NPS Project Sustainability Checklist
Building Projects
(For New Construction or Major Renovation)

Project Title:	**Zielenski Court Complex**
Description:	**Rehabilitation as a primary Visitor Center**
Park/PMIS:	**CUVA / 187814**
Architect/Engineer Firm:	**Undetermined**
Date:	**4/27/2016**

Fund Source:	Other
Predesign Begin Date:	2014
FY of Const. Funding	2016
Park:	CUVA
State:	OH

Gross Project Construction Cost:	$3,000,000
Gross Building Construction Cost:	$2,500,000
Gross Non Building (i.e. Site) Cost:	$500,000
Region:	Midwest
Type of Building	Historic
LEED Certification Level Sought:	

% Federal Regulations Achieved	87%	82%	82%	0%	0%	0%
Total LEED-NC Credits	**40**	**47**	**47**	**Missed Prereq.**	**Missed Prereq.**	**Missed Prereq.**
LEED Certification Level	**Gold (39 to 51)**	**Gold (39 to 51)**	**Gold (39 to 51)**	**Not Certified/Missing Prereq.**	**Not Certified/Missing Prereq.**	**Not Certified/Missing Prereq.**

Sustainable Sites (SS)
14 LEED-NC Credits

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
SS Prereq 1	Construction Activity Pollution Prevention	Y	An Erosion & Sediment Control Plan will be developed in DD phase.	Y	An Erosion & Sediment Control Plan will be developed in DD phase.	Y	An Erosion & Sediment Control Plan will be developed in DD phase.						
SS Credit 1	Site Selection	N	Site is within FEMA 100-year flood, but has not been impacted by last 6 events.	Y	Previously developed land (c. 1905) within FEMA 100-year floodplain.	Y	Previously developed land (c. 1905) within FEMA 100-year floodplain.						
SS Credit 2	Development Density & Community Connectivity	N	No existing development / infrastructure within project area.	Y	Utilizes existing structures at intersection of multi-modal transportation (roadways, rail, multi-purpose trail).	Y	Utilizes existing structures at intersection of multi-modal transportation (roadways, rail, multi-purpose trail).						
SS Credit 3	Brownfield Redevelopment	N	No brownfield sites within project area.	N	No brownfield sites within project area.	N	No brownfield sites within project area.						

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
SS Credit 4.1	Alternative Transportation, Public Transportation Access	Y	Site is located adjacent to park's alternative transportation routes - the Valley Railway & the Canal Towpath.	Y	Site is located adjacent to park's alternative transportation routes - the Valley Railway & the Canal Towpath.	Y	Site is located adjacent to park's alternative transportation routes - the Valley Railway & the Canal Towpath.						
SS Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	N	Bike rack to be provided. No changing facility.	Y	Bike circulation is incoporated & storage is to be provided. No changing facility. Project located on rail line.	Y	Bike circulation is incoporated & storage is to be provided. No changing facility. Project located on rail line.						
SS Credit 4.3	Alternative Transportation, Low-Emitting & Fuel-Efficient Vehicles	Y	A low-emitting / fuel efficient vehicle will be provided for staff use. Preferred parking will be provided.	Y	A low-emitting / fuel efficient vehicle will be provided for staff use. Preferred parking will be provided.	Y	A low-emitting / fuel efficient vehicle will be provided for staff use. Preferred parking will be provided.						
SS Credit 4.4	Alternative Transportation, Parking Capacity	Y	Preferred parking for vanpools / carpools will be provided.	Y	Preferred parking for vanpools / carpools will be provided. Site serves as inter-modal hub for rail, bike, car, pedestrian systems.	Y	Preferred parking for vanpools / carpolls will be provided.						
SS Credit 5.1	Site Development, Protect or Restore Habitat	Y	At least 50% of site area will be restored or protected.	Y	At least 50% of site area will be restored or protected.	Y	At least 50% of site area will be restored or protected.						
SS Credit 5.2	Site Development, Maximize Open Space	Y	Vegetated open space adjacent to building will be provided.	Y	Vegetated open space adjacent to building will be provided.	Y	Vegetated open space adjacent to building will be provided.						
SS Credit 6.1	Stormwater Design, Quantity Control (See EISA Section 438)	Y	A Stormwater Management Plan will be developed in Pre-Design phase.	Y	Outdoor gathering areas will be porous pavement, rain gardens will be utilized to capture runoff from new hard surface walkways. A Stormwater Management	Y	Outdoor gathering areas will be porous pavement, rain gardens will be utilized to capture runoff from new hard surface walkways. A Stormwater Management						
SS Credit 6.2	Stormwater Design, Quality Control (See EISA Section 438)	Y	A Stormwater Management Plan will be devloped in Pre-Design phase.	Y	Outdoor gathering areas will be porous pavement, rain gardens will be utilized to capture runoff from new hard surface walkways. A Stormwater Management	Y	Outdoor gathering areas will be porous pavement, rain gardens will be utilized to capture runoff from new hard surface walkways. A Stormwater Management						
EISA 2007, Section 438	Protect Hydrology	Y	Pervious pavement, rainwater capture & vegetated swales will be incorporated.	Y	Pervious pavement, rainwater capture & vegetated swales will be incorporated.	Y	Pervious pavement, rainwater capture & vegetated swales will be incorporated.						

