



South Carolina
Department of Transportation

August 14, 2026

GEOTECHNICAL DESIGN BULLETIN NO. 2026-1

SUBJECT: Updates to SCENERIO PC (2006) to CarolinaADRS

EFFECTIVE DATE: Immediately

SUPERSEDES: GDM GDF 002

RE: 2024 Geotechnical Design Manual

Geotechnical Design Support office is releasing two new software for the development of Acceleration Design Response Spectrum (ADRS) curves: CarolinaShake and CarolinaADRS. These programs are based on the results of the research SPR No. 745 "Update/Improvements to SCENARIO_PC (2006)".

CarolinaShake and CarolinaADRS will replace SCENARIO_PC (2006) and the 3-Point ADRS spreadsheet. CarolinaADRS provides refined data and methodologies to obtain the earthquake hazards required for seismic design in South Carolina.

The technical research is complete, and the data is available for use. All requests for ADRS curves or for updated ADRS curves will be performed in coordination with the Office of Engineering Support - Geotechnical Design Section (OES/GDS). Geotechnical Design Support is currently working with the research team to finalize separate user manuals for CarolinaShake and CarolinaADRS to enable the use of the software outside of Engineering Support.

ADRS curves generated from CarolinaADRS should be used where design has not advanced beyond the preliminary design submittal. All projects beyond the preliminary design submittal can request an updated ADRS curve as deemed appropriate by the Regional Production Groups. All updated ADRS curves must move forward using the CarolinaADRS method and shall not revert to 3-Point ADRS curves or Site-Specific Response Analysis, if performed. Consult the OES/GDS office for geotechnical submittal requirements when requesting for seismic design information.

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