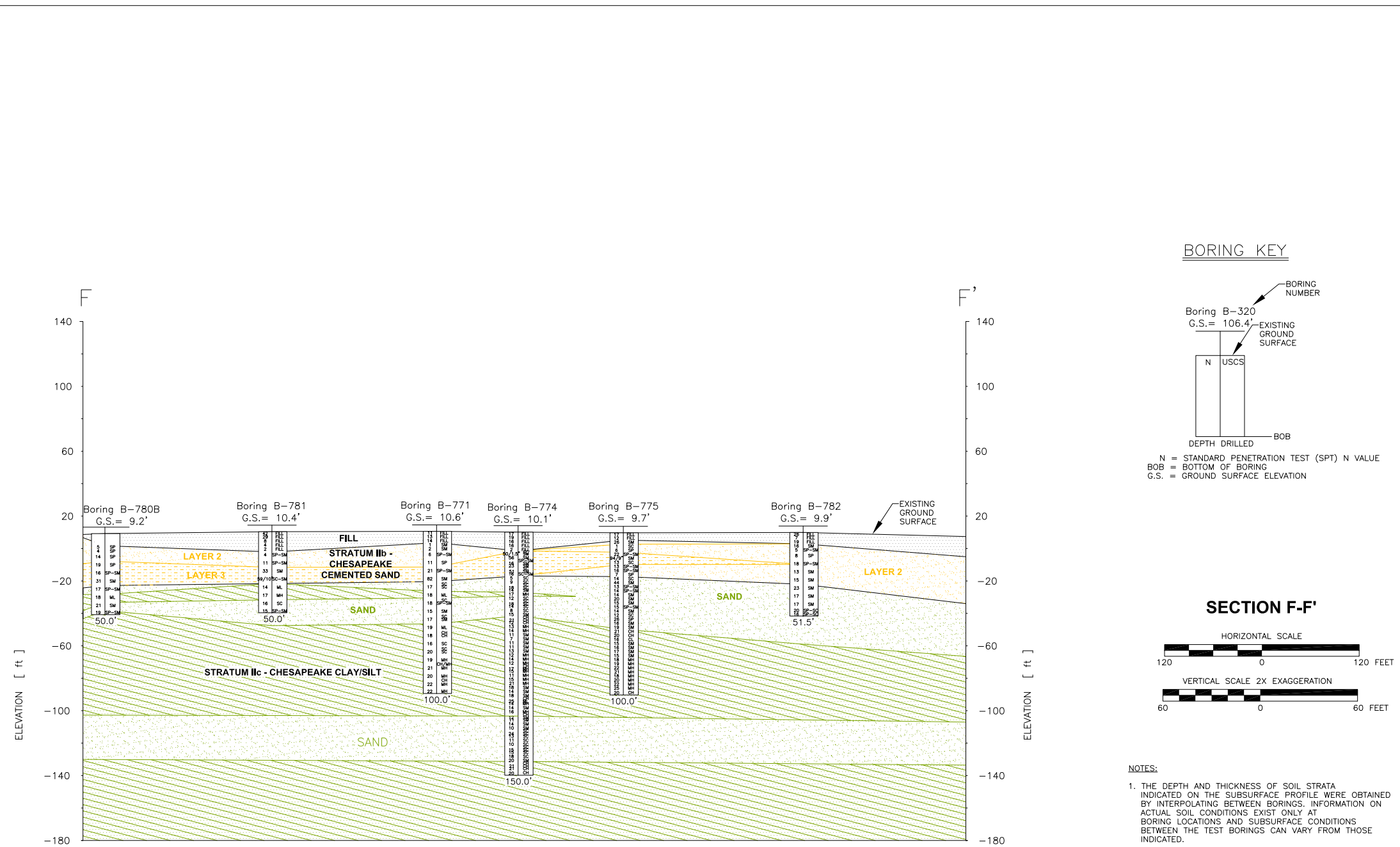


Figure 2.5-100 — {Subsurface Profile E-E'}



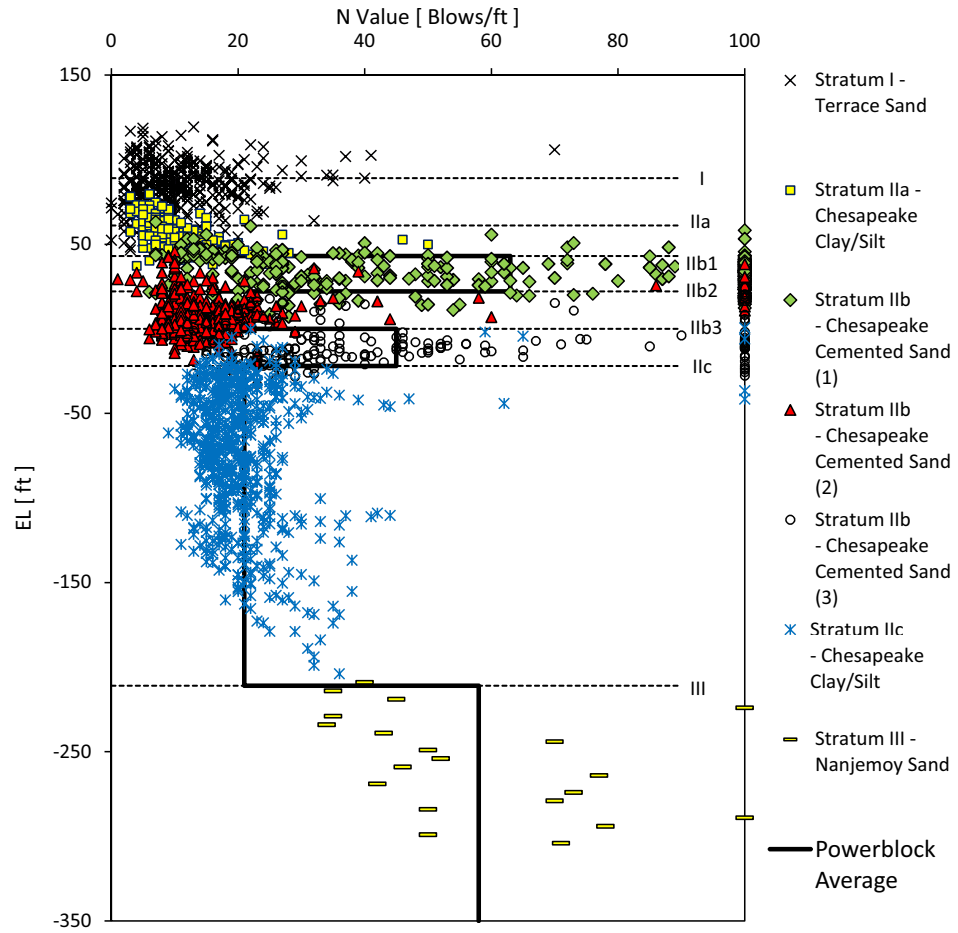
CC3-10-0270

Figure 2.5-101 — {Subsurface Profile F-F'}



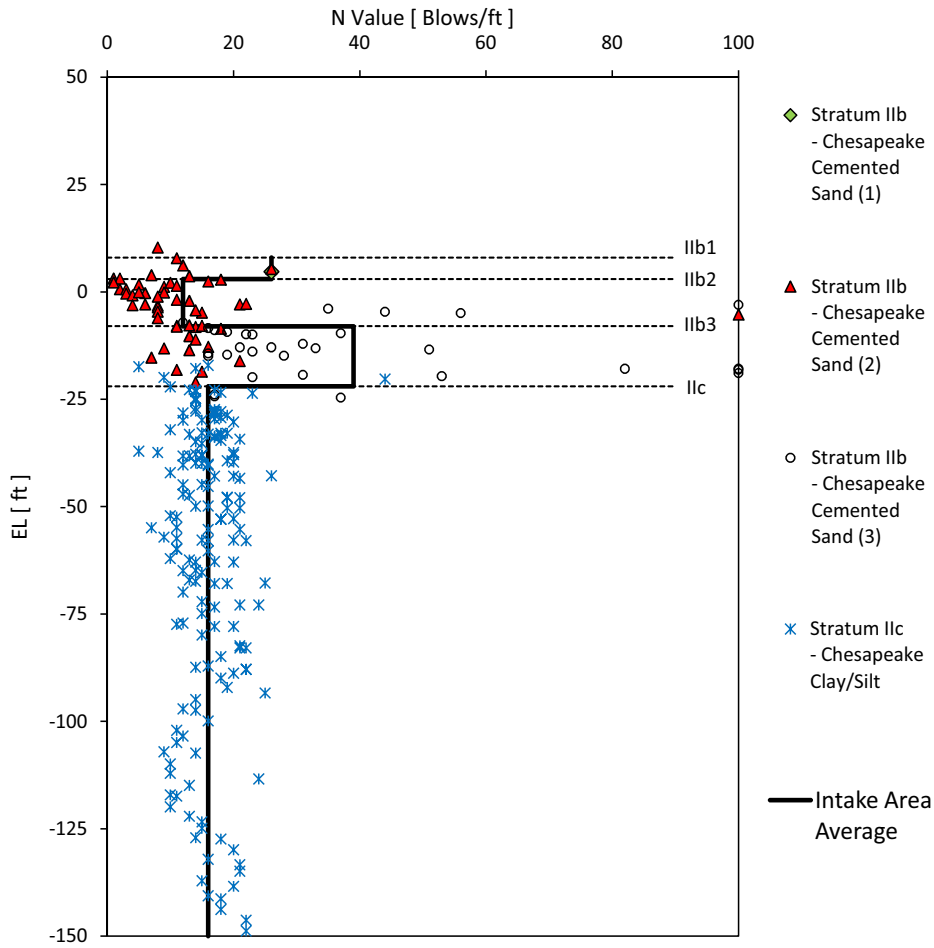
CC3-10-0270

Figure 2.5-102 — {SPT Data for Powerblock Area}



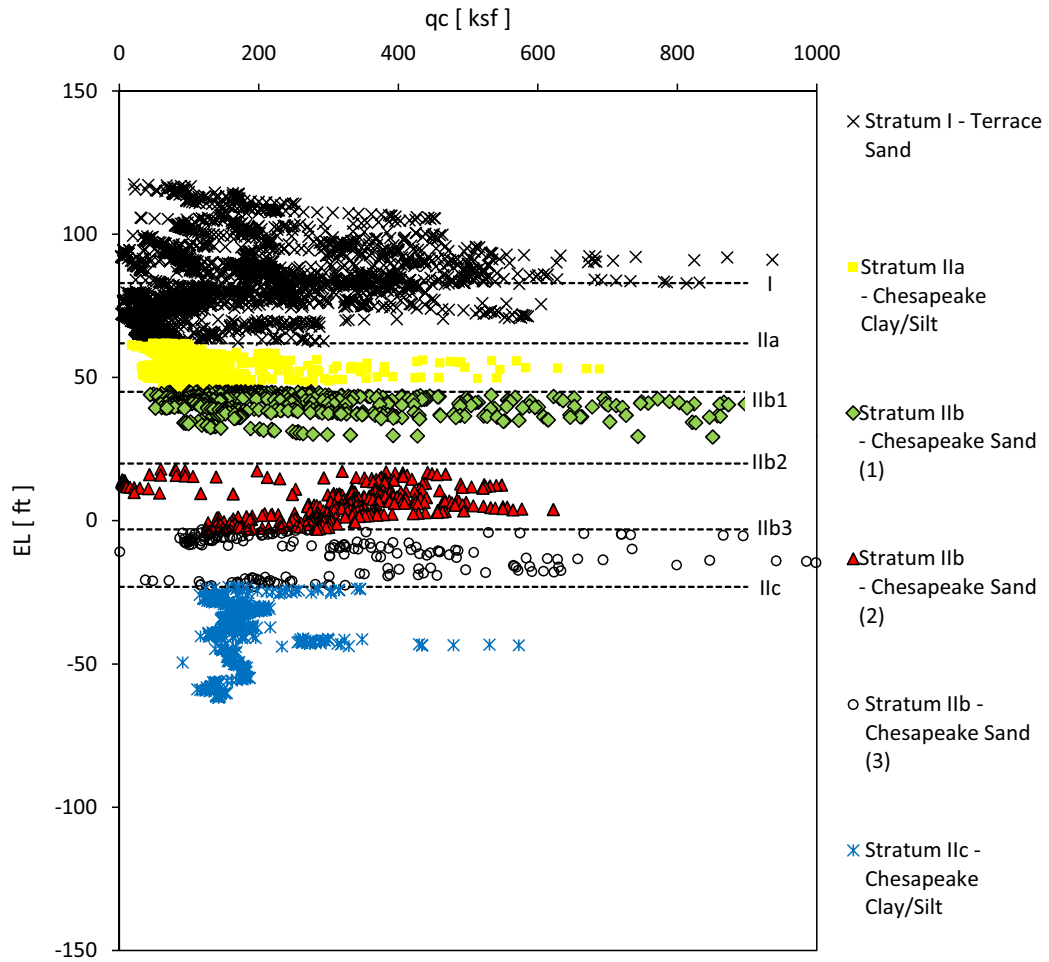
CC3-10-0270

Figure 2.5-103 — {SPT Data for Intake Area}



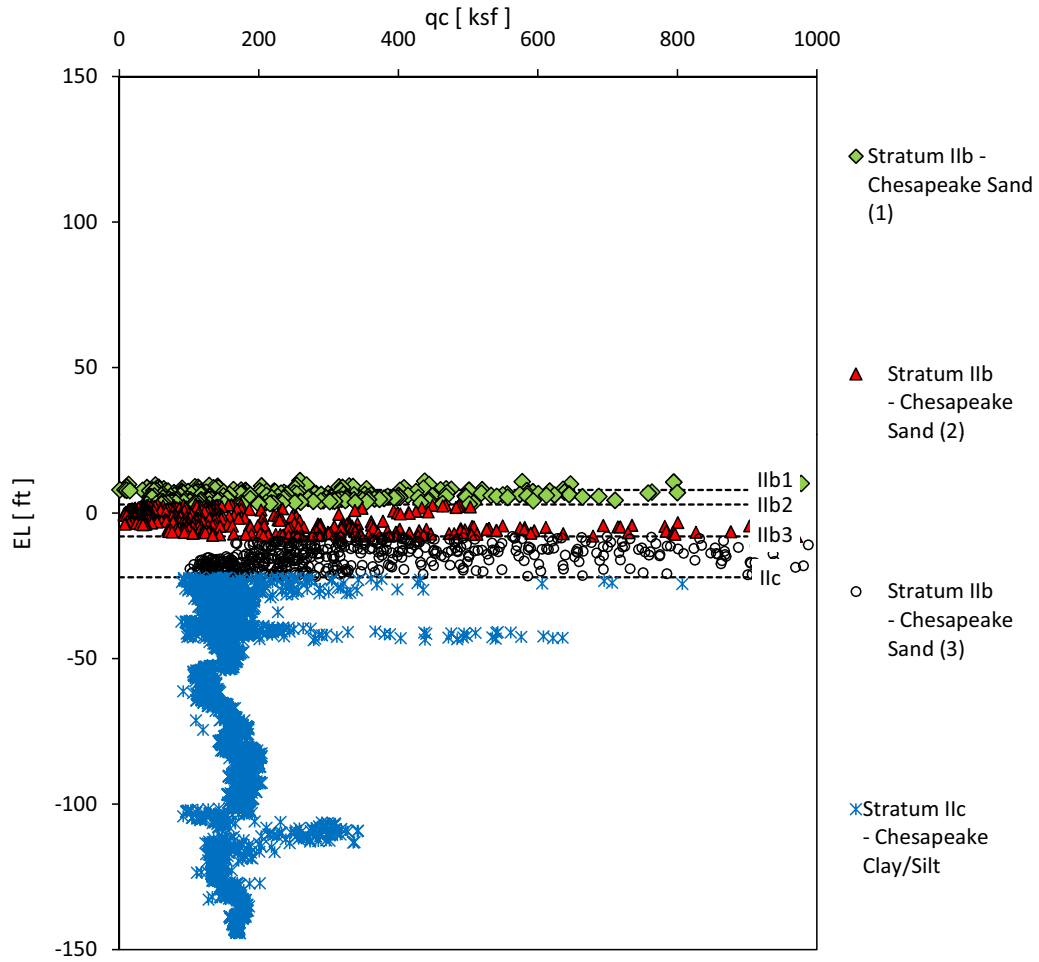
CC3-10-0270

Figure 2.5-104 — { CPT Tip Resistance, Powerblock Area}



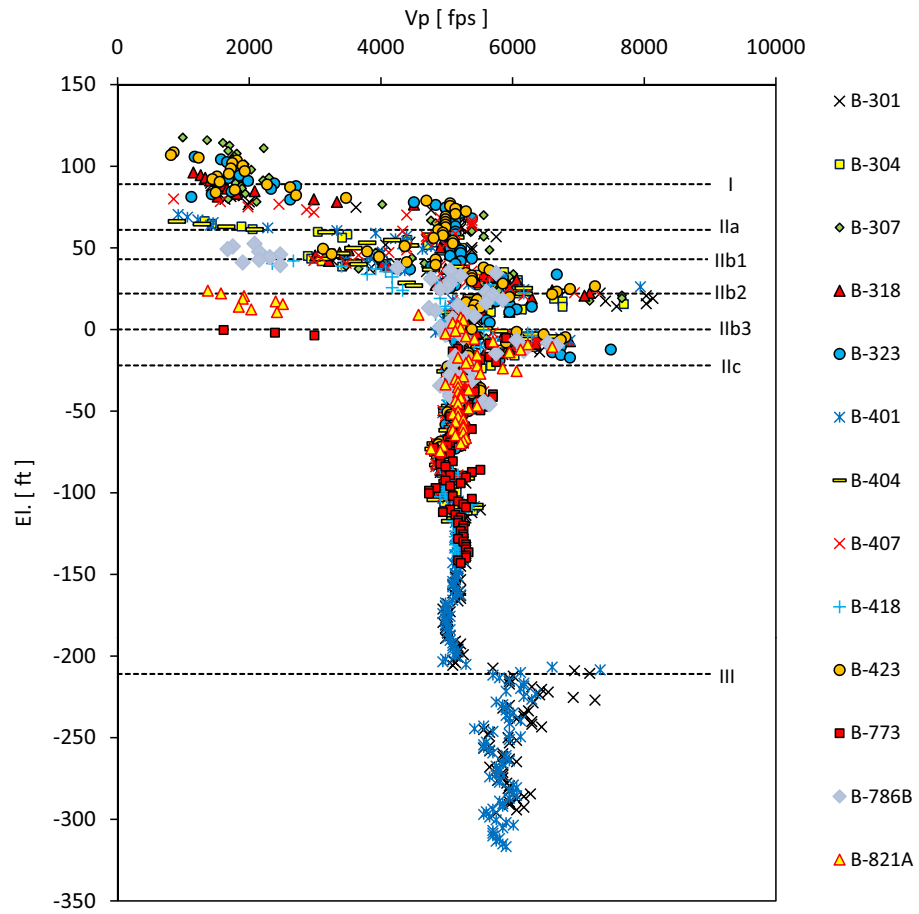
CC3-10-0270

Figure 2.5-105 — {CPT Tip Resistance, Intake Area}



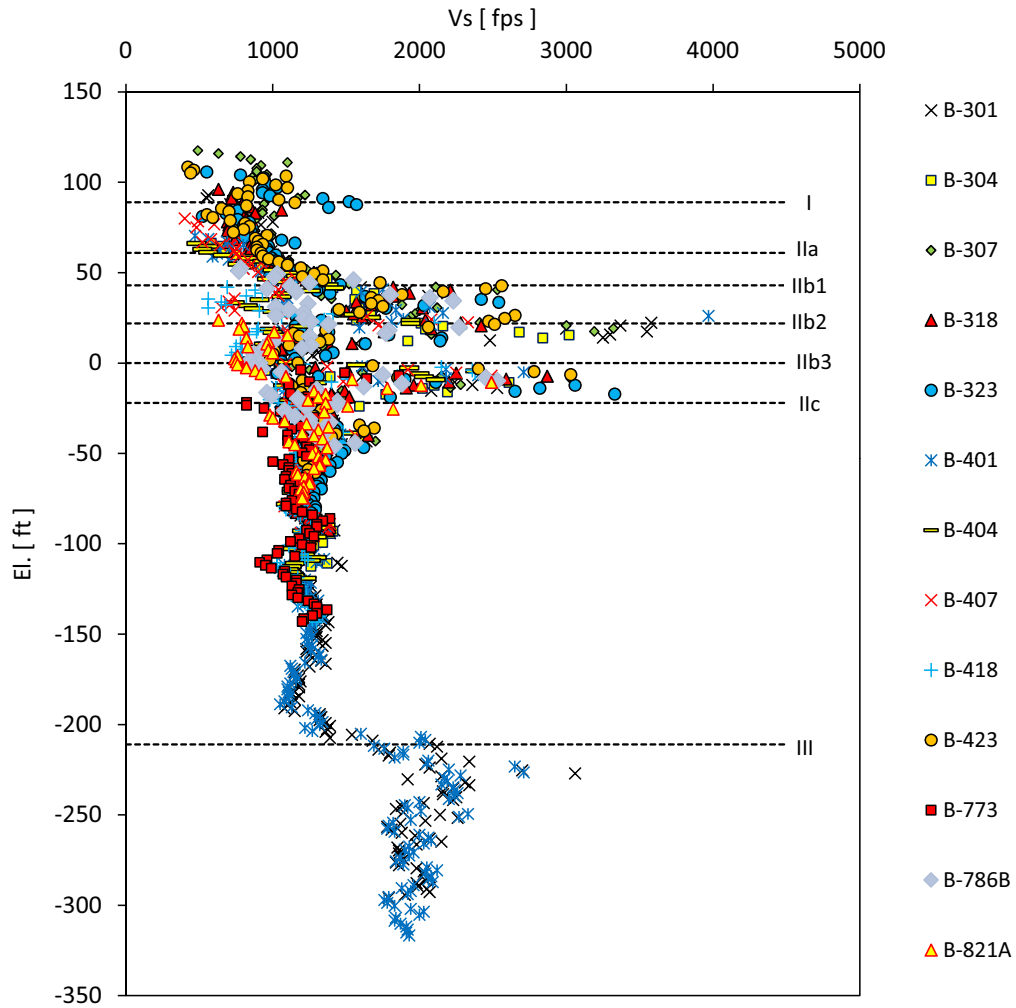
CC3-10-0270

Figure 2.5-106 — {Vp Measurements from Suspension P-S Velocity Logging}



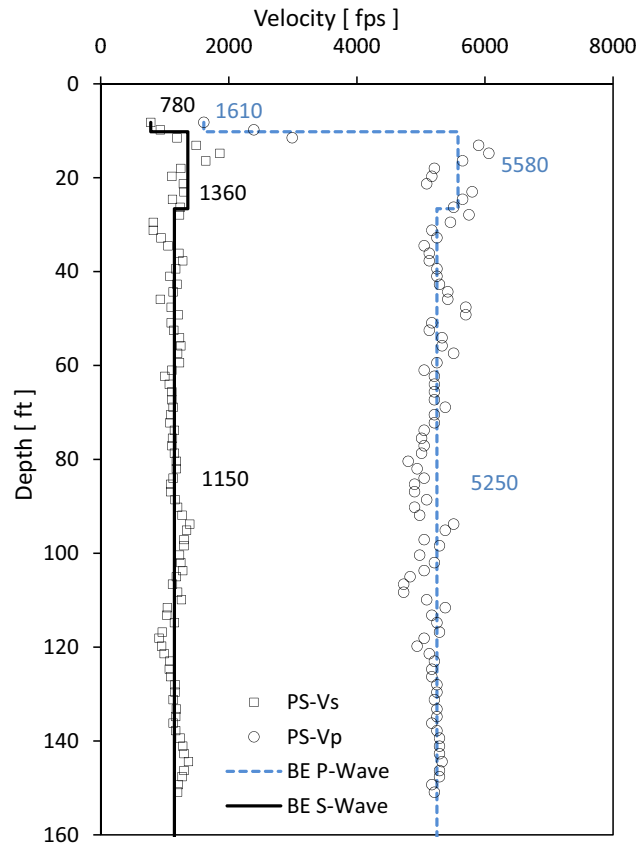
CC3-10-0270

Figure 2.5-107 — {Vs Measurements from Suspension P-S Velocity Logging}



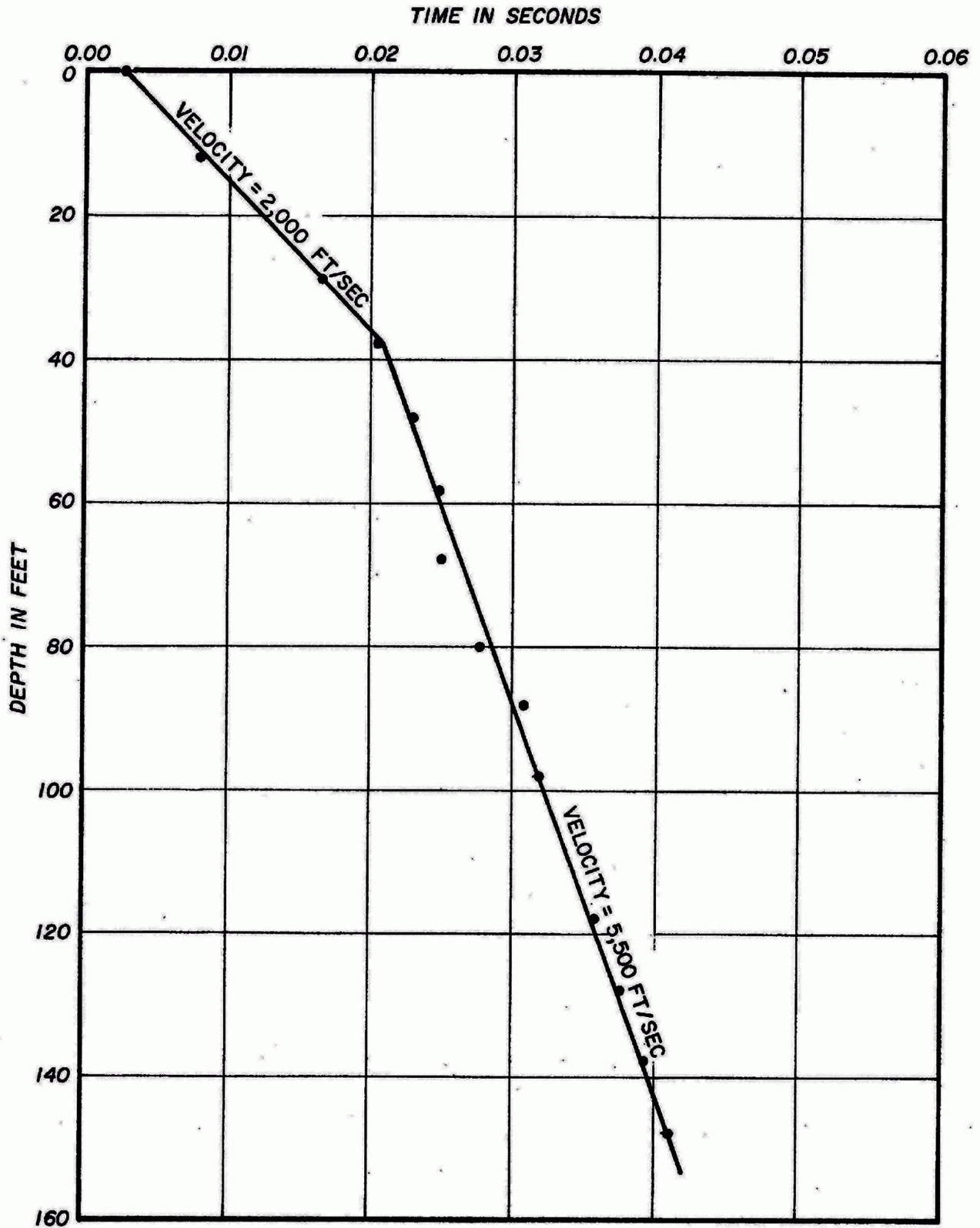
CC3-10-0270

Figure 2.5-108 — {PS Logging Test at Intake Area B-773}



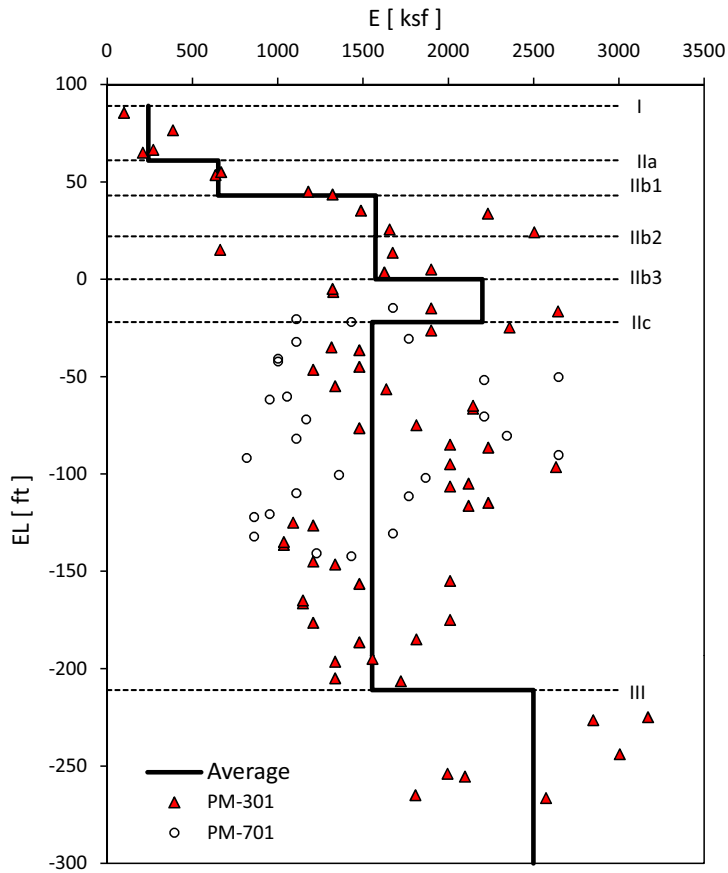
CC3-10-0270

Figure 2.5-109 — {Uphole Seismic Survey Results from CCNPP Units 1 and 2 UFSAR}



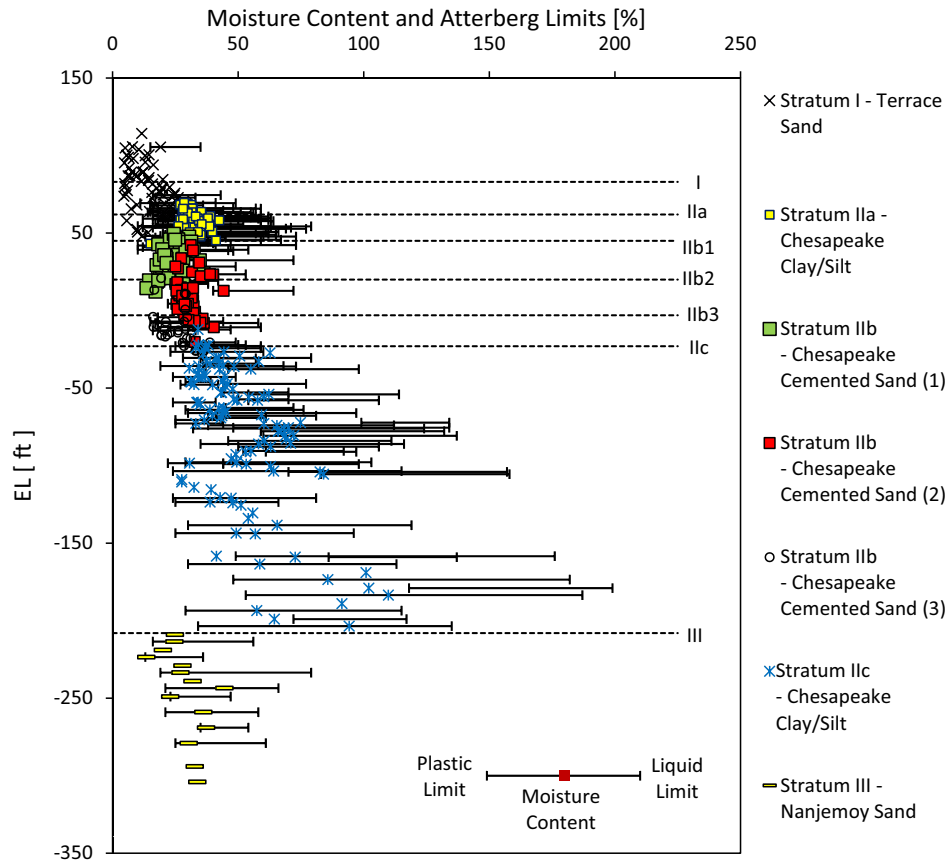
CC3-10-0270

Figure 2.5-110 — {Pressuremeter Data}



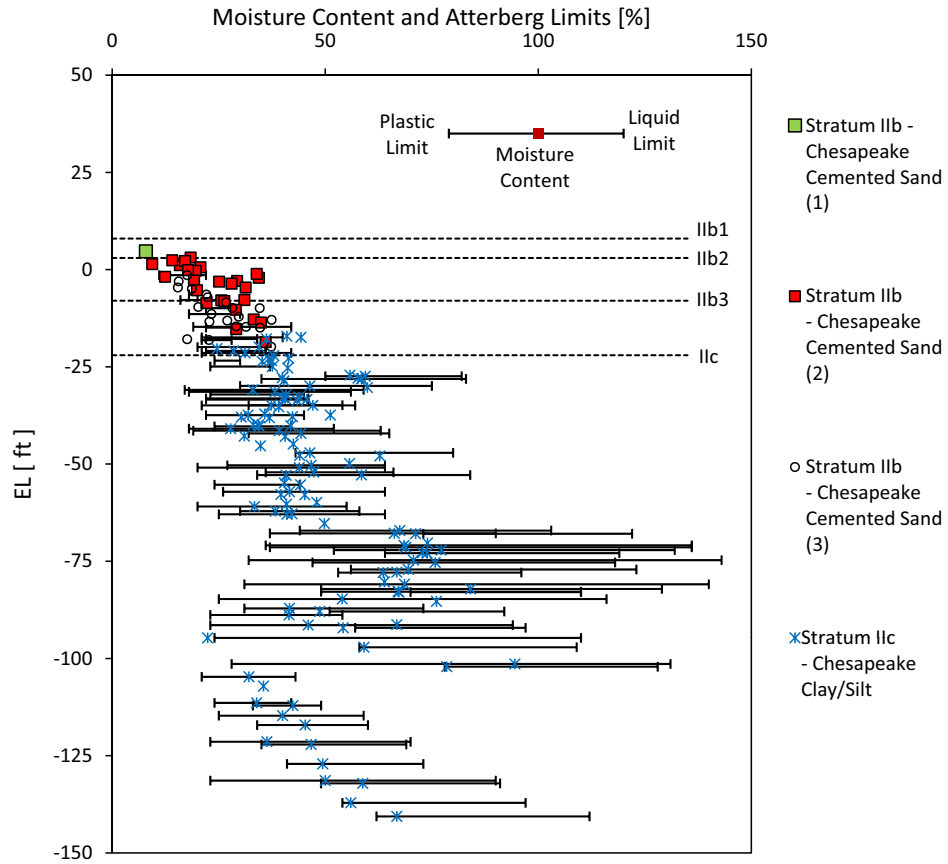
CC3-10-0270

Figure 2.5-111 — {Moisture Content and Atterberg Limits, Powerblock Area}



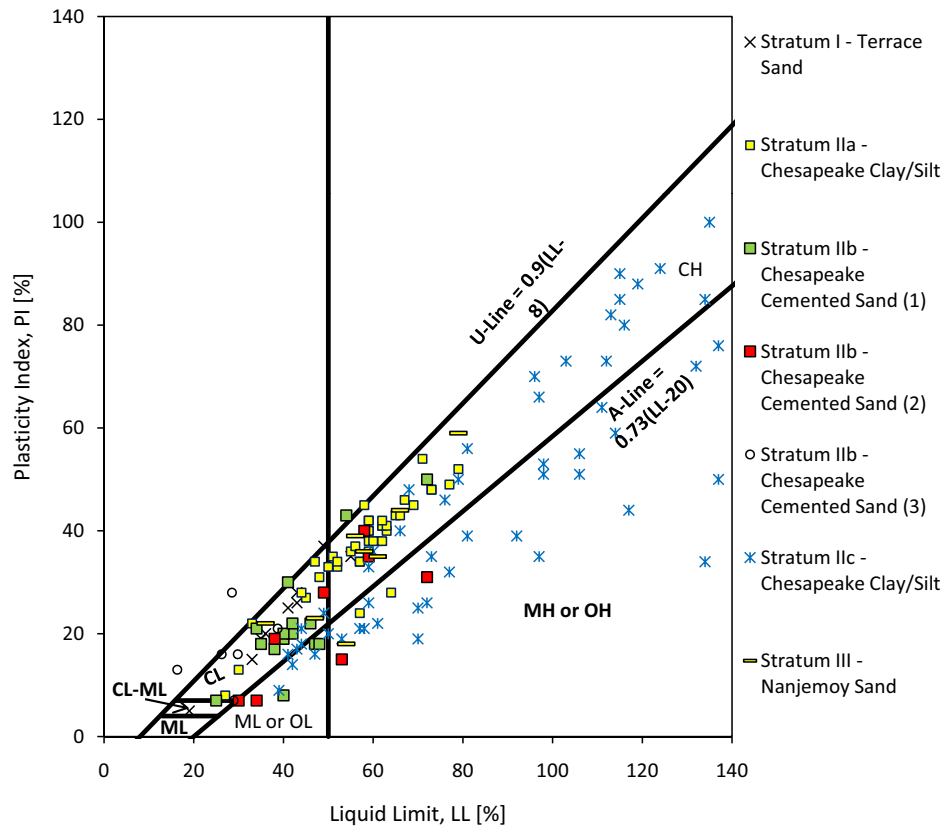
CC3-10-0270

Figure 2.5-112 — {Moisture Content and Atterberg Limits, Intake Area}



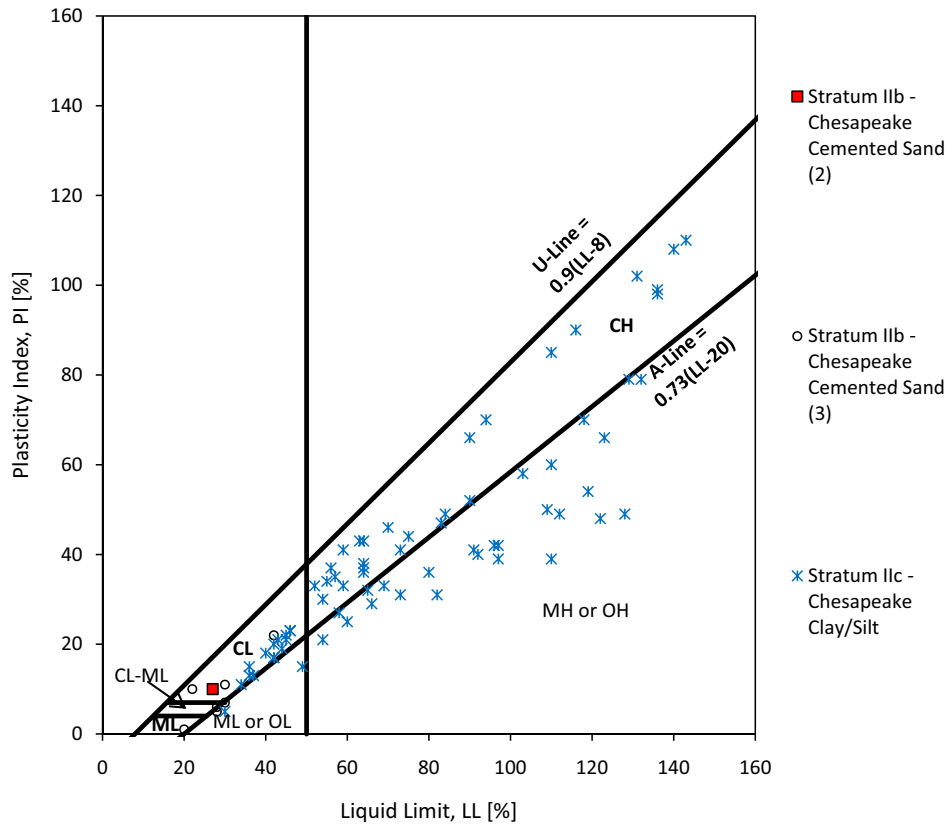
CC3-10-0270

Figure 2.5-113 — {Plasticity Chart, Powerblock Area}



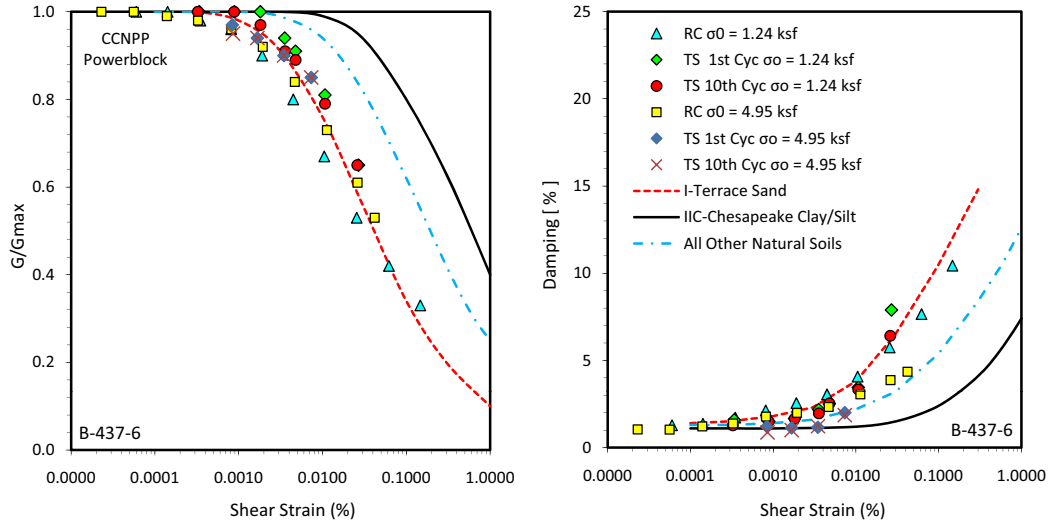
CC3-10-0270

Figure 2.5-114 — {Plasticity Chart, Intake Area}