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SS Credit 7.1	Heat Island Effect, Non-Roof	N	Not certain if this credit can be earned.	Y	The amount of impervious hardscape will be limited, addition shade trees will be added.	Y	The amount of impervious hardscape will be limited, addition shade trees will be added.						
SS Credit 7.2	Heat Island Effect, Roof	N	Not certain if this credit can be earned & potential adverse impact to historic district.	N	Not certain if this credit can be earned & potential adverse impact to historic district.	Y	New roof is part of the project will investigate options for material to reduce heat island effect in Design Development.						
SS Credit 8	Light Pollution Reduction	Y	Nonemergency interior lighting will be motion controlled. Exterior lighting will be minimized.	Y	Nonemergency interior lighting will be motion controlled. Exterior lighting will be minimized.	Y	Nonemergency interior lighting will be motion controlled. Exterior lighting will be minimized.						
2006 NPS Mgmt Policies (Para. 4.9)	Soundscape Preservation	Y	No generation of outdoor noise anticipated.	Y	No additional rail traffic anticipated, vehicular traffic and users will increase. Will investigate sound mitigation measures in later design phases.	Y	Plant material buffers and porous pavement will be utilized.						
2006 NPS Mgmt Policies (Para. 4.10)	Dark Sky Preservation	Y	All lighting to be night sky friendly.	Y	All lighting to be night sky friendly.	Y	All lighting to be night sky friendly and design refinement in Design Development.						
LEED-NC Subtotal		**8**		**12**		**13**		**Missed Prereq.**		**Missed Prereq.**		**Missed Prereq.**	

Water Efficiency (WE)

5 LEED-NC Credits

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
WE Credit 1.1	Water Efficient Landscaping, Reduce by 50% (see Guiding Principle III - Protect and Conserve Water)	Y	No irrigation to be installed.	Y	No irrigation to be installed. Native plantings to be incorporated.	Y	No irrigation to be installed. Native plantings to be incorporated.						
WE Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	Y	No irrigation to be installed.	Y	No irrigation to be installed. Native plantings to be incorporated.	Y	No irrigation to be installed. Native plantings to be incorporated.						

