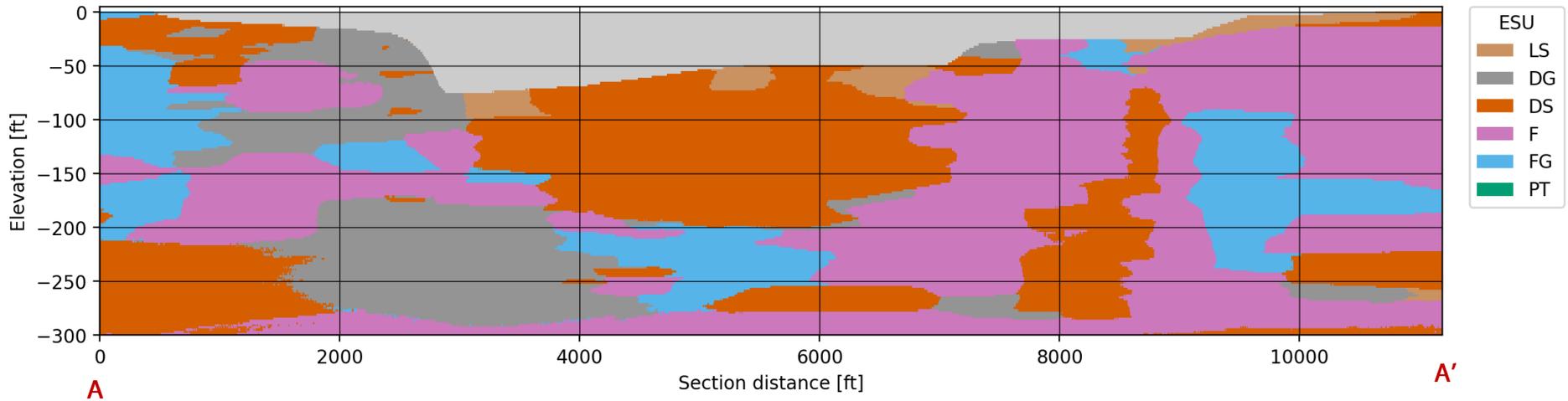




ESU	Description	Acronym	SPT Range	SPT Description	USCS	Additional Requirements
LS	Loose Sand and Silty Sand	LS	0-30	Very loose, very-loose, loose, medium dense, medium-dense	SM, SC, SP, SP-SM, SP-SC, SW, SW-SM, SW-SC	
DG	Dense Gravel	DG	31+	Dense, very dense, very-dense	GM, GP, GP-GM, GW, GW-GM	
DS	Dense Sand and Silty Sand	DS	31+	Dense, very dense, very-dense	SM, SC, SP, SP-SM, SP-SC, SW, SW-SM, SW-SC	
F	Stiff to Hard Low-Plasticity Fines	F	8+	Stiff, very stiff, very-stiff, hard	CL, CL-ML, ML	
FG	Stiff to Hard Gravelly Fines	FG	8+	Stiff, very stiff, very-stiff, hard	CL, CL-ML, ML	Gravel supported by fines
PT	Peat	PT	0+	-	PT	



ESU Profile Knik Arm Tunnel Feasibility Study		Figure 1
Anchorage, Alaska	September 2025	