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

						RESPONSIBILITY					Ach.	
Yes	?	No			City/OBG	MSR	MEP	Lghtg	KSD	Other	Rate	
19	6	1	Sustai	nable Sites 26 Poin	S							Notes
Υ			Prereq 1	Construction Activity Pollution Prevention Require	d	Х			Х	GC	100%	Provide ESC Plan in drawings and specification. GC to implement.
1			Credit 1	Site Selection	1						86%	Site selected prior to design process commencing. Site is already developed and parkland.
5			Credit 2	Development Density & Community Connectivity	5 X						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.
		1	Credit 3	Brownfield Redevelopment	1 X	х					18%	Site is not a brownfield
6			Credit 4.1	Alternative Transportation, Public Transportation Access	6 X						62%	Site within 1/4 mile of at least two bus lines.
	1		Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1	x			х		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.
	3		Credit 4.3	Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles	3 X						81%	Provide and implement a low-emitting and fuel-efficient vehicle-sharing program on-site.
2			Credit 4.4	Alternative Transportation, Parking Capacity	2 X						73%	Option 3: No new parking provided on site for Phase 1.
	1		Credit 5.1	Site Development, Protect or Restore Habitat	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.
1			Credit 5.2	Site Development, Maximize Open Space	1						66%	Provide vegetated open space equal to 20% of the project's site area. If existing gardens count, we've got it.
1			Credit 6.1	Stormwater Design, Quantity Control	1				Х		43%	Yes if we implement phase 1 stormwater control, caputre, reuse.
1			Credit 6.2	Stormwater Design, Quality Control	1				Х		47%	Yes if we implement phase 1 stormwater control, caputre, reuse.
	1		Credit 7.1	Heat Island Effect, Non-Roof	1				Х		50%	Yes if existing parking does not count in site calculation. Use strategies for 50% of hardscape including shading or high SRI.
1			Credit 7.2	Heat Island Effect, Roof	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
1			Credit 8	Light Pollution Reduction	1 X			x			24%	Or in 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 sigh 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.
		_										
7		3	Water	Efficiency 10 Poin	5							Notes
Y			Prereq 1	Water Use Reduction, 20% Reduction Require	d		х				100%	Use 20% less than baseline for interior water use only. Use low flow lavs and WCs, etc.
4			Credit 1	Water Efficient Landscaping 2 to	4 X				х		87%	OBG to cconfirm. Rainwater cistern can use recharge from city water and still comply with PATH 1 for the 2nd 2 points.
1		1	Credit 2	Innovative Wastewater Technologies	2		Х				20%	Use of low-flush fixtures - to be confirmed by City/OBG.
2		2	Credit 3	Water Use Reduction 2 to	4		Х				85%	Fixtures with 30% reduction from baseline (40% reduction will achieve 4 points).
		_										
20	2	13	Energy	y & Atmosphere 35 Poin	IS .							Notes
Y			Prereq 1	Fundamental Commissioning of the Building Energy Systems Require	d X		×				100%	
Y			Prereq 2	Winimum Energy Performance Require			X				100%	o% better than ASHKAE 90.1-2007 required for Extg Buildings
T			Pieled 2	Fundamental Keingerant Management Require			^				100%	Per McKinstry Energy Model Results and not yet taking into account PV array utility cost
13	2	4	Credit 1	Optimize Energy Performance 1 to 7	9		х	х		McKinnstry	97%	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.)
		7	Credit 2	On-Site Renewable Energy 1 to	7	х	х				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).
2			Credit 3	Enhanced Commissioning	2 X					McKinnstry	52%	City/OBG to confirm.
2			Credit 4	Ennanced Kerrigerant Management	2		Х			McKinnetr	55%	MEP to confirm: ODP, BWP, ratio of coolant charge to coolant capacity, leakage rate.
3		2	Credit 6	Green Power	2					workinnstry	40%	to be confirmed by City/OBG
		_	Ground								4175	