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
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WE Credit 2	Innovative Wastewater Technologies	Y	Water conserving fixtures will be utilized. Wastewater to be conveyed to NPS constructed wetlands.	Y	Water conserving fixtures will be utilized. Wastewater to be conveyed to NPS constructed wetlands.	Y	Water conserving fixtures will be utilized. Wastewater to be conveyed to NPS constructed wetlands.						
NPS Policy	Water Metering	Y	No municipal water supply. Water delivery will be documented.	Y	No municipal water supply. Water delivery will be documented.	Y	No municipal water supply. Water delivery will be documented.						
EPACT 2005, Section 109	Water Used for Energy Conservation	NA	Water will not be used to achieve energy efficiency.	N	Water will not be used to achieve energy efficiency.	N	Water will not be used to achieve energy efficiency.						
WE Credit 3.1	Water Use Reduction, 20% Reduction (see Guiding Principle III - Protect and Conserve Water)	Y	Dual-flush toilets, touchless faucets & tankless water heaters will be utilized.	Y	Low-flush toilets, low flow urinals, touchless faucets & tankless water heaters will be utilized.	Y	Low-flush toilets, low flow urinals, touchless faucets & tankless water heaters will be utilized.						
WE Credit 3.2	Water Use Reduction, 30% Reduction	N	Every effort will be made to achieve the 30% threshold.	Y	High-efficiency fixtures will achieve the 30% threshold.	Y	High-efficiency fixtures will achieve the 30% threshold. Consideration given to reuse of graywater.						
LEED-NC Subtotal		**4**		**5**		**5**		**0**		**0**		**0**	

Energy & Atmosphere (EA)

17 LEED-NC Credits

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
EA Prereq 1	Fundamental Commissioning of the Building Energy Systems * (see Guiding Principle I - Employ Integrated Design Principles)	Y	Commissioning process activities will be performed.	Y	Commissioning process activities will be performed.	Y	Commissioning process activities will be performed and initiatied in Design Development.						
EA Prereq 2	Minimum Energy Performance (see Guiding Principle II Optimize Energy Performance)	Y	Project will comply with ASHRAE 90.1-2004.	Y	Project will comply with ASHRAE 90.1-2004.	Y	Project will comply with ASHRAE 90.1-2004.						

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
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EA Prereq 3	Fundamental Refrigerant Management (see Guiding Principle V - Reduce Environmental Impact of Materials)	Y	Zero use of CFC-based refrigerants.	Y	Zero use of CFC-based refrigerants.	Y	Zero use of CFC-based refrigerants.						
EA Credit 1 (Prereq.)	Optimize Energy Performance: ** 10.5% New Buildings or 3.5% Existing Building Renovations	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.						
EA Credit 1 (cont'd) (Prereq.)	Optimize Energy Performance: ** 14% New Buildings or 7% Existing Building Renovations (Min. LEED req)	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.						
EA Credit 1 (cont'd)	Optimize Energy Performance:** 17.5% New Buildings or 10.5% Existing Building Renovations	N	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	Y	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.						
EA Credit 1 (cont'd)	Optimize Energy Performance:** 21% New Buildings or 14% Existing Building Renovations	N	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	N	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	N	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.						
EA Credit 1 (cont'd)	Optimize Energy Performance:** 24.5% New Buildings or 17.5% Existing Building Renovations	N	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	N	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	N	Building will be more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.						
EA Credit 1 (cont'd)	Optimize Energy Performance:** 28% New Buildings or 21% Existing Building Renovations (Federal Regulations require 30% for New Construction and 20% for Existing Building Renovation) (see Guiding Principle II Optimize Energy Performance)	N	Building will more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	N	Building will more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.	N	Building will more efficient than an ASHRAE 90.1 compliant building. Percentage undetermined.						
EA Credit 1 (cont'd)	Optimize Energy Performance:** 31.5% New Buildings or 24.5% Existing Building Renovations	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.						
EA Credit 1 (cont'd)	Optimize Energy Performance:** 35% New Buildings or 28% Existing Building Renovations	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.						

