



LEED-NC[®]

How to Interpret this Report

Purpose The Leadership in Energy and Environmental Design (LEED) Rating System was designed by the US Green Building Council to encourage and facilitate the development of more sustainable buildings.

Environmental Categories The report is organized into five environmental categories as defined by LEED including: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental C

LEED Prerequisites Prerequisites must be achieved. Non-compliant prerequisites must be resolved before a certification can be awarded.

LEED Credits The environmental categories are subdivided into the established LEED credits, which are based on desired performance goals within each category. An assessment of whether the credit is earned or denied is made and a narrative describes the basis for the assessment.

Achieved The applicant has provided the mandatory documentation which supports the achievements of the credit requirements, achieving the associated points. Currently the project has scored the adjacent points in this category.

Denied The applicant has applied for a point in a particular credit, but has misinterpreted the credit intent or cannot substantiate meeting the requirements. Currently the project has the adjacent points in this category.

Rating Rating is Platinum

Official Scores Official LEED v2 Scores: Certified: 26-32 Silver Rating: 33-38 Gold Rating: 39-51 Platinum Rating: 52+

Earned	Denied	Sustainable Sites		Possible Points
11	1			14
0	0	Erosion & Sedimentation Control		Prerequisite 1-Version 2.1
		Design Application	12/13/2007	
The signed LEED Letter Template states that the local Best Management Practices meet or exceed the EPA BMPs. Measures include preservation of existing vegetation, earth dikes and drainage swales, silt fencing, check dams, fiber rolls, street sweeping and vacuuming, sand bag barriers, and storm drain inlet protection.				
1	0	Site Selection	Credit 1-Version 2.1	
		Design Application	12/13/2007	
The signed LEED Letter Template declares that the site does not meet any of the prohibited criteria.				
<input type="checkbox"/>	<input type="checkbox"/>	Urban Redevelopment	Credit 2-Version 2.1	
<input type="checkbox"/>	<input type="checkbox"/>	Brownfield Redevelopment	Credit 3-Version 2.1	
1	0	Alternative Transportation, Public Transportation Access	Credit 4.1-Version 2.1	
		Design Application	12/13/2007	
The signed LEED Letter Template states that there are 2 bus lines within 1/4 mile of the project site. A scaled site map has been provided. However, the map does not highlight the Diamond Valley Lake Bus Route. Further, it is unclear whether the Riverside Transit Agency Hemet Bus Route 33 extension to the Museum of Water and Life campus provides frequent bus service for building occupants.				
TECHNICAL ADVICE: Please provide an area drawing or transit map highlighting the building and each bus line serving at least one bus stop within 1/4 mile. Include documentation (i.e. bus schedule) demonstrating that each bus line provides frequent bus service for building occupants.				
		Construction Application	3/18/2008	
The applicant provided a narrative, transit authority memo, and specific route information for two bus lines capable of serving the project site. Based on the unique aspects of this project, credit compliance has been demonstrated.				

1

0

Alternative Transportation, Bicycle Storage & Changing Rooms

Credit 4.2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that 8 bicycle stalls and 1 shower are provided within 200 yards of the project for 20 occupants. However, it appears that transients (visitors) were not accounted for in the calculations to determine the bike storage capacity. Support documentation submitted for WEc3 indicates that the total building occupancy per day equals 296, of which 40 appear to be full time employees.

Per CIR ruling dated 9/5/2001, "the peak occupant load figure should be used to calculate the required number of bike slots." Further, please note that "although transients are required to calculate the bike storage capacity, they shall not be required to be included in the occupant count for calculating the number of showers/changing areas. Transients are defined as visitors to the building for less than 7 hours."

TECHNICAL ADVICE: Please provide clarification on the number of employees and transients (at peak occupancy), and demonstrate that sufficient bicycle parking and showers has been provided for the project.

Construction Application

3/18/2008

The applicant provided a narrative and support documentation confirming that 16 bicycle stalls and 1 shower are provided within 200 yards of the project for 20 regular building occupants and 276 transients, demonstrating compliance with the credit requirements.

1

0

Alternative Transportation, Alternative Fuel Refueling Stations

Credit 4.3-Version 2.1

Design Application

12/13/2007

This credit has been submitted based on a compliance path of LEED-NC v2.2. The signed LEED Letter Template declares that 10 preferred parking spaces for low emitting and fuel efficient vehicles have been provided, representing at least 5% of the total vehicle parking capacity on the site. A site plan has been included to further demonstrate achievement.

1

0

Alternative Transportation, Parking Capacity

Credit 4.4-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the parking for the project does not exceed minimum zoning requirements and 2 preferred carpool parking spaces are provided for 20% of building occupants.

1

0

Reduced Site Disturbance, Protect or Restore Open Space

Credit 5.1-Version 2.1

Design Application

12/13/2007

A signed LEED Letter Template declares that 64% of the project site area has been restored. A site plan and calculations demonstrate that of the 794,099 sf site, 505,723 sf has been restored with native planting or vegetation.

1	0
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Reduced Site Disturbance, Development Footprint

Credit 5.2-Version 2.1

Design Application

12/13/2007

A signed LEED Letter Template declares that there are no local zoning requirements for open space, so an area of open space has been allocated adjacent to the building which is equal in size to the building footprint. A letter from the building owner, as well as calculations, substantiates this claim.

1	0
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Stormwater Management, Rate or Quantity

Credit 6.1-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the post-development 1.5 year, 24 hour peak discharge rate and quantity do not exceed pre-development conditions. The provided narrative states that the project is pursuing compliance with the LEED-NC v2.2 credit requirements. As a LEED-NC v2.1 Letter Template has been submitted, it is unclear which compliance path is being pursued. It should be noted that calculations are required to demonstrate credit achievement.

