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## EXECUTIVE SUMMARY

The thesis proposal outlines the items to be addressed during the Spring 2008 semester for The Maryland Transportation Authority Police Training Facility. It includes both lighting and electrical depths, which involve the redesign of the respective systems in four spaces: the large classroom, physical training gymnasium, firing range, and the exterior front façade and main entrance.

The firing range, the largest space in the Maryland Transportation Authority Police Training Facility, has special air flow requirements. Laminar air flow is especially important in the range area so that ammunition particles settle to the floor and are not ingested by the users of the range. The mechanical breadth will examine changes to the mechanical system that will decrease turbulent air flow.

Currently, the range incorporates Tectum panels, a type of acoustical paneling, to limit the attenuation of sound into the surrounding spaces, and provide absorption within the space. The acoustical breadth will examine alternate materials that could further improve the acoustical isolation of the space.