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EA Credit 1 (cont'd)	Optimize Energy Performance:** 38.5% New Buildings or 31.5% Existing Building Renovations	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.						
EA Credit 1 (cont'd)	Optimize Energy Performance:** 42% New Buildings or 35% Existing Building Renovations	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.						
EISA 2007, Section 433	Reduce Fossil Fuel Derived Energy	N	Uncertain how this will be accomplished.	N	Uncertain how this will be accomplished.	N	Uncertain how this will be accomplished.						
EO 13423, Sec. 2.(h)	Energy Efficient Electronic Products (Select EPEAT) (Predominantly relates to purchases of desktop/laptop computers and peripherals)	Y	EPEAT rated electronics will be explored for use.	Y	EPEAT rated electronics will be explored for use.	Y	EPEAT rated electronics will be explored for use as art of operational planning.						
CFR Title 10, Part 436.4	Procure Energy Star or FEMP designated products	Y	Energy Star / FEMP designated products will be explored for use.	Y	Energy Star / FEMP designated products will be explored for use.	Y	Energy Star / FEMP designated products will be explored for use during Design Devlopment.						
EPACT 2005, Section 104	Premium Efficiency Electric Motors	Y	All motors will be premium efficiency.	Y	All motors will be premium efficiency.	Y	All motors will be premium efficiency.						
EISA 2007, Section 523	On-Site Renewable Energy*** Solar Thermal for Hot Water (Choose NA if proven not life cycle cost effective)	NA	Uncertain how this will be accomplished.	N	Uncertain how this will be accomplished.	N	Uncertain how this will be accomplished.						
EA Credit 2	On-Site Renewable Energy*** 2.5% Renewable Energy	N	Likely not life-cycle cost-effective & potential adverse impact to historic district.	N	Likely not life-cycle cost-effective & potential adverse impact to historic district.	N	Likely not life-cycle cost-effective & potential adverse impact to historic district.						
EA Credit 2 (Cont'd)	On-Site Renewable Energy*** 7.5% Renewable Energy	N	Likely not life-cucle cost-effective & potential adverse impact to historic district.	N	Likely not life-cycle cost-effective & potential adverse impact to historic district.	N	Likely not life-cycle cost-effective & potential adverse impact to historic district. Consideration being given to geothermal.						

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EA Credit 2 (Cont'd)	On-Site Renewable Energy*** 12.5% Renewable Energy	N	Likely not life-cycle cost-effective & potential adverse impact to historic district.	N	Likely not life-cycle cost-effective & potential adverse impact to historic district.	N	Likely not life-cycle cost-effective & potential adverse impact to historic district.						
EA Credit 3	Enhanced Commissioning (required for projects with building net construction cost > $2 million) (see Guiding Principle I - Employ Integrated Design Principles)	Y	Enhanced Commissioning process activities will be performed.	Y	Enhanced Commissioning process activities will be performed.	Y	Enhanced Commissioning process activities will be performed and initiated in Design Development.						
MOU Guiding Principles & EO 13423	Building Commissioning in accordance with ASHRAE 0-2005	Y	Building Commissioning process activities will be performed.	Y	Building Commissioning process activities will be performed.	Y	Enhanced Commissioning process activities will be performed and initiated in Design Development.						
EA Credit 4	Enhanced Refrigerant Management (see Guiding Principle V - Reduce Environmental Impact of Materials)	Y	Refrigerants that minimize ozone depletion & global warming will be used.	Y	Refrigerants that minimize ozone depletion & global warming will be used.	Y	Refrigerants that minimize ozone depletion & global warming will be used.						
EA Credit 5	Measurement & Verification (see Guiding Principle II - Optimize Energy Performance)	Y	A Measurement & Verification Plan will be developed during CD phase and implemented post-construction.	Y	A Measurement & Verification Plan will be developed during CD phase and implemented post-construction.	Y	A Measurement & Verification Plan will be developed during CD phase and implemented post-construction.						
NPS Policy	Energy Metering	Y	Meters will be installed for all energy use.	Y	Meters will be installed for all energy use.	Y	Meters will be installed for all energy use.						
MOU Guiding Principles & EO 13423	Benchmarking - Develop (and execute) a plan to verify that the building energy performance (one year after construction) meets or exceeds the design target	Y	An Energy Performance Verification Plan will be developed.	Y	An Energy Performance Verification Plan will be developed.	Y	An Energy Performance Verification Plan will be developed.						
EA Credit 6	Green Power	N	Requirements exceed existing budget.	N	Requirements exceed existing budget.	N	Requirements exceed existing budget.						
LEED-NC Subtotal		**8**		**9**		**9**		**Missed Prereq.**		**Missed Prereq.**		**Missed Prereq.**	

Materials & Resources (MR)

