RS&H developed the Design Criteria and Modification Plan to convert the RS&H-designed Ares-1 Mobile Launcher (ML) to be used for the Space Launch System (SLS) vehicle. The Modification Plan included proposed layouts of planned Ground Support Equipment (GSE) and Ground Support Systems (GSS) that provided functional installation while maintaining Life Safety Code mandated egress paths and OSHA-mandated clearance requirements for access to equipment.

RS&H also provided a comprehensive design package that included construction drawings and technical specifications for a competitive, fixed-price bid contract to modify the ML structure and facility systems.

The project demonstrates:

» Major structural system analysis and design
» Major mechanical system analysis and design
» Major electrical system analysis and design
» Comprehensive cost estimating and analysis
» CPM schedule and analysis
» FFP construction bidding documents
» 3-D modeling (PTC) Creo and interference resolution
» Engineering services during construction