

Re:

LED Lighting Retrofit

Date:

25-May-16

Project Location(s):

Southern Arkansas University Tech

6415 Spellman Rd.

Camden, AR 71711

Scope of Work:

We hereby propose to furnish the materials and perform the labor necessary to

install the following:

Project Summary

Total Project Cost:

\$513,593.86

Estimated Annual Savings (\$0.10/kWh):

\$91,224.00

Estimated Annual kWh Reduction:

912,240

Estimated Payback (years):

5.6

Estimated Return on Investment:

17.76%

pondins 529,001.52

Plus interest

1008,442.00

Administration Building

Proposed Scope of Work:

- -Total fixture swap of linear fluorescent fixtures to LED fixtures (lay-in, surface mount, and strips).
- -All incandescent and compact florescent lamps with be replaced with LED lamps.
- -Removing some redundant lighting in various locations throughout the lower level.

Total Project Cost:

\$98,068.00

Estimated Annual Cost Savings:

\$18,628.00

Estimated Annual kWh Savings:

186,284

Estimated Project Payback (years):

5.3

Estimated ROI:

18.99%



Manufacturing Building

Proposed Scope of Work:

- -All linear fluorescent fixtures in the classroom, office, breakroom, and restrooms will be replaced with new LED fixtures.
- -All of the existing fixtures in the warehouse/shop area will be removed from service (with the exception of a select number of task tuned linear fluorescent fixtures these will be retrofitted with LED tubes and kits).
- -New LED high bay fixtures with built in occupancy sensors will replace the above mentioned lighting to be removed.
- -Any compact fluorescent or incandescent lamps will be replaced with new LED lamps.

Total Project Cost: \$37,417.98

Estimated Annual Cost Savings: \$10,850.00

Estimated Annual kWh Savings: 108,500

Estimated Project Payback (years): 3.4

Estimated ROI: 29.00%

Activities Center/Old Gymnasium

Proposed Scope of Work:

- -Removing all (24) 400W Metal Halide fixtures from the gymnasium and replacing them with 34W LED 2'x2' lay-in troffers. (SEAL will provide lift needed for fixture swap).
- -Total fixture swap of linear fluorescent fixtures to LED fixtures
- -Re-lamping all fluorescent A-lamp and CFL fixtures.

Total Project Cost: \$28,709.98

Estimated Annual Cost Savings: \$7,041.00

Estimated Annual kWh Savings: 70,414

Estimated Project Payback (years): 4.1

Estimated ROI: 24.52%



Library

Proposed Scope of Work

- -All linear fluorescent fixtures will be replaced with new LED fixtures, with the exception of the ones above the front desk which will be retrofitted using LED tubes and kits.
- -Replacing all recessed can lighting with new LED fixtures.
- -Existing exterior flood lights will be replaced with new LED floods.

Total Project Cost: \$33,602.39
Estimated Annual Cost Savings: \$6,265.00
Estimated Annual kWh Savings: 62,650

Estimated Project Payback (years): 5.4

Estimated ROI: 18.64%

Business Building

Proposed Scope of Work:

- -Existing linear fluorescent pendant fixtures on the north and south end of the building will be retrofitted with LED tubes and kits. All others will be replaced with new LED fixtures.
- -All compact fluorescent and incandescent lamps will be replaced with LED lamps.
- -Recessed can fixtures will be retrofitted with LED trip kits.
- -The exterior wall pack and flood fixture will be replaced with new LED fixtures.

Total Project Cost: \$89,228.05

Estimated Annual Cost Savings: \$15,227.00

Estimated Annual kWh Savings: 152,272

Estimated Project Payback (years): 5.9

Estimated ROI: 17.07%



Technology and Engineering Building

Proposed Scope of Work:

- -Retrofitting linear fluorescent vanity, accent/up lighting, and task tuned strip fixtures with LED tubes and kits. All remaining linear fluorescent fixtures will be replace with new LED fixtures.
- -All compact fluorescent, incandescent, and halogen fixtures will be retrofitting with LED lamps and trim kits.
- -There is an abundance of lighting throughout this building that could be eliminated. We propose to visit each area as the Scope of Work progresses to see where lighting can be removed from service. Lighting will removed only per clients' request.

Total Project Cost: \$1

\$120,714.64

Estimated Annual Cost Savings:

\$18,616.00

Estimated Annual kWh Savings:

186,160

Estimated Project Payback (years):

6.5

Estimated ROI:

15.42%

Maintenance Shop:

Proposed Scope of Work:

- -Replacing all existing high bay fixtures with new LED fixtures with built-in occupancy sensors.
- -All linear fluorescent lay in fixtures will be replace with new LED fixtures.
- -Proposal calls for the removal of some redundant linear fluorescent fixtures throughout the shop area. Once new high bay fixtures are in place, if there is a need for additional task tuned lighting, we can address it at that point.
- -All new LED fixtures to replace existing metal halide fixtures on the exterior.

Total Project Cost:

\$22,343.62

Estimated Annual Cost Savings:

\$3,798.00

Estimated Annual kWh Savings:

37,985

Estimated Project Payback (years):

5.9

5.9

Estimated ROI:

17.00%



Area Lighting

Proposed Scope of Work:

-All of the existing pole lights will be replaced with the low-profile fixtures that are currently in place outside of the new student Union.

-The vapor tight fixtures mounted under covered picnic tables will be replace with similar LED fixtures.

Total Project Cost: \$39,856.21

Estimated Annual Cost Savings: \$2,704.90

Estimated Annual kWh Savings: 27,049

Estimated Project Payback (years): 14.7

Estimated ROI: 6.79%

Career Academy Scope of Work

Proposed Scope of Work:

-Total fixture swap for all fixtures (interior and exterior) with the exception of the compact fluorescent and incandescent, which will be re-lamped with LED lamps.

Total Project Cost: \$9,663.78

Estimated Annual Cost Savings: \$1,784.00

Estimated Annual kWh Savings: 17,841

Estimated Project Payback (years): 5.4

Estimated ROI: 18.46%



Auto Shop Scope of Work

Proposed Scope of Work:

- -Lay-in fluorescent fixtures will be replaced with new LED fixtures and all others will be retrofitted with LED tubes and kits.
- -All high bay metal halide fixtures with LED fixtures with built-in occupancy sensors.
- -New LED fixtures to replace existing exterior fixtures.

Total Project Cost: \$16,268.54
Estimated Annual Cost Savings: \$2,755.90
Estimated Annual kWh Savings: 27,559
Estimated Project Payback (years): 5.9
Estimated ROI: 16.94%

Environmental Lat Academy

Proposed Scope Of Work:

- -All linear fluorescent lay-in fixtures will be replaced with new LED fixtures and any remaining linear fluorescent fixtures will be retrofitted with LED tubes and kits.
- -Incandescent track lighting will be re-lamped with LED lamps.
- -Two new exterior wall packs will replace existing metal halide fixtures and the incandescent lamp in the porch fixture will be replace with an LED lamp.

Total Project Cost:	\$17,720.33
Estimated Annual Cost Savings:	\$3,544.00
Estimated Annual kWh Savings:	35,440
Estimated Project Payback (years):	5.0
Estimated ROI:	20.00%