EECBG Budget Justification

Activity: LED Street Light Replacements (Eligible Activity No. 12)

Grant money will be used to replace 500 existing street light fixtures and bulbs with LED street light fixtures and bulbs. No grant funds are being requested for labor/installation because current staff in City's Engineering Department will perform the work.

Number of Bulbs/Fixtures	Cost per Bulb/Fixture	Total Cost
500	$800	$ 400,000
Activity Total		$ 400,000

Activity: Position for Grant Administrator (Eligible Activity No. 14)

Salary & Benefits - This position will be created to work in the City's Department of Public Works. The responsibilities for this position include monitoring and oversight of the EECBG program, completing required reports, documenting grant program activities, providing updates to City Council regarding EECBG program activities and accomplishments, participating on the Strategic Action Plan Sustainability Goal work group, and any other duties necessary to ensure program compliance. The personnel cost is based on the salary grade for a Management Analyst II (Grade 12). Fringe benefits are calculated at 58.12 percent of salary. Annual cost of living increases are calculated at 3% per year.

	Year 1	Year 2	Year 3	TOTAL
Salary	$ 50,000	$ 51,500	$ 53,045	$ 154,545
Benefits	$ 29,060	$ 29,932	$ 30,830	$ 89,822
Travel	$ 1,487	$ 1,487	$ 1,488	$ 4,462
Equipment	$ 5,773	-	-	$ 5,773
Supplies	$ 1,500	$ 1,500	$ 1,500	$ 4,500
Activity Total				$ 259,102

Travel - This position may require frequent travel in and around the City of Newport News to attend meetings and monitor projects; this position may also be required to travel to regional meetings such as those of the Planning District Commission. The land area of the City itself is 68 square miles and that the City's reimbursement rate for mileage is $0.55 cents per mile. Cost for travel is based on an estimated 2704 miles per year.

Equipment & Supplies – Because this is a new position, it will be necessary to purchase a computer, printer, phone, desk, chair, and other small items of office equipment and

furniture. This cost is placed entirely in Year 1. Is it expected that monthly consumable office supplies will be required. The estimated budget for supplies is $125 per month.

Activity: Energy Efficiency HVAC Retrofits (Eligible Activity No. 5)

These costs are to retrofit four City buildings with more energy efficient HVAC equipment. In City Hall, EECBG funds will be used to replace four air-handling units in the sub-basement. In Pearl Bailey Library, EECBG funds will be used to replace the air handler and boiler and integrate the upgrades into the energy management control system. In the Family Courts Building the 14 year-old chiller and the roof need to be replaced. Additional insulation will be used when replacing the roof, increasing the R-value for the building envelope and a reflective light colored roof will be selected for a cooler roof surface. In the Circuit Courthouse, the existing gas-fired boilers are original to the building and finding replacement parts is difficult or impossible. New boilers will be more energy efficient and will add to the optimal performance of the building's HVAC system. The cost shown is to replace two boilers and tie into the energy management control system. All work will be contracted out to local businesses.

	Materials	Labor	Total
City Hall	$ 113,400	$ 159,464	$ 272,864
Pearl Bailey Library	$ 102,000	$ 83,000	$ 185,000
Family Courts	$ 169,000	$ 51,000	$ 220,000
Circuit Courthouse	$ 120,000	$ 20,000	$ 140,000
TOTAL	$ 504,400	$ 313,464	$ 817,864

Activity: Energy Efficiency Lighting Retrofits (Eligible Activity No. 5)

The following costs are for lighting and occupancy sensors:

Justice Center Parking Garage – Cost to complete two levels (other levels have been updated); when compared to metal halide fixtures will reduce the annual energy consumption by 43,660 KWHs and avoid 31.4 MT CO2 emissions.

Family Courts (Juvenile & Domestic Relations Courthouse) - Changing T12 lamps and magnetic ballasts in existing light fixtures to T8 lamps with electronic ballasts will reduce the annual energy consumption by 5,985 KWHs and avoid emitting about 4.3 metric tons of CO2. Adding occupancy sensors will save an additional 45,723 KWHs per year and avoid 32.8 MT of CO2 emissions. Replacing the recessed "can" fixtures with LED fixtures throughout the courthouse will reduce 15,852 KWHs per year, equivalent to 11.4 MT CO2. Total energy savings per year with the lighting retrofit: 67,560 KWHs and 48.5 MT of avoided CO2 emissions.

Main Street Library – Cost to complete a group re-lamping of all the recessed light fixtures in the stack areas, replacing the T12 lamps and magnetic ballasts with T8 lamps and electronic ballasts, will conserve 8,858 KWHs per year, equal to 6.4 metric tons of CO2. Replacing fluorescent cove lighting and dimmable lighting in the meeting room with LED lighting will further reduce energy consumption by 32,120 KWHs, equal to 23.1 metric tons of CO2. Replacing the difficult to reach pendant light fixtures with LED fixtures will save 7,964 KWHs per year, avoiding 5.7 metric tons of CO2. Adding occupancy sensors in restrooms, workrooms and offices will save an additional $1,221 per year, reduce energy use by 12,717 KWHs, equal to 9.1 metric tons of CO2. Replacing the exterior bollards and area lighting with LED fixtures will save another 9,220 KWHs and 6.6 metric tons of CO2. Total energy savings per year with the lighting retrofit is 70,879 KWHs and 50.8 MT of avoided CO2 emissions. Occupancy sensors will be installed by existing staff so there is no labor cost listed for this item.

Fire Station #2 – Current lighting is original to the building and includes numerous recessed incandescent fixtures. Replacing the original fixtures with energy efficient fluorescent fixtures and lamps will reduce 18,558 KWHs yearly, equivalent to 13.3 MT CO2. Adding occupancy sensors will further reduce energy by 4,315 KWHs, equivalent to 3.1 MT CO2. Replacing the insufficient exterior lighting with LED lighting will provide for a safer environment and save another 1,555 KWHs per year and avoiding 1.1 MT CO2. Total energy savings per year with the lighting retrofit: 24,428 KWHs and 17.5 MT of avoided CO2 emissions. Labor for interior lighting and occupancy sensors will be performed by City staff, so no labor costs are listed for this item,

		Materials	Labor	Total
Justice Center Garage		$ 35,000	$ 5,000	$ 40,000
Family Courts				
	Lighting – T8 & LED	$ 62,282	$ 27,300	$ 89,582
	Occupancy Sensors	$ 5,100	$ 6,400	$ 11,500
Main Street Library				
	Interior Lighting	$ 76,000	$ 22,900	$ 98,900
	Occupancy Sensors	$ 767	$ 0	$ 767
	Exterior Lighting – LED	$ 12,380	$ 2,205	$ 14,585
Fire Station # 2				
	Interior Lighting	$ 13,530	$ 0	$ 13,530
	Occupancy Sensors	$ 820	$ 0	$ 820
	Exterior Lighting - LED	$ 5,640	$ 5,010	$ 10,650
TOTAL		$ 211,519	$ 68,815	$ 280,334

Total All Activities

LED Street Light Replacements	$ 400,000
Grant Administrator	$ 259,102
HVAC Retrofit of 4 Existing City Buildings	$ 817,864
Energy Efficient Lighting for 4 Existing City Buildings	$ 280,334
TOTAL ALL	**$ 1,757,300**