



Albemarle County

Legislation Text

File #: 17-480, **Version:** 1

AGENDA DATE: 8/9/2017

TITLE:

Light-Emitting Diode (LED) Performance Contract

SUBJECT/PROPOSAL/REQUEST: Approve LED Performance Contract Financing

ITEM TYPE: Regular Action Item

STAFF CONTACT(S): Walker, Letteri, Kamptner, Burrell

PRESENTER (S): Doug Gebhardt, Financial Advisor, Davenport & Company

LEGAL REVIEW: Yes

REVIEWED BY: Douglas C. Walker

BACKGROUND: Following positive responses from administrators, teachers, and students to a light-emitting diode (LED) upgrade pilot in several schools, the School Division began investigating using an energy performance contract to upgrade lighting to improve the learning environment and save energy. As a first step to determining the project's feasibility, the School Board voted on January 28, 2016 to support the request for a Back-of-the-Envelope Audit for a division-wide LED lighting project. Subsequently, school staff worked with members of the Local Government and School Efficiency Committee to procure audits for School Division facilities through an Energy Service Company (ESCO).

An energy performance contract allows an ESCO to design and implement facility improvements while also guaranteeing the utility savings resulting from the projects. The debt service/loan repayment amount necessary to install LED lighting throughout the school system will be repaid from savings in the schools operating utility budget, thus it is expected to be cost-neutral for the life of the loan.

After procuring Back-of-the-Envelope audits, proposed projects with initial savings projections were received from four ESCOs. The firm, Ameresco, was selected and subsequently completed investment grade audits involving both energy and water use at all schools, as well as COB - McIntire, and COB - 5th Street at no cost. Ameresco has vast project experience across the country with similar projects, and in Virginia.

STRATEGIC PLAN: Infrastructure Investment: Prioritize, plan, and invest in critical infrastructure that responds to past and future changes and improves the capacity to serve community needs.

DISCUSSION: The School Division project scope includes LED lighting and plumbing fixture upgrades at the majority of school locations. LED lighting upgrades are included for classrooms, gymnasiums, cafeterias, and the building exteriors. Plumbing fixture upgrades include high-efficiency sink fixtures, toilets and urinals at schools served by municipal water sources. While the desired outcome for this project is improvements to the quality of lighting in instructional spaces (i.e., LED dimmable fixtures), the additional lighting and plumbing projects further support the goal by reducing the overall payback period for the project. The current project scope for schools is approximately \$7,500,000 with a projected financing term of 12 years. Improvements to

County facilities were also identified, to include lighting, mechanical upgrades and system controls for a total estimated cost of \$1.3 million, however, staff recommends that any action on these improvements to County facilities be postponed until the Board makes a decision on the future use or disposition of these facilities.

The impact of the proposed projects will improve the school learning environment and reduce energy and water consumption. The proposed school projects will reduce electricity consumption by over 6,000,000 kWh and 3,700 tons of carbon dioxide emissions each year. The plumbing fixture upgrades will reduce water consumption by over 7.7 million gallons per year. The anticipated annual savings to the environment are equivalent to:

- Planting 769 acres of trees per year
- 620 cars per year being removed from the road
- Powering 469 houses per year

The past and future milestones of this proposed project, from development to possible execution, are summarized in Attachment A.

The County's Financial Advisors, Davenport and Company, issued a Request for Proposals (RFP) on the County's behalf, and received proposals on August 1st from financial institutions that were willing to providing financing for the subject energy conservation equipment. The essence of the financing options will be explained to the Board by Davenport during the meeting.

BUDGET IMPACT: The Guaranteed Energy Savings Performance Contract is based on projected energy saving after improvements are made to School Facilities, with those savings being earmarked as the source of debt service payments.

RECOMMENDATION:

Recommendations regarding the financing options will depend on the responses to the RFP. The County's Financial Advisors, Davenport and Company, will recommend a funding option for the Board's approval at the August 9 meeting. If, on the basis of the responses to the RFP, it would be more advantageous for the County to issue bonds directly for these improvements, then Board action will be required; alternatively, if the schools elect to finance the projects directly, then no action will be required of the Board of Supervisors.

ATTACHMENTS: Attachment A: Proposed Project Development Plan