TECHNICAL ADVICE: Please provide confirmation of the compliance path being pursued. For LEED-NC v2.1, include calculations demonstrating that existing site imperviousness is less than or equal to 50% (refer to pages 53-54 of the Reference Guide for guidance). For LEED-NC v2.2, provide both pre and post-development site runoff rate and quantities, demonstrating that the post-development rate and quantity are equal to or less than the pre-development values (refer to pages 77-78 of the Reference Guide for guidance).

Construction Application

3/18/2008

The applicant provided a LEED-NC v2.2 Submittal Template, clearly identifying the compliance path being pursued. A narrative was also included, describing how the stormwater management plan protects receiving stream channels from excessive erosion through storage and quantity control strategies. This demonstrates compliance with the LEED-NC v2.2 credit requirements.

1	0
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Stormwater Management, Treatment

Credit 6.2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template has been provided declaring that the EPA standard for stormwater treatment was followed, that this standard is more stringent than local standards, and that treatment results in at least an 80% reduction in TSS and a 40% reduction in TP. The provided narrative states that the project is pursuing compliance with the LEED-NC v2.2 credit requirements. As a LEED-NC v2.1 Letter Template has been submitted, it is unclear which compliance path is being pursued.

TECHNICAL ADVICE: Please provide confirmation of the compliance path being pursued and include adequate documentation to demonstrate that the credit requirements have been met for the given compliance path.

Construction Application

3/18/2008

The applicant provided a LEED-NC v2.2 Submittal Template, clearly identifying the compliance path being pursued. A narrative was also included, describing how the proposed stormwater management system will comply with the credit requirements. This demonstrates compliance with the LEED-NC v2.2 credit requirements.

1

0

Landscape & Exterior Design to Reduce Heat Islands, Non-Roof

Credit 7.1-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template states that a minimum of 30% of non-roof impervious surfaces areas will be shaded within five years, and/or constructed with light-colored/high albedo materials (reflectance at 0.3). A site plan has also been submitted to demonstrate compliance.

However, it is unclear from the documentation provided how the project will comply with the credit requirements as impervious areas have not been explicitly identified. Further, the materials legend indicates bid alternates, making it difficult to determine the actual as built conditions.

TECHNICAL ADVICE: Please provide documentation (i.e. site plan drawings, calculations, and material cut sheets) clearly demonstrating that at least 30% of non-roof impervious surfaces areas will be shaded within five years, and/or constructed with light-colored/high albedo materials (reflectance at 0.3). The site plan drawing should clearly identify areas of paving (both pervious and impervious), landscaping (indicate areas shaded within five years), and the building footprint.

Construction Application

3/18/2008

The applicant provided a narrative describing the cumulative compliance strategies associated with the design. A revised site plan was submitted clearly identifying reflective and shaded areas, confirming that these areas in total exceed the area required to demonstrate compliance with the credit requirements.

1

0

Landscape & Exterior Design to Reduce Heat Islands, Roof

Credit 7.2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template has been provided stating that roofing materials for 100% of the project's roof surface meet the emissivity and reflectivity requirements of the credit.

0	1
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Light Pollution Reduction

Credit 8-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the project's exterior lighting has been designed according to the IESNA RP-33 requirements of the credit. A photometric site plan has been provided. However, the LEED Project Boundary has not been clearly identified. Further, there is no indication of the Environmental Zone for this project. Finally, it appears that the uniformity ratio for the parking area greatly exceeds the threshold established in the referenced standard (RP-20).

TECHNICAL ADVICE: Please provide a photometric site plan with illuminance data extending 10 feet beyond the LEED Project Boundary or property line. Include a declaration of the Environmental Zone for this project. Confirm that the light trespass along the entire property line is in compliance with the thresholds relative to the declared environmental zone. Please also provide documentation demonstrating that the uniformity ratio for the parking area is in compliance with the referenced standard (RP-20).

Construction Application

3/18/2008

The applicant provided a new photometric site plan, a narrative, and a declaration of the Environmental Zone E-3 for this project. Uniformity ratio calculations demonstrate compliance with the credit requirements. However, allowable light trespass thresholds have been exceeded at various locations, most notably at the vehicular entrances to the site. As this does not demonstrate credit achievement, this credit is not awarded.

Earned	Denied
4	0
1	0

Water Efficiency	Possible Points	5
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Water Efficient Landscaping, reduce by 50%

Credit 1.1-Version 2.1

Design Application

12/13/2007

The LEED Submittal Template states that high efficiency irrigation technology reduces potable water consumption for irrigation by 50%.

1	0
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Water Efficient Landscaping, No Potable Use or No Irrigation

Credit 1.2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the project site will not use any potable water for irrigation. A narrative indicates that recycled water provided by the Easter Municipal Water District (EMWD) of Southern California will be used to irrigate the entire project site.

0	0
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Innovative Wastewater Technologies

Credit 2-Version 2.1

2	0
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Water Use Reduction

Credit 3.1-3.2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template and calculations have been provided demonstrating that water use has been reduced by 38.8% through the use of low-flow water closets, waterless urinals, low-flow electronically controlled lavatories, low-flow kitchen sinks, and low-flow showers.

It should be noted that the calculations are incorrect. The number of occupants identified as using the lavatory should represent the sum of male and female occupant users, also equal to the total average occupants per day, indicated as equal to 296. However, an independent calculation using the appropriate value confirms that at least a 30% