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Final Report



Conclusions

The goals for this design were to create an appealing lighting design while maintaining an energy and maintenance efficient system. These goals were met by providing concealed fixtures where possible and using mostly fluorescent lighting sources. Fluorescent sources allowed the ability to be energy efficient while maintain the flexibility to be dimmed as well. To complete this design flexibility, a Grafik Eye system was specified for controls. The system design has the option to dim the different layers of light in each major space. The system has a straightforward plan for wiring because the circuiting plan reflects the lighting control zoning plans directly. This design is successful because the electrical layout plan was integrated into the lighting controls to simplify the installation.

Breadth studies provide a better understanding of the overall design. To improve the details of the lighting system other elements of the architectural design are affected. There are two architectural elements that would be modified by this design to avoid conflict with the lighting system plan. The first is the addition of coves in the lobby areas which was analyzed within the fixture cost installation analysis. The second conflict occurs in the auditorium space and affects the size of acoustical reflectors. The outcomes of both studies show that the results can either support the design or suggest modifications. As it turns out, the cost to install the cove lighting significantly adds to the lobby lighting installation costs. As a designer without a budget or limits to creativity, it is still recommended that the design be implemented as planned in this report. The added flexibility, aesthetics, and efficiency make the design a success.