13 LEED-NC Credits

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Sustainability Features		**PMIS Submission**		**Predesign**		**Schematic Design**		**Design Development**		**Construction Documents**		**Construction**	
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MR Prereq 1	Storage & Collection of Recyclables	Y	A recycling area will be incorporated in the design.	Y	A recycling area will be incorporated in the design.	Y	A recycling area will be incorporated in the design.						
MR Credit 1.1	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	Y	At least 75% of sound building structure & enevlope will be maintained.	Y	At least 75% of sound building structure & enevlope will be maintained.	Y	At least 75% of sound building structure & enevlope will be maintained.						
MR Credit 1.2	Building Reuse, Maintain 95% of Existing Walls, Floors & Roof	N	Every effort will be made to achieve the 95% threshold.	N	Removal of nonhistoric fabric to restore historic conditions exceeds 5%.	N	Removal of nonhistoric fabric to restore historic conditions exceeds 5%.						
MR Credit 1.3	Building Reuse, Maintain 50% of Interior Non-Structural Elements	Y	At least 50% of sound interior nonstructural elements will be maintained.	Y	At least 50% of sound interior nonstructural elements will be maintained.	N	Removal of partition walls to create accessible exhibit space and removal nonhistoric fabric exceeds 50%.						
MR Credit 2.1	Construction Waste Management, Divert 50% from Disposal (see Guiding Principle V - Reduce Environmental Impact of Materials)	Y	At least 50% of construction & demolition debris will be recycled.	Y	At least 50% of construction & demolition debris will be recycled.	Y	At least 50% of construction & demolition debris will be recycled.						
MR Credit 2.2	Construction Waste Management, Divert 75% from Disposal	N	Every effort will be made to achieve the 75% threshold.	N	Every effort will be made to achieve the 75% threshold.	N	Every effort will be made to achieve the 75% threshold.						
MR Credit 3.1	Materials Reuse, 5%	N	The use of salvaged material is generally not in keeping with the rehabilitation of historic structures.	N	The use of salvaged material is generally not in keeping with the rehabilitation of historic structures.	N	The use of salvaged material is generally not in keeping with the rehabilitation of historic structures.						
MR Credit 3.2	Materials Reuse,10%	N	The use of salvaged material is generally not in keeping with the rehabilitation of historic structures.	N	The use of salvaged material is generally not in keeping with the rehabilitation of historic structures.	N	The use of salvaged material is generally not in keeping with the rehabilitation of historic structures.						

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MR Credit 4.1	Recycled Content, 10% (post-consumer + ½ pre-consumer). Use EPA's CPG for designated products to use)	Y	At least 10% of materials will be of recycled content.	Y	At least 10% of materials will be of recycled content.	Y	At least 10% of materials will be of recycled content.						
MR Credit 4.2	Recycled Content, 20% (post-consumer + ½ pre-consumer)	Y	Every effort will be made to achieve the 20% threshold.	Y	Every effort will be made to achieve the 20% threshold.	Y	Every effort will be made to achieve the 20% threshold.						
MR Credit 5.1	Regional Materials, 10% Extracted, Processed & Manufactured Regionally	Y	At least 10% of materials will be locally sourced.	Y	At least 10% of materials will be locally sourced.	Y	At least 10% of materials will be locally sourced.						
MR Credit 5.2	Regional Materials, 20% Extracted, Processed & Manufactured Regionally	Y	Every effort will be made to achieve the 20% threshold.	Y	Every effort will be made to achieve the 20% threshold.	Y	Every effort will be made to achieve the 20% threshold.						
EO 13423, Sec. 2.(d)	Biopreferred Products	NA	No biopreferred products are likely to be used on this project.	N	No biopreferred products are likely to be used on this project.	N	No biopreferred products are likely to be used on this project.						
MR Credit 6	Rapidly Renewable Materials	N	No rapidly renewable material are likely to be used on this project.	N	No rapidly renewable material are likely to be used on this project.	N	No rapidly renewable material are likely to be used on this project.						
MR Credit 7	Certified Wood (see Guiding Principle V - Reduce Environmental Impact of Materials)	N	Likely not cost-effective.	N	Likely not cost-effective.	N	Likely not cost-effective.						
	LEED-NC Subtotal	**7**		**7**		**6**		**Missed Prereq.**		**Missed Prereq.**		**Missed Prereq.**	

