





December 9, 2020

TO: Members of the Board of Trustees

FROM: Scott A. Jordan 
Executive Vice President for Administration and Chief Financial Officer

Carl W. Lejuez 
Provost and Executive Vice President for Academic Affairs

RE: Project Budget for Storrs LED (SLED) Lighting Upgrade
(Revised Final: \$7,850,000)

RECOMMENDATION:

That the Board of Trustees approve the Revised Final Budget of \$7,850,000 to provide design, procurement and installation services for planning materials and turnkey installation of LED lighting and controls on the Storrs and regional campuses. The Administration recommends that the Board of Trustees adopt the Resolution below:

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$7,850,000 in University Funds for the Storrs LED (SLED) Lighting Upgrade.”

BACKGROUND:

This comprehensive energy efficiency project involves implementing Design Lighting Consortium (DLC) Compliant Lighting System Upgrades to energy efficient and reduced maintenance LED luminaires and drivers by providing Design, Procurement, and Installation Services for materials and turnkey installation of LED Lighting and Controls. Location Group 1 at Storrs consisting of 39 buildings totaling 1.5 million square feet will be saving over 2.5 million kWh annually. Per the United States Environmental Protection Agency (US-EPA) Greenhouse Equivalencies Calculator <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> this is equivalent to removing 1,796 tons of CO₂e, or 381 passenger vehicles from the road, or supplying the energy to 313 homes for one year, or the carbon sequestering of 2,114 acres of forest for one year. This is also nearly twice the total CO₂e emissions of the Innovation Partnership Building (IPB was 931 Metric Tons/Year in 2018).

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This effort is not contemplated to be merely a one for one replacement of lighting but to create a lighting design that meets current UCONN design guidelines, industry standards and the specification of the latest energy efficient lighting technology. Designers are to attend to all the space types in the list of buildings, walkways, and/or parking lots attached and provide the best solution for the LED lighting system in that area in an aesthetically complimentary design for the Storrs, Avery Point, and Law School campuses. This work will include interior and exterior areas. Design documents will be specific in work required in each area including but not limited to the re-layout of lighting to minimize the number of installed fixtures, improved control and resident operability, and code compliance.

This project has encountered delays in Location Group 1 construction and increased costs due to COVID-19 mitigation compliance and supply chain interruptions requiring the requested increase in funding. This project is eligible for rebates and incentives up to 60% of installed costs from Eversource and Connecticut Natural Gas. The project commenced October 2018, is currently 52% complete, and is expected to be complete March 2022.

This project will result in significant carbon footprint reductions to increase energy efficiency, decrease overall energy use, and reduce greenhouse gas emissions moving us toward UConn's goal of achieving carbon neutrality by the year 2050, per the Governor's Executive Orders 2020-01 and 2020-03, American College & University Presidents' Climate Commitment (ACUPCC) agreement and UConn's Climate Action Plan.

The Revised Final Budget is attached for your information and reflects an increase of \$2,500,000 to the previously approved Final Budget of \$5,350,000. The increase is requested for construction to continue during the extended winter 2020 break allowing the University regain progress towards meeting the stated Sustainability goals of 45% greenhouse gas reductions by 2030.

CAPITAL PROJECT BUDGET REPORTING FORM

TYPE BUDGET: REVISED FINAL

PROJECT NAME: STORRS LED (SLED) LIGHTING UPGRADE


<u>BUDGETED EXPENDITURES</u>	<u>APPROVED PLANNING 10/31/2018</u>	<u>APPROVED FINAL 10/23/2019</u>	<u>PROPOSED REVISED FINAL 12/9/2020</u>
CONSTRUCTION	\$ -	\$ 3,440,000	\$ 4,318,640
DESIGN SERVICES	899,800	1,289,800	1,812,645
TELECOMMUNICATIONS	-	-	-
FURNITURE, FIXTURES AND EQUIPMENT	-	-	-
CONSTRUCTION ADMINISTRATION	-	-	167,130
OTHER AE SERVICES (including Project Management)	5,655	89,000	189,000
ART	-	-	-
RELOCATION	-	-	-
ENVIRONMENTAL	-	28,100	52,700
INSURANCE AND LEGAL	-	-	-
MISCELLANEOUS	-	-	500,000
OTHER SOFT COSTS	-	-	-
SUBTOTAL	\$ 905,455	\$ 4,846,900	\$ 7,040,115
PROJECT CONTINGENCY	90,545	503,100	809,885
TOTAL BUDGETED EXPENDITURES	<u>\$ 996,000</u>	<u>\$ 5,350,000</u>	<u>\$ 7,850,000</u>
<u>SOURCE(S) OF FUNDING*</u>			
UNIVERSITY FUNDS	<u>\$ 996,000</u>	<u>\$ 5,350,000</u>	<u>\$ 7,850,000</u>
TOTAL BUDGETED FUNDING	<u>\$ 996,000</u>	<u>\$ 5,350,000</u>	<u>\$ 7,850,000</u>

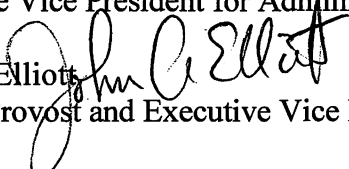
* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.



October 23, 2019

TO: Members of the Board of Trustees

FROM: Scott A. Jordan 
Executive Vice President for Administration and Chief Financial Officer

John A. Elliott 
Interim Provost and Executive Vice President for Academic Affairs

RE: Project Budget for Storrs LED (SLED) Lighting Upgrade
(Final: \$5,350,000)

RECOMMENDATION:

That the Board of Trustees approve the Final Budget of \$5,350,000, as detailed in the attached project budget, to provide design, procurement and installation services for planning materials and turnkey installation of LED lighting and controls on the Storrs and regional campuses. The Administration recommends that the Board of Trustees adopt the Resolution below:

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$5,350,000 in Renewable Energy funds for the Storrs LED (SLED) Lighting Upgrade and approve the request for a waiver of the three-stage budget approval process to allow the work to proceed immediately.”

BACKGROUND:

This comprehensive energy efficiency project involves implementing Design Lighting Consortium (DLC) Compliant Lighting System Upgrades to energy efficient and reduced maintenance LED luminaires and drivers by providing Design, Procurement, and Installation Services for materials and turnkey installation of LED Lighting and Controls at 123 buildings and 23 parking areas on the Storrs, Avery Point, and Hartford Law Campuses. The facilities total approximately 3 million square feet of building space and 1.3 million square feet of parking to be phased into three (3) Location Groups. The intent is to reduce operating and maintenance costs within the facility for cooling/heating and lighting utilizing CT Energy Efficiency Funds and UConn’s Renewable Energy Credit proceeds. Location Group 1 at Storrs consisting of 39 buildings totaling 1.5 million square feet will be saving over 2.5

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million kWh annually. Per the United States Environmental Protection Agency (US-EPA) Greenhouse Equivalencies Calculator <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> this is equivalent to removing 1,796 tons of CO₂e, or 381 passenger vehicles from the road, or supplying the energy to 313 homes for one year, or the carbon sequestering of 2,114 acres of forest for one year. This is also nearly twice the total CO₂e emissions of the Innovation Partnership Building (IPB was 931 Metric Tons/Year in 2018, CT DEEP EnergyCap <https://app.energycap.com/app/buildings/building/6264/actual/ghg>).

This project also meets the Campus Master Plan, Climate Action Plan, and Strategic Energy Management Plan to reduce operating costs, reduce the carbon footprint, and enhance the student experience. The University of Connecticut has plans to achieve an all LED campus to support the University's sustainability and climate action plan objectives. The University's Facilities Operations through the Energy and Water Conservation Team have developed a multifaceted approach to meeting these objectives.