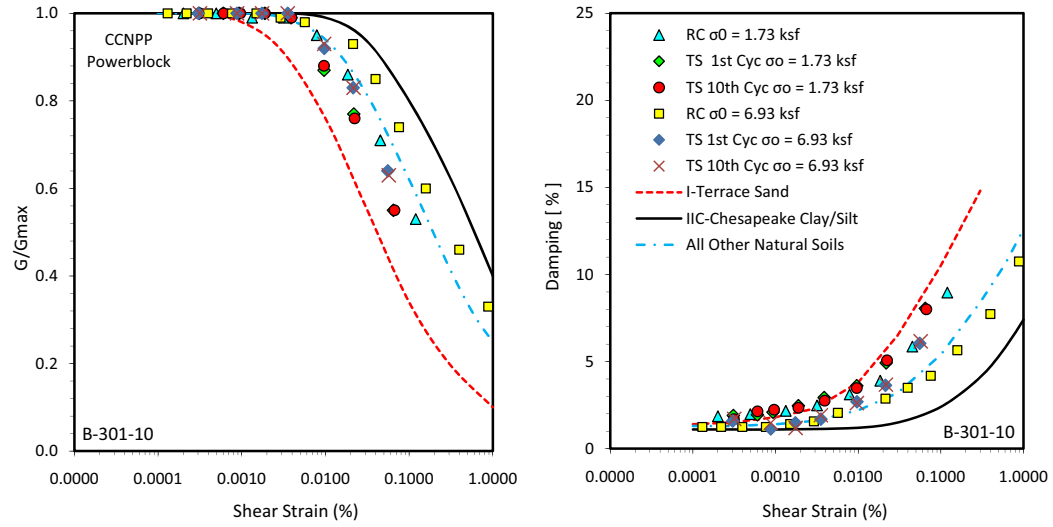
CC3-10-0270

Figure 2.5-115 — {RCTS Testing Sample B-437-6, Powerblock Area}



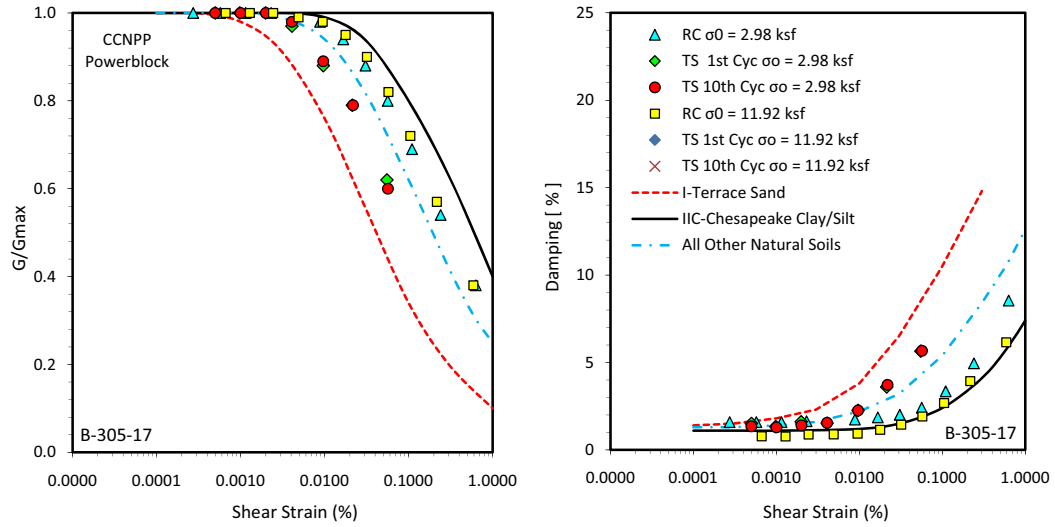
CC3-10-0270

Figure 2.5-116 — {RCTS Testing Sample B-301-10, Powerblock Area}



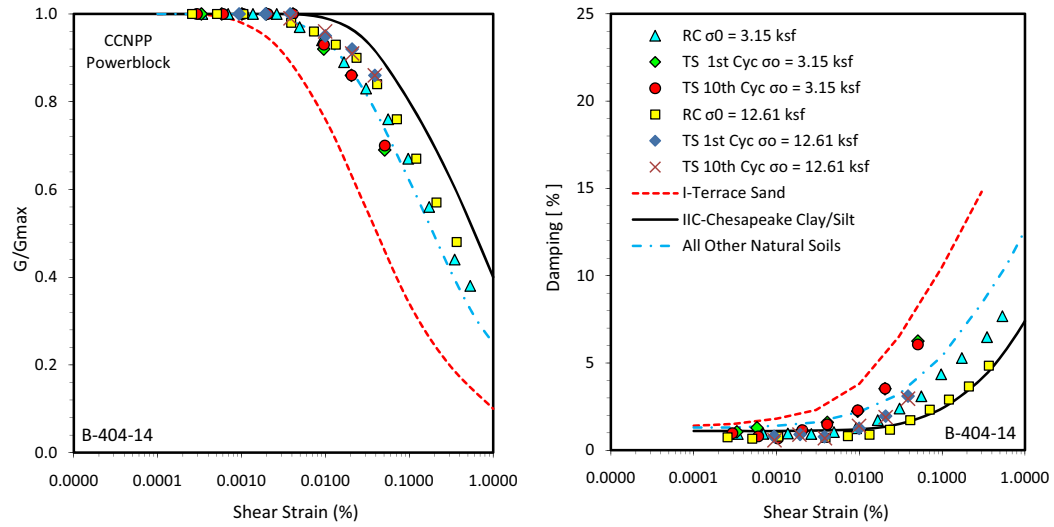
CC3-10-0270

Figure 2.5-117 — {RCTS Testing Sample B-305-17, Powerblock Area}



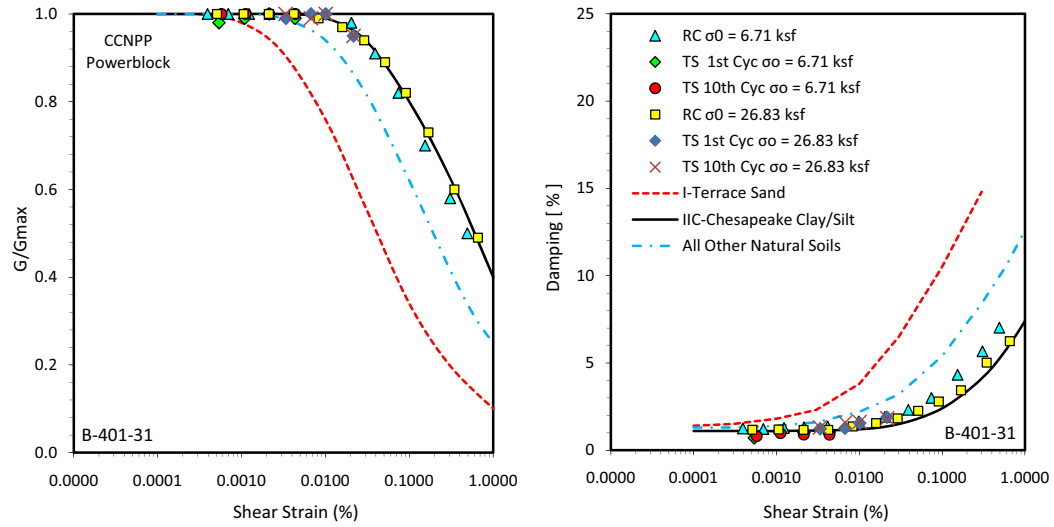
CC3-10-0270

Figure 2.5-118 — {RCTS Testing Sample B-404-14, Powerblock Area}



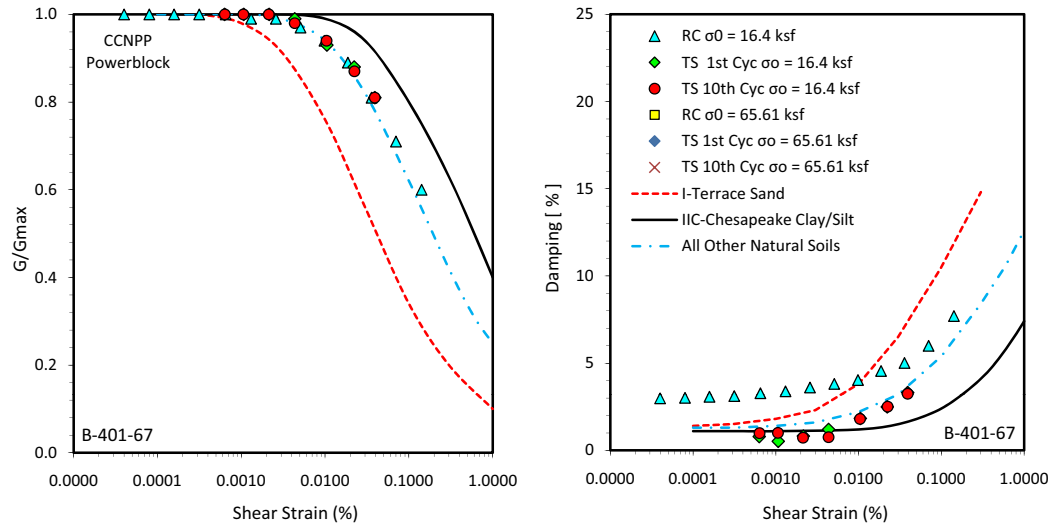
CC3-10-0270

Figure 2.5-119 — {RCTS Testing Sample B-401-31, Powerblock Area}



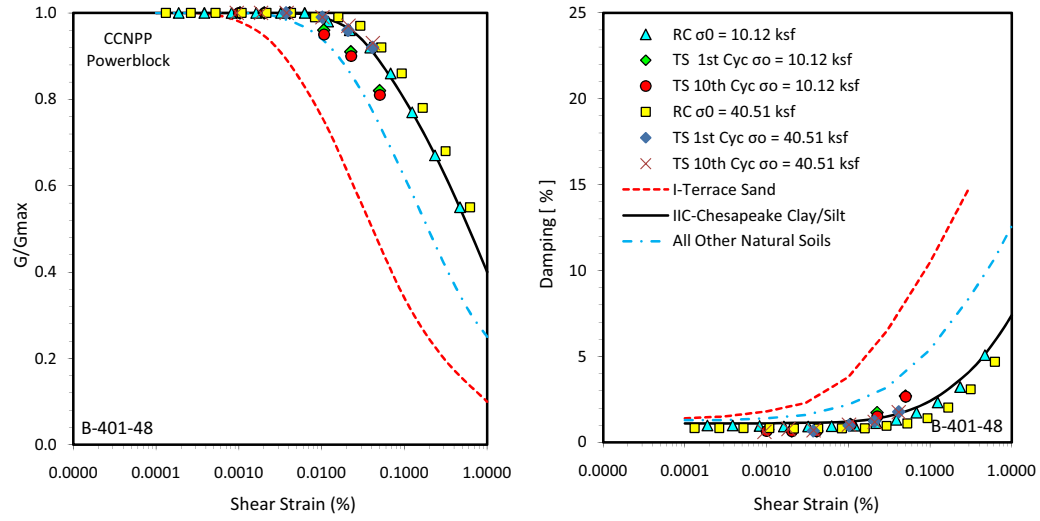
CC3-10-0270

Figure 2.5-120 — {RCTS Testing Sample B-401-67, Powerblock Area}



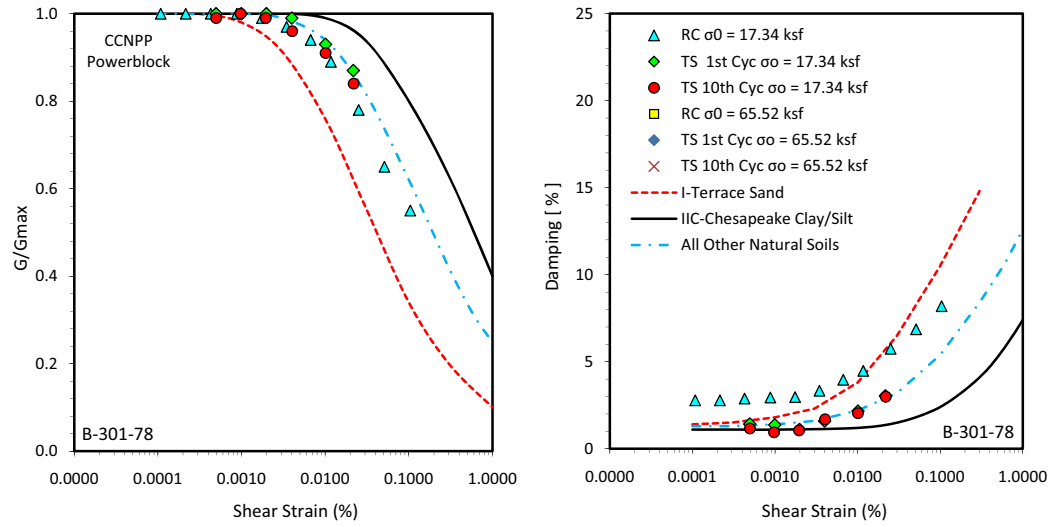
CC3-10-0270

Figure 2.5-121 — {RCTS Testing Sample B-401-48, Powerblock Area}



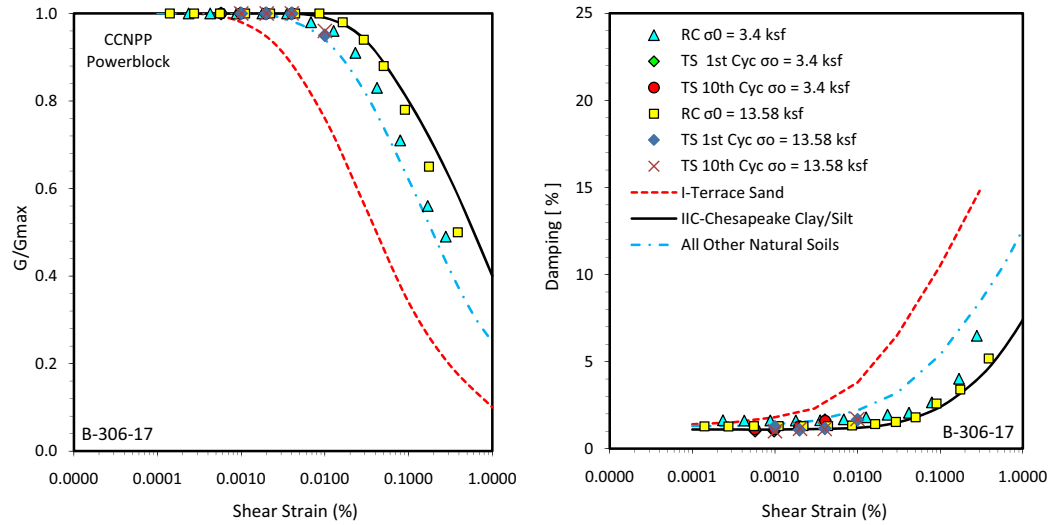
CC3-10-0270

Figure 2.5-122 — {RCTS Testing Sample B-301-78, Powerblock Area}



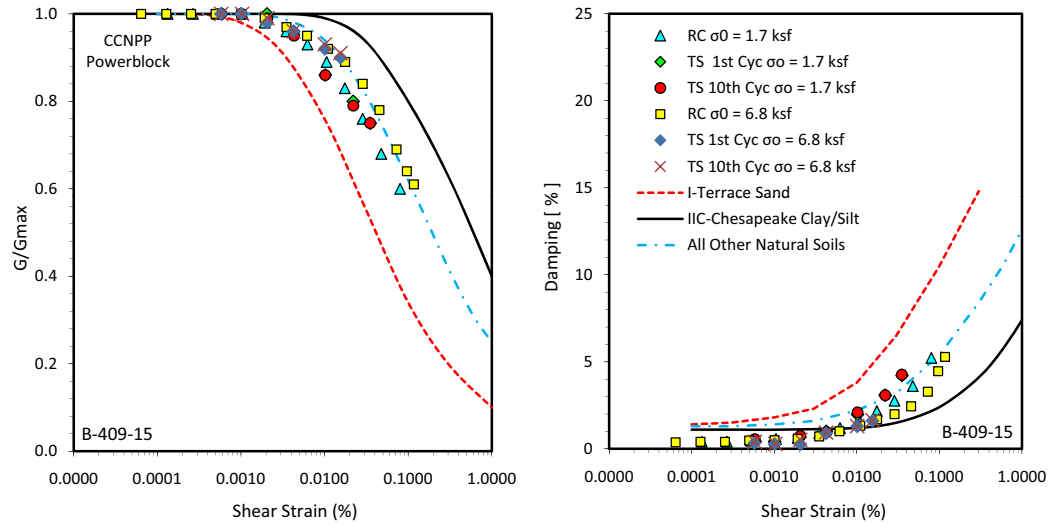
CC3-10-0270

Figure 2.5-123 — {RCTS Testing Sample B-306-17, Powerblock Area}



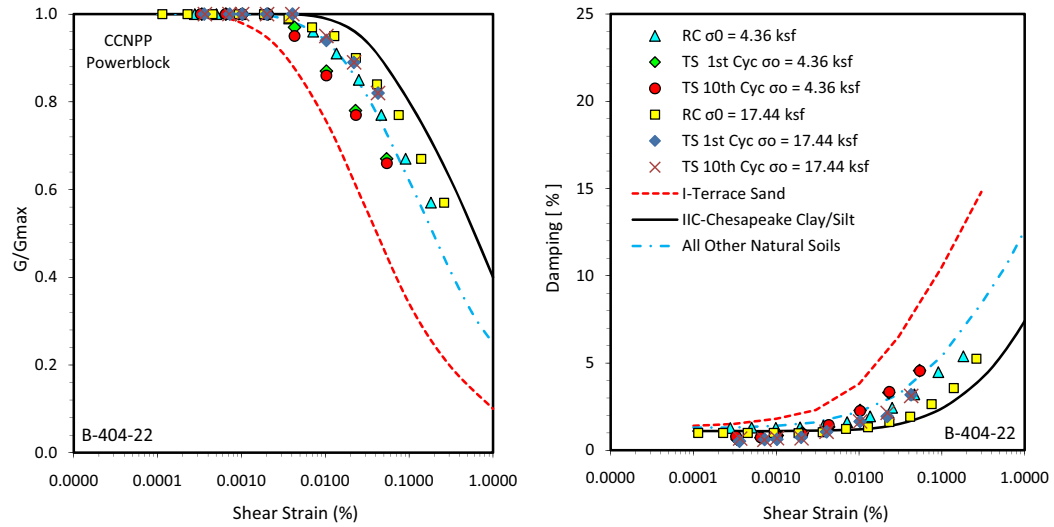
CC3-10-0270

Figure 2.5-124 — {RCTS Testing Sample B-409-15, Powerblock Area}



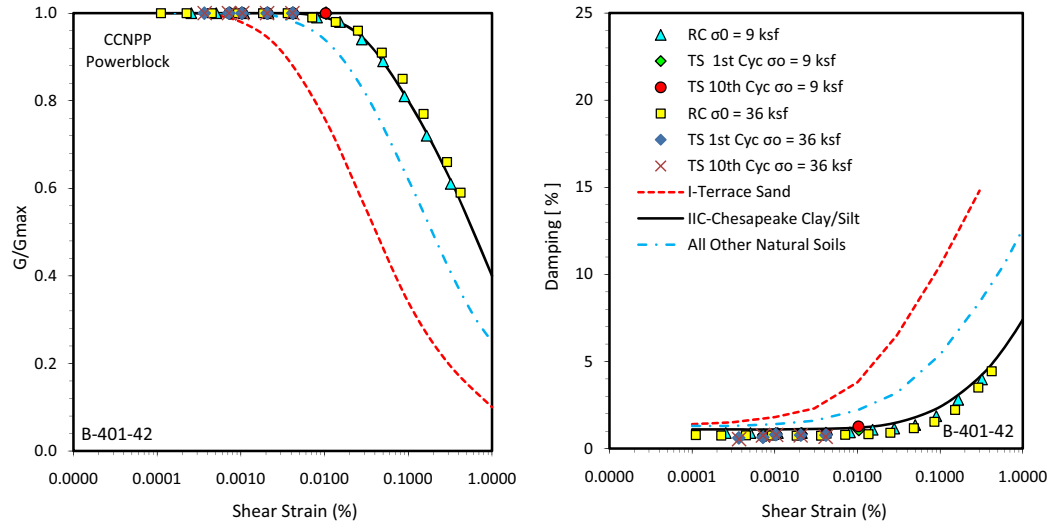
CC3-10-0270

Figure 2.5-125 — {RCTS Testing Sample B-404-22, Powerblock Area}



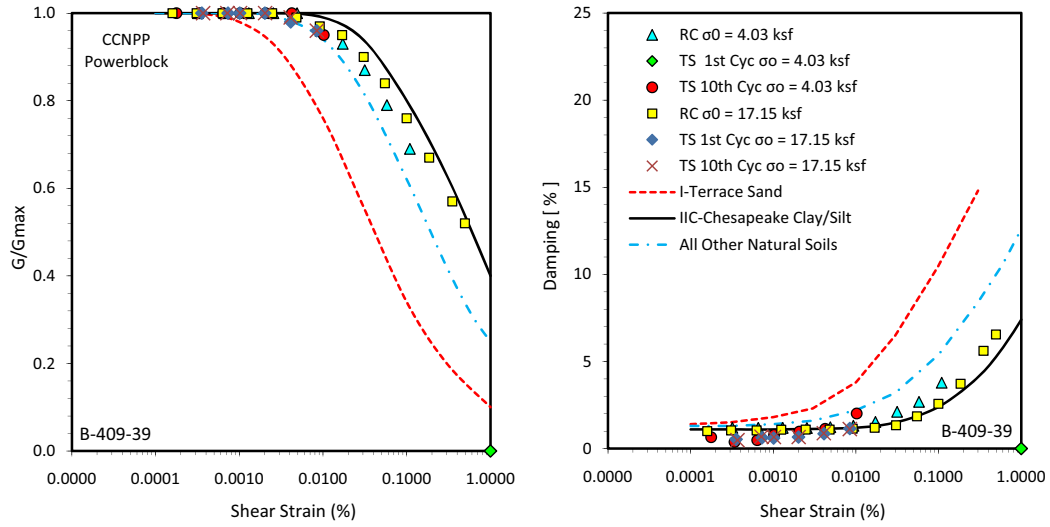
CC3-10-0270

Figure 2.5-126 — {RCTS Testing Sample B-401-42, Powerblock Area}



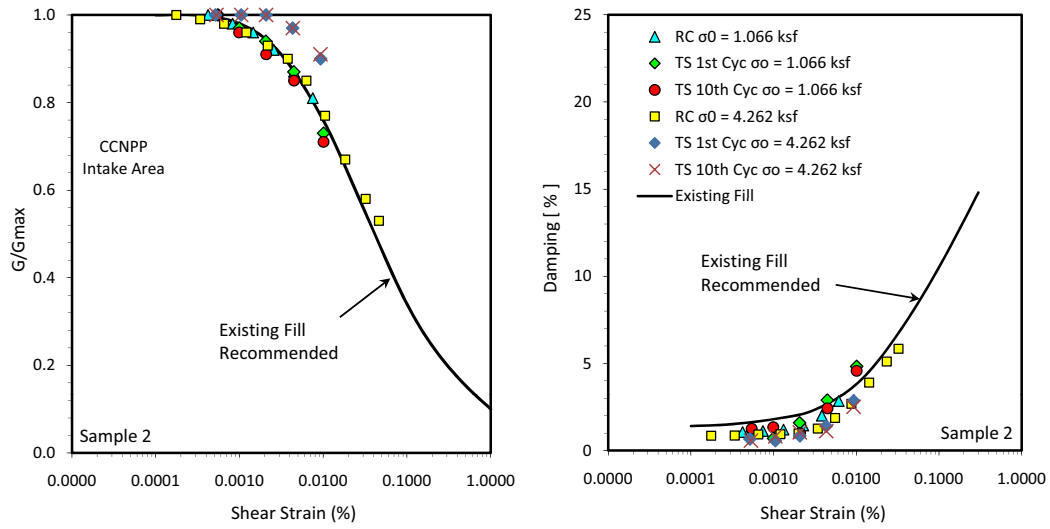
CC3-10-0270

Figure 2.5-127 — {RCTS Testing Sample B-409-39, Powerblock Area}



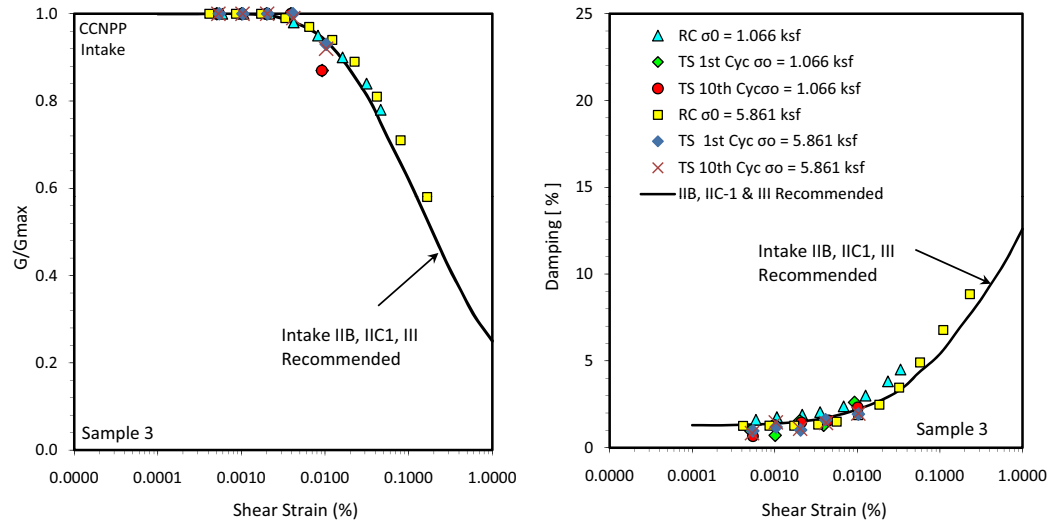
CC3-10-0270

Figure 2.5-128 — {RCTS Testing Sample B-773-2, Intake Area}



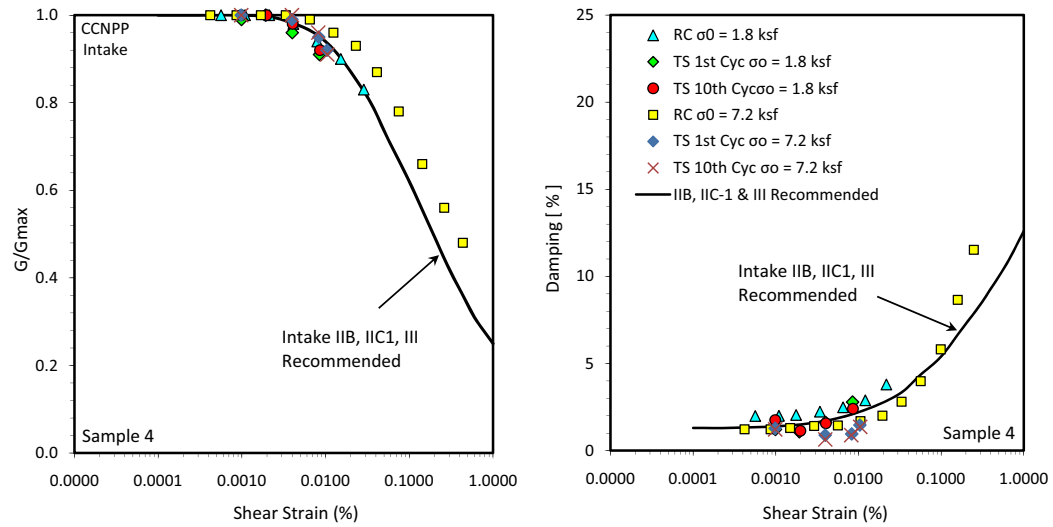
CC3-10-0270

Figure 2.5-129 — {RCTS Testing Sample B-773-3, Intake Area}



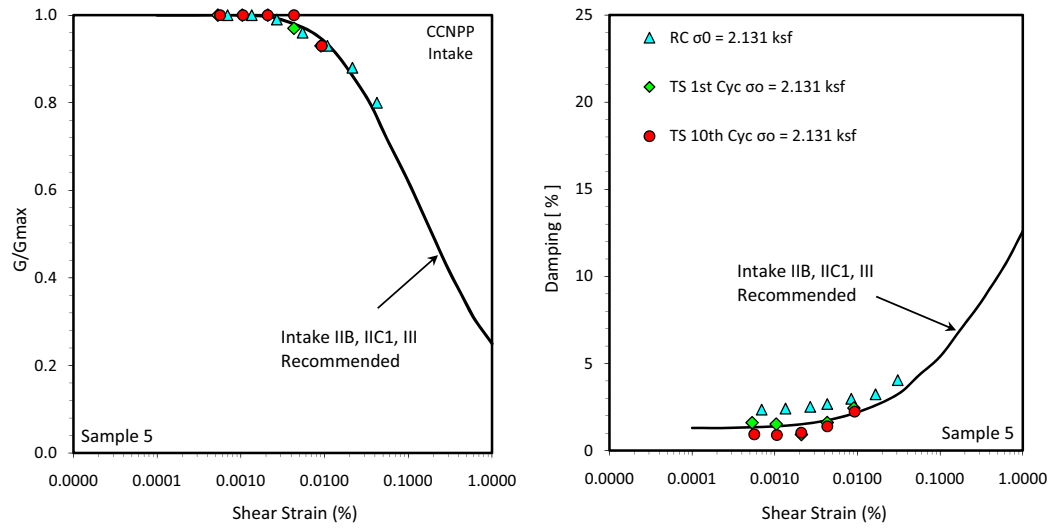
CC3-10-0270

Figure 2.5-130 — {RCTS Testing Sample B-773-4, Intake Area}



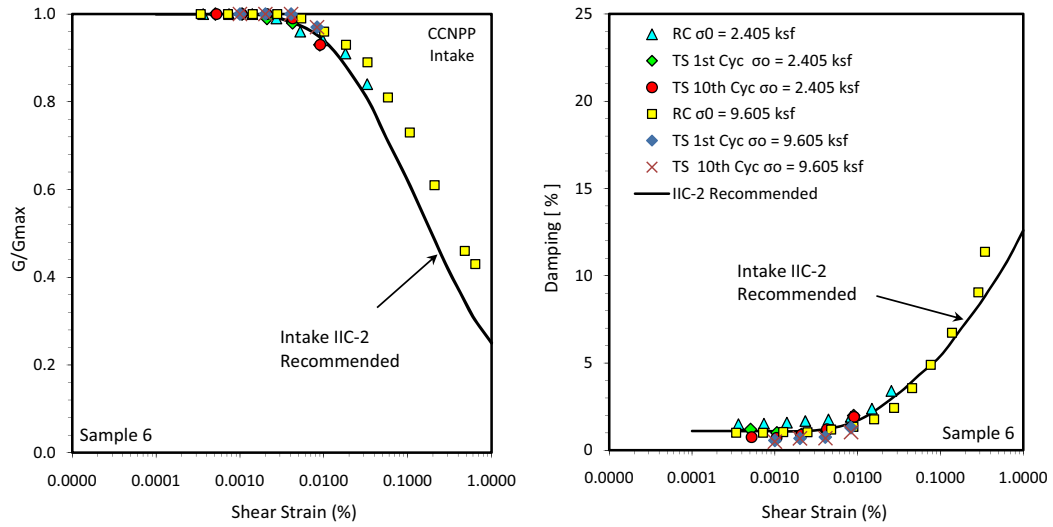
CC3-10-0270

Figure 2.5-131 — {RCTS Testing Sample B-773-5, Intake Area}



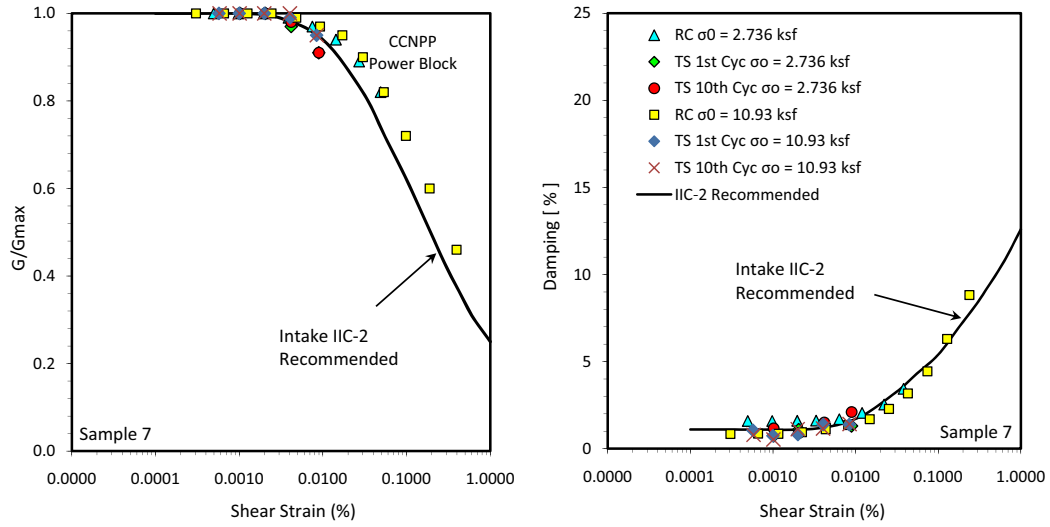
CC3-10-0270

Figure 2.5-132 — {RCTS Testing Sample B-773-6, Intake Area}



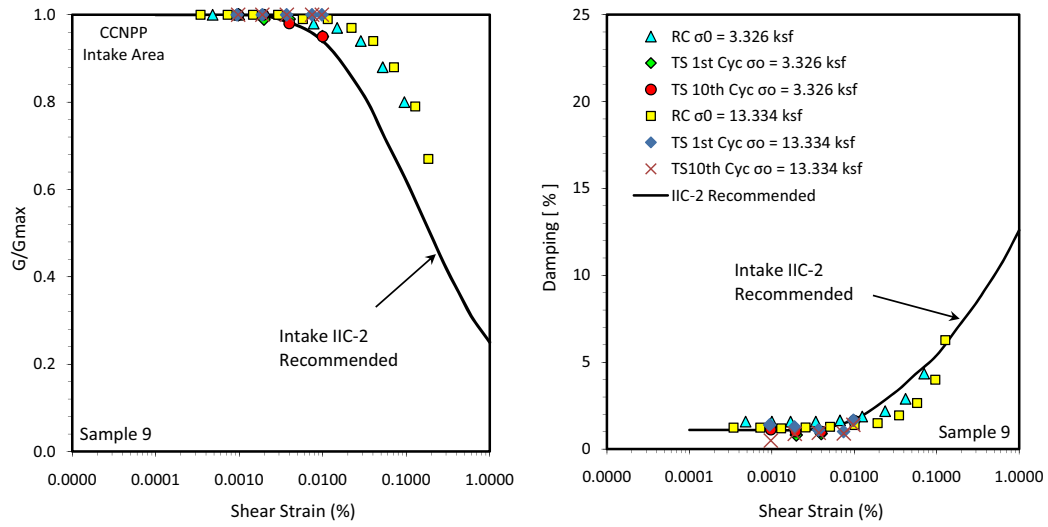
CC3-10-0270

Figure 2.5-133 — }RCTS Testing Sample B-773-7, Intake Area}



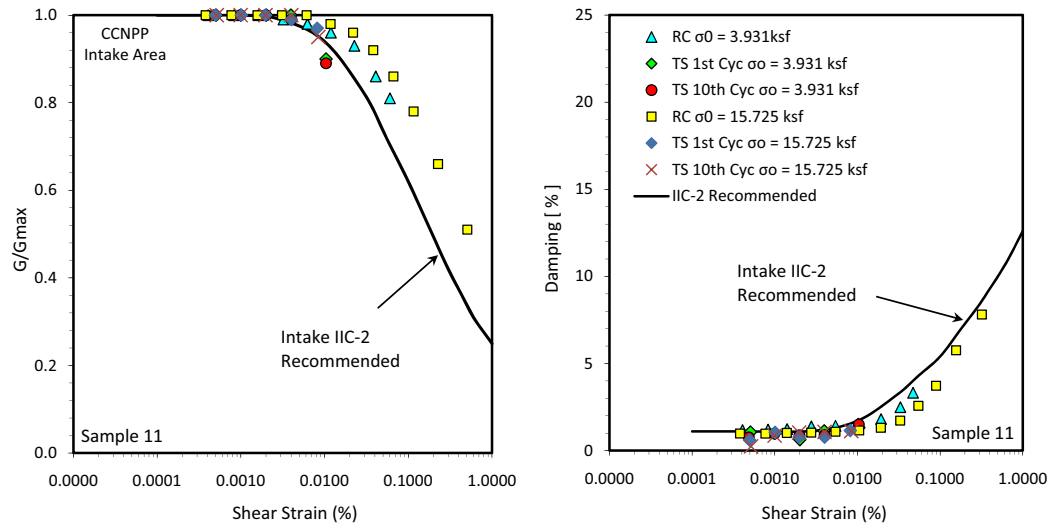
CC3-10-0270

Figure 2.5-134 — {RCTS Testing Sample B-773-9, Intake Area}



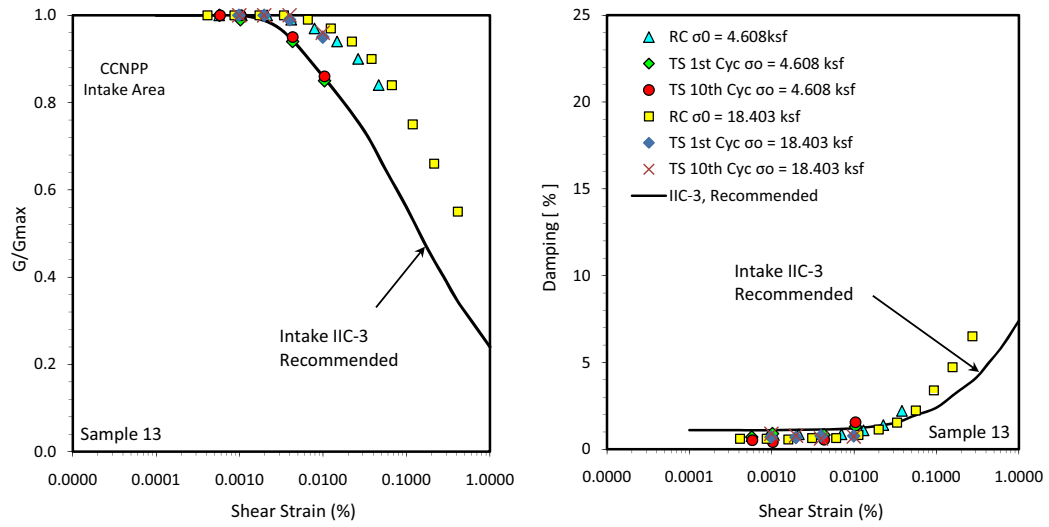
CC3-10-0270

Figure 2.5-135 — {RCTS Testing Sample B-773-11, Intake Area}



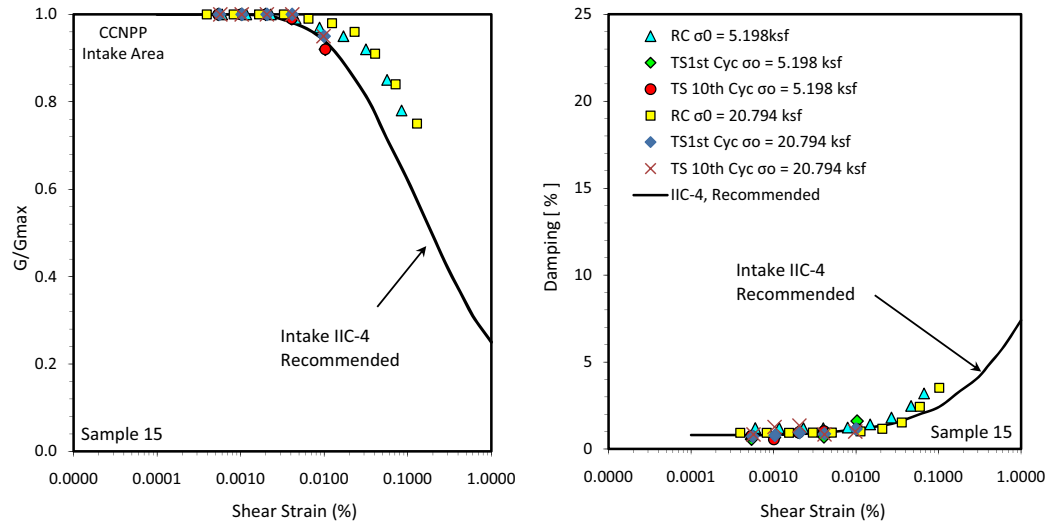
CC3-10-0270

Figure 2.5-136 — {RCTS Testing Sample B-773-13, Intake Area}



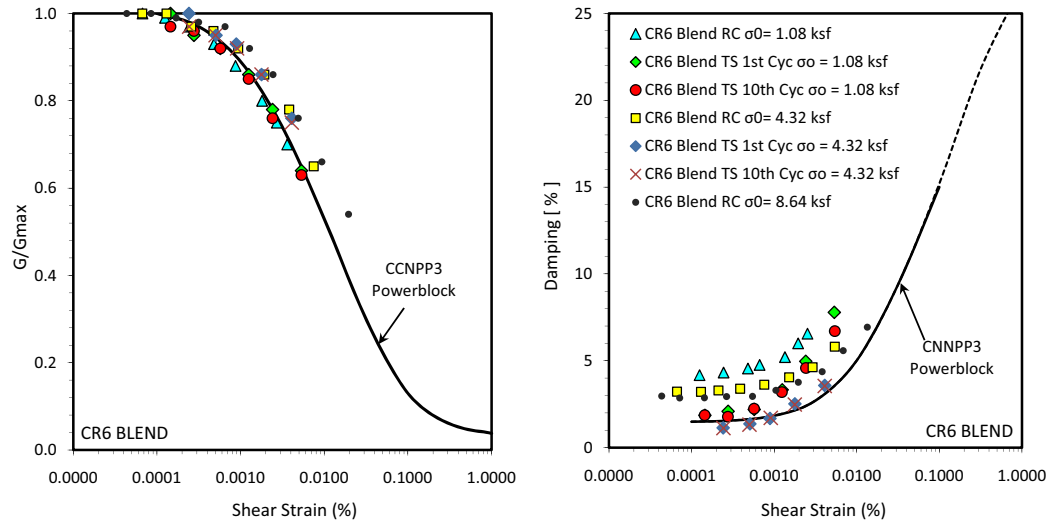
CC3-10-0270

Figure 2.5-137 — {RCTS Testing Sample B-773-15, Intake Area}



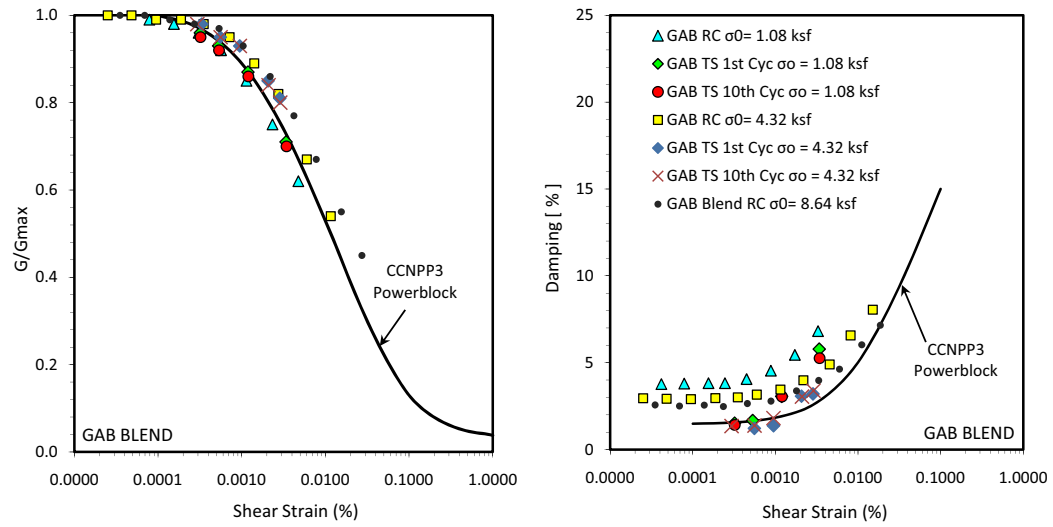
CC3-10-0270

Figure 2.5-138 — {RCTS Testing Sample CR6 Blend, Backfill}



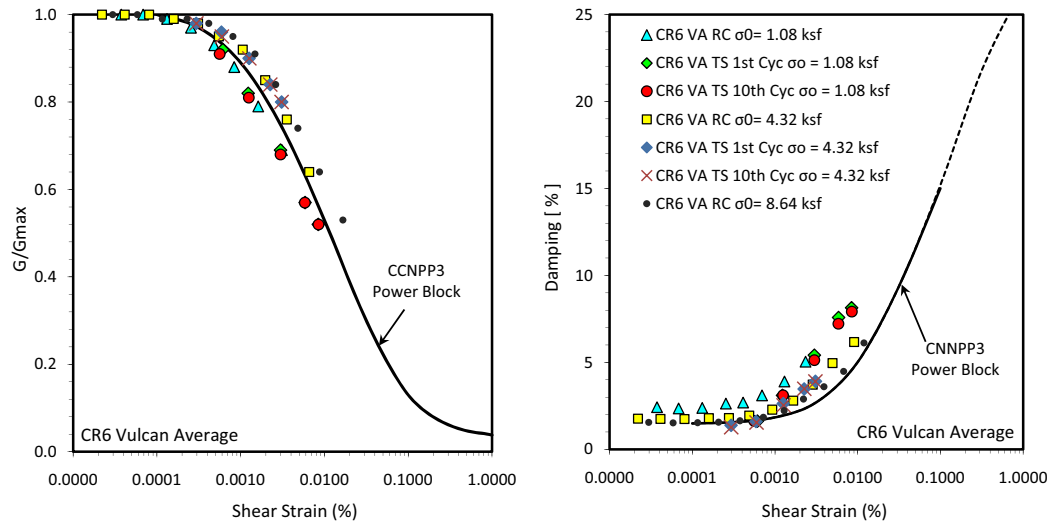
CC3-10-0270

Figure 2.5-139 — {RCTS Testing Sample GAB Blend, Backfill}



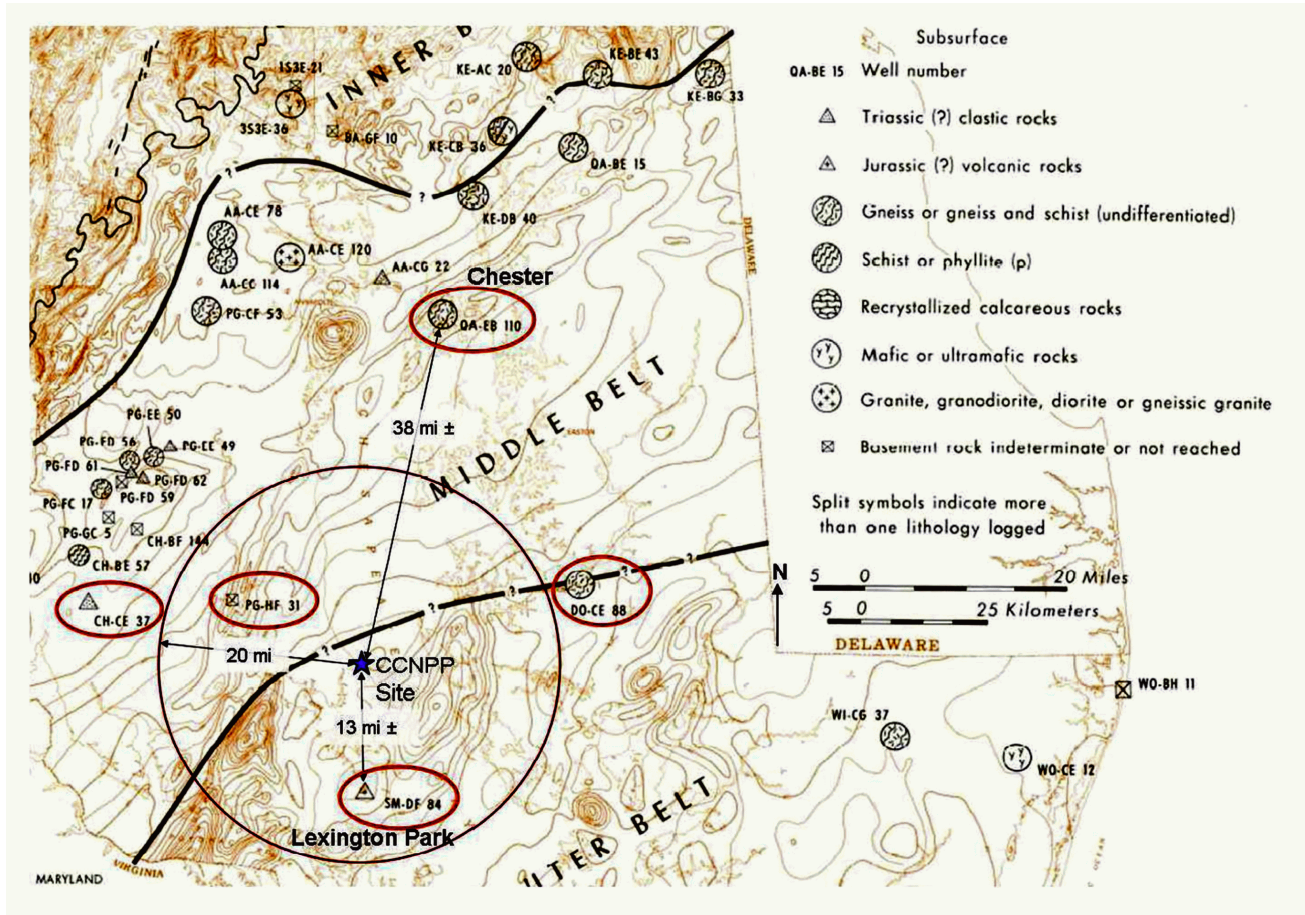
CC3-10-0270

Figure 2.5-140 — {RCTS Testing Sample CR6 Vulcan Average, Backfill}



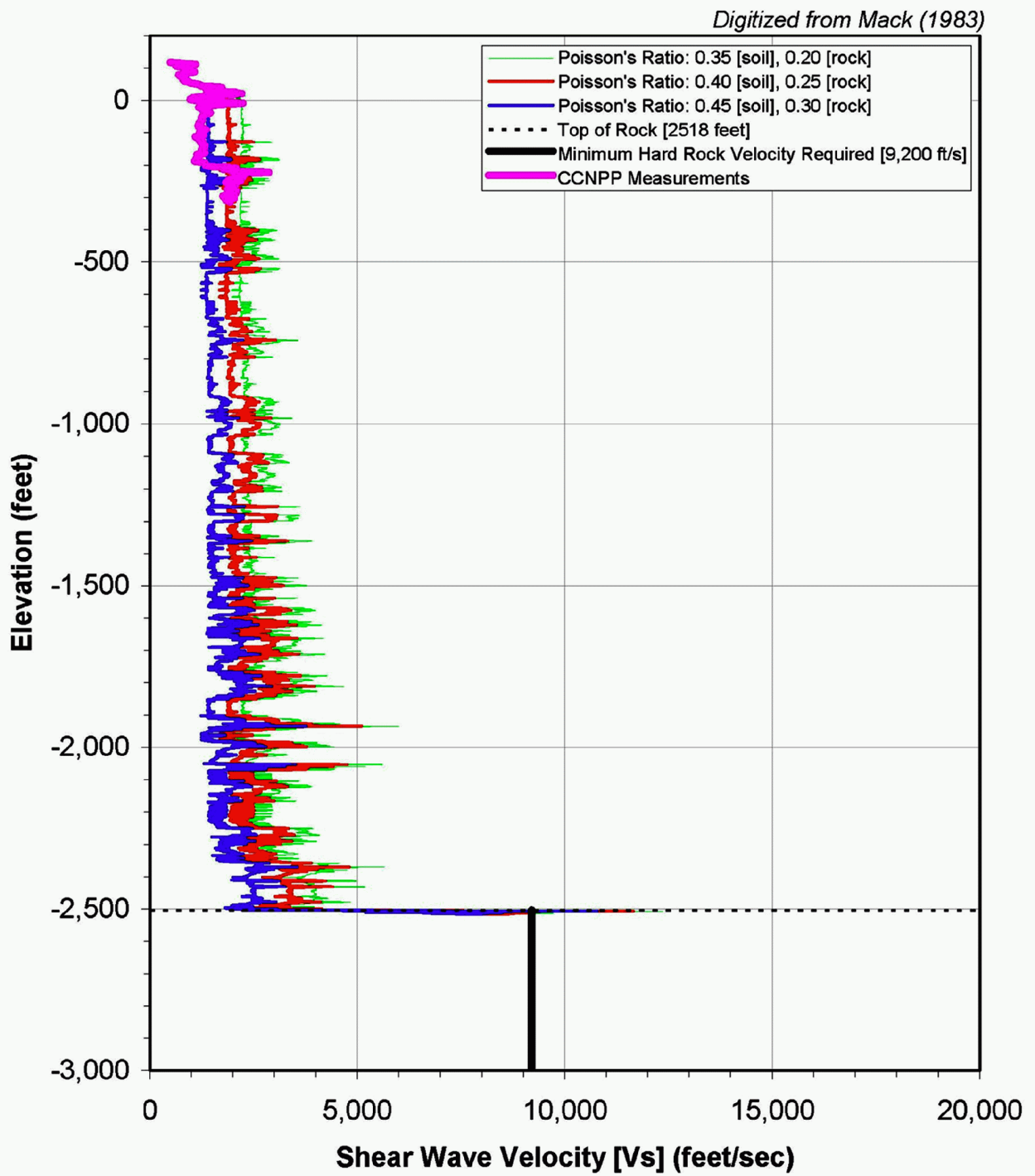
CC3-10-0270

Figure 2.5-141 — {Proximity of Chester and Lexington Park Sites to CCNPP}



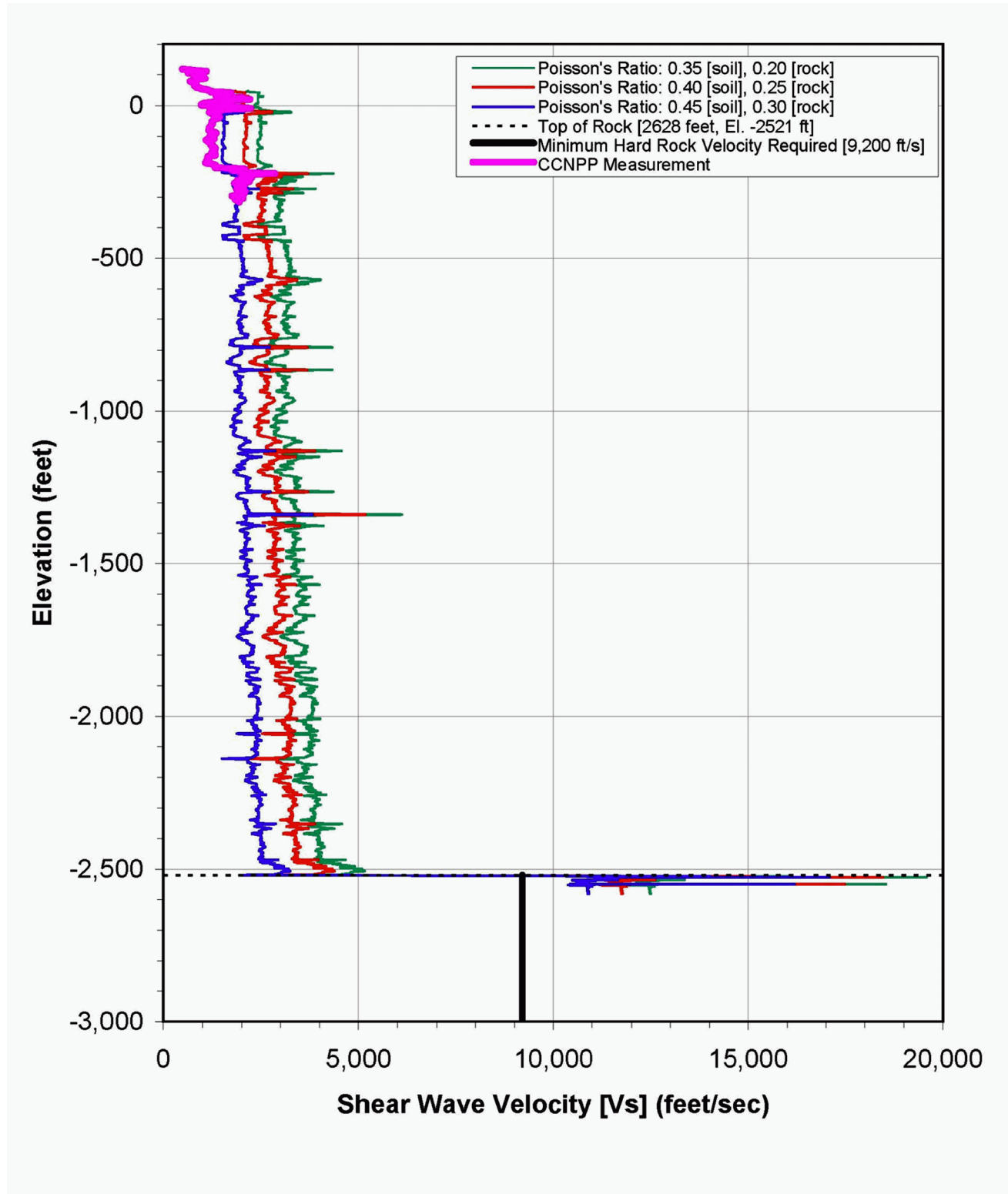
CC3-10-0270

Figure 2.5-142 — {Shear Wave Velocity Based on Chester (Kent Island) Measurements}



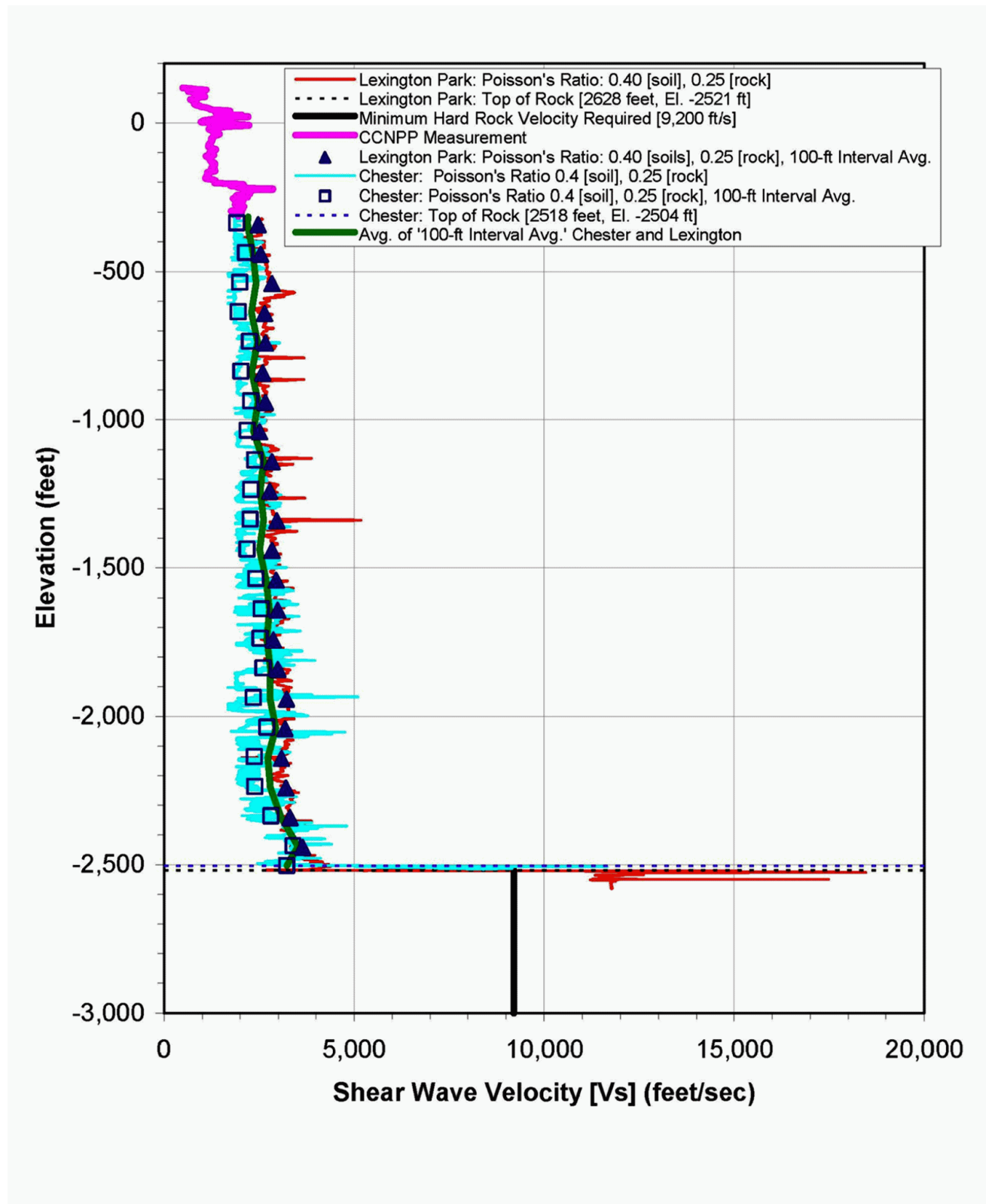
CC3-10-0270

Figure 2.5-143 — {Shear Wave Velocity Based on Lexington Park Measurements}



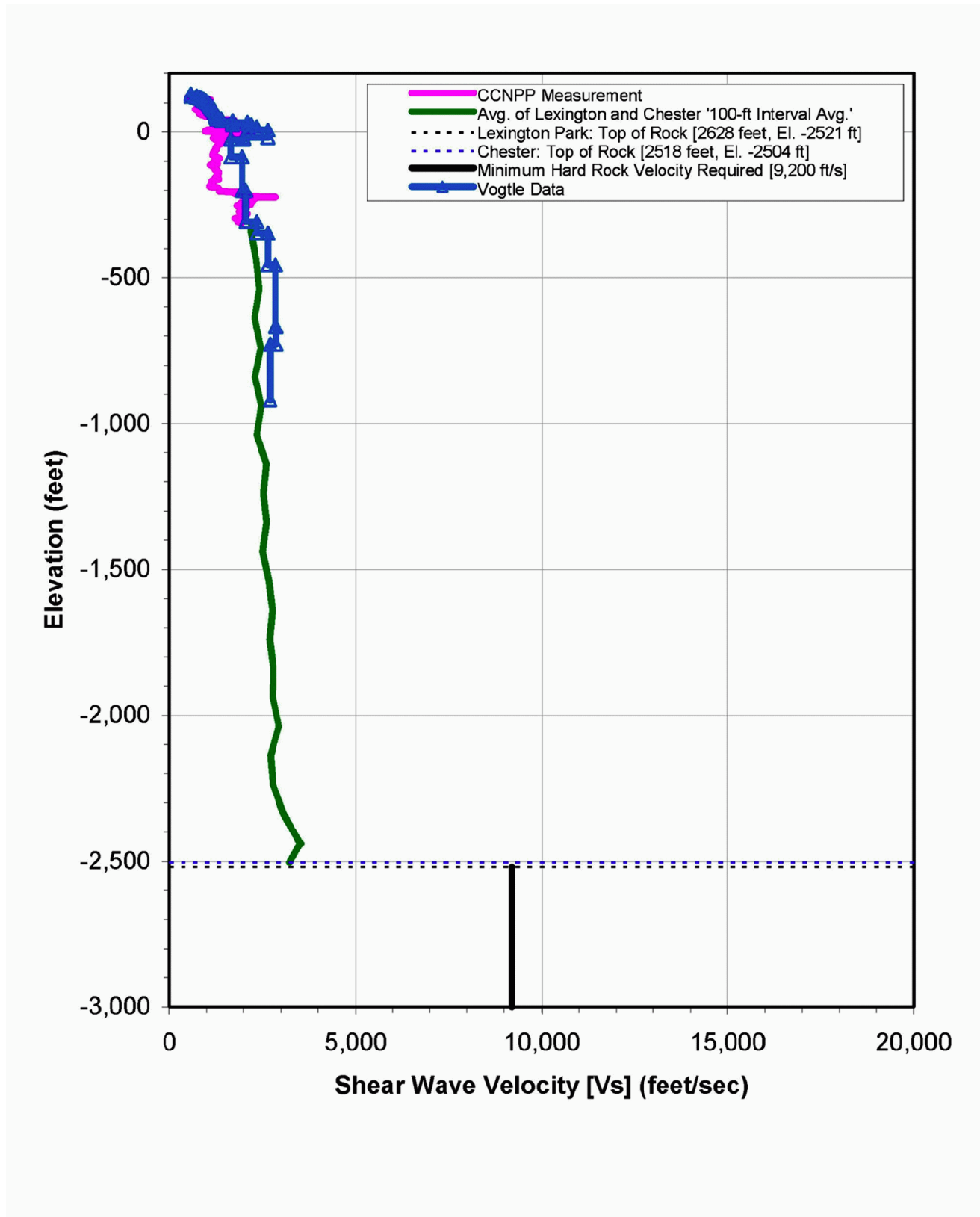
CC3-10-0270

Figure 2.5-144 — {{Smoothed and Averaged Vs Log for Chester and Lexington Park Measurements}}



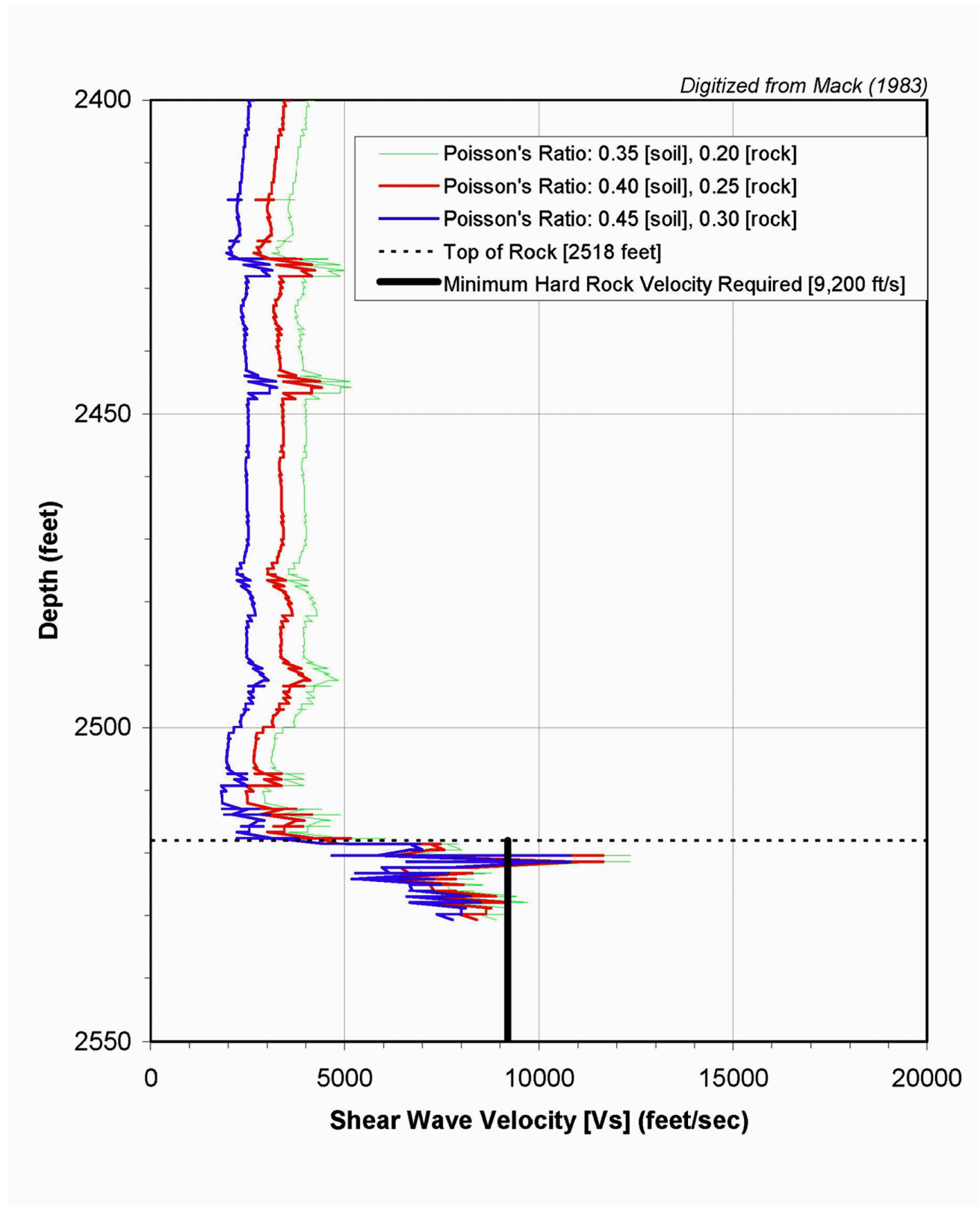
CC3-10-0270

Figure 2.5-145 — Average Vs, Chester, Lexington Park, Maryland and Deep Measurements in Coastal Plain Soils



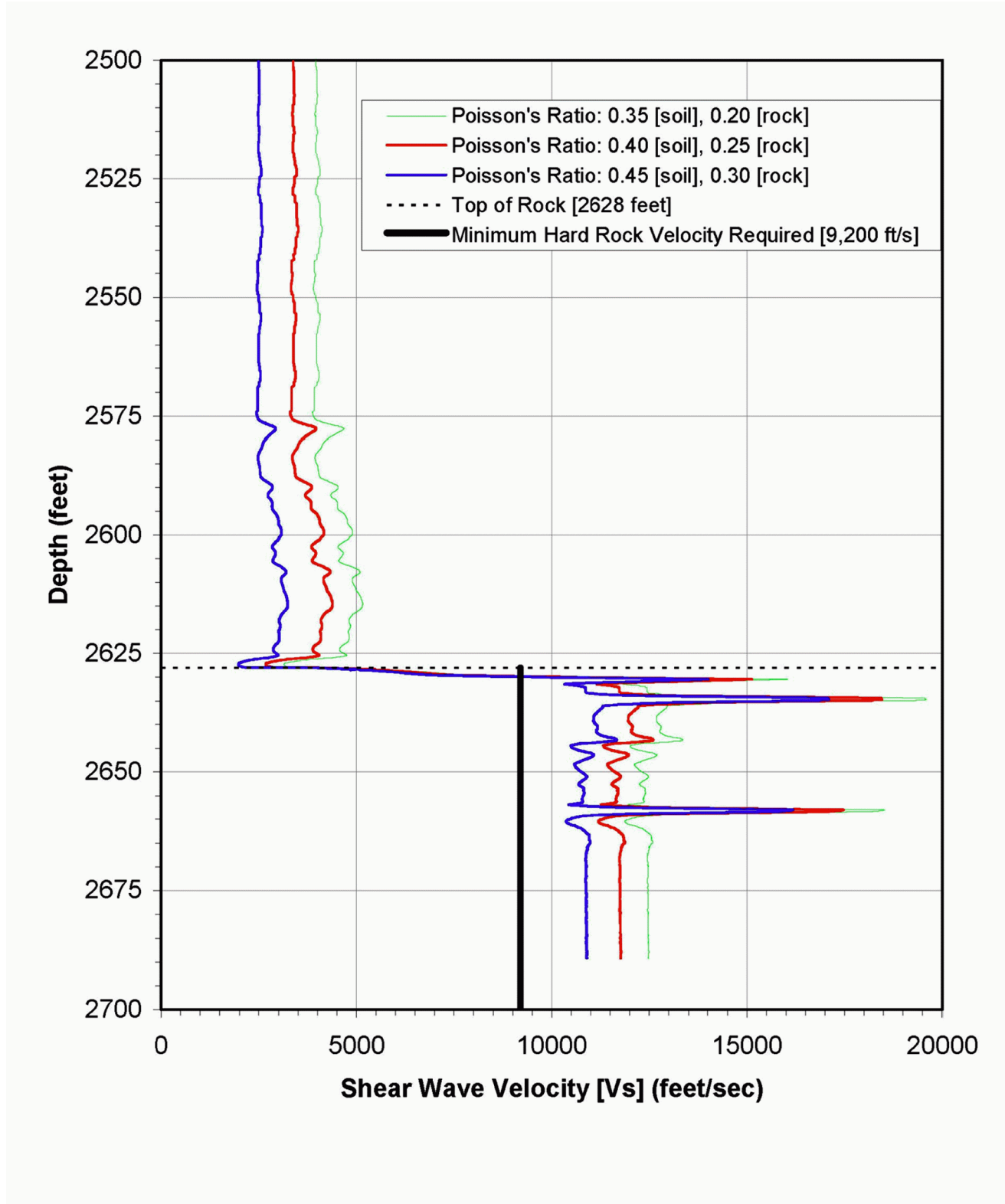
CC3-10-0270

Figure 2.5-146 — {Bedrock Vs Log for Chester (Kent Island), Maryland}



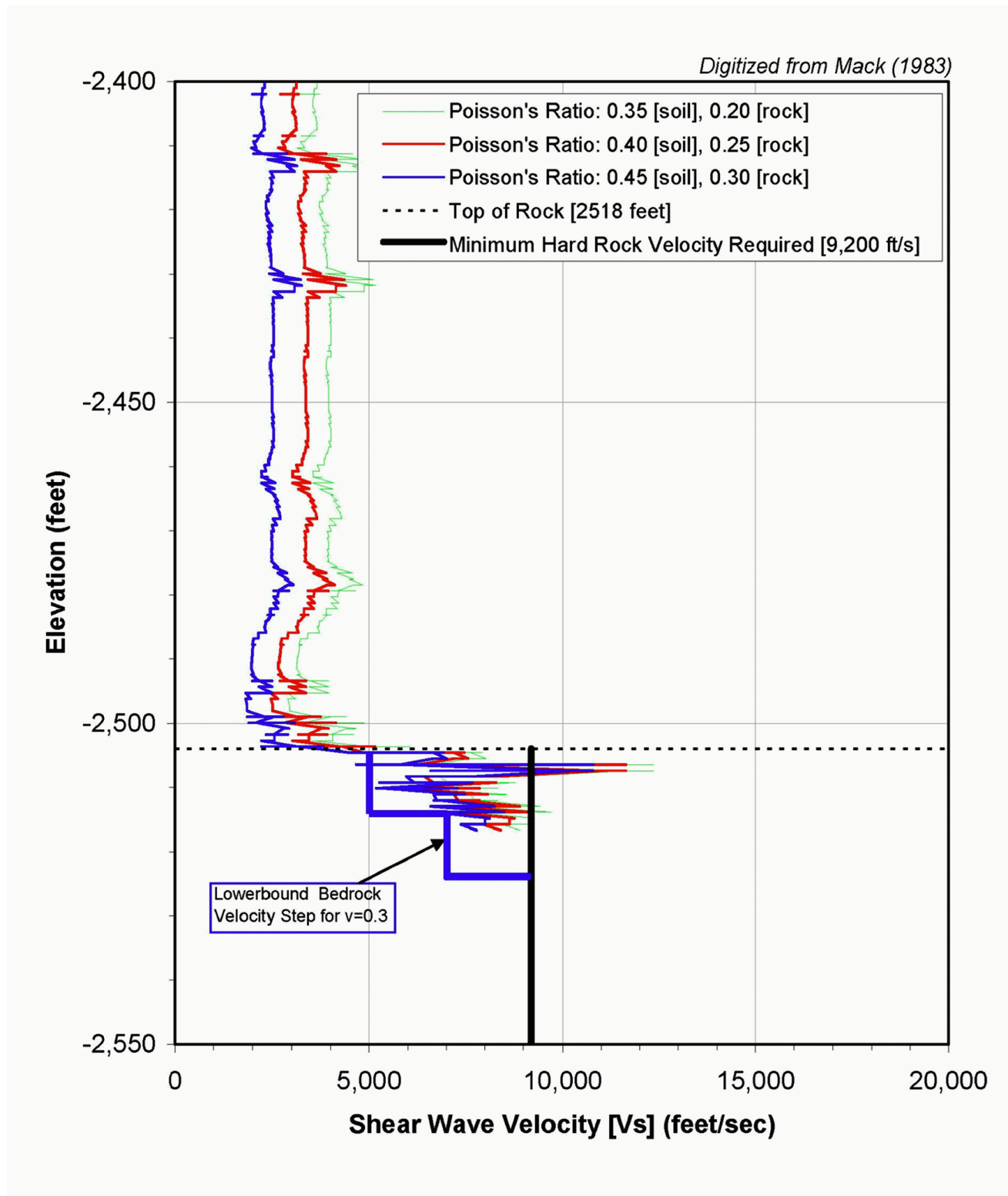
CC3-10-0270

Figure 2.5-147 — {Bedrock Vs Log for Lexington Park, Maryland}



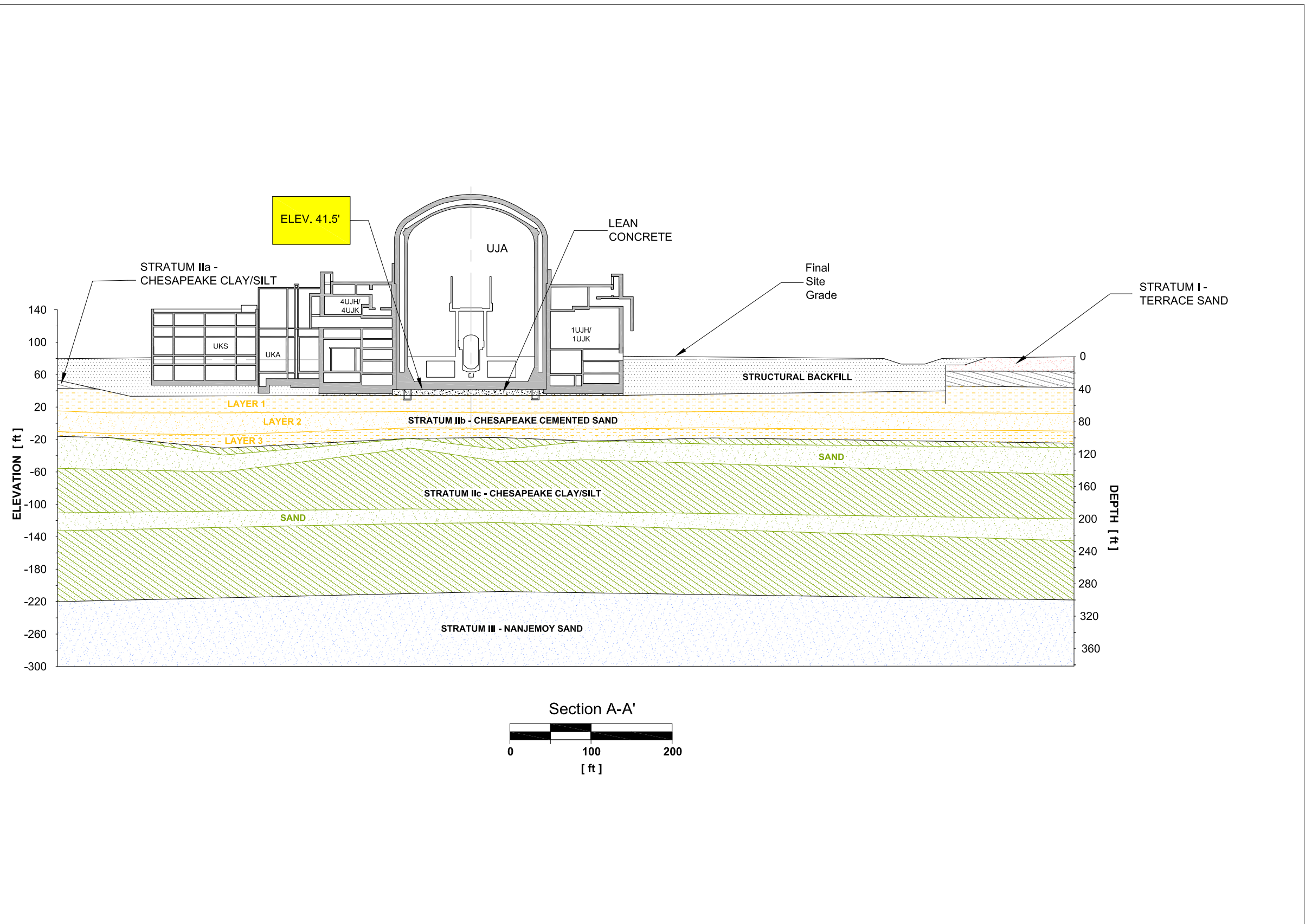
CC3-10-0270

Figure 2.5-148 — {Interpretation of Bedrock Velocity Gradient for Chester Measurement}



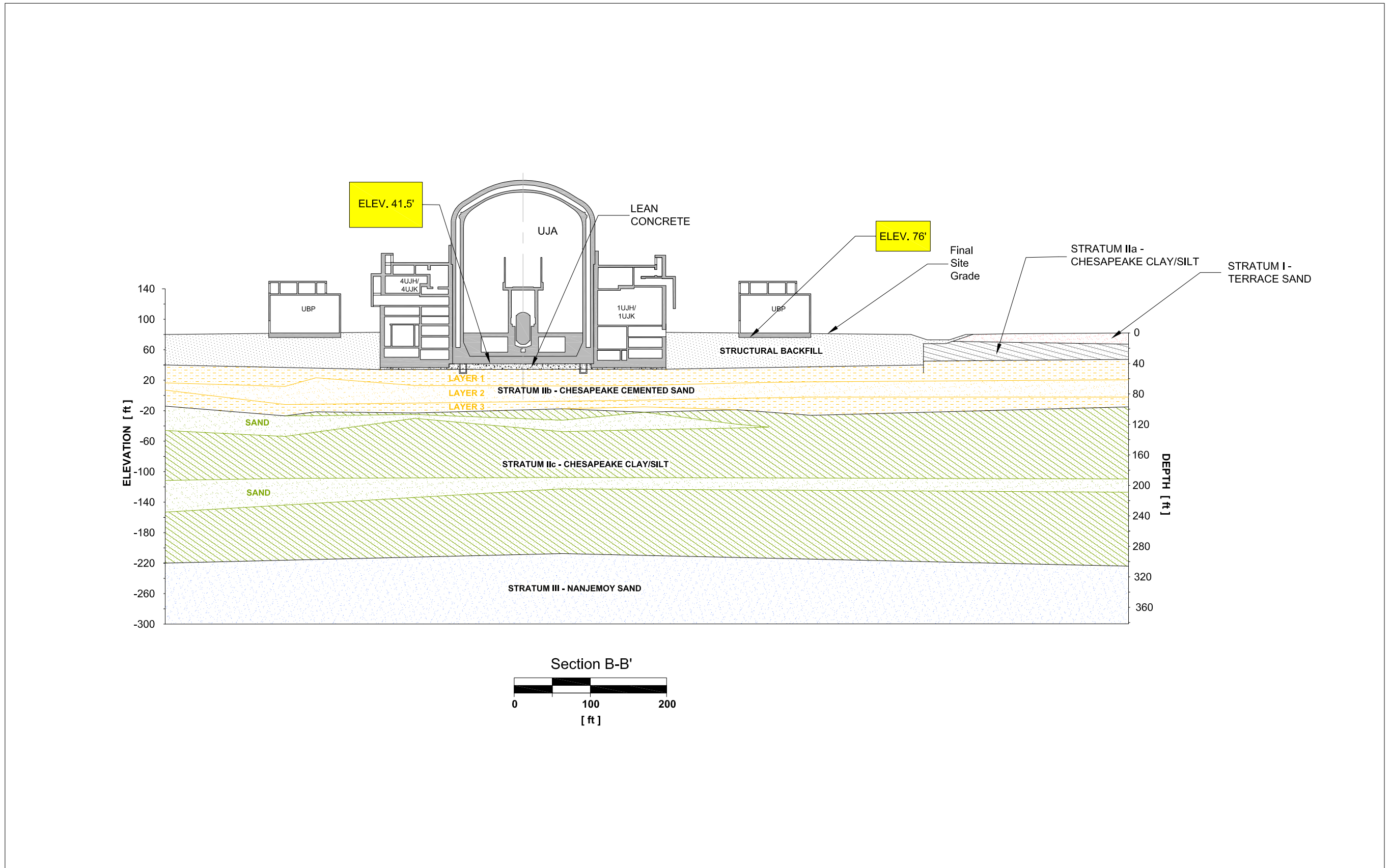
CC3-10-0270

Figure 2.5-149 — {Excavation Profile AA', Powerblock Area}



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Figure 2.5-150 — {Excavation Profile BB', Powerblock Area}



CC3-10-0270

Figure 2.5-151 — {Excavation Profile CC', Powerblock Area}

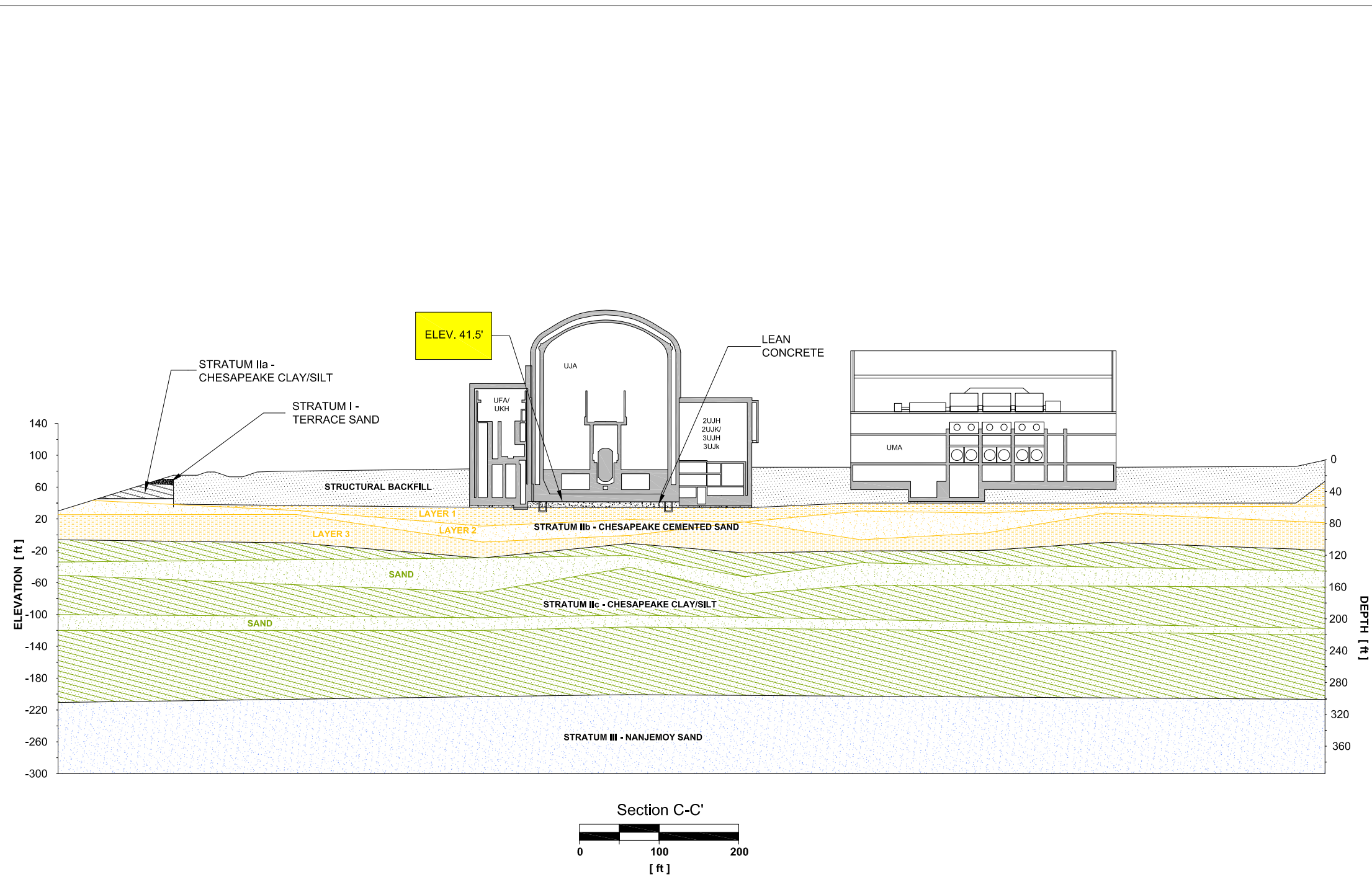
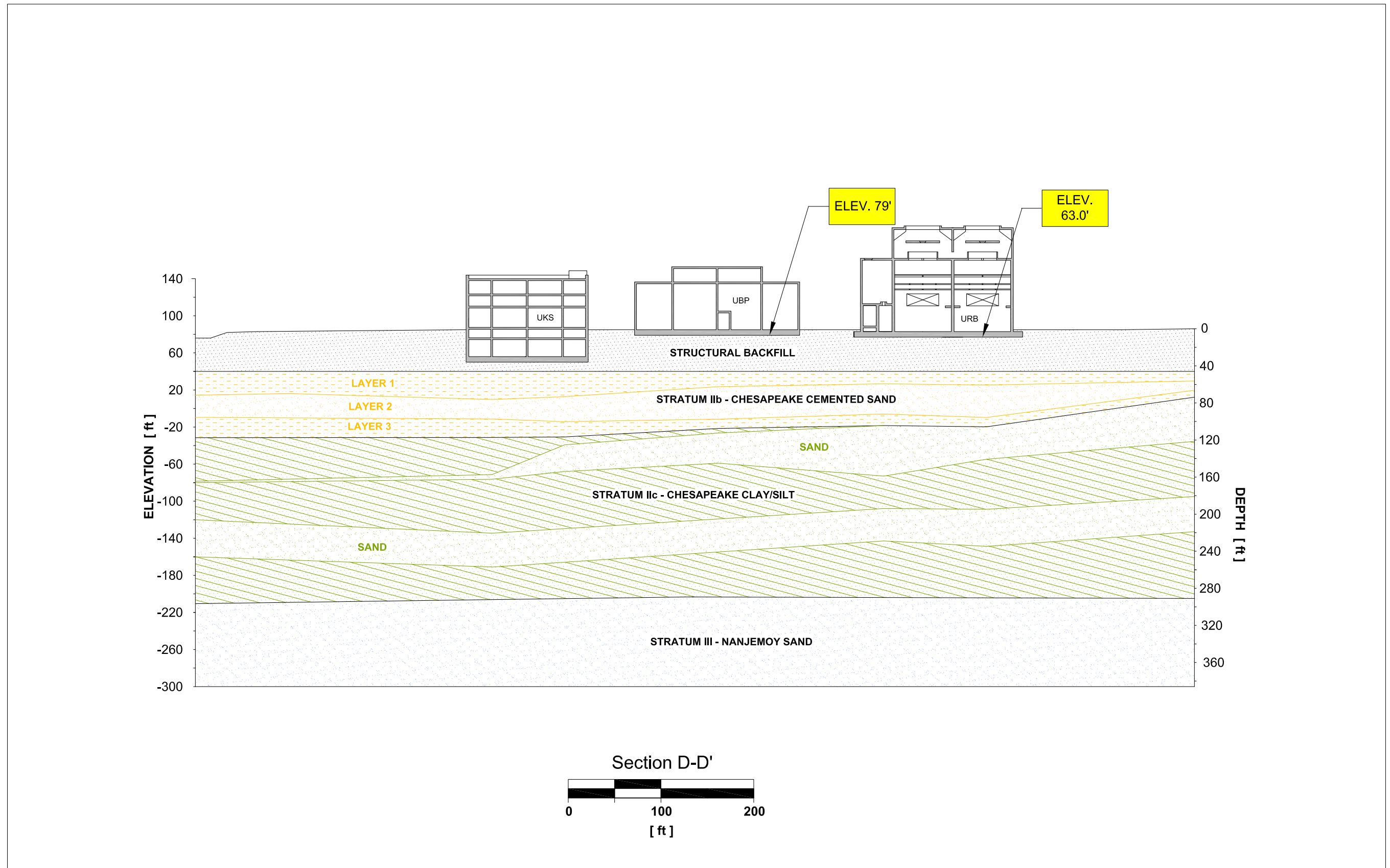
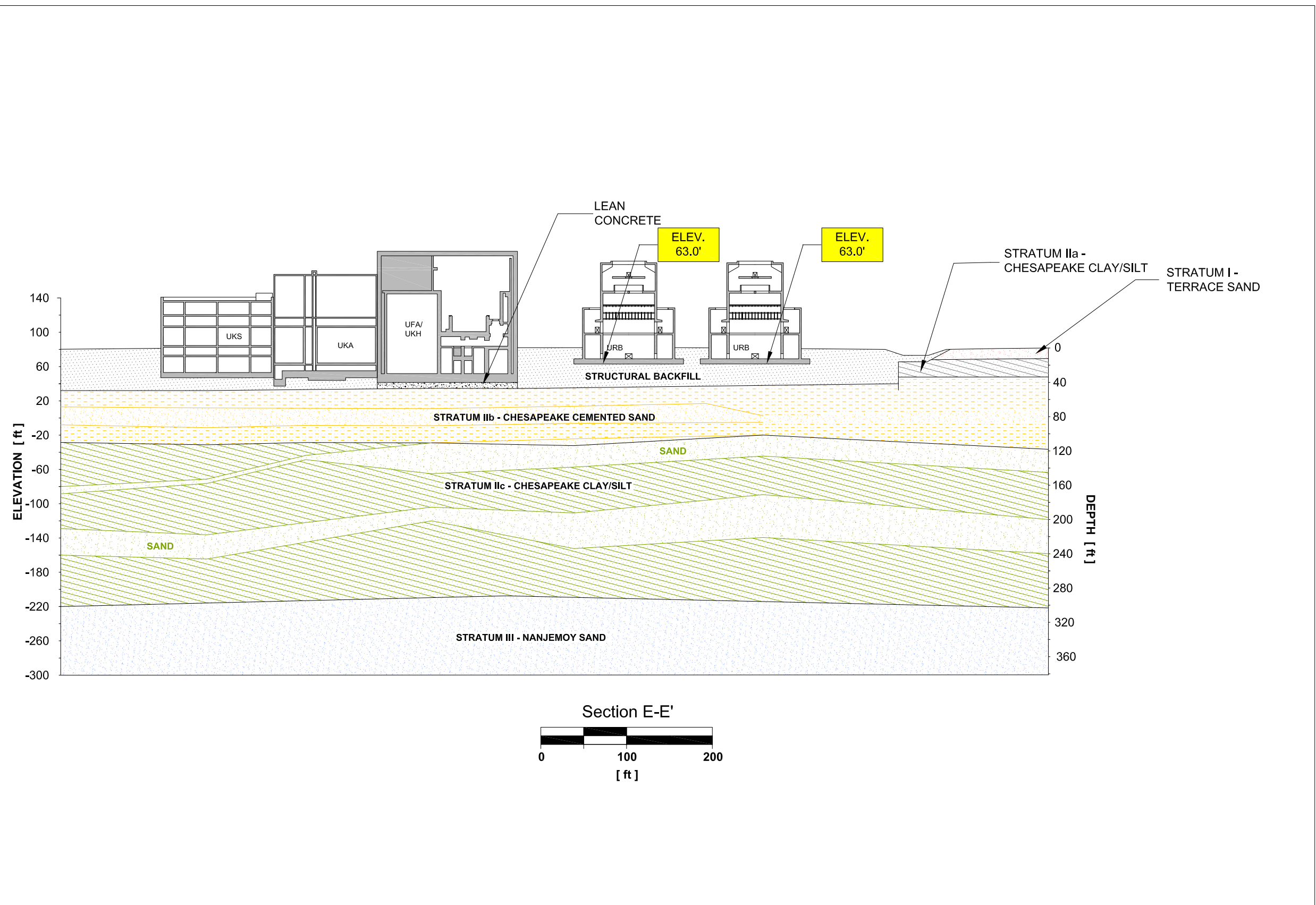


Figure 2.5-152 — {Excavation Profile DD', Powerblock Area}



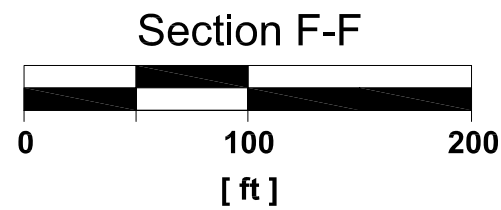
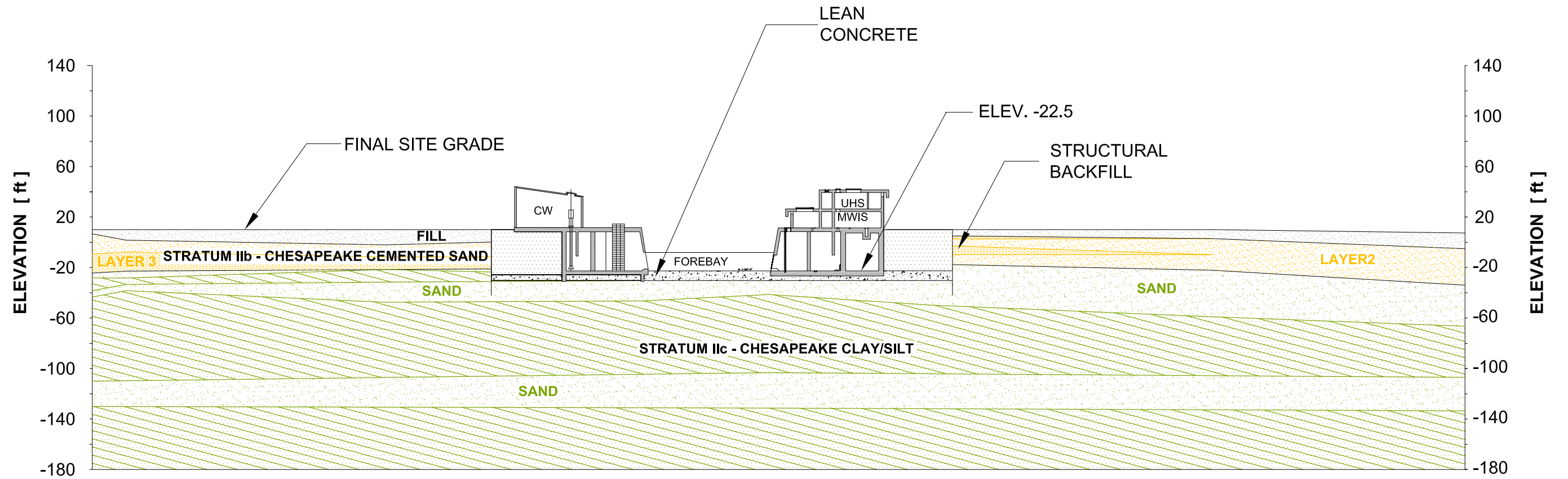
CC3-10-0270

Figure 2.5-153 — {Excavation Profile EE', Powerblock Area}



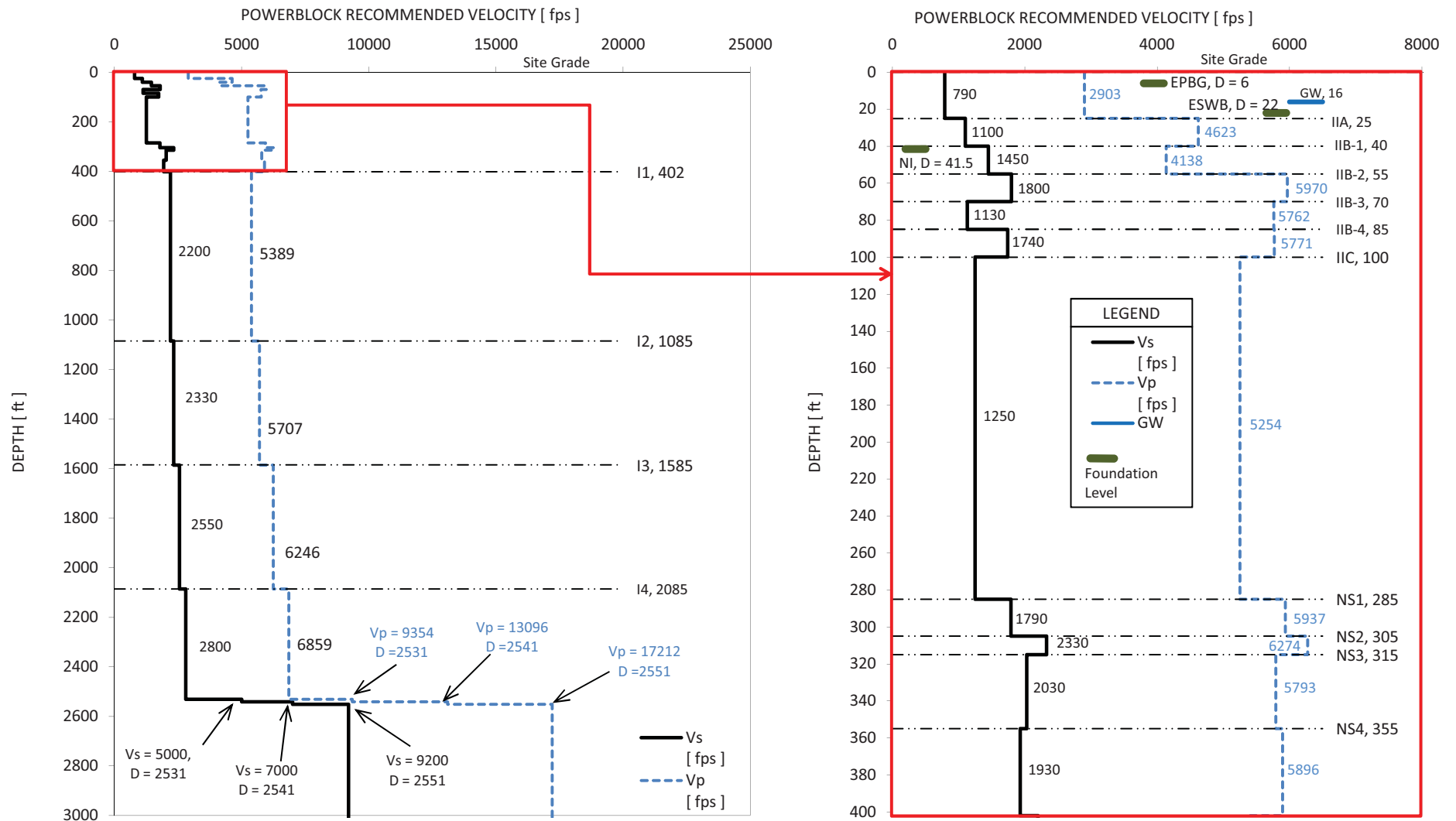
CC3-10-0270,
CC3-10-0302

Figure 2.5-154 — {Excavation Profile FF, Intake Area}



CC3-10-0270

Figure 2.5-155 — {Best Estimate Velocity Profiles, In-Situ condition, Powerblock Area}



CC3-10-0270

Figure 2.5-156 — {Best Estimate Velocity Profiles with Fill Placement, Powerblock Area}

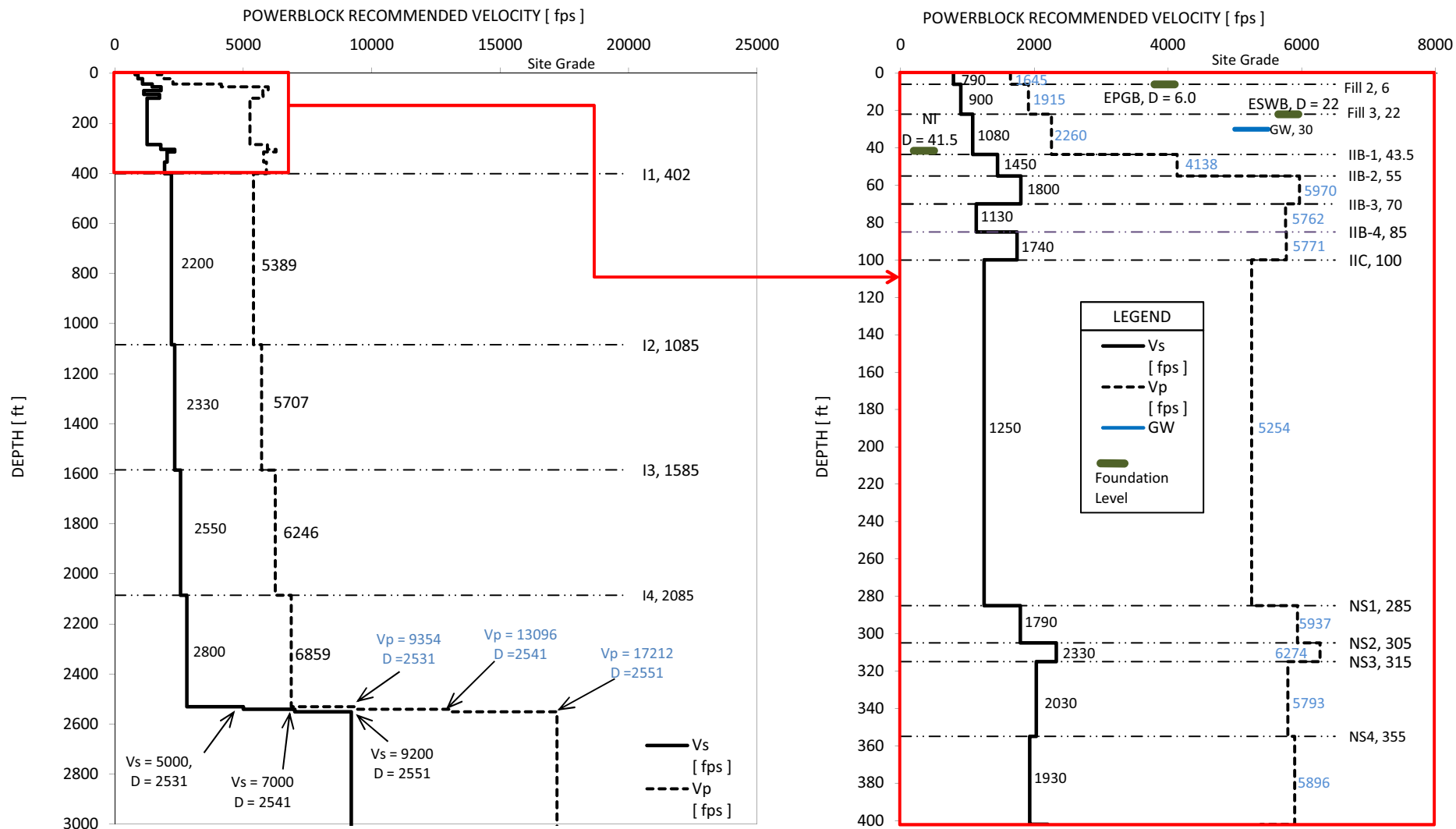
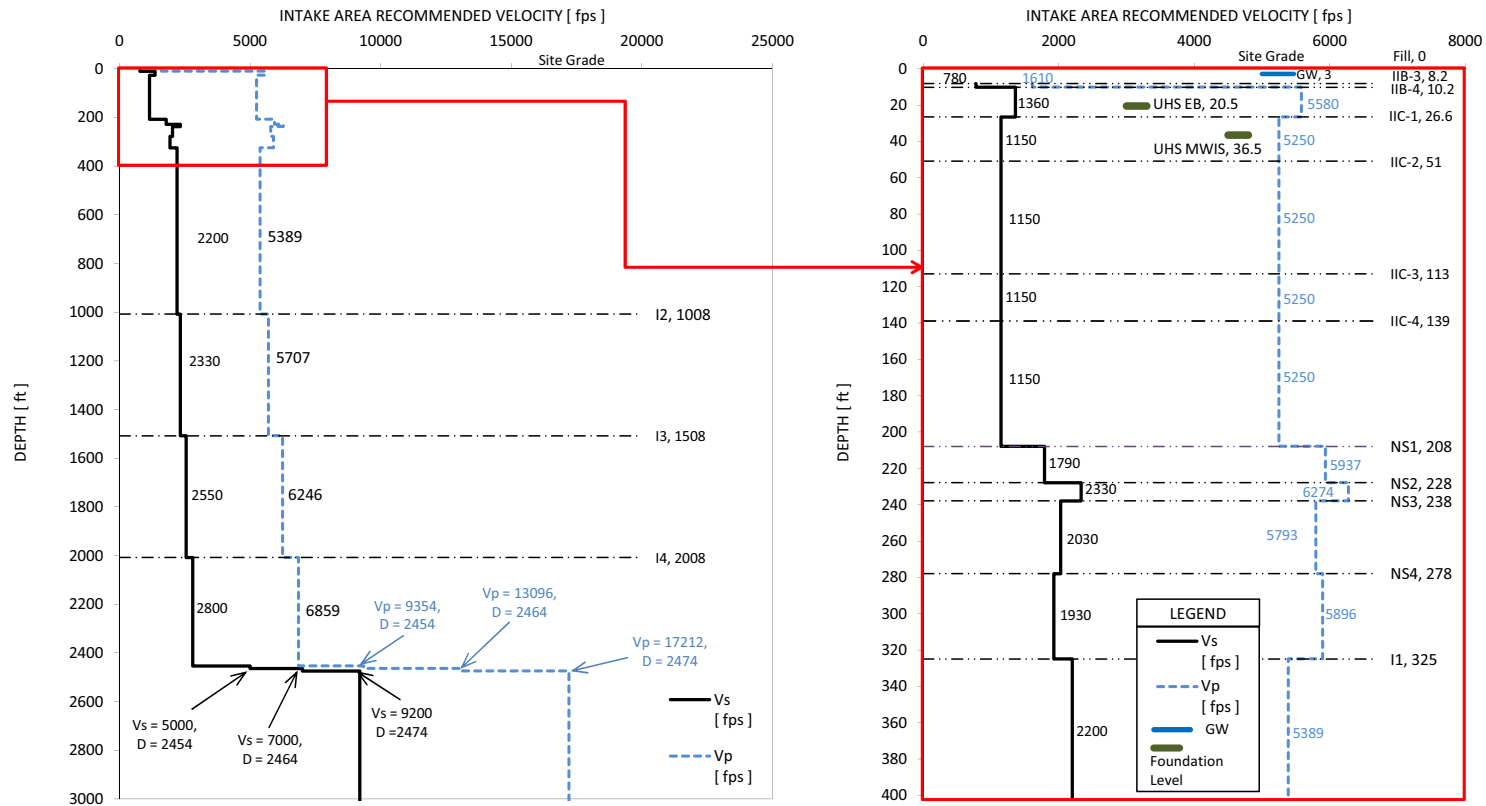
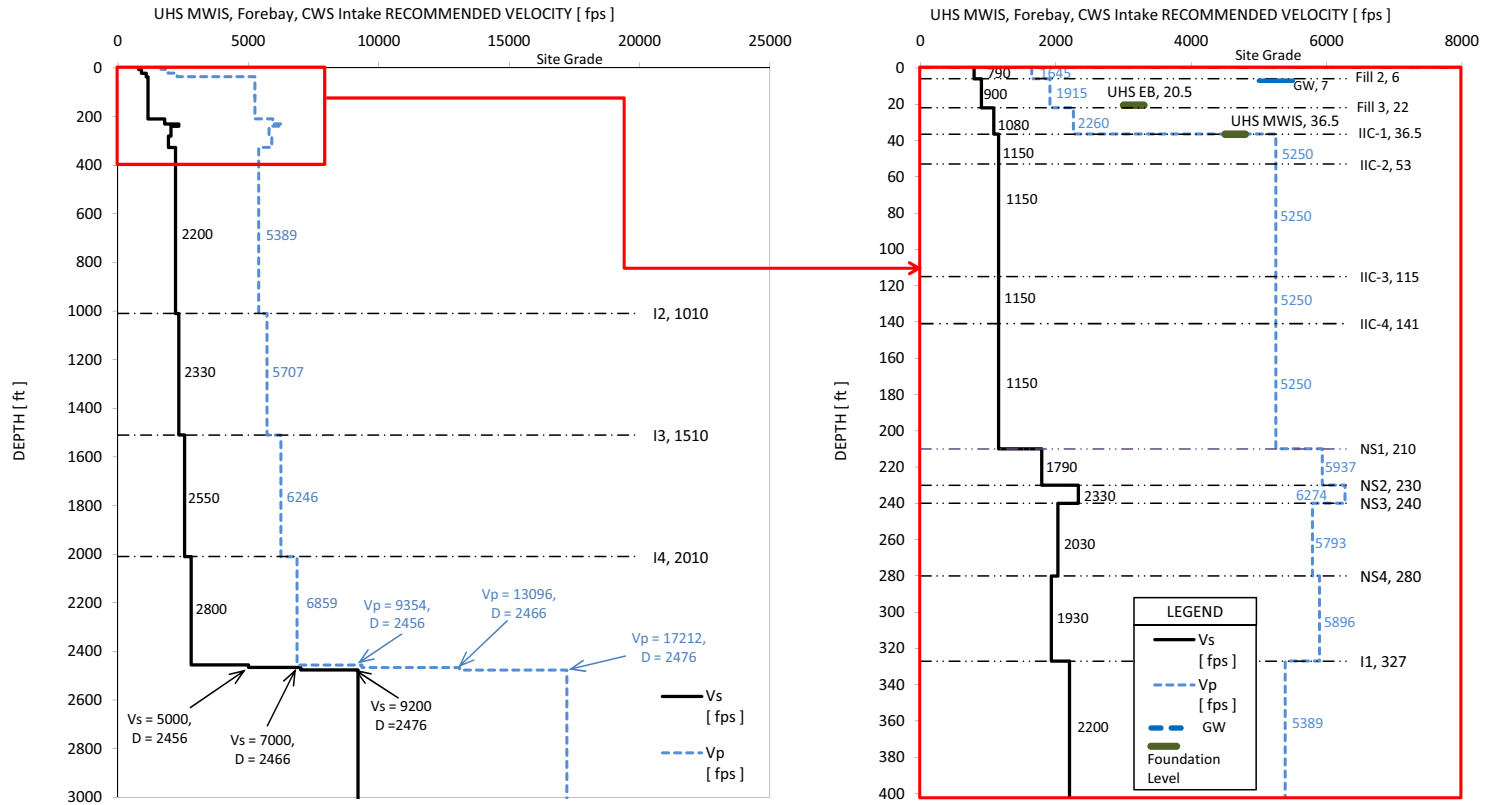


Figure 2.5-157 — {Best Estimate Velocity Profiles, In-Situ Condition, Intake Area}



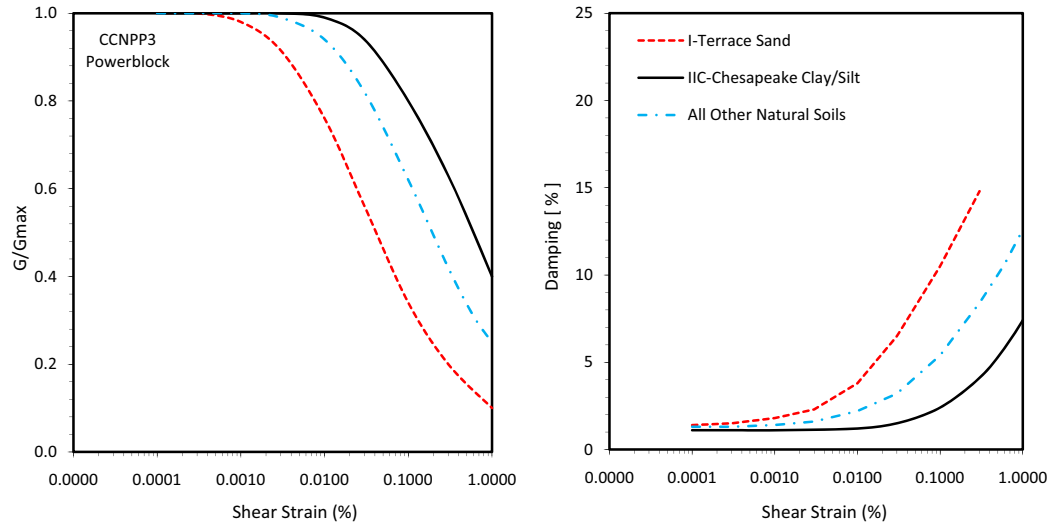
CC3-10-0270,
CC3-10-0302

Figure 2.5-158 — {Best Estimate Velocity Profiles with Fill Placement, Intake Area}



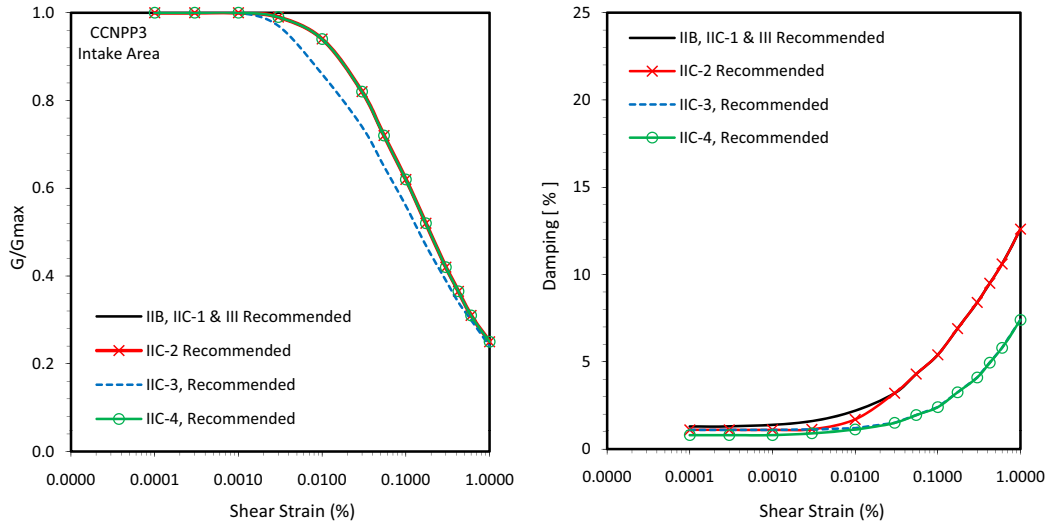
CC3-10-0270

Figure 2.5-159 — {Strain Dependant Properties for Powerblock Area}



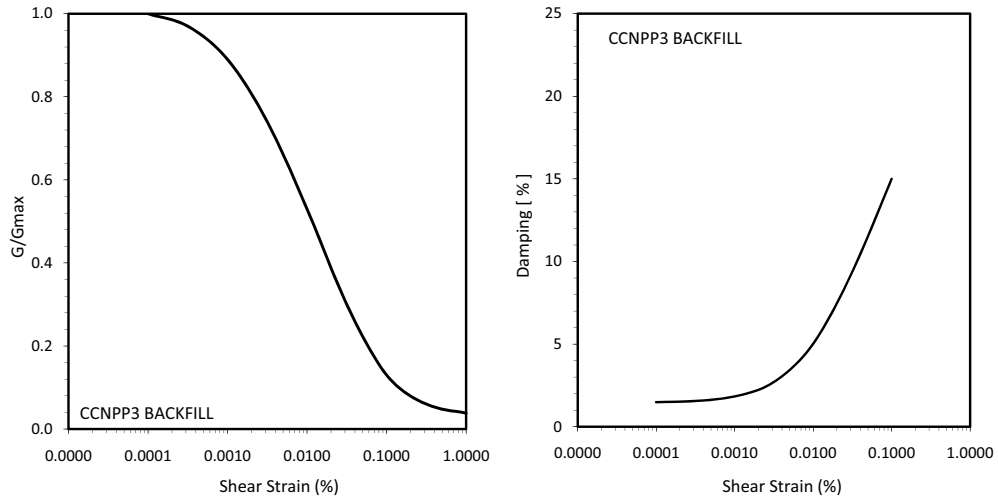
CC3-10-0270

Figure 2.5-160 — {Strain Dependant Properties for Intake Area}



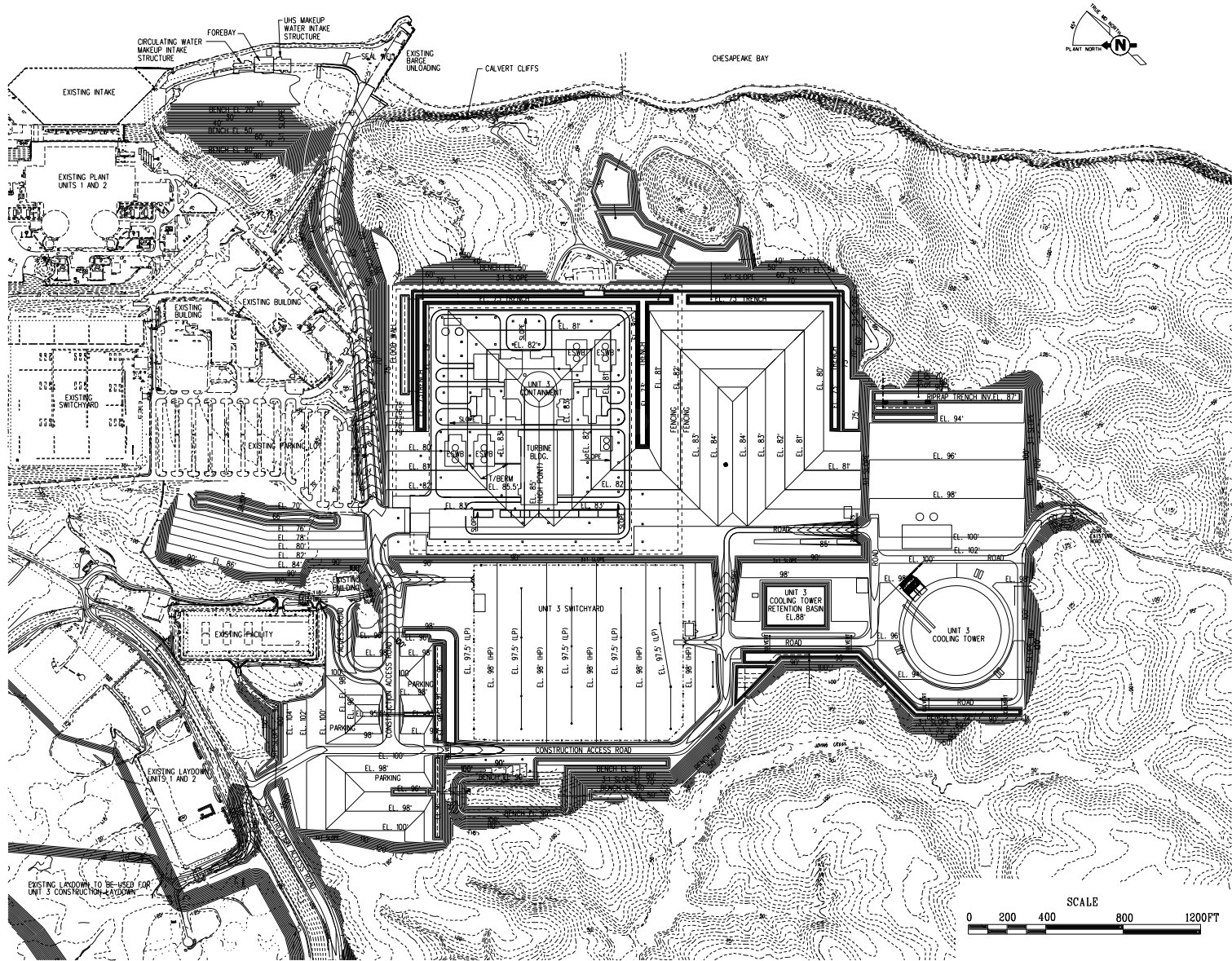
CC3-10-0270

Figure 2.5-161 — {Strain Dependant Properties for Backfill}



CC3-11-0081,
CC3-11-0238

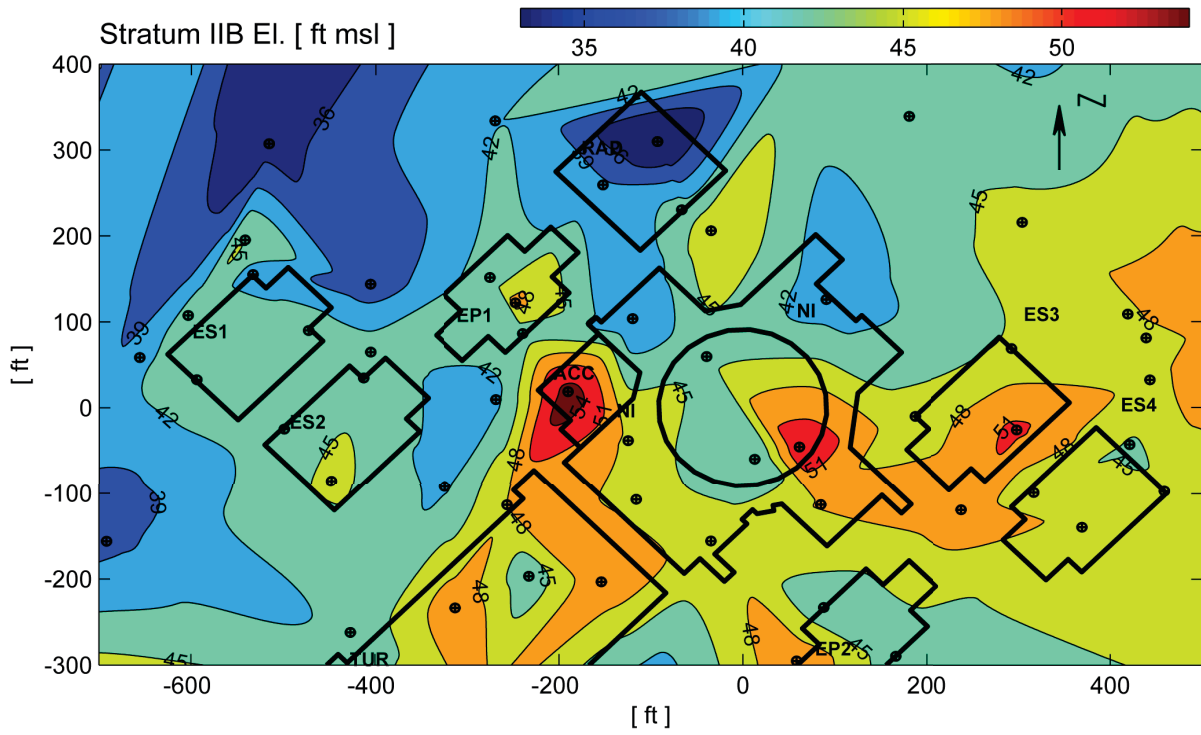
Figure 2.5-162 — {Site Grading Plan}



See Figure 1.2-1 for Powerblock layout

CC3-10-0270

Figure 2.5-163 — {Elevation Contours of Top of Stratum IIb Cemented Sand}



CC3-10-0270

Figure 2.5-164 — {Topography in Powerblock Area}

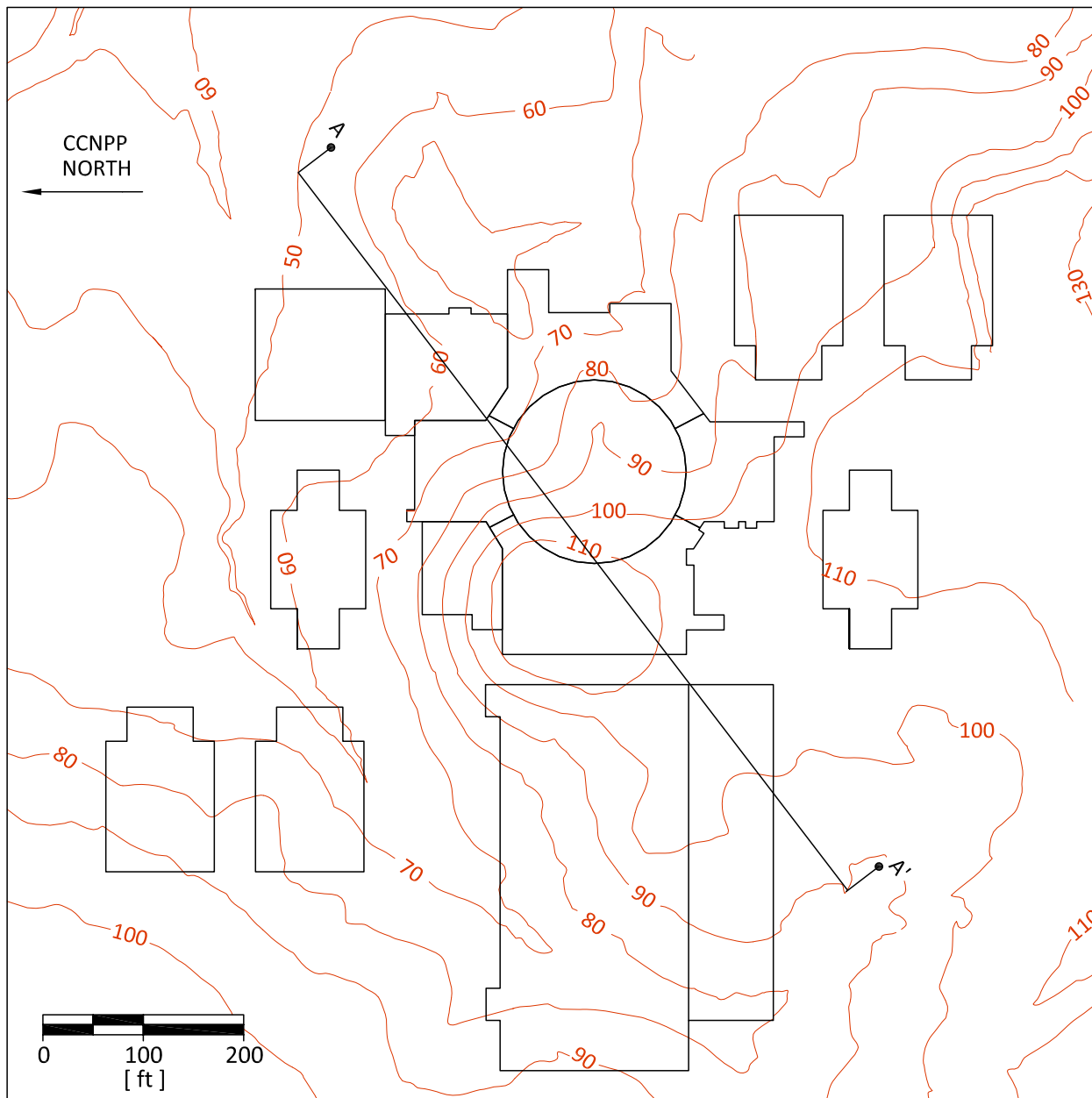
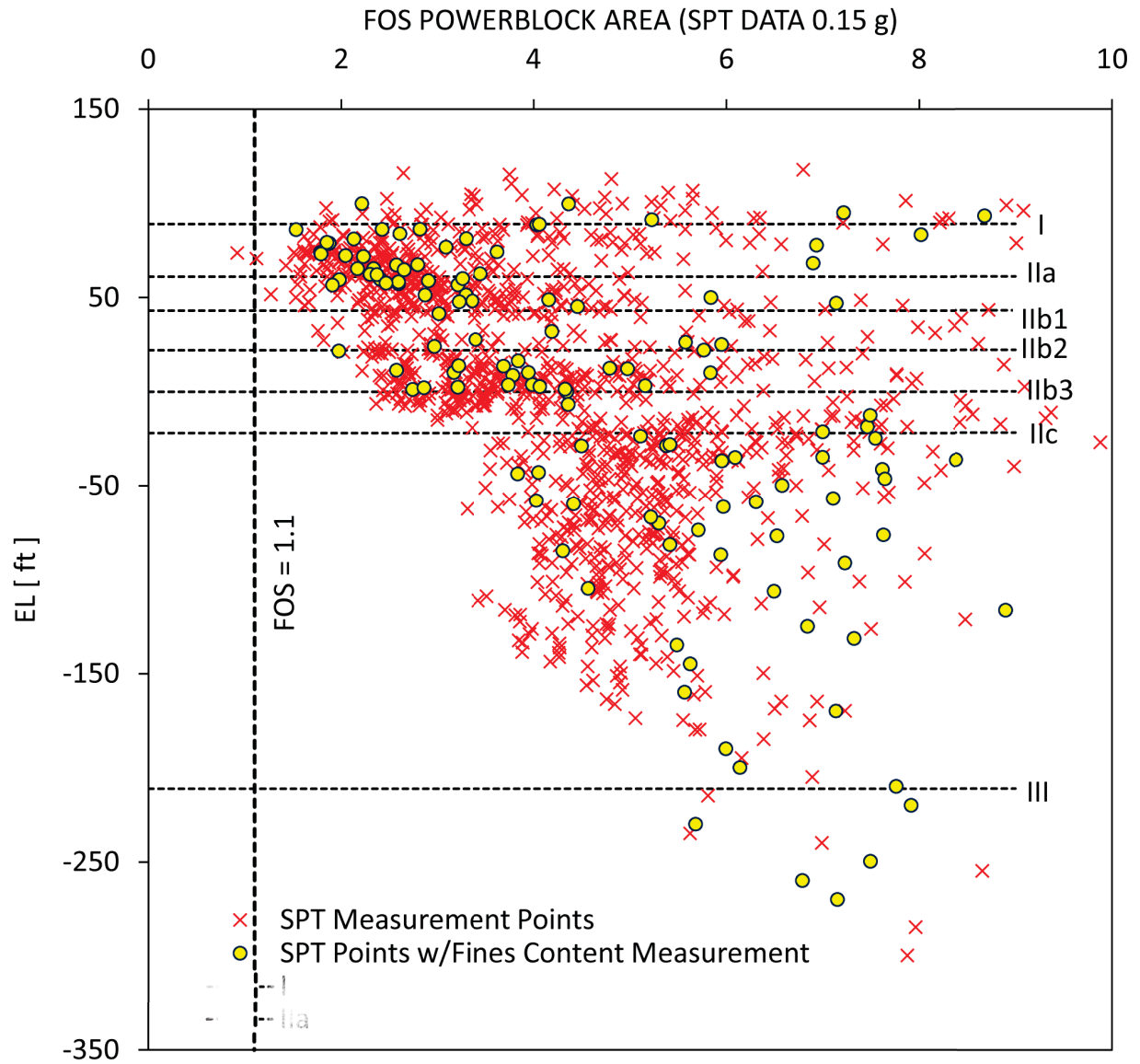
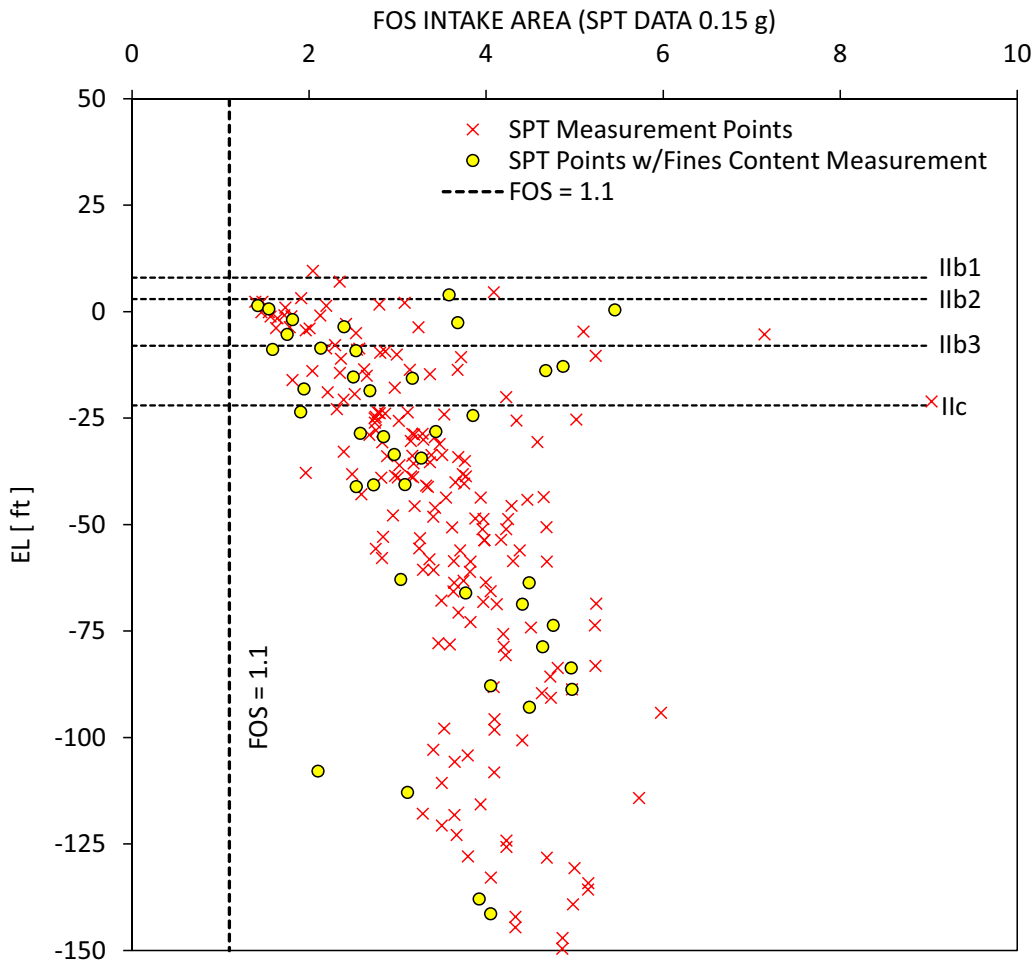


Figure 2.5-165 — {FOS against Liquefaction Based on SPT Data, Powerblock}



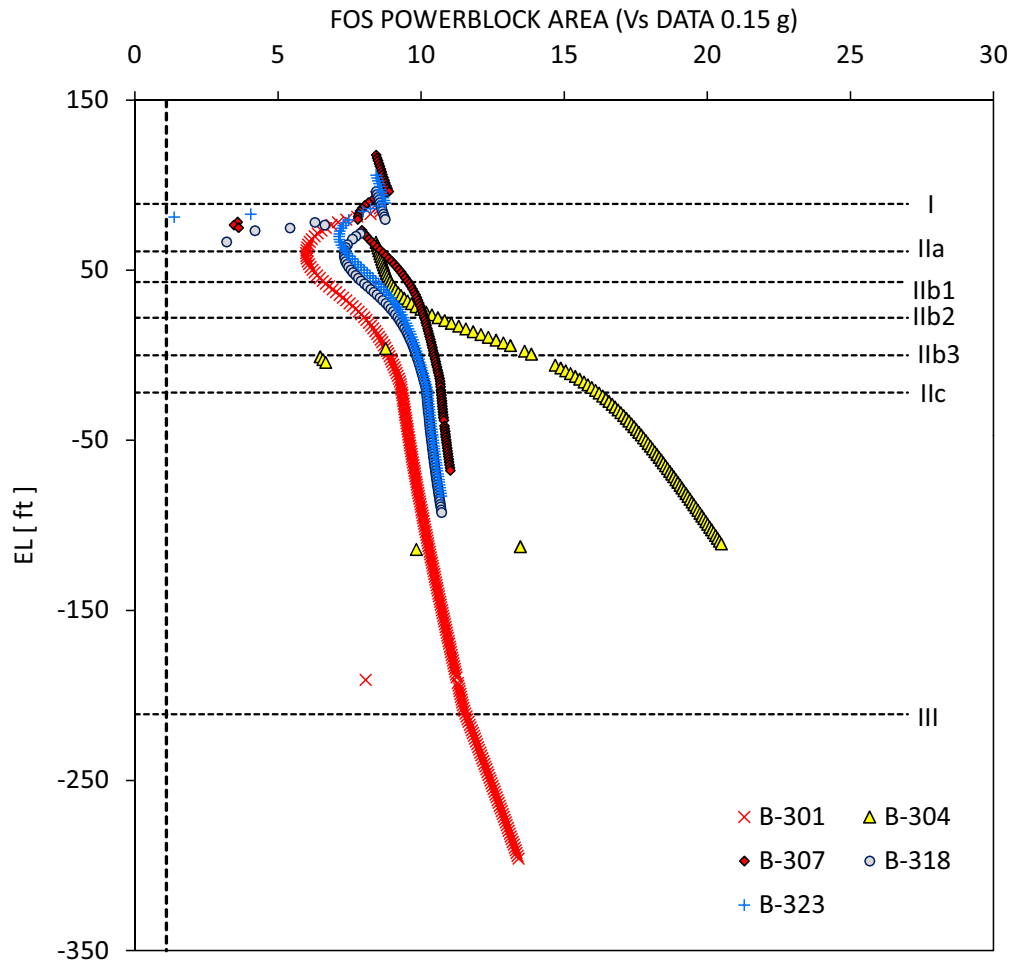
CC3-10-0270

Figure 2.5-166 — {FOS against Liquefaction Based on SPT Data, Intake Area}



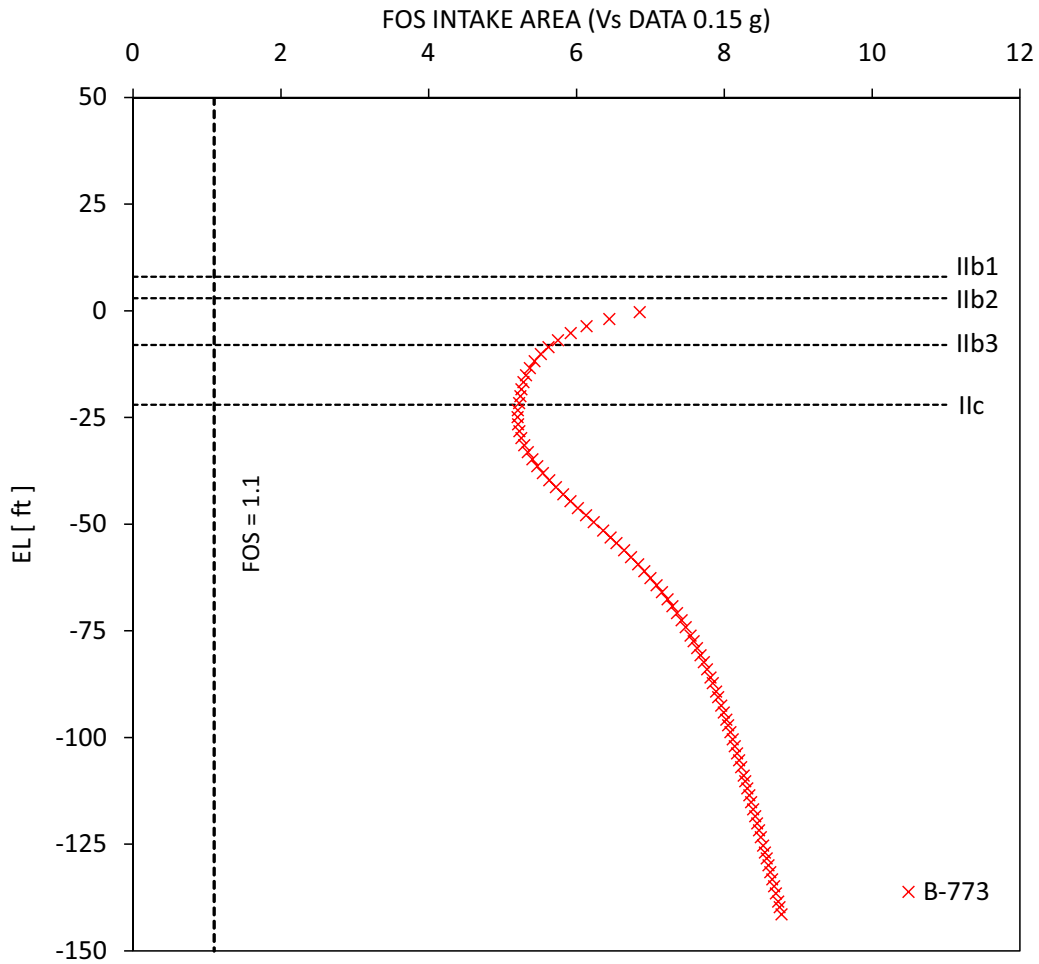
CC3-10-0270

Figure 2.5-167 — {FOS against Liquefaction Based on Vs Data, Powerblock}



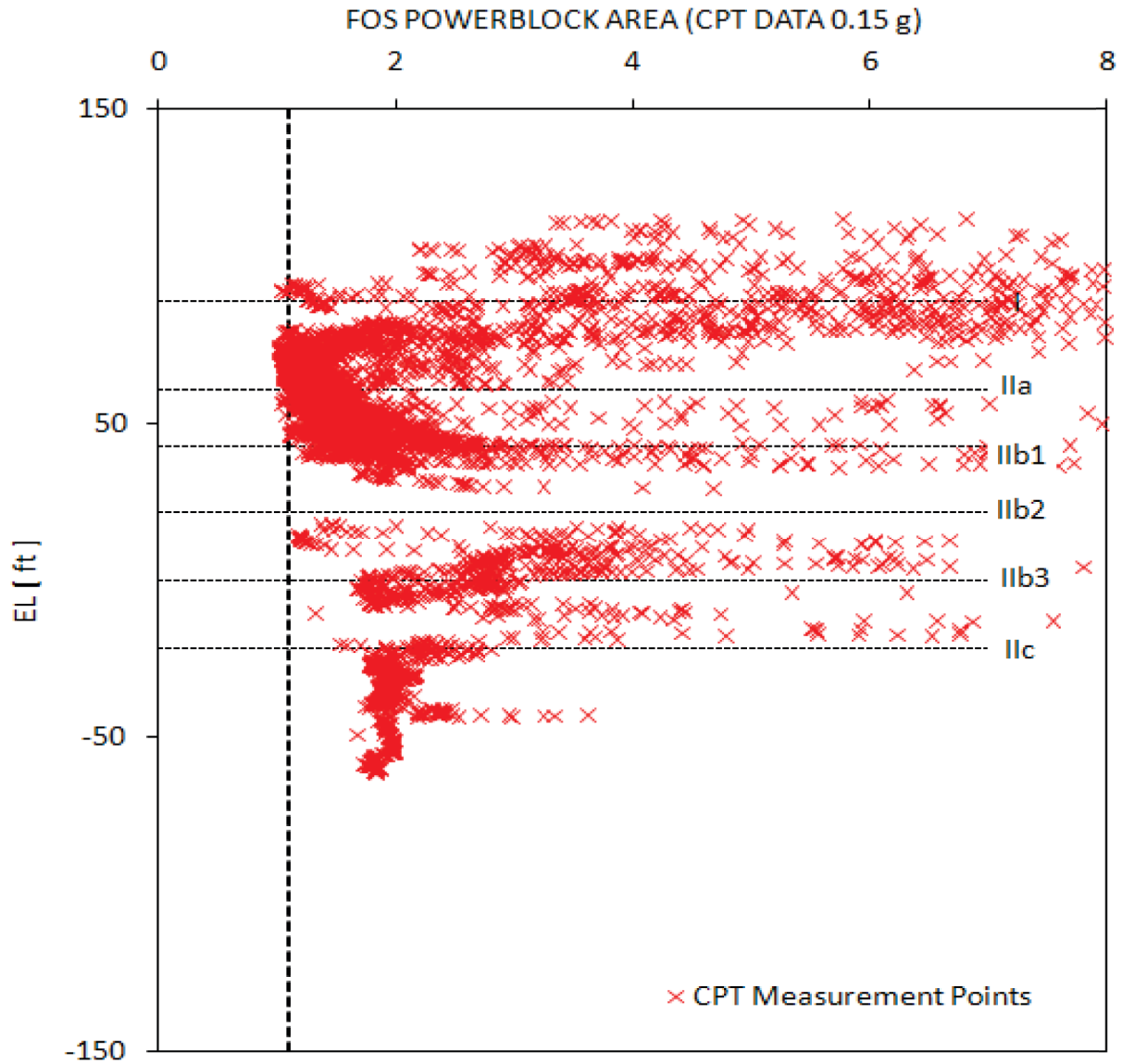
CC3-10-0270

Figure 2.5-168 — {FOS against Liquefaction Based on Vs Data, Intake Area}



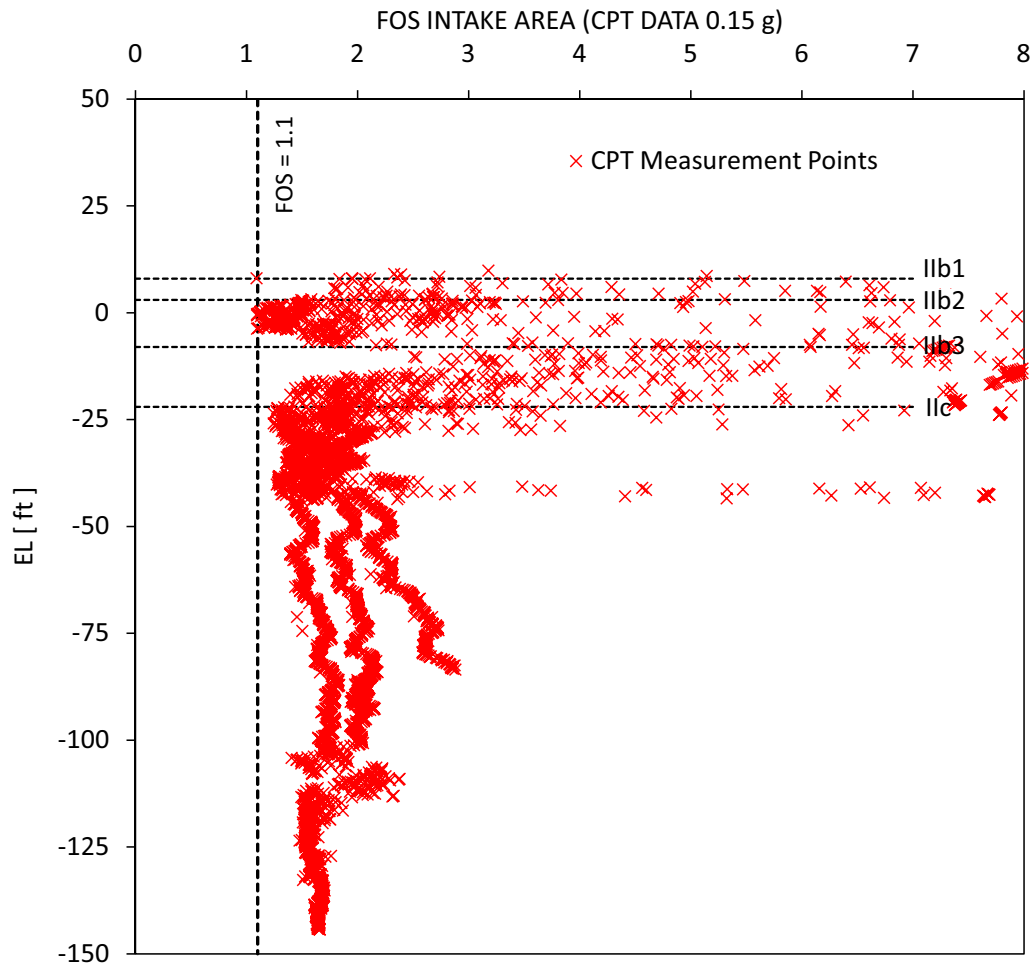
CC3-10-0270

Figure 2.5-169 — {FOS against liquefaction based on CPT Data, Powerblock Area}



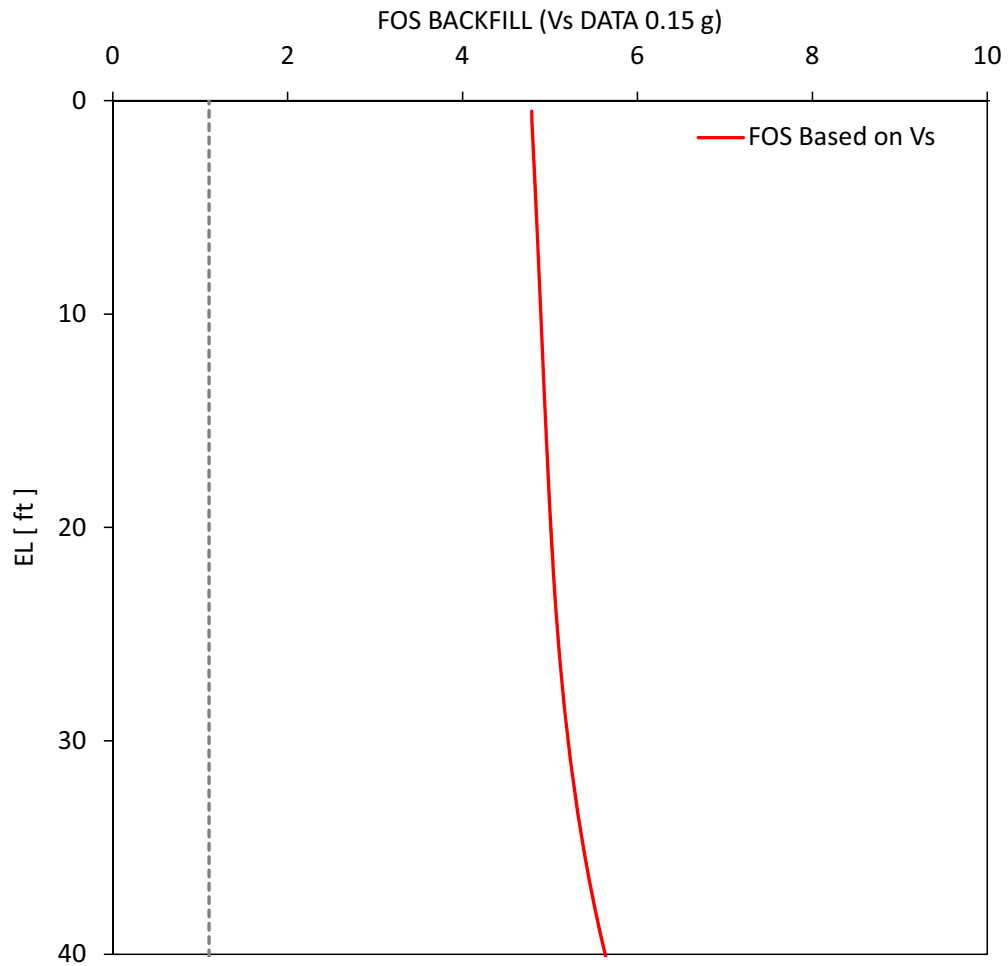
CC3-10-0270

Figure 2.5-170 — {FOS against liquefaction based on CPT Data, Intake Area}



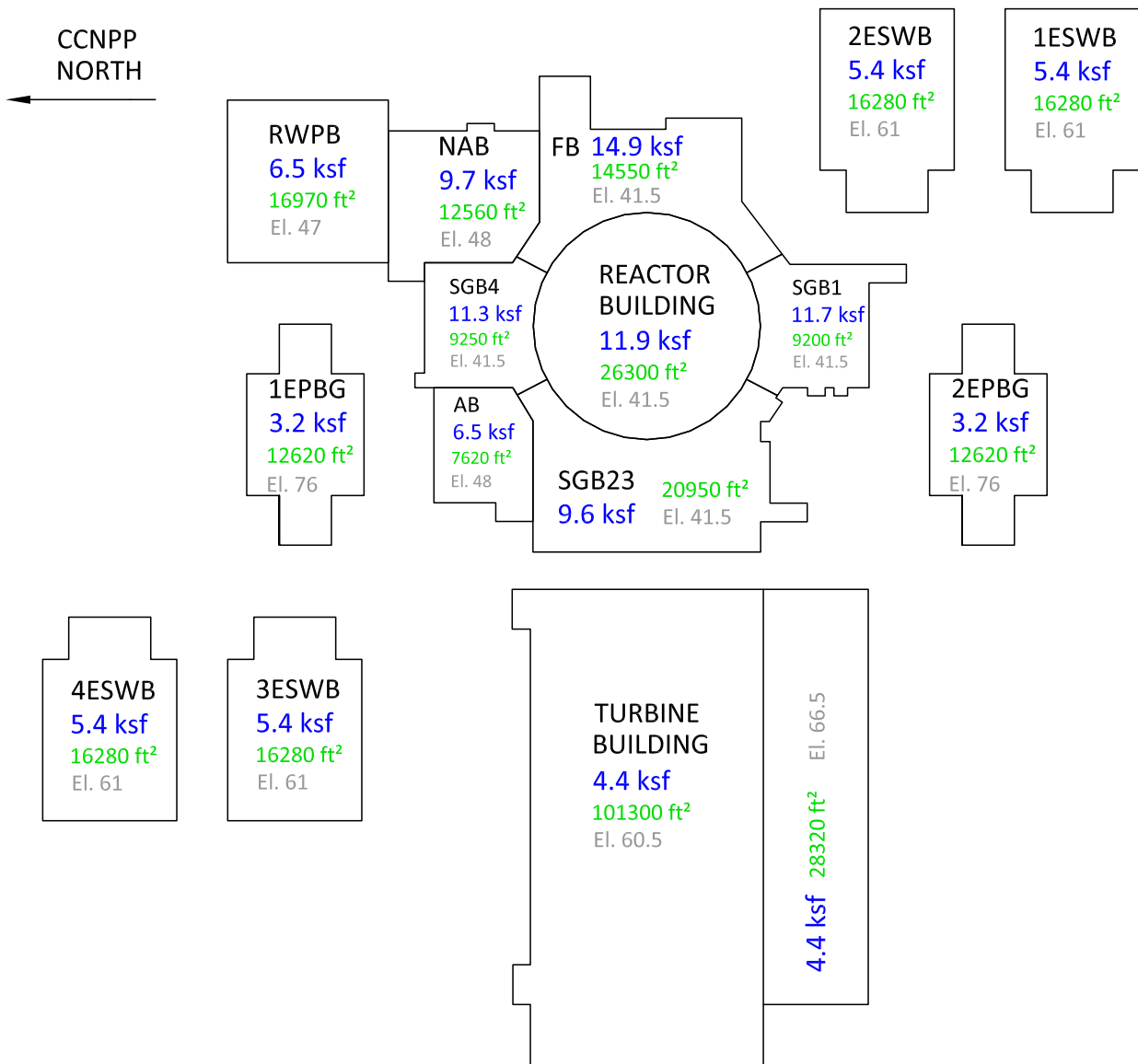
CC3-10-0270

Figure 2.5-171 — {FOS against Liquefaction for Backfill, Powerblock Area}



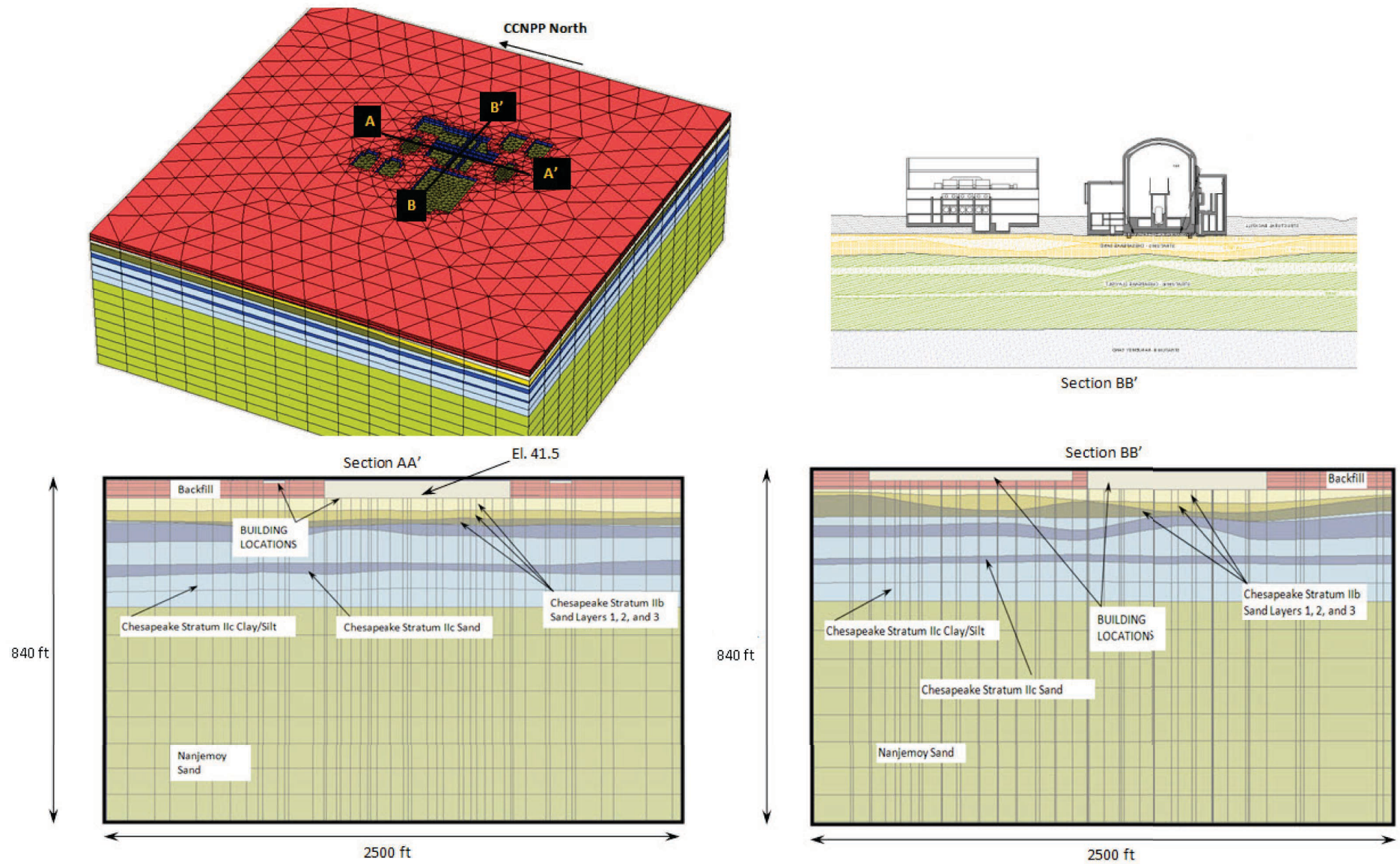
CC3-10-0270

Figure 2.5-172 — {Building Areas, Loads, and Foundation Elevation}



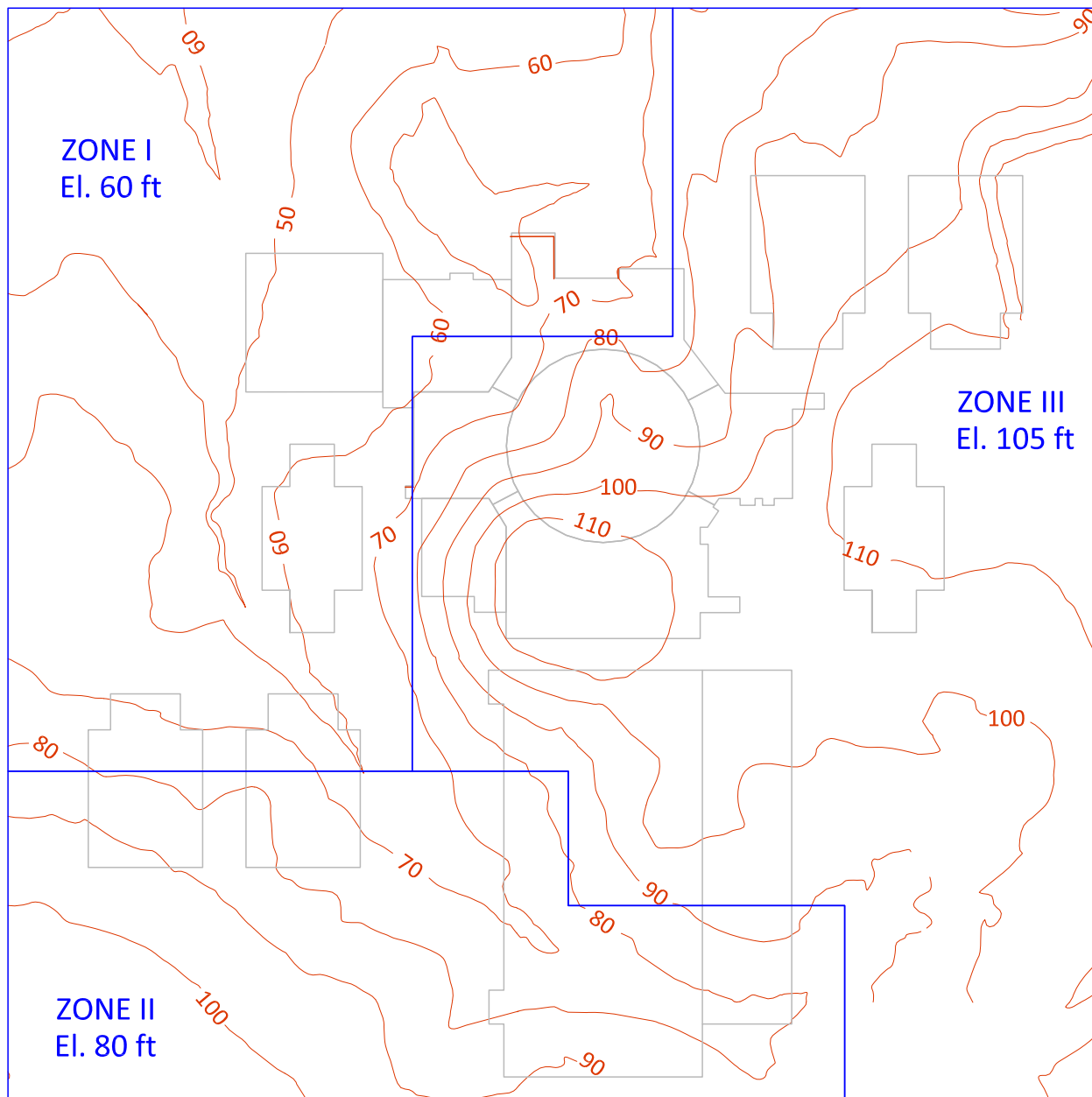
CC3-10-0270

Figure 2.5-173 — {PLAXIS 3D Subsurface Representation}



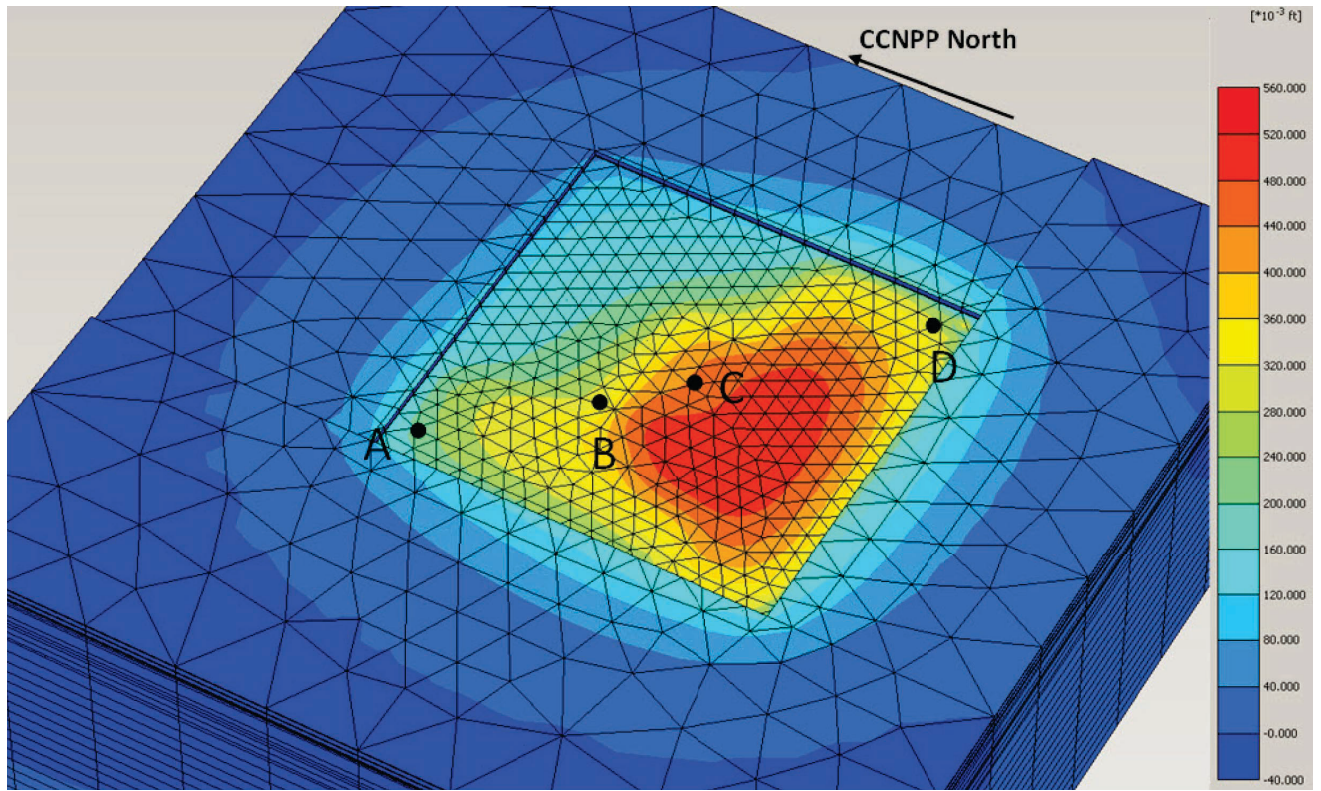
CC3-10-0270

Figure 2.5-174 — {Subdivision of ED Model to Account for Variable Surface Topography}



