George Mason University Art & Visual Technology Building Fairfax, VA Allen Walker Lighting/Electrical Option Thesis Proposal 12/18/07

## **Executive Summary**

The proposed thesis will comprise the redesign of four critical spaces for the building. The main courtyard, entry lobby, exhibit gallery and typical painting studio will be redesigned based on the schematic design which was completed for the third technical report. These spaces will also have the electrical service to them redesigned for the change in lighting with analysis of the panels serving them incorporated as well. In addition, a coordination of the electrical system will be conducted. Finally, analyses of adding a photo voltaic array and use of energy efficient transformers will be done. Each will look at the feasibility of the system along with benefit-cost study for the owner. Breadth work will include a mechanical redesign of the main lobby which went from being an exposed system to having an air plenum. And finally, an acoustical study will be done for the metal workshop studio in the lower level of the building. It will analyze the existing conditions and provide solutions to create a better atmosphere.