Indoor Environmental Quality (EQ)

15 LEED-NC Credits

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
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		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
EQ Prereq 1	Minimum IAQ Performance (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	Minimum indoor air quality performance will be established.	Y	Minimum indoor air quality performance will be established.	Y	Minimum indoor air quality performance will be established.						
EQ Prereq 2	Environmental Tobacco Smoke (ETS) Control	Y	No smoking will be permitted in building.	Y	No smoking will be permitted in building.	Y	No smoking will be permitted in building.						
EQ Credit 1	Outdoor Air Delivery Monitoring	Y	CO2 monitoring will be installed.	Y	CO2 monitoring will be installed.	Y	CO2 monitoring will be installed.						
EQ Credit 2	Increased Ventilation	N	Likely not cost-effective.	N	Likely not cost-effective.	N	Likely not cost-effective.						
EQ Credit 3.1	Construction IAQ Management Plan, During Construction (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	IAQ Management Plan will be developed for construction phase.	Y	IAQ Management Plan will be developed for construction phase.	Y	IAQ Management Plan will be developed for construction phase.						
EQ Credit 3.2	Construction IAQ Management Plan, Before Occupancy (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	IAQ Management Plan will be developed for pre-occupancy phase.	Y	IAQ Management Plan will be developed for pre-occupancy phase.	Y	IAQ Management Plan will be developed for pre-occupancy phase.						
EQ Credit 4.1	Low-Emitting Materials, Adhesives & Sealants (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	Adhesives & sealants will comply with established VOC limits.	Y	Adhesives & sealants will comply with established VOC limits.	Y	Adhesives & sealants will comply with established VOC limits.						
EQ Credit 4.2	Low-Emitting Materials, Paints & Coatings (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	Paints & coatings will comply with established VOC limits.	Y	Paints & coatings will comply with established VOC limits.	Y	Paints & coatings will comply with established VOC limits.						
EQ Credit 4.3	Low-Emitting Materials, Carpet Systems (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	Carpet products will comply with established VOC limits.	Y	Carpet products will comply with established VOC limits.	Y	Carpet products will comply with established VOC limits.						

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
EQ Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.	N	Likely not life-cycle cost-effective.						
EQ Credit 5	Indoor Chemical & Pollutant Source Control	Y	Interior floor grates will be installed to capture particulates.	Y	Interior floor grates will be installed to capture particulates.	Y	Interior floor grates will be installed to capture particulates.						
MOU Guiding Principles & EO 13423	Moisture Control (See ASHRAE Fundamentals 2005 and/or Moisture Control Handbook (Lstiburek and Carmody 1991) for recommended practices.)	Y	Elements will be installed to reduce potential issues with moisture.	Y	Elements will be installed to reduce potential issues with moisture.	Y	Elements will be installed to reduce potential issues with moisture.						
EQ Credit 6.1	Controllability of Systems, Lighting (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	Local control of lighting will be provided.	Y	Local control of lighting will be provided.	Y	Local control of lighting will be provided.						
EQ Credit 6.2	Controllability of Systems, Thermal Comfort	Y	Existing operable windows will be maintained.	Y	Existing operable windows will be maintained.	Y	Existing operable windows will be maintained.						
EQ Credit 7.1	Thermal Comfort, Design (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	Comfortable building temperature will be provided.	Y	Comfortable building temperature will be provided.	Y	Comfortable building temperature will be provided.						
EQ Credit 7.2	Thermal Comfort, Verification	N	Thermal Comfort Survey may be considered.	N	Thermal Comfort Survey may be considered.	N	Thermal Comfort Survey may be considered.						
EQ Credit 8.1	Daylight & Views, Daylight 75% of Spaces (See Guiding Principle IV, Enhance Indoor Environmental Quality)	Y	Daylight & views will be incorporated into 75% of occupied spaces.	Y	Daylight & views will be incorporated into 75% of occupied spaces.	Y	Daylight & views will be incorporated into 75% of occupied spaces.						
EQ Credit 8.2	Daylight & Views, Views for 90% of Spaces	Y	Daylight & views will be incorporated into 90% of occupied spaces.	Y	Daylight & views will be incorporated into 90% of occupied spaces.	Y	Daylight & views will be incorporated into 90% of occupied spaces.						
	LEED-NC Subtotal	**12**		**12**		**12**		**Missed Prereq.**		**Missed Prereq.**		**Missed Prereq.**	

