

Serves as a civil engineer specialist in pavement and site design on the staff of a design organization responsible for planning, and design of new and/or extension, conversion, or modernization of existing buildings or facilities sites/complexes. Assignments involve performance of office and field design duties associated with in house design and architectural/engineering review on project sites with diverse climatic, geographic, and environmental conditions that involves new pavements (airfields, highways, streets, parking lots), building sites/complexes earthwork grading, erosion control, storm water, and storm water quality designs. Applies the latest design and construction techniques to all type project sites.

1. Performs technical design, contract document preparation, review, assessment, and provides guidance, including the resolution of complex civil site design issues, development of CADD 3D site models and drawings, specifications, and design analysis, obtain erosion/sedimentation control and storm water quality permits of projects in GA, NC and SC, as well as the preparation of appropriate documents for agency officials, client agencies, and contract Architect-Engineer (A-E)/Design-Build (D-B) firms.
2. Design new pavement design and/or rehabilitation of airfield runways, taxiways and/or aprons to include DoD criteria for Army and AF airfields, soil conditions, subgrade supporting characteristics, design requirements.
3. Design new site complex including roads, parking lots, railroads, TEMF hardstands, recreation facilities, parks, site support all facilities types from DFAC, Barracks, COFs, Admin Headquarters etc., culvert and storm water drainage systems, ditches and channels taking into account soil conditions, environmental wetlands and endangered species, and installation specific requirements.
4. Design analysis includes but not limited to erosion/sedimentation control, pavement thickness, and various types of hydraulic analyses.
5. Conducts or directs the conduct of investigations of project site to determine (for new construction) feasibility of proposed project; topography; and essential site configuration; preliminary site features and utility cost scope, condition of pavements, and storm drainage systems and essential data prior to initiating design. Conduct site investigations to include reports reflecting unusual site conditions, remedial actions, cause of distressed airfield and roadway pavements, site erosion problems and surcharge storm drainage pipes and channel systems with recommendations and cost studies for corrective measures. Evaluates data obtained and incorporating relevant features into design consideration and solutions.
6. Prepares statement of civil engineering scope of work and detailed man-hour estimates used for negotiating with A-E firms for design services (military and civil works); and all pertinent correspondence, plans, reports, state permits and A/E contract criteria necessary for project completion.

