

**LEED-NC v3.0 Preliminary Project Checklist**  
**Olbrich Botanical Gardens**  
**Madison, WI**

Wednesday, January 10, 2018

			RESPONSIBILITY						Ach. Rate		
Yes	?	No	City/OBG	MSR	MEP	Lghtg	KSD	Other		Notes	
<b>19</b>	<b>6</b>	<b>1</b>	<b>Sustainable Sites</b>						<b>26 Points</b>		
<b>Y</b>			Prereq 1 <b>Construction Activity Pollution Prevention</b>						Required	100%	Provide ESC Plan in drawings and specification. GC to implement.
<b>1</b>			Credit 1 <b>Site Selection</b>						1	86%	Site selected prior to design process commencing. Site is already developed and parkland.
<b>5</b>			Credit 2 <b>Development Density &amp; Community Connectivity</b>						5	59%	Min. density of 60k SF per acre - MSR to measure surrounding density. 9 services within 1/2 mile. 1 more gas station may count as convenience grocery for a total of 10. If 2 of a use can be counted, we also have more than 10. Otherwise, we can use LEED v4. 2 points for Diverse uses (8 or more diverse uses double counting uses). Density of at least 12 residential units / acre for another 3 points.
		<b>1</b>	Credit 3 <b>Brownfield Redevelopment</b>						1	18%	Site is not a brownfield
<b>6</b>			Credit 4.1 <b>Alternative Transportation, Public Transportation Access</b>						6	62%	Site within 1/4 mile of at least two bus lines.
	<b>1</b>		Credit 4.2 <b>Alternative Transportation, Bicycle Storage &amp; Changing Rooms</b>						1	69%	Provide secure bike racks for 5% occup. and shower-change for 0.5% occup. Peak FTE occup. = 31. Extg exterior bike racks = 20. (Zoning Code requires 1 per 5,000 gsf for Museum/Exhibit buildings, so 38,000/5,000 = 8 bikes). Changing rooms and showers are existing.
	<b>3</b>		Credit 4.3 <b>Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles</b>						3	81%	Provide and implement a low-emitting and fuel-efficient vehicle-sharing program on-site.
<b>2</b>			Credit 4.4 <b>Alternative Transportation, Parking Capacity</b>						2	73%	Option 3: No new parking provided on site for Phase 1.
	<b>1</b>		Credit 5.1 <b>Site Development, Protect or Restore Habitat</b>						1	20%	Green roof with native plants + SSc2 could get us a point. Restore or protect 50% of the site (excluding building footprint) or 20% (including bldg footprint) with native or adapted vegetation.
<b>1</b>			Credit 5.2 <b>Site Development, Maximize Open Space</b>						1	66%	Provide vegetated open space equal to 20% of the project's site area. If existing gardens count, we've got it.
<b>1</b>			Credit 6.1 <b>Stormwater Design, Quantity Control</b>						1	43%	Yes if we implement phase 1 stormwater control, caputre, reuse.
<b>1</b>			Credit 6.2 <b>Stormwater Design, Quality Control</b>						1	47%	Yes if we implement phase 1 stormwater control, caputre, reuse.
	<b>1</b>		Credit 7.1 <b>Heat Island Effect, Non-Roof</b>						1	50%	Yes if existing parking does not count in site calculation. Use strategies for 50% of hardscape including shading or high SRL.
<b>1</b>			Credit 7.2 <b>Heat Island Effect, Roof</b>						1	78%	Water capture and PV more likely than green roof. SD design has flat membrane roof and roof pavers - high albedo selections can be made
<b>1</b>			Credit 8 <b>Light Pollution Reduction</b>						1	24%	Option 1: Reduce by 50% the input power to interior non-emergency luminaires with direct line-of-sight to envelope openings. Option 2: Shield envelope openings that have direct line of sight to non-emergency luminaires. This is achievable provided the non-emergency interior lights are switched OFF between 11PM and 5 AM. City confirmed acceptance of this.
<b>7</b>	<b>3</b>		<b>Water Efficiency</b>						<b>10 Points</b>		
<b>Y</b>			Prereq 1 <b>Water Use Reduction, 20% Reduction</b>						Required	100%	Use 20% less than baseline for interior water use only. Use low flow lavs and WCs, etc.
<b>4</b>			Credit 1 <b>Water Efficient Landscaping</b>						2 to 4	87%	OBG to cconfirm. Rainwater cistern can use recharge from city water and still comply with PATH 1 for the 2nd 2 points.
<b>1</b>	<b>1</b>		Credit 2 <b>Innovative Wastewater Technologies</b>						2	20%	Use of low-flush fixtures - to be confirmed by City/OBG.
<b>2</b>	<b>2</b>		Credit 3 <b>Water Use Reduction</b>						2 to 4	85%	Fixtures with 30% reduction from baseline (40% reduction will achieve 4 points).
<b>20</b>	<b>2</b>	<b>13</b>	<b>Energy &amp; Atmosphere</b>						<b>35 Points</b>		
<b>Y</b>			Prereq 1 <b>Fundamental Commissioning of the Building Energy Systems</b>						Required	100%	
<b>Y</b>			Prereq 2 <b>Minimum Energy Performance</b>						Required	100%	5% better than ASHRAE 90.1-2007 required for Extg Buildings
<b>Y</b>			Prereq 3 <b>Fundamental Refrigerant Management</b>						Required	100%	
<b>13</b>	<b>2</b>	<b>4</b>	Credit 1 <b>Optimize Energy Performance</b>						1 to 19	97%	Per McKInstry Energy Model Results and not yet taking into account PV array utility cost savings, the design improves performance 37% better than baseline based on total utility cost of the design building of \$8,921 (baseline design energy costs = \$\$14,212.)
		<b>7</b>	Credit 2 <b>On-Site Renewable Energy</b>						1 to 7	23%	PV performance and impact to be determined in early CDs. Based on overall electrical energy use on _____ kWh, and PV Array electrical energy generation of _____ kWh (____% of annual energy utility cost based on \$0.15/kWh = \$ _____ savings per year from total energy cost per EA1 above).
<b>2</b>			Credit 3 <b>Enhanced Commissioning</b>						2	52%	City/OBG to confirm.
<b>2</b>			Credit 4 <b>Enhanced Refrigerant Management</b>						2	55%	MEP to confirm: ODP, BWP, ratio of coolant charge to coolant capacity, leakage rate.
<b>3</b>			Credit 5 <b>Measurement &amp; Verification</b>						3	46%	SEG to confirm
	<b>2</b>		Credit 6 <b>Green Power</b>						2	41%	to be confirmed by City/OBG.