This effort is not contemplated to be a one for one replacement of lighting but to create a lighting design that meets current UCONN design guidelines, industry standards and the specification of the latest energy efficient lighting technology to date. Designers are to attend to all the space types in the list of buildings, walkways, and/or parking lots attached and provide the best solution for the LED lighting system in that area in an aesthetically complimentary design. This work will include interior and exterior areas. Design documents will be specific in work required in each area including but not limited to the re-layout of lighting to minimize the number of installed fixtures, improved control and resident operability, and code compliance.

This project, Location Group 1, will be funded by the UConn Renewable Energy Credit (REC) Fund account. The REC Fund is a revolving energy conservation account that reinvests proceeds from the economical operation of the Cogeneration Facility, Connecticut Conservation and Load Management Fund rebates, and utility incentives into next step energy conservation projects. The funding sources for the additional locations have not been determined yet but may include rebates and incentives from this project which is eligible for rebates and incentives up to 40% of installed costs from Eversource and Connecticut Natural Gas. The project commenced October 2018 and is expected to be complete March 2022. It is requested to waive the three stage budget approval process, allowing the work to proceed immediately, to encumber the rebate and incentives funds.

This project is similar, although larger in scope, to the lighting upgrades conducted as a Continuous Energy Efficiency Improvement Initiative in more than 130 UConn buildings to date. These projects result in significant carbon footprint reductions, increase energy efficiency, decrease overall energy use, and reduce greenhouse gas emissions moving us toward UConn's goal of achieving carbon neutrality by the year 2050, per the American College & University Presidents' Climate Commitment (ACUPCC) agreement and UConn's Climate Action Plan.

The Final Budget is attached for your information and reflects an increase of \$4,354,000 to the previously approved Planning Budget of \$996,000. The increase is requested for construction to begin during the summer of 2020, which will advance the University toward meeting the stated Climate Action goals of 45% greenhouse gas reductions by 2030.

CAPITAL PROJECT BUDGET REPORTING FORM

TYPE BUDGET: FINAL

PROJECT NAME: STORRS LED (SLED) LIGHTING UPGRADE

<u>BUDGETED EXPENDITURES</u>	<u>PROPOSED PLANNING 10/31/2018</u>	<u>PROPOSED FINAL 10/23/2019</u>
CONSTRUCTION	\$ -	\$ 3,440,000
DESIGN SERVICES	899,800	1,289,800
TELECOMMUNICATIONS	-	-
FURNITURE, FIXTURES AND EQUIPMENT	-	-
CONSTRUCTION ADMINISTRATION	-	-
OTHER AE SERVICES (including Project Management)	5,655	89,000
ART	-	-
RELOCATION		
ENVIRONMENTAL	-	28,100
INSURANCE AND LEGAL	-	-
MISCELLANEOUS		
OTHER SOFT COSTS	-	-
SUBTOTAL	\$ 905,455	\$ 4,846,900
PROJECT CONTINGENCY	90,545	503,100
TOTAL BUDGETED EXPENDITURES	<u>\$ 996,000</u>	<u>\$ 5,350,000</u>
<u>SOURCE(S) OF FUNDING</u>		
UNIVERSITY FUNDS	<u>\$ 996,000</u>	<u>\$ 5,350,000</u>
TOTAL BUDGETED FUNDING	<u>\$ 996,000</u>	<u>\$ 5,350,000</u>



October 31, 2018

TO: Members of the Board of Trustees

FROM: Scott A. Jordan *SAJ*
Executive Vice President for Administration and Chief Financial Officer

Craig H. Kennedy *CK*
Provost and Executive Vice President for Academic Affairs

RE: Project Budget for Storrs LED (SLED) Lighting Upgrade
(Planning: \$996,000)

RECOMMENDATION:

That the Board of Trustees approve the Planning Budget of \$996,000, as detailed on the attached project budget for planning and design, services for materials and turnkey installation of LED lighting and controls at 123 buildings and 23 parking areas on the Storrs and regional campuses. The Administration recommends that the Board of Trustees adopt the Resolution below:

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$996,000 in Renewable Energy funds for the Storrs LED (SLED) Lighting Upgrade.”

BACKGROUND:

This comprehensive energy efficiency project involves implementing Design Lighting Consortium (DLC) Compliant Lighting System Upgrades to energy efficient and reduced maintenance LED luminaires and drivers by providing planning and design, services for materials and turnkey installation of LED lighting and controls at 123 buildings and 23 parking areas on the Storrs and regional campuses. The facilities total approximately 3 million square feet of building space and 1.3 million square feet of parking to be phased into three (3) Location Groups. The intent is to reduce operating and maintenance costs within the facility for cooling/heating and lighting utilizing CT Energy Efficiency Funds and UConn’s Renewable Energy Credit proceeds. The total project budget will be in the range of \$8 million to \$12 million prior to rebates and incentives.

This project also meets the Campus Master Plan, Climate Action Plan, and Strategic Energy Management Plan to reduce operating costs, reduce the carbon footprint, and enhance the student experience. The University of Connecticut has committed to achieving an all LED campus to support the University's sustainability and Climate Action Plan objectives. The University's Facilities Operations, through the Energy and Water Conservation Team, have developed a multifaceted approach to meeting these objectives.

This effort is not contemplated to be a one for one replacement of lighting but to create a lighting design that meets current UCONN design guidelines, industry standards and the specification of the latest energy efficient lighting technology to date. Designers are to attend to all the space types in the list of buildings, walkways, and/or parking lots attached and provide the best solution for the LED lighting system in that area in an aesthetically complimentary design. This work will include interior and exterior areas. Design documents will be specific in work required in each area including, but not limited to, the re-layout of lighting to minimize the number of installed fixtures, improved control and resident operability, and code compliance.

This project will be funded by the UConn Renewable Energy Credit (REC) Fund account. The REC Fund is a revolving energy conservation account that reinvests proceeds from the economical operation of the Cogeneration Facility, Connecticut Conservation and Load Management Fund rebates, and utility incentives into next step energy conservation projects. This project is eligible for rebates and incentives up to 40% of installed costs from Eversource and Connecticut Natural Gas. The project planning will commence in October 2018 and is expected to be complete in March 2022.

This project is similar, although larger in scope, to the lighting upgrades conducted as a Continuous Energy Efficiency Improvement Initiative in more than 130 UConn buildings to date. These projects result in significant carbon footprint reductions, increase energy efficiency, decrease overall energy use, and reduce greenhouse gas emissions moving us toward UConn's goal of achieving carbon neutrality by the year 2050, per the American College & University Presidents' Climate Commitment (ACUPCC) agreement and UConn's Climate Action Plan.

This Planning Budget is attached for your consideration and approval.

CAPITAL PROJECT BUDGET REPORTING FORM

TYPE BUDGET: PLANNING

PROJECT NAME: STORRS LED (SLED) LIGHTING UPGRADE

<u>BUDGETED EXPENDITURES</u>	<u>PROPOSED PLANNING 10/31/2018</u>
CONSTRUCTION	\$ -
DESIGN SERVICES	899,800
TELECOMMUNICATIONS	-
FURNITURE, FIXTURES AND EQUIPMENT	-
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	5,655
ART	-
RELOCATION	-
ENVIRONMENTAL	-
INSURANCE AND LEGAL	-
MISCELLANEOUS	-
OTHER SOFT COSTS	-
SUBTOTAL	\$ 905,455
PROJECT CONTINGENCY	90,545
TOTAL BUDGETED EXPENDITURES	\$ 996,000
<u>SOURCE(S) OF FUNDING*</u>	
UNIVERSITY FUNDS	\$ 996,000
TOTAL BUDGETED FUNDING	\$ 996,000

* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

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