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				RESPONSIBILITY						Ach.	
Yes	? No			City/OBG	MSR	MEP	Lghtg	KSD	Other	Rate	
6	2 6	Materials & Resources	14 Points								Notes
V		Prereg 1 Storage & Collection of Recyclables	Required							100%	10100
-	2	Credit 11 Building Bouco Maintain Evicting V/alls Elears & Roof	1 to 3	v	v					17%	0% of existing structure and envelope maintained
		Credit 1.2 Building Reuse, Maintain EABling Walls, Hoors & Roor	1 10 0	~	×					20%	0% of existing structure and envelope maintained.
2	-	Credit 1.2 Building Reuse, Maintain 50% of Interior Non-Structural Elements	1 40.2	V					00	2 /0	City/MSD to include requirements in Draiset Manual and meniter during CA
2	2	Credit 2 Meteriala Bause	1 to 2	^	×				GC	20/	Net receibles no activered meterial
4	4	Credit 4 Booveled Content	1 to 2		×				<u> </u>	370	Not possible. No salvaged material.
-	4	Credit 5 Regional Materiala	1 to 2		×				GC	00%	MCR to include in Project Manual, and confirm via submittel approval process
4	-	Credit 6 Regional Materials	1 10 2						GC	03%	MSR to include in Project Manual, and confirm via submittel approval process
4		Credit 7 Certified Wood	1						GC	270	MSR to include in Project Manual, and confirm via submittal approval process
			1		^				GC	3270	wisk to include in Project Manual, and confirm via submittal approval process
	0 0	Indexe Frederic metal Anality	4								N - 4
11	2 2	Indoor Environmental Quality	15 Points								NOTES
Y		Prereq 1 Minimum IAQ Performance	Required			Х				100%	
Υ		Prereq 2 Environmental Tobacco Smoke (ETS) Control	Required	Х						100%	City/OBG to confirm: no smoking inside and within 25ft of building openings.
1		Credit 1 Outdoor Air Delivery Monitoring	1			Х				44%	
	1	Credit 2 Increased Ventilation	1							41%	Not preferred by the City due to HVAC system impacts.
1		Credit 3.1 Construction IAQ Management Plan, During Construction	1						GC	92%	Included in Project Manual
1		Credit 3.2 Construction IAQ Management Plan, Before Occupancy	1	Х		Х			GC	41%	Both options included in Project Manual
1		Credit 4.1 Low-Emitting Materials, Adhesives & Sealants	1		Х				GC	87%	Included in Project Manual, and confirm via submittal approval process
1		Credit 4.2 Low-Emitting Materials, Paints & Coatings	1		Х				GC	94%	Included in Project Manual, and confirm via submittal approval process
1		Credit 4.3 Low-Emitting Materials. Flooring Systems	1		Х				GC	80%	Included in Project Manual, and confirm via submittal approval process
1		Credit 4.4 Low-Emitting Materials Composite Wood & Agrifiber Products	1		Х				GC	60%	Included in Project Manual, and confirm via submittal approval process
1		Credit 5 Indoor Chemical & Pollutant Source Control	1		X	х			GC	40%	Provide MERV 13 filtration, entry walkoff systems 10ft deep min., self-closing doors on janitor
	1	Credit 6.1 Controllability of Systems, Lighting	1	х		х	х			67%	Provide individual lighting control for 90% of occupants and in all shared spaces. This is difficult in a public building. Project could fal under the "School" ruling making the credit more feasible. Classrooms can then operate in "general illumination and AV mode" and have "adequate controls to suit their activities".
	1	Credit 6.2 Controllability of Systems, Thermal Comfort	1	Х		х				39%	Provide individual access to control air and temp for 50% of occupants, and all shared rooms
1		Credit 7.1 Thermal Comfort Design	1			Х				80%	Design HVAC system to meet ASHRAE-55-2004 requirements.
- i	1	Credit 7.2 Thermal Comfort Verification	1	Х		~				60%	City/Olbrich to confirm willingness to survey occupants 6-18 months post-occupancy
1	-	Credit 8.1 Daylight & Views, Daylight 75% of Spaces	1		х					20%	Perform early daylight simulation modeling. Occupied spaces to achieve daylight illuminance levels of a minimum of 10 footcandles (fc) (110 lux) and a maximum of 500 fc (5,400 lux) in a clear sky condition on September 21 at 9 a.m. and 3 p.m. Provide glare control devices.
1		Credit 8.2 Daylight & Views, Views for 90% of Spaces	1		Х					38%	MSR to determine during design.
1	1 4	Innovation & Design Process	6 Points								Notes
	1	Credit 1.1 Innovation in Design: Pursue low-emitting furnishings per LEED-CI	1	x	x						NON to apply to FF&E design process. Standard to achieve this point is either Greenguard IAQ Certified (Option 1), or testing protocols based on ANSI/BIFMA standards by 3rd party lab (Option 2). Option 1
	1	Credit 1.2 Innovation in Design: Pursue Architecture 2030 energy performance	1		х	х	х		McKinnstry		Requires 70% improvement over regional baseline building of this type based on Energy Star (77 kbtu/sf/yr), so 23 kbtu/sf/yr is target to achieve this.
	1	Credit 1.3 Innovation in Design: On-site energy generation	1								
	1	Credit 1.4 Innovation in Design: Provide Specific Title	1								
	1	Credit 1.5 Innovation in Design: Provide Specific Title	1								
1		Credit 2 I FED [®] Accredited Professional	1							99%	MSR: CW. SB. TL. BS.
	2 4	Pogional Priority	/ Points								Notos
	0 1			X							
	1	Creat 1.1 Regional Priority: Development density and community connectivity	1	X	X	X					
	1	Credit 1.2 Regional Priority: Bicycle storage and change rooms	1	X	Х	X					No changing rooms in Phase 1. There are existing changing rooms.
	1	Credit 1.3 Regional Priority: Water use reduction	1	Х		Х					Based on achieving WE3.
	1	Credit 1.4 Regional Priority: Parking capacity	1	Х							Based on achieving 554.4.
64	16 30	Project Totals (one-certification estimates)	110 Points								

 64
 16
 30
 Project Totals
 (pre-certification estimates)
 1

 Yes
 ?
 No
 Certified 40-49 points
 Silver 50-59 points
 Gold 60-79 points
 Platinum 80-110 points

Wednesday, January 10, 2018