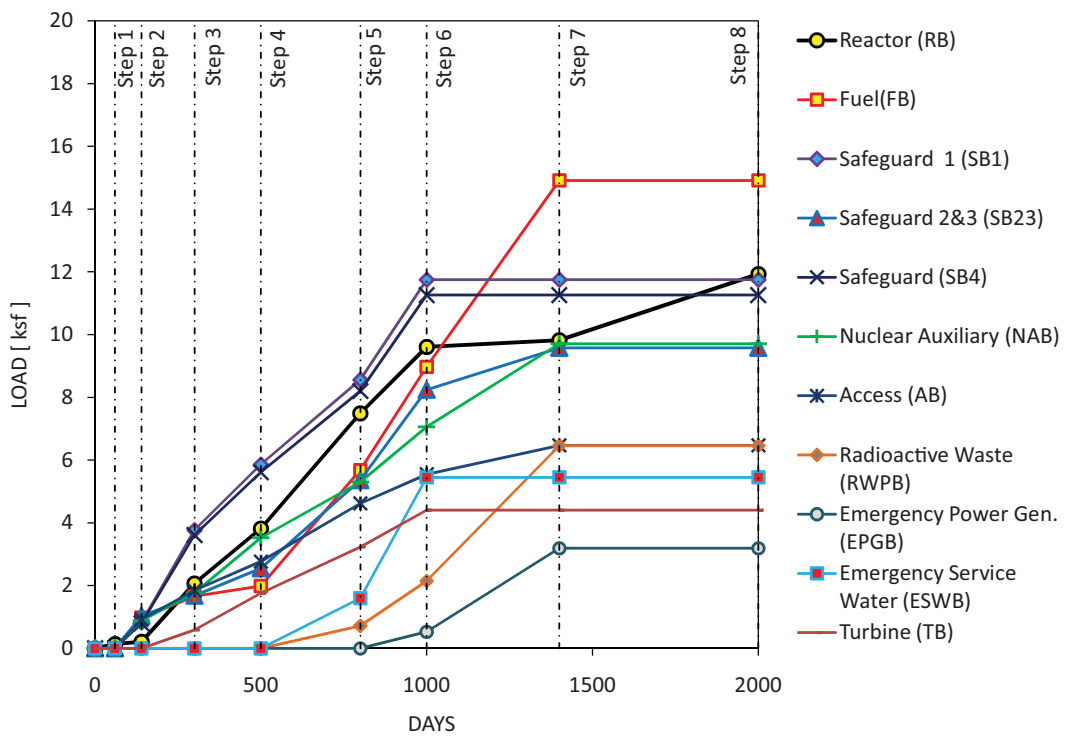
CC3-10-0270

Figure 2.5-175 — {Heave After Excavation}



CC3-10-0270,
CC3-12-0201

Figure 2.5-176 — {Building Load Construction Sequence}



CC3-10-0270

Figure 2.5-177 — {Surface Topography Plan and Cross Section}

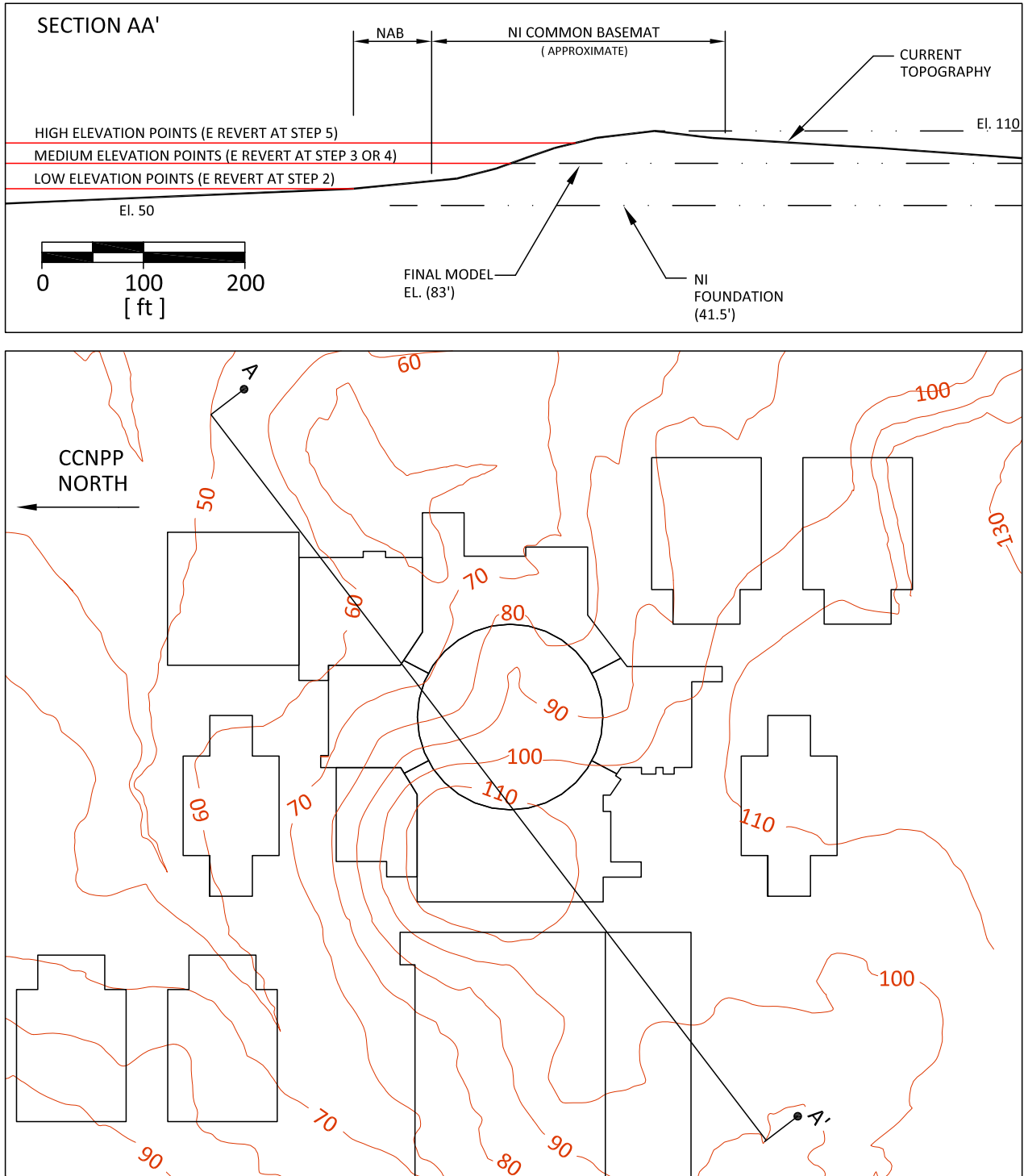
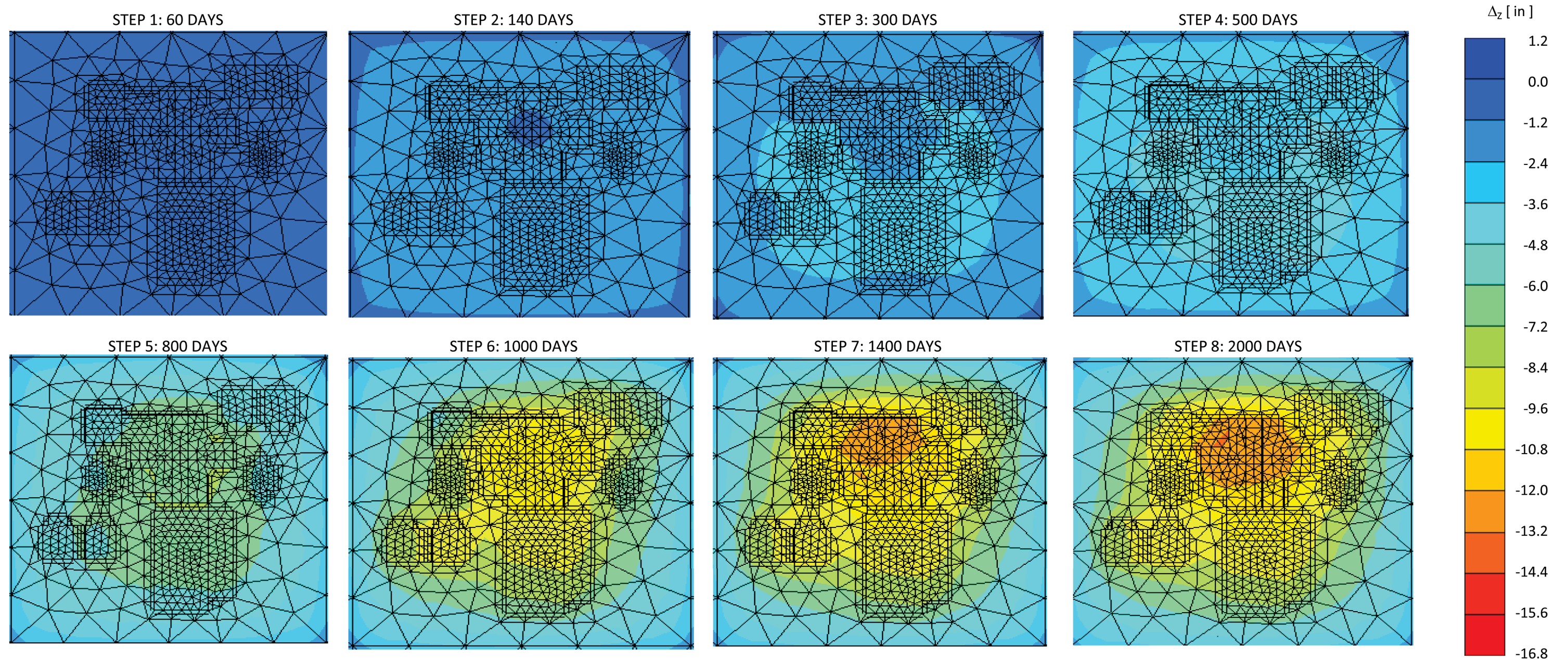
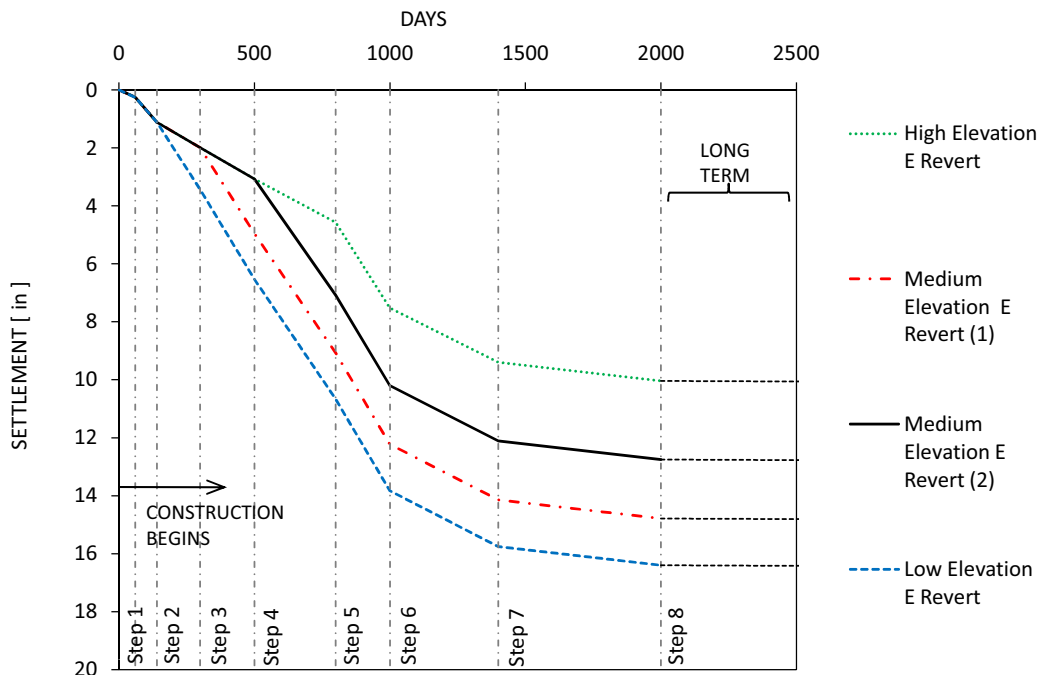


Figure 2.5-178 — {Contour Plots of Incremental Settlements}



CC3-10-0270

Figure 2.5-179 — {NI Settlement Estimate}

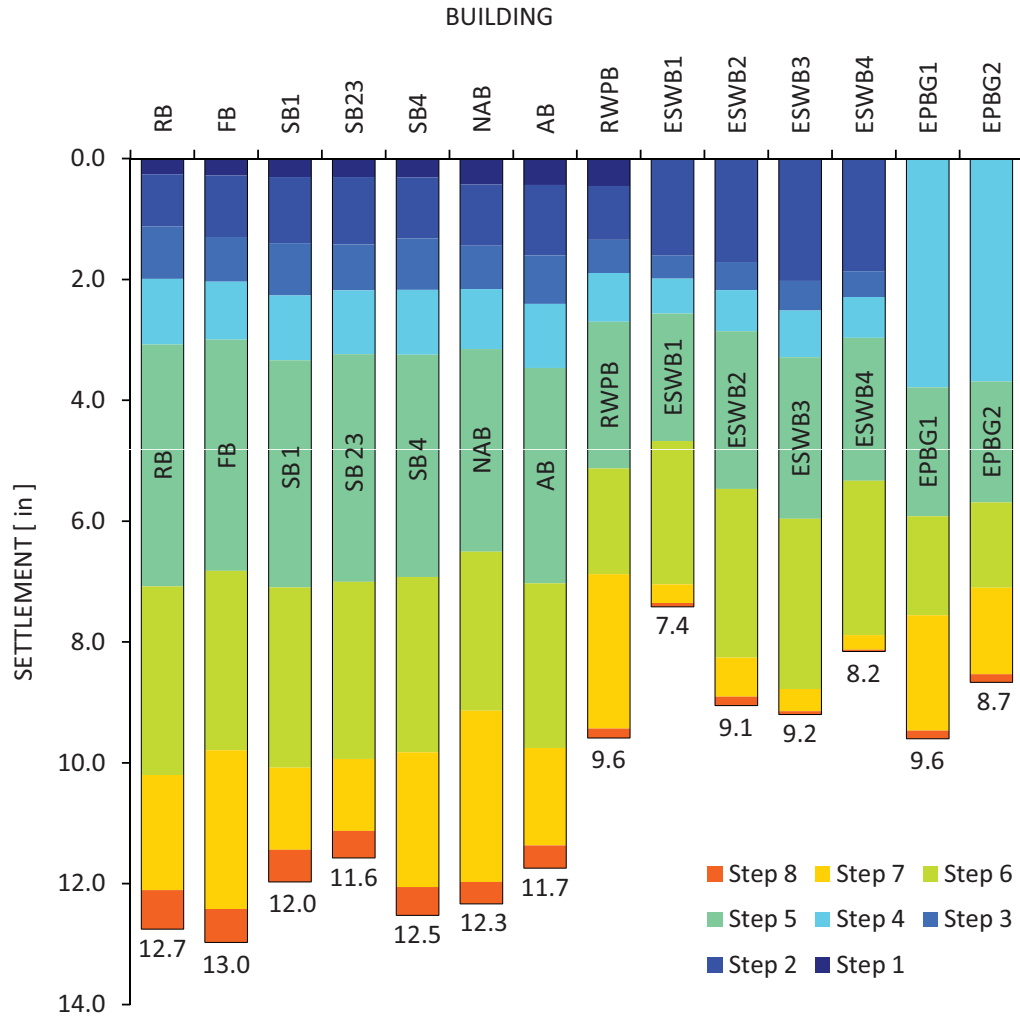


Notes:

- Low Elevation: revert to loading modulus at the end of the 2nd load step (140 days)
- Medium Elevation (1): revert to loading modulus at the end of the 3rd load step (300 days)
- Medium Elevation (2): revert to loading modulus at the end of the 4th load step (500 days)
- High Elevation: revert to loading modulus at the end of the 5th load step (800 days)
- Long term settlement estimate due to creep and rewatering offset each other and are not significant

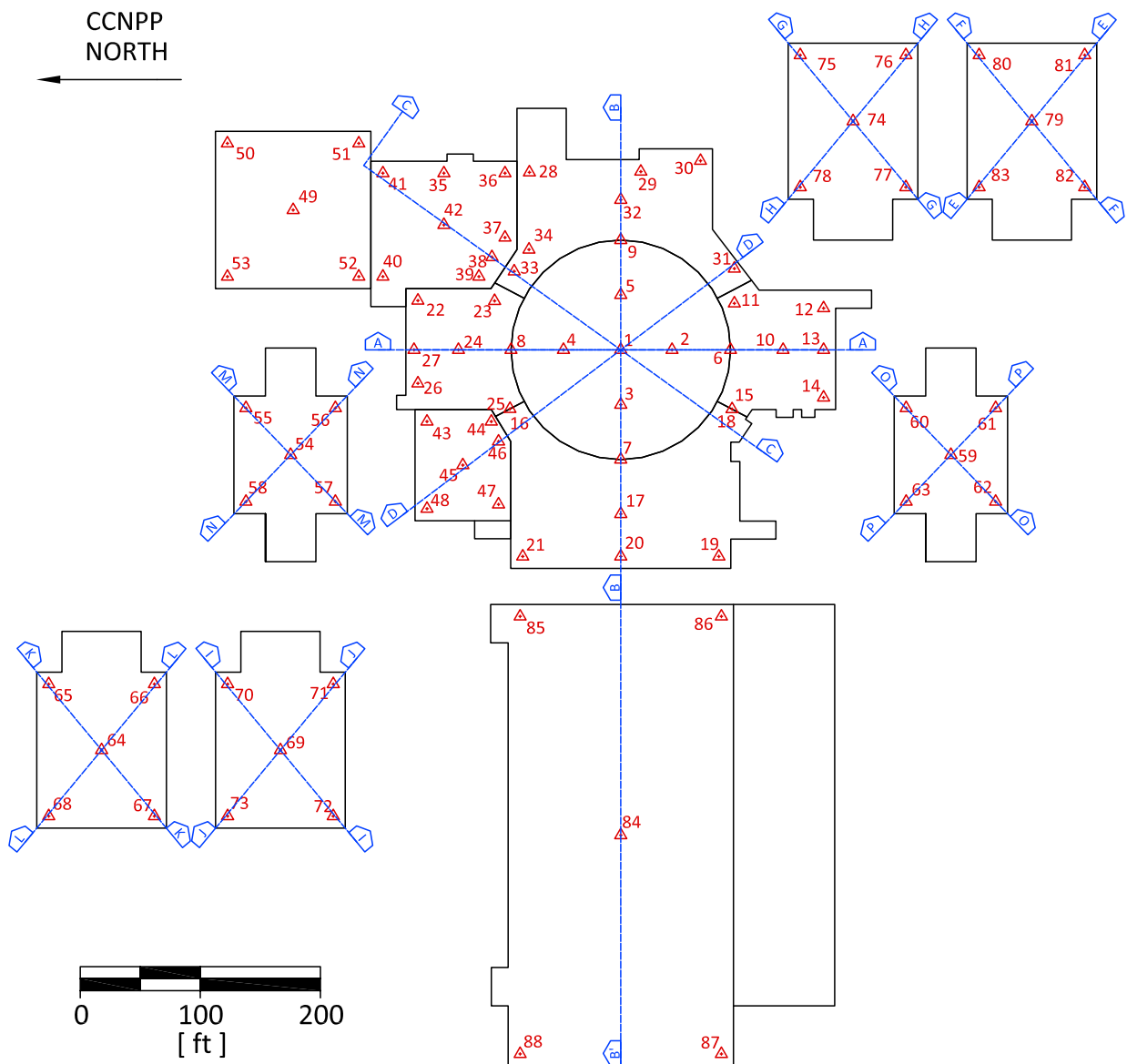
CC3-10-0270,
CC3-12-0201

Figure 2.5-180 — {Settlement at Center Point of Safety Related Buildings}



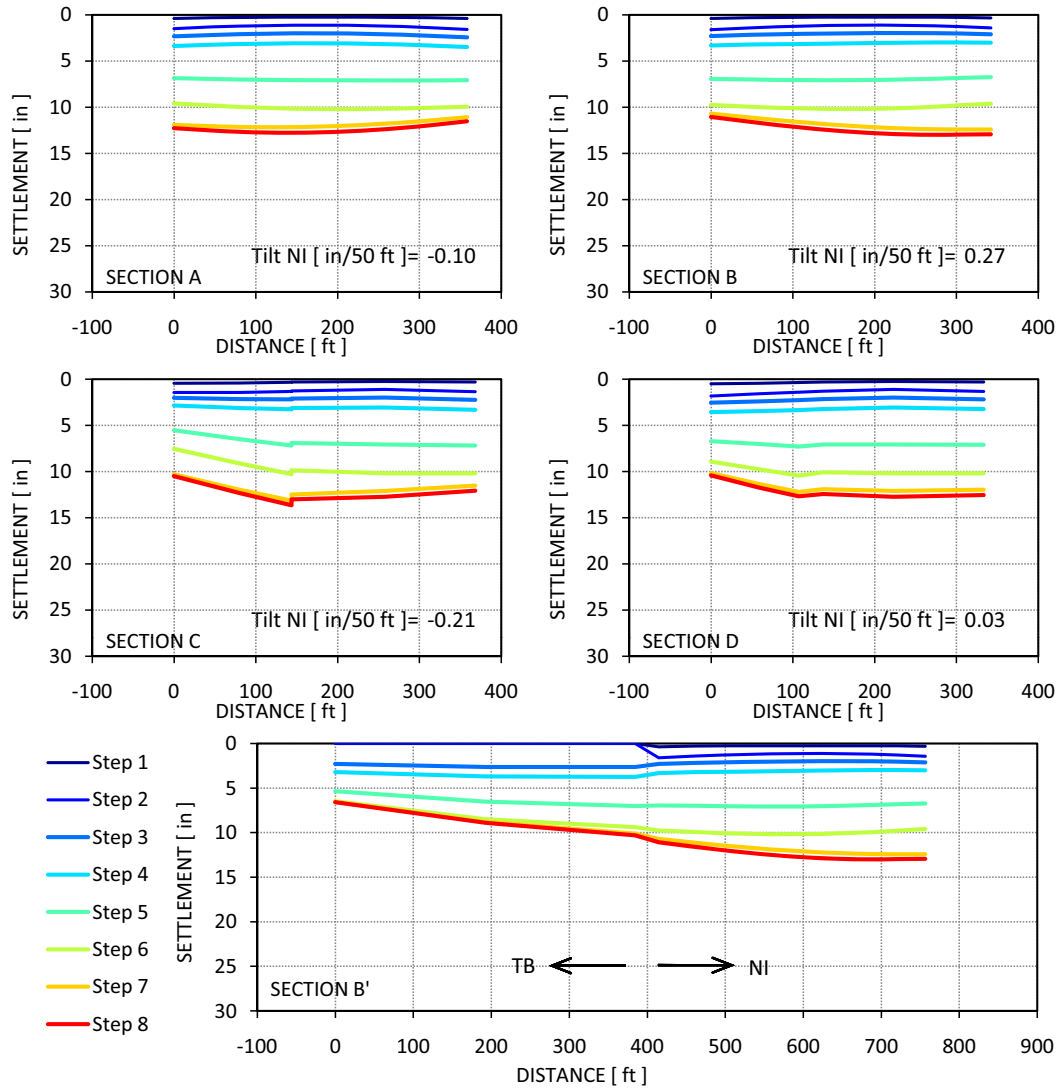
CC3-10-0270

Figure 2.5-181 — {Settlement Tracking Cross Sections}



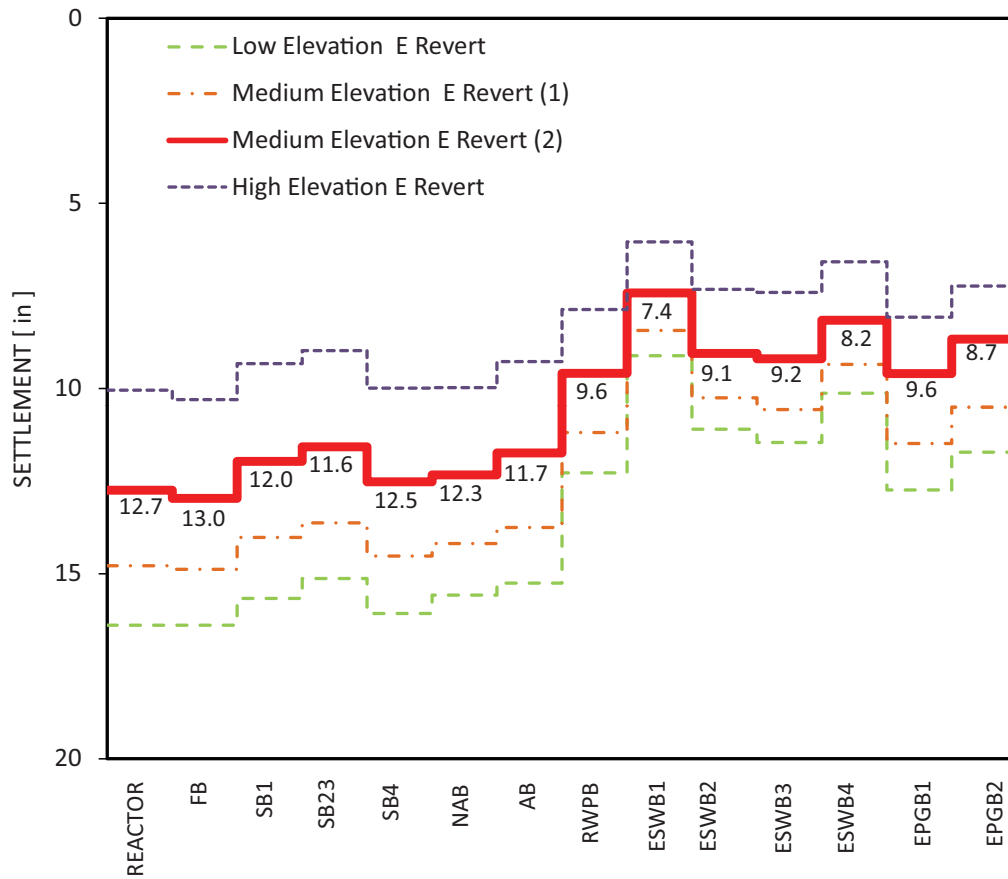
CC3-10-0270

Figure 2.5-182 — {Foundation Settlement across NI and TB Footprint}



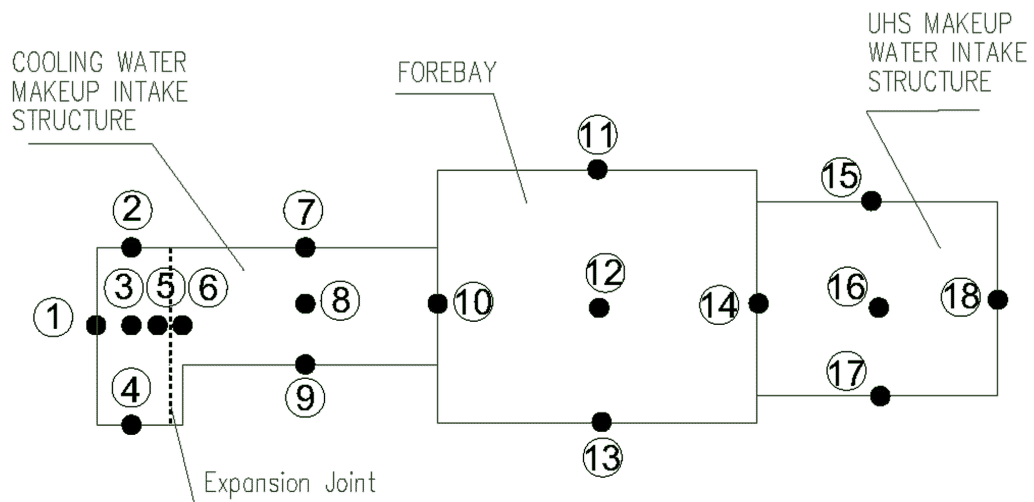
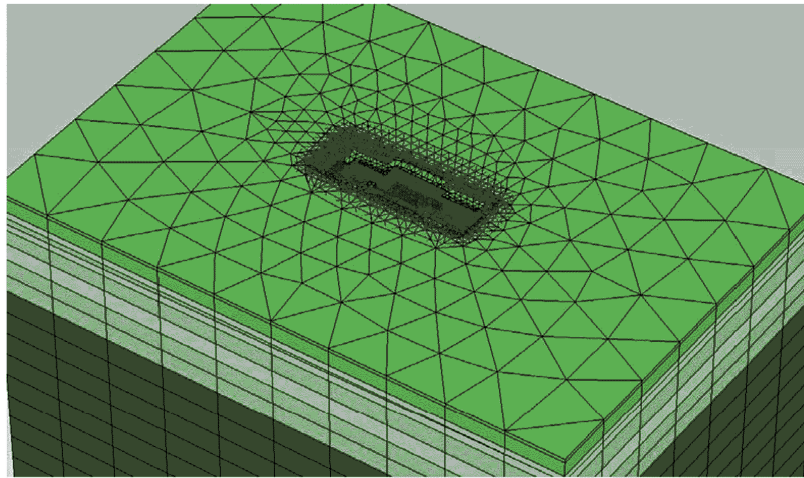
CC3-10-0270,
CC3-12-0201

Figure 2.5-183 — {Settlement at Center of Facilities After Adjustment for Topography}



CC3-10-0270,
CC3-10-0302

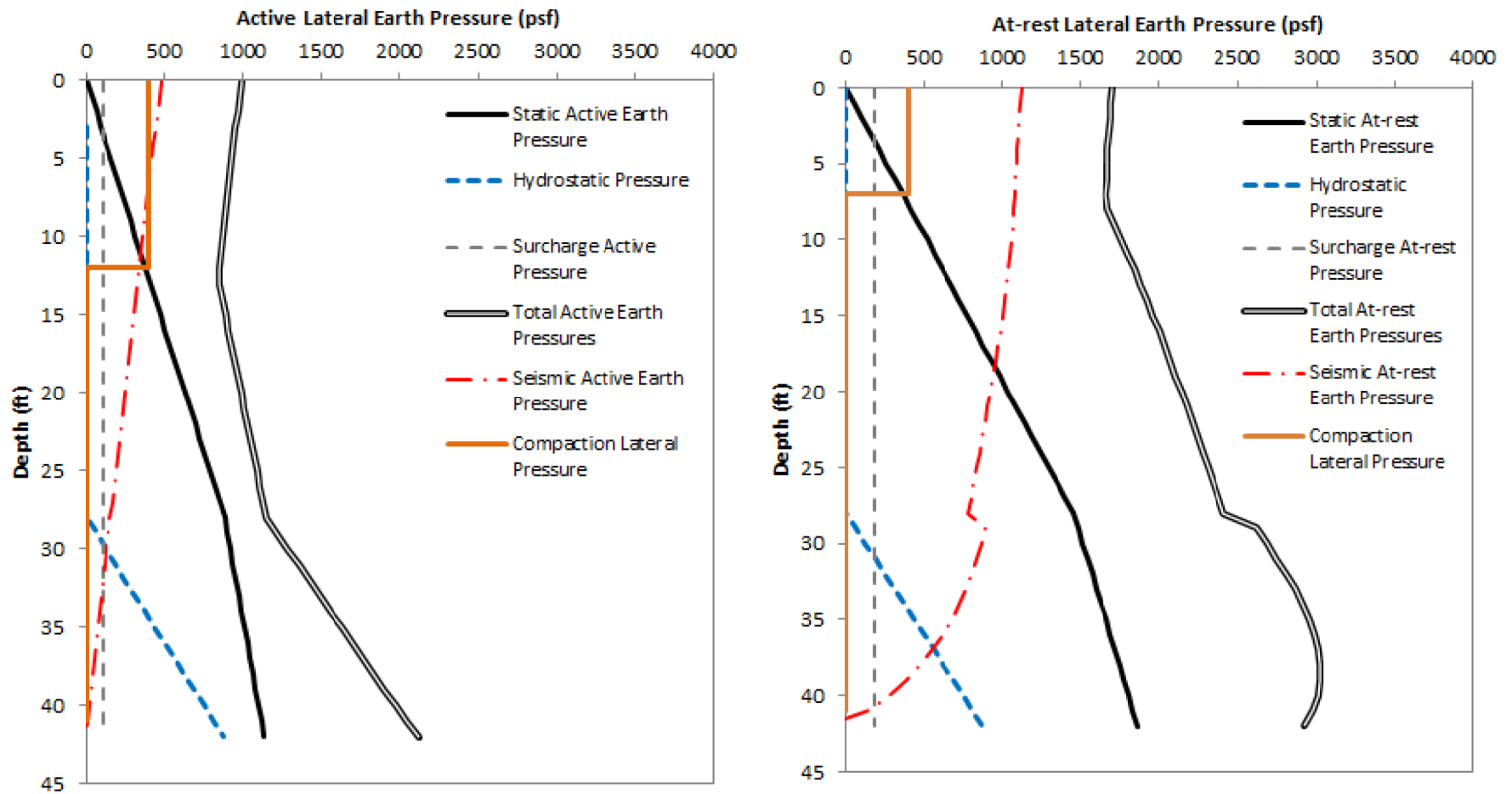
Figure 2.5-184 — {UHS FEM Model}



Note: Numbers correspond to the settlement and tilt calculation points in the settlement analysis model.

CC3-10-0270,
CC3-11-0125

Figure 2.5-185 — {Earth Pressure Representative Diagrams}



CC3-10-0270,
CC3-10-0302

Figure 2.5-186 — {Site Grading Plan with Slope Cross-Sections}

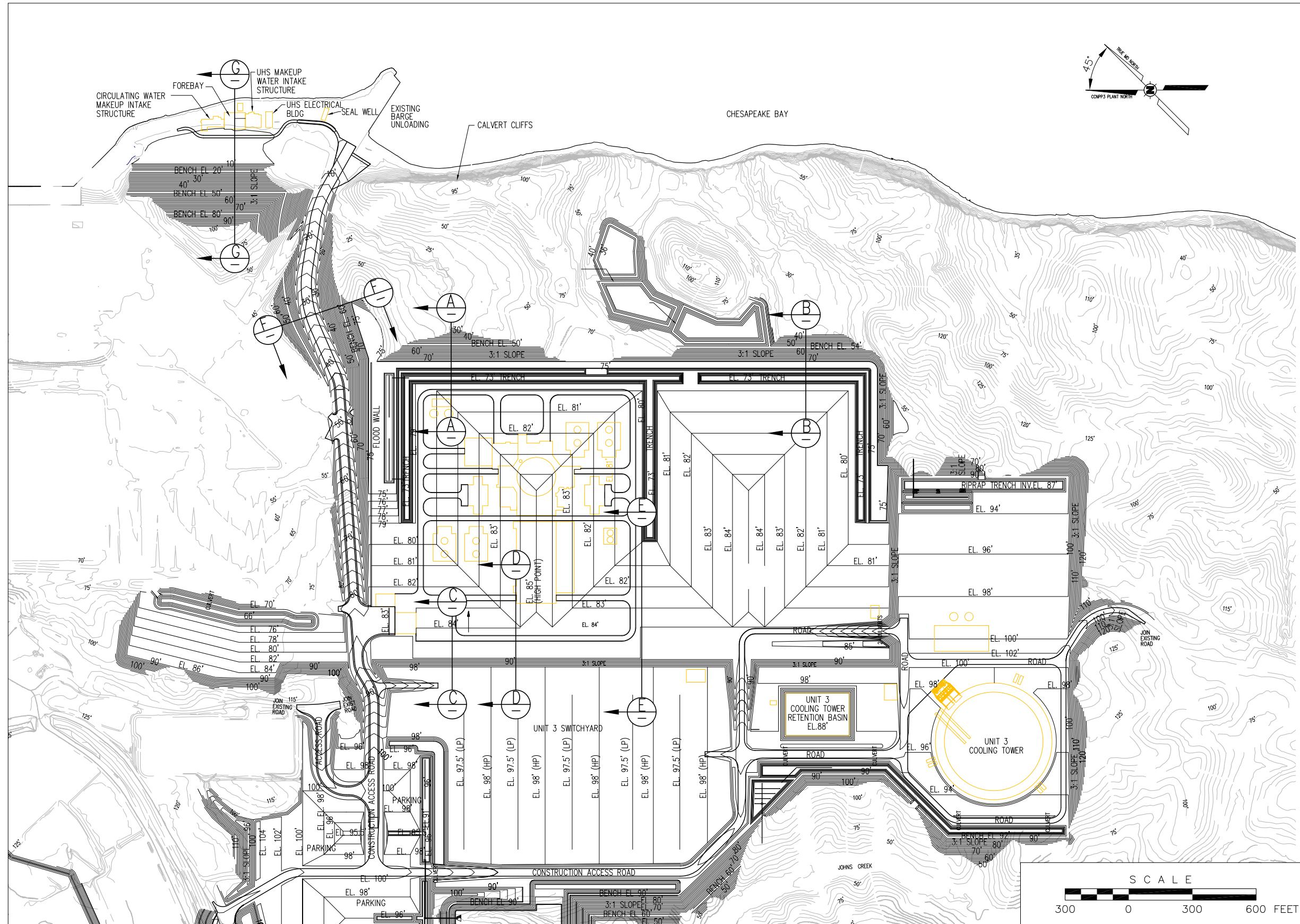
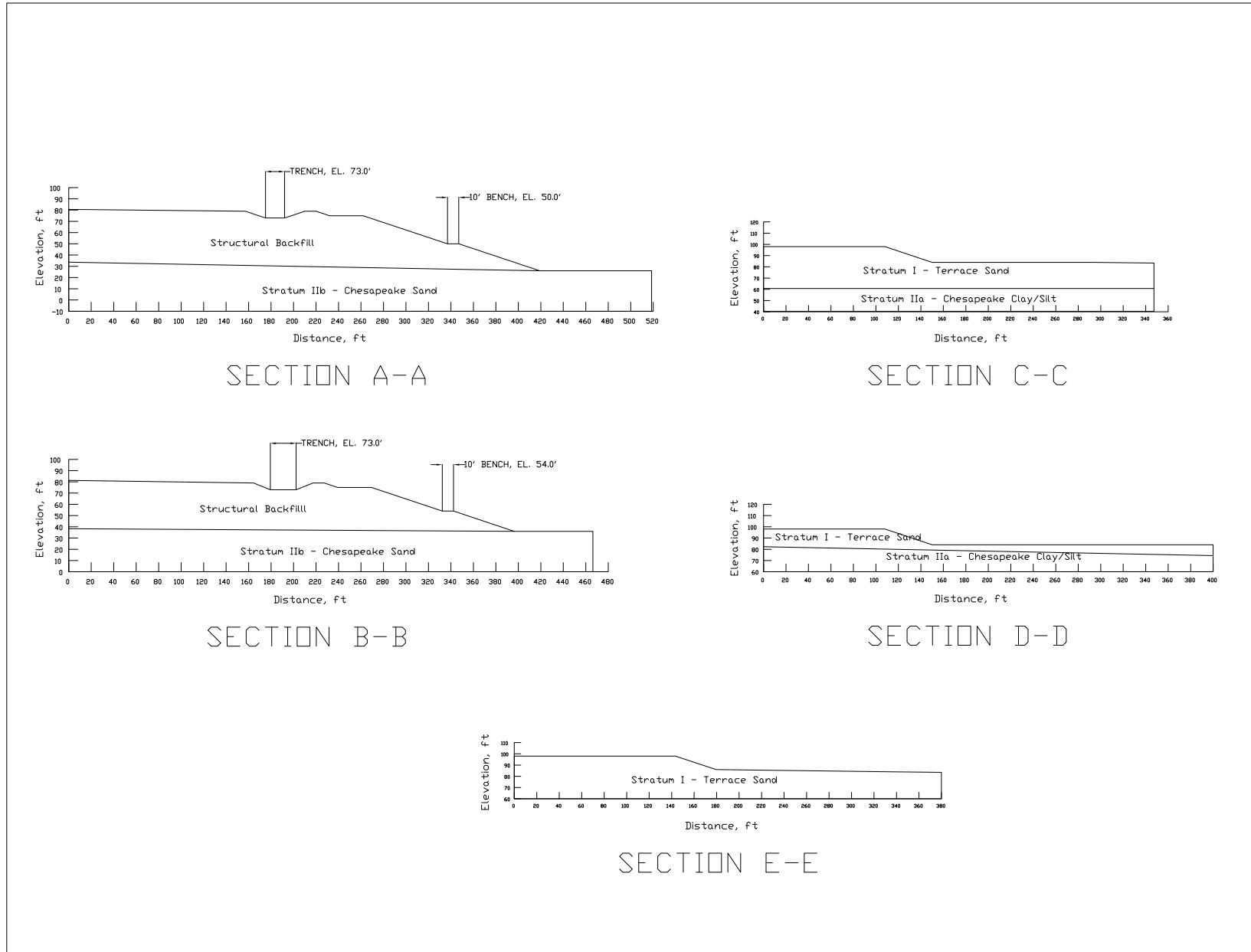
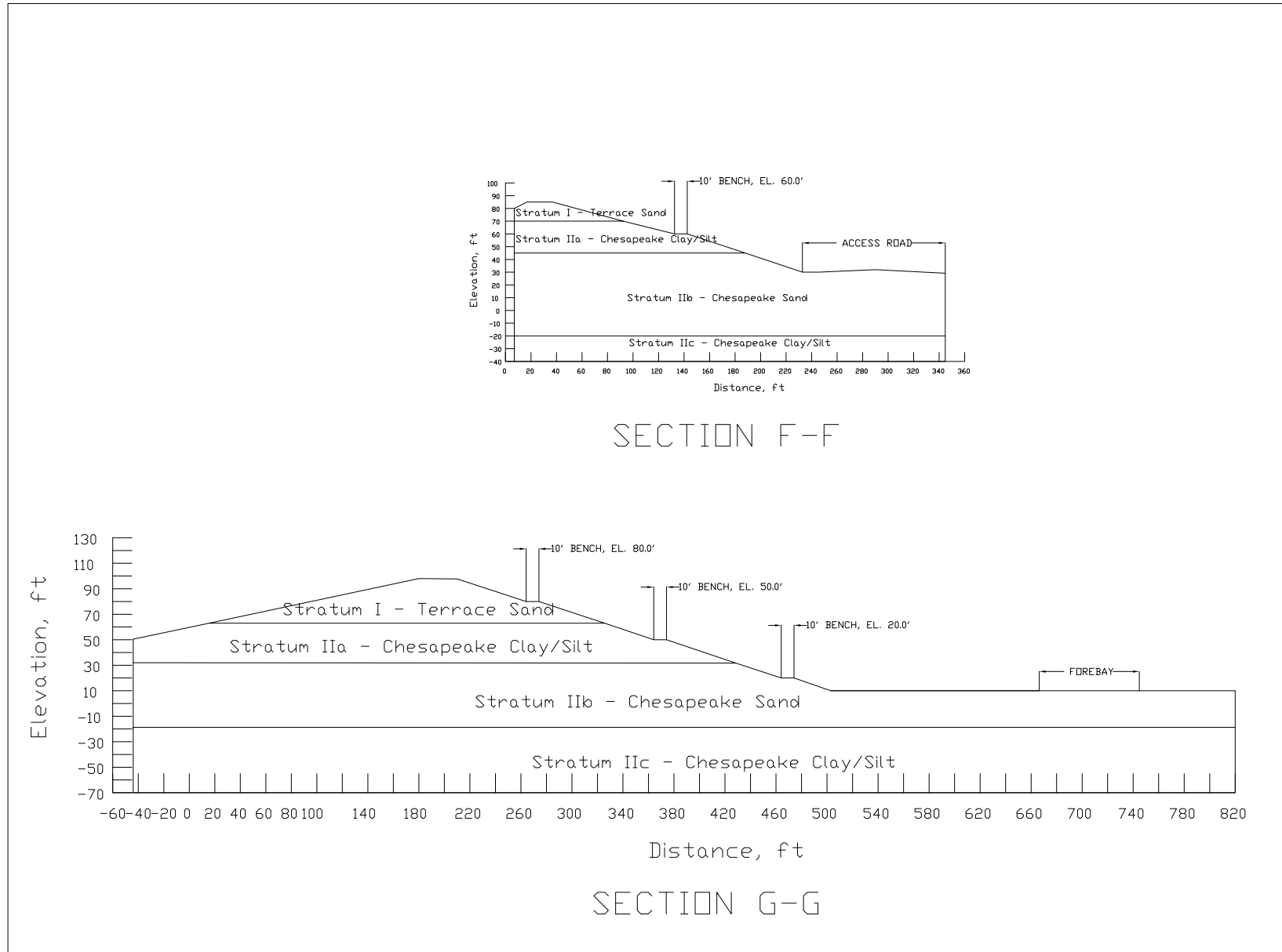


Figure 2.5-187 — {Cross-sections in Powerblock Area}



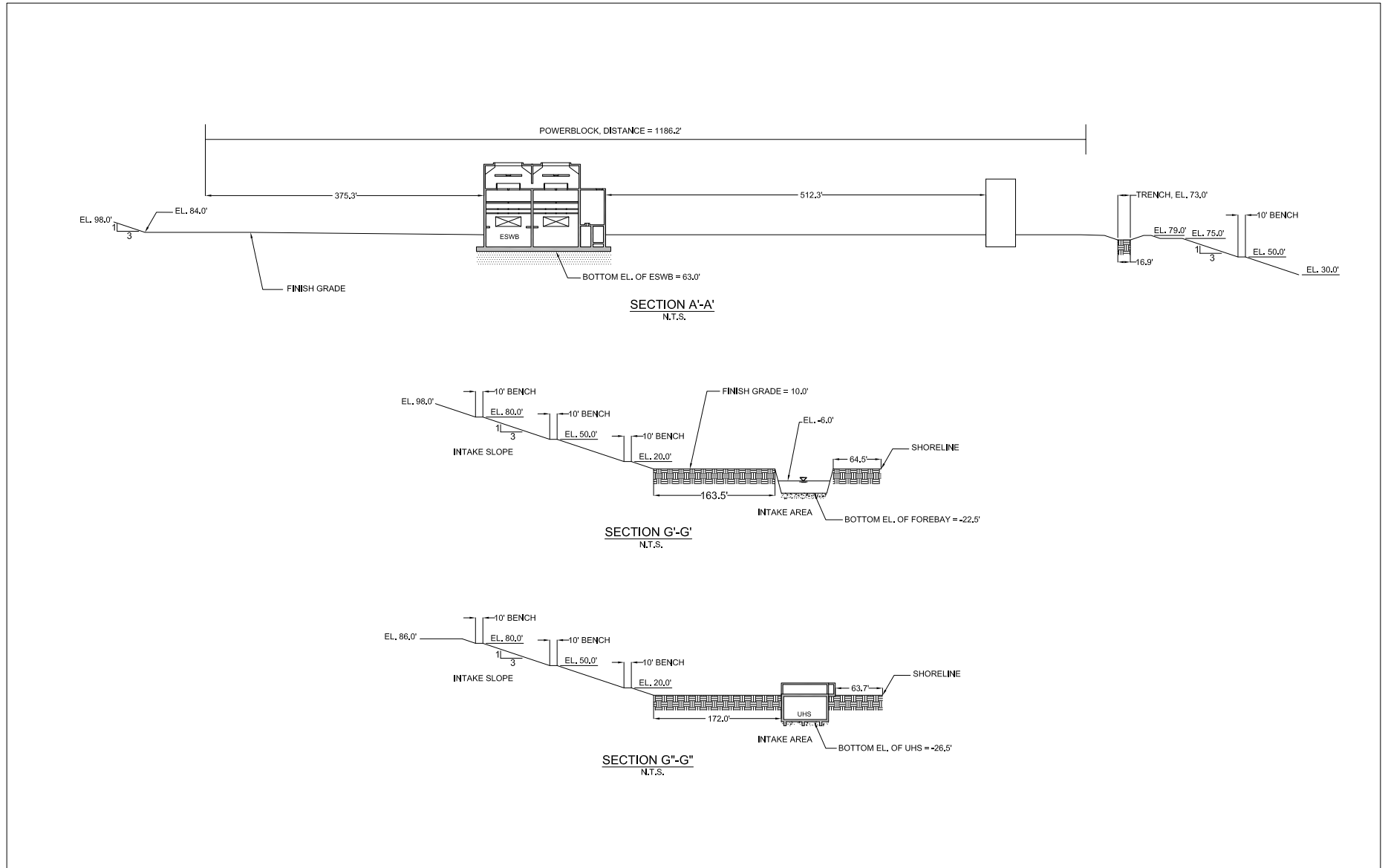
CC3-10-0270

Figure 2.5-188 — {Cross-sections in Intake Area and Utility Corridor}



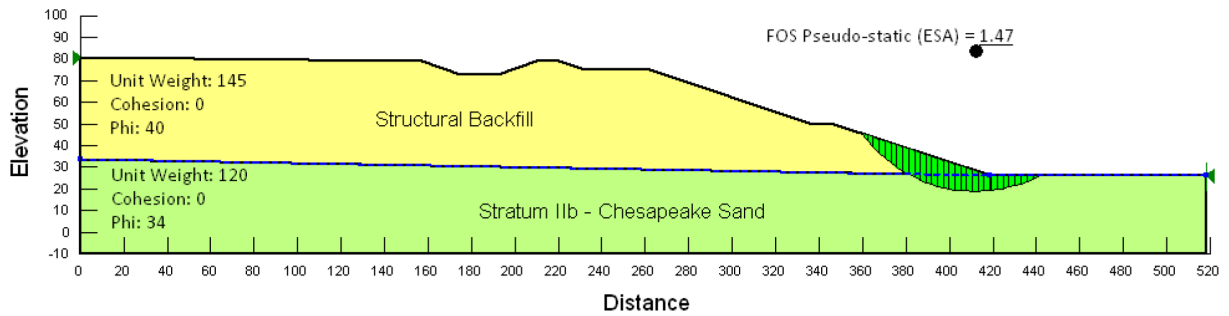
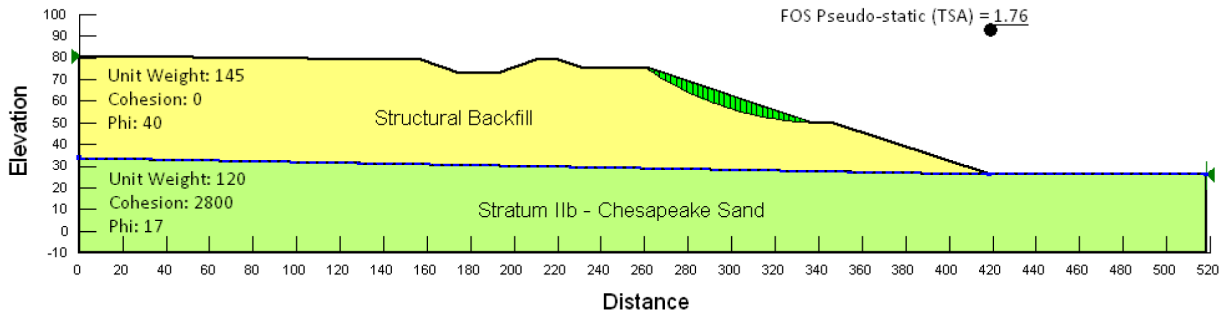
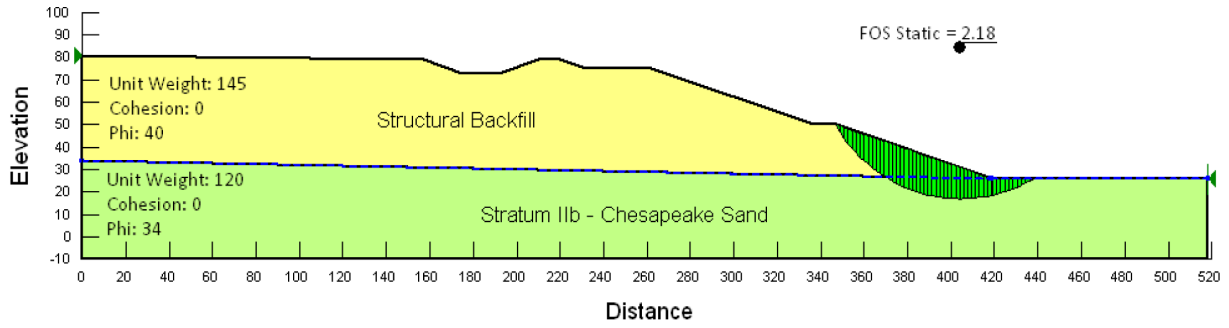
CC3-10-0270

Figure 2.5-190 — {Excavation Cross-sections in CCNPP Unit 3}



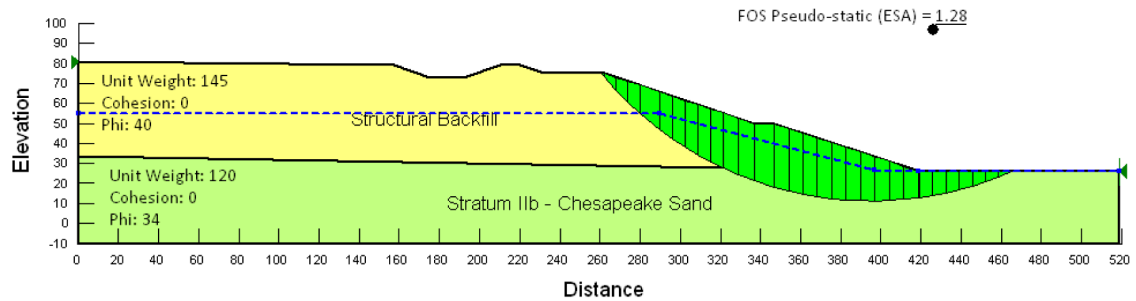
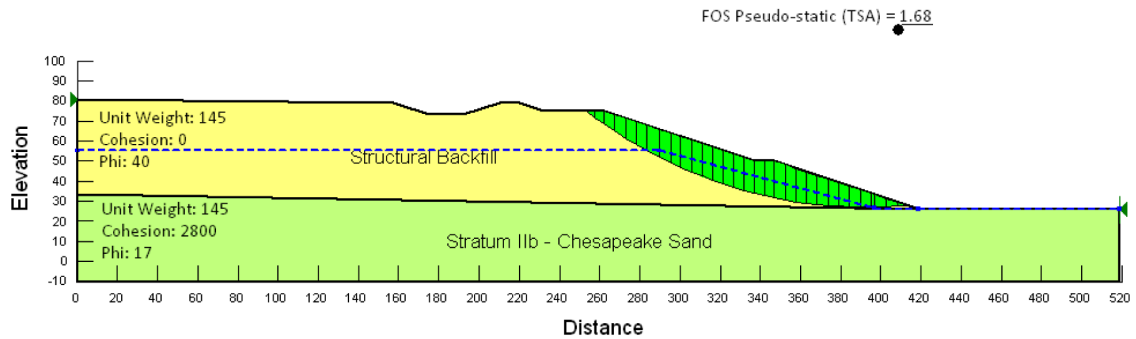
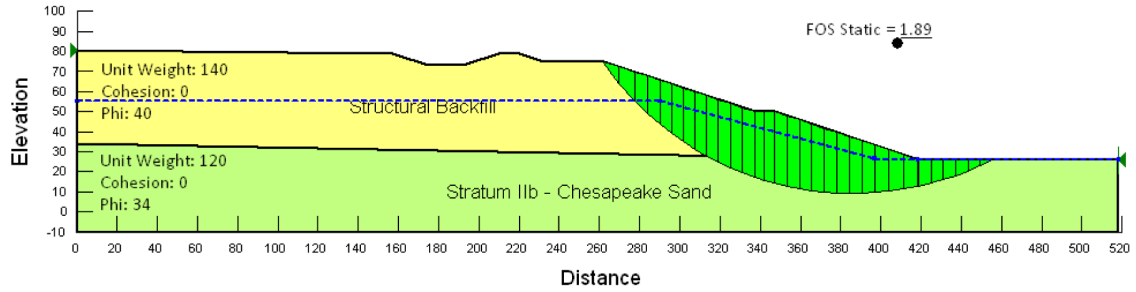
CC3-10-0270

Figure 2.5-191 — {Static and Pseudo-Static Stability Analyses of Slope Section A - Case a}



CC3-10-0270

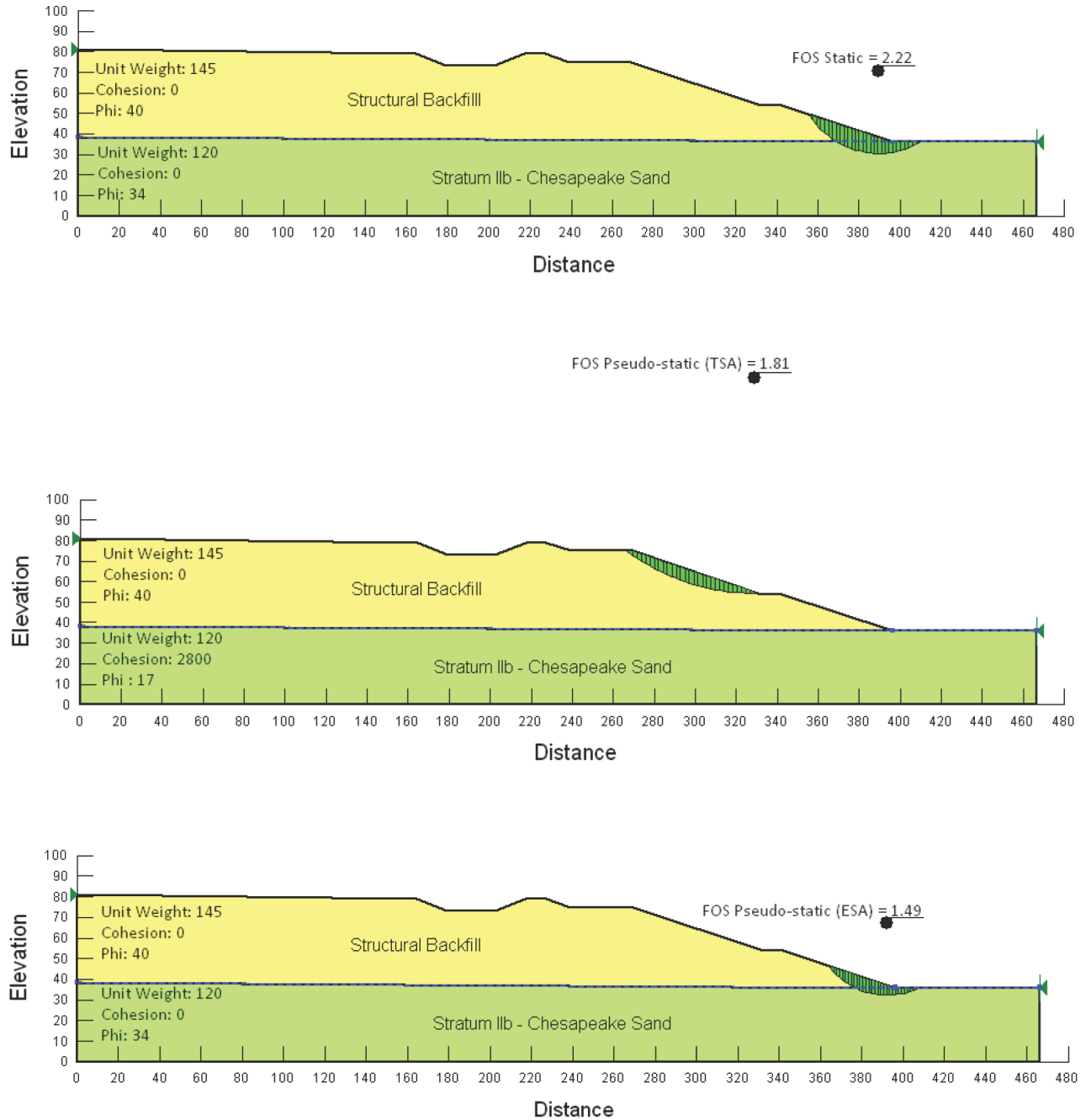
Figure 2.5-192 — {Static and Pseudo-Static Stability Analyses of Slope Section A - Case b}



{ Static and Pseudo-Static Stability Analyses of Slope Section A - Case b }

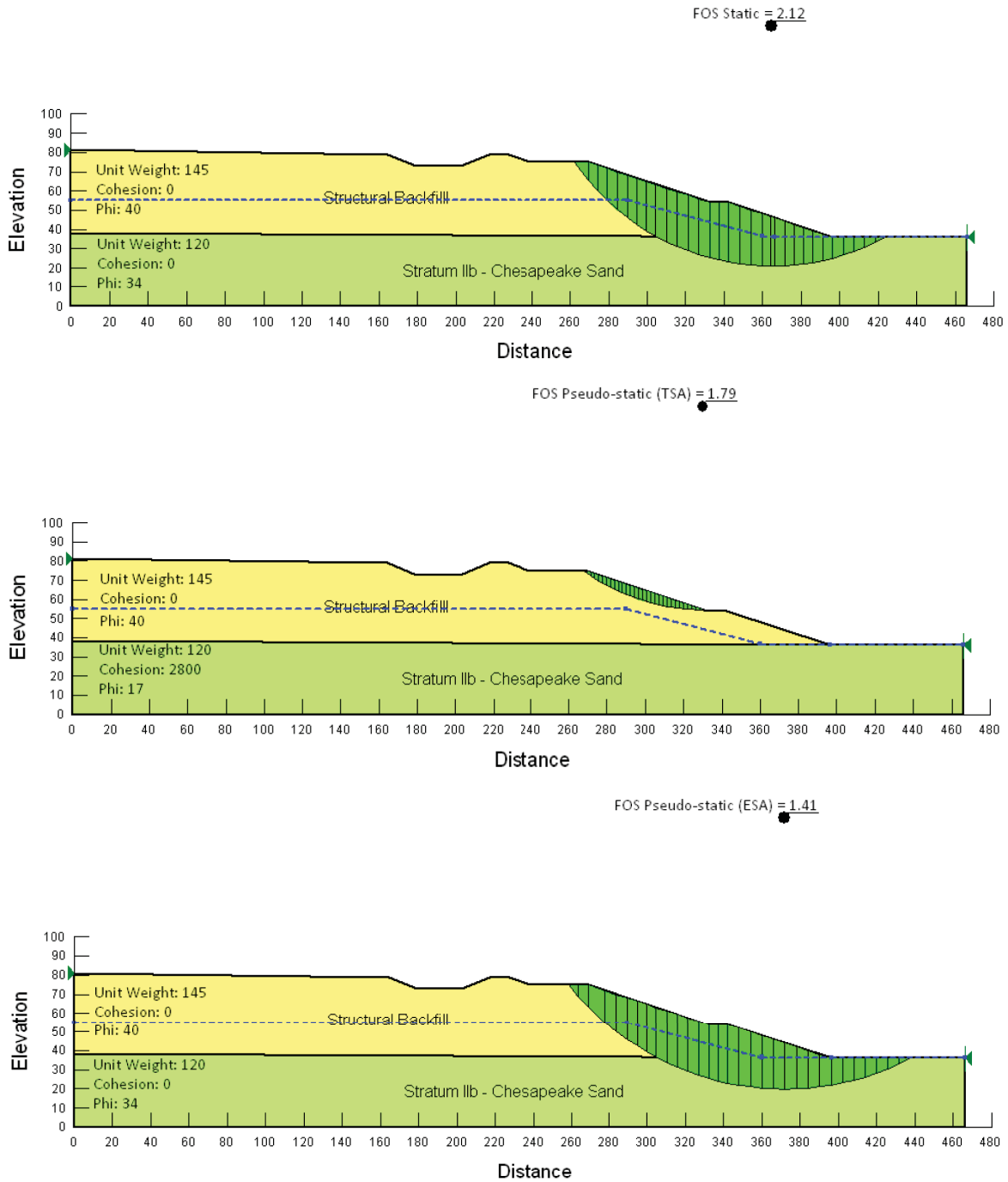
CC3-10-0270

Figure 2.5-193 — {Static and Pseudo-Static Stability Analyses of Slope Section B - Case a}



CC3-10-0270

Figure 2.5-194 — {Static and Pseudo-Static Stability Analyses of Slope Section B - Case b}



CC3-10-0270

Figure 2.5-195 — {Static and Pseudo-Static Stability Analyses of Slope Section C}

