What is a Seismic Design Category

If A Seismic Design Category is a classification assigned to a structure based on its occupancy category, and the severity of the design earthquake ground motion. The category assignment can range from A-F, and can be defined as the following:

- Seismic Design Category A – Corresponds to buildings in areas where expected ground shaking will be minor. Good Soils
- Seismic Design Category B - Corresponds to buildings of Occupancy Groups I,II and III where expected ground shaking will be moderate. Stratified soils with Good and poor Soils
- Seismic Design Category C - Corresponds to buildings of Occupancy Groups IV (Hospitals, Police Stations Emergency control centers etc) I where expected ground shaking will be MODERATE AND buildings of occupancy categories I, II, and III where MORE SEVERE ground shaking will occur
- Seismic Design Category D -Corresponds to buildings and structures in areas expected to experience severe and destructive ground shaking But NOT located close to a major fault. Sites with poor soils are a good example
- Seismic Design Category E - Corresponds to buildings of Occupancy Groups I,II and III in areas NEAR MAJOR ACTIVE FAULTS. Soil or rock is of no consequence
- Seismic Design Category F - Corresponds to buildings of Occupancy Groups IV (Hospitals, Police Stations Emergency control centers etc)areas NEAR MAJOR ACTIVE FAULTS. Soil or rock is of no consequence

A Good Soils report from a Geotechnical engineer will and should provide to the structural engineer and architect the parameters necessary to determine the Seismic Design Category OR provide the Seismic Design category outright. However it MUST be specified in their sub-contract.