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<b>6</b>	<b>2</b>	<b>6</b>	<b>Materials &amp; Resources</b>						<b>14 Points</b>	<b>Notes</b>
<b>Y</b>			Prereq 1 <b>Storage &amp; Collection of Recyclables</b>						Required	100%
		<b>3</b>							17%	
		<b>1</b>							2%	
<b>2</b>									89%	
		<b>2</b>							3%	
<b>1</b>	<b>1</b>								85%	
<b>1</b>	<b>1</b>								83%	
<b>1</b>									2%	
<b>1</b>									32%	
<b>11</b>	<b>2</b>	<b>2</b>	<b>Indoor Environmental Quality</b>						<b>15 Points</b>	<b>Notes</b>
<b>Y</b>			Prereq 1 <b>Minimum IAQ Performance</b>						Required	100%
<b>Y</b>									100%	
<b>1</b>									44%	
		<b>1</b>							41%	
<b>1</b>									92%	
<b>1</b>									41%	
<b>1</b>									87%	
<b>1</b>									94%	
<b>1</b>									80%	
<b>1</b>									60%	
<b>1</b>									40%	
	<b>1</b>								67%	
		<b>1</b>							39%	
<b>1</b>									80%	
	<b>1</b>								60%	
<b>1</b>									20%	
<b>1</b>									38%	
<b>1</b>	<b>1</b>	<b>4</b>	<b>Innovation &amp; Design Process</b>						<b>6 Points</b>	<b>Notes</b>
	<b>1</b>									
		<b>1</b>								
		<b>1</b>								
		<b>1</b>								
		<b>1</b>								
<b>1</b>									99%	
<b>3</b>	<b>1</b>		<b>Regional Priority</b>						<b>4 Points</b>	<b>Notes</b>
	<b>1</b>									
		<b>1</b>								
	<b>1</b>									
<b>1</b>										
<b>64</b>	<b>16</b>	<b>30</b>	<b>Project Totals</b> (pre-certification estimates)						<b>110 Points</b>	
Yes	?	No	Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points							