

Capital Project for Campus Fiber Optic Improvement Project

JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

October 6, 2010

The University's 2010-2016 Six-Year Capital Plan approved on March 23, 2009 includes a project to improve the campus network and communication infrastructure. The University's technology infrastructure is integral to supporting the institution's core mission of teaching, research, and outreach. The current fiber-optic backbone is outdated and needs to be upgraded. The physical infrastructure installed over 20 years ago no longer has sufficient capacity to meet existing demand and will not be able to meet future demand as new facilities come on-line.

The proposed implementation strategy to improve the network and communications infrastructure is to phase improvements over several years. This request is for the installation of a fiber-optic core on campus which will consist of five segments connecting to the five campus switching centers and connections from the core to several buildings. The pathway improvements will increase capacity and ensure diversity, both of which are needed to provide abundant and reliable network connectivity to the university. The installation will include use of conduit in horizontal boring and existing pathways in steam tunnels and other duct banks where available.

The estimated project cost inclusive of design, construction, and equipment is \$2 million. As with all self-supporting projects, the University has developed a financing plan to provide assurance regarding the financial feasibility of the project. This funding plan calls for cash from reserves. With the scope, cost, and funding plan established, the University is ready to move the project forward.

Under the 2006 Management Agreement between the Commonwealth of Virginia and the University, the Board of Visitors has the authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral fund capital outlay projects. This request is for a project authorization to move forward with the Campus Fiber Optic Backbone Installation project.

RESOLUTION ON CAPITAL PROJECT FOR CAMPUS FIBER OPTIC IMPROVEMENT PROJECT

WHEREAS, the University's 2010-2016 Six Year Capital Plan includes the Technology Infrastructure project to improve the network and communication infrastructure; and,

WHEREAS, the current fiber-optic backbone was installed over twenty years ago and is outdated and needs to be upgraded; and,

WHEREAS, the proposed implementation strategy to improve the network and communications infrastructure is to phase improvements over several years; and,

WHEREAS, this request is to install a new fiber-optic backbone and building connections that will increase capacity and diversity to ensure adequate and reliable service to the University; and,

WHEREAS, the estimated project cost inclusive of design, construction, and materials for this fiber-optic installation is \$2 million; and,

WHEREAS, the University has developed a 100 percent nongeneral fund resource plan that can successfully support the \$2 million of project costs; and,

WHEREAS, under the 2006 Management Agreement between the Commonwealth of Virginia and the University, the Board of Visitors has authority to approve the budget, size, scope, debt issuances, and overall funding of nongeneral funded major capital outlay projects; and,

WHEREAS, the University may address minor cost and scope variances provided sufficient funds are available to support the full project costs;

NOW, THEREFORE BE IT RESOLVED, that the University be authorized to move forward with the Campus Fiber-Optic Backbone Installation project at a total project cost not to exceed \$2 million.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to complete the Campus Fiber Optic Improvement project be approved.

November 8, 2010