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:

Innovation & Design Process (ID)

5 LEED NC Credits

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
ID Credit 1.1	Innovation in Design: Provide Specific Title	N	Innovations not addressed in Rating System are unlikely.	Y	Media & technology will be utilized to enable smaller footprint for visitor center functions	Y	Media & technology will be utilized to enable smaller footprint for visitor center functions						
ID Credit 1.2	Innovation in Design: Provide Specific Title	N	Innovations not addressed in Rating System are unlikely.	N	Innovations not addressed in Rating System are unlikely.	N	Innovations not addressed in Rating System are unlikely.						
ID Credit 1.3	Innovation in Design: Provide Specific Title	N	Innovations not addressed in Rating System are unlikely.	N	Innovations not addressed in Rating System are unlikely.	N	Innovations not addressed in Rating System are unlikely.						
ID Credit 1.4	Innovation in Design: Provide Specific Title	N	Innovations not addressed in Rating System are unlikely.	N	Innovations not addressed in Rating System are unlikely.	N	Innovations not addressed in Rating System are unlikely.						
ID Credit 2	LEED® Accredited Professional	Y	At least one principal participant will be LEED Accredited Professional.	Y	At least one principal participant will be LEED Accredited Professional.	Y	At least one principal participant will be LEED Accredited Professional.						
	LEED-NC Subtotal	**1**		**2**		**2**		**0**		**0**		**0**	

Non-LEED-NC Federal Requirements

Sustainability Features		PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
		Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:
MOU Guiding Principles & EO 13423 (pg. 3)	Complete Integrated Design Narrative During Predesign Only	NA	N/A		Integrated design process is being utilized.	0	N/A	0	N/A	0	N/A	0	N/A

Sustainability Features	PMIS Submission		Predesign		Schematic Design		Design Development		Construction Documents		Construction	
	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:	Y/N	Concisely explain how credit/requirement is met at this milestone:

Fulfillment of Guiding Principles for HPSB completes 24 LEED NC credits and 7 prerequisites.

LEED Certification Rating System

Certified: 26-32 points, **Silver:** 33-38 points, **Gold:** 39-51 points, **Platinum:** 52-69 points

For more information on LEED Certification and credits, visit www.usgbc.org

* For projects of net construction equal to or greater than $2 million, contract with an independent Commissioning Authority and comply with ASHRAE 0-2005, "The Commissioning Process". For projects with a lower net construction value, comply with the requirements of LEED NC 2.2, EA Prerequisite 1, "Fundamental Commissioning of the Building Energy Systems" (which allows the commissioning authority to be an employee of the design firm)

** For projects of net construction equal to or greater than $2 million, perform whole building energy simulation(s) in accordance with ASHRAE 90.1, 2007 (or IECC 2006 for residential) to show performance at least 30% better (20% for major renovations) than a code compliant similar building. If it can be shown that meeting the 30% performance standard for new construction (or 20% for major renovations) is not life cycle cost effective (over 40 years) then the project must incorporate the maximum energy savings that can be shown to be life cycle cost effective. For projects with a lower net construction value, meet or exceed the minimum requirements prescribed by the ASHRAE Advanced Energy Design Guide (a much simpler prescriptive method for achieving the target) appropriate for the project's building. For buildings without an appropriate Advanced Energy Design Guide perform whole building energy simulation(s).

*** The federal requirement (from EISA 2007) that relates to these LEED-NC credits is "Where life cycle cost effective, design systems to provide not less than 30 percent of the hot water demand through the installation and use of solar hot water heaters." The LEED credits for this item stipulates a percentage of total energy consumption to be provided by on site renewable sources. In some cases meeting the federal requirement will also meet the LEED requirement for these credits.