122nd FW Pre-Engineering Building Capstone Project

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The team is working on the design of a cost-effective vehicle maintenance structure with a footprint of approximately 8,000 square feet. The intent of this project is to provide an adequate, functional shelter and service space for vehicles while maintaining economic feasibility.

The scope of the project consists of a one-, two-, or three-sided roofed structure, with no expectation for doors or fire protection systems. Its primary purpose is to protect vehicles by providing cover from weather exposure. To enhance usability, the structure should ideally include lighting and a newly installed concrete floor, designed with an appropriate slope to ensure proper drainage.

Key considerations for the design include determining the required height of the structure and confirming the customer's preference for the number of enclosed sides. The final configuration of sides may also be influenced by siting conditions. The preferred location is within the existing fenced area of the vehicle maintenance facility, ideally situated on the portion currently paved with asphalt.