Sustainability

LEED Project Checklist

LEED v4 for BD+C: New Construction and Major Renovation
Project Checklist

Project Name: Orange & Bowl Lanes
Date: 2/10/2024

Y	?	N			
1			Credit	Integrative Process	1

Y	?	N			
3	0	13	**Location and Transportation**		16
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
		5	Credit	Surrounding Density and Diverse Uses	5
		5	Credit	Access to Quality Transit	5
1			Credit	Bicycle Facilities	1
		1	Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1
9	0	1	**Sustainable Sites**		10
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
2			Credit	Site Development - Protect or Restore Habitat	2
		1	Credit	Open Space	1
3			Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1
7	0	4	**Water Efficiency**		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2			Credit	Outdoor Water Use Reduction	2
4		2	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1
16	0	17	**Energy and Atmosphere**		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
5		1	Credit	Enhanced Commissioning	6
10		8	Credit	Optimize Energy Performance	18
		1	Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1
		2	Credit	Green Power and Carbon Offsets	2

Y	?	N			
3	0	10	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
3		2	Credit	Building Life-Cycle Impact Reduction	5
		2	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
		2	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
		2	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
		2	Credit	Construction and Demolition Waste Management	2
6	0	10	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
		2	Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
		1	Credit	Construction Indoor Air Quality Management Plan	1
2			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
		2	Credit	Interior Lighting	2
		3	Credit	Daylight	3
		1	Credit	Quality Views	1
		1	Credit	Acoustic Performance	1
1	0	5	**Innovation**		6
		5	Credit	Innovation	5
1			Credit	LEED Accredited Professional	1
2	0	2	**Regional Priority**		4
1			Credit	Outdoor Water Use Reduction	1
1			Credit	Bicycle Facilities	1
		1	Credit	Regional Priority: Specific Credit	1
		1	Credit	Regional Priority: Specific Credit	1
48	0	62	**TOTALS**	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED Narrative

Integrative Process – We propose to hold a pre-design meeting between owner, architect, members of the city of Alachua, and extend an invite to local residents and users of the facility. In this meeting, we will discuss opportunities we may take in design of the building in order to achieve efficiencies and synergies in the energy-use and water systems within the building. We will take what is discussed in this meeting forward into further design phases and implement it into our final building designs. **(1 point)**

Location and Transportation

LT1: Sensitive Land Protection – We are locating on the development footprint on land that does not meet any applicable criteria for sensitive land. **(1 point)**

LT5: Bicycle Facilities – We propose to add bicycle racks and a shower room to the project to meet necessary requirements for this credit. Additionally, we will connect into the Alachua bicycle network via the sidewalks of US Highway 441. **(1 point)**

Additionally, this is a regional priority credit. **(1 point)**

LT7: Green Vehicles – We will add an electric charging station to the project and designate 5% of spaces as preferred parking for green vehicles. **(1 point)**

Sustainable Sites

SS1: Construction Activity Pollution Prevention – We will create an implement a erosion and sedimentation control plan to be put into place during all construction activities. The plan will be created and implemented by the chosen contractor when construction begins.

SS2: Site Assessment – We will have a site survey performed to include information about topology, hydrology, climate, vegetation, soils, human use, and human health effects. **(1 point)** We will take this information into account before design to inform our site design decisions.

SS3: Site Development – Protect or Restore Habitat - We propose to preserve at least 40% of the site from construction and restore a minimum of 30% of the disturbed area of the site using native soil at the end of construction. (**2 points)**

SS5: Rainwater Management – We propose to manage the annual increase in runoff volume in post-development through natural vegetation, land cover, and green area water retention. **(3 Points)**

SS6: Heat Island Reduction – We plan to leave enough trees in place to provide enough shade cover area to cover both site paving area and roof area. **(2 points)**

SS7: Light Pollution Reduction – All onsite lighting will be calculated to be under the allowable uplight and light trespass limits by using the BUG rating method. **(1 point)**

Water Efficiency

WE1: Outdoor Water Use Reduction – We propose to plant vegetation that is native to the Alachua area and will not need a permanent irrigation system beyond two years in order to reduce outdoor water use.

WE2: Indoor Water Use Reduction – We propose the use of WaterSense labeled fixtures and fittings as required to reduce aggregate water use by a minimum of 20% from baseline calculations.

WE3: Building-Level Water Metering - A permanent water meter will be installed in order to track monthly water usage and identify additional water savings opportunities.

WE4: Outdoor Water Use Reduction – By using a variety of native vegetation in our landscaping, we expect that the landscaping will not have a water requirement. **(2 points)**

Additionally, this is a regional priority credit. **(1 point)**

WE5: Indoor Water Use Reduction – By implementing water efficient fixtures and fittings in our bathroom and kitchen areas, we expect to reduce water use by 40% from the baseline amounts. **(4 points)**

WE7: Water Metering – Individual water meters will be installed to track indoor plumbing fixtures and fittings and other process water. **(1 point)**

Energy and Atmosphere

EA1: Fundamental Commissioning and Verification – We will go through the commissioning process with a commissioning agent to review MEP systems as they relate to sustainable development. They will assist in developing the OPR and BOD, and will complete all the requirements related to commissioning for this project. They will document all findings throughout the project and review project progress to ensure proper usage of systems.

EA2: Minimum Energy Performance – We propose that we will calculate baseline building energy performance using a simulation and use that data to achieve a minimum 5% energy reduction as required for new construction. Additionally, the design will meet all required criteria through ANSI/ASHRAE/IESNA.

EA3: Building-Level Energy Metering – A building level energy meter will be installed to track energy usage for the building. Energy consumption data will be shared with USGBC for a minimum of a five-year period.

EA4: Fundamental Refrigerant Management – No chlorofluorocarbon-based refrigerants will be used in any application for this project.

EA5: Enhanced Commissioning – We will use the commissioning authority to complete the Path-1 commissioning process for mechanical, electrical, plumbing, and renewable systems for this project. **(3 points)** Additionally, we will perform envelope commissioning to verify systems are working as expected. We will do this through the commissioning authority. **(2 points)**

EA6: Optimize Energy Performance – We propose to analyze building energy efficiency measures and reduce energy usage from the baseline by a minimum of 24%. **(10 points)** We will establish a baseline by using a simulation, and we will reduce energy consumption by minimum of 24% from there.

EA10: Enhanced Refrigerant Management – We propose that all refrigerants used will have zero ozone depletion potential (ODP) and a global warming potential (GWP) of less than 50 as required. **(1 point)**

Materials and Resources

MR1: Storage and Collection of Recyclables – There will be dedicated areas throughout the building for both collection and storage of recyclables. There will be recycling bins located next to trash bins to make it easy and painless for occupants of the building to differentiate their recyclables and put them in the correct area.

MR2: Construction and Demolition Waste Management Plan – We will create and implement a construction waste management plan for the lifecycle of the project. We will establish diversion goals and will track and deliver a report of the waste streams at the end of construction.

MR3: Building Life-Cycle Impact Reduction – We plan to perform a whole-building life-cycle assessment in which we demonstrate a minimum 10% reduction in at least three of the required impact categories. **(3 points)** This reduction will be achieved by establishing a baseline through lifecycle software.

Indoor Environmental Quality

EQ1: Minimum Indoor Air Quality Performance – We propose to provide a mechanical ventilation system that meets the ASHRAE requirements for mechanical ventilation rates. We will provide a monitoring system to measure air intake flow.

EQ2: Environmental Tobacco Smoke Control – Smoking will be prohibited inside of the building. There will be a designated smoking area located at least 25 feet from possible air intakes. Signage will be posted throughout the building as required.

EQ4: Low-Emitting Materials – We will choose low VOC emitting materials for interior paint, flooring, composite wood, ceilings, walls, insulation, interior adhesives, and furniture. **(3 points)**

EQ6: Indoor Air Quality Assessment – We will perform air testing after construction ends but before occupancy to ensure ventilation conditions are typical for occupancy. **(2 points)** If anything is found, we will go through mitigation processes to reduce concentrations to acceptable levels before occupancy.

EQ7: Thermal Comfort – Building heating, ventilation, and HVAC systems, along with building envelope, will be designed to meet ASHRAE standard requirements. **(1 point)** This will ensure thermal comfort for all building occupants.

Innovation

IN2: LEED Accredited Professional – At least one member of the project team will be a LEED Accredited Professional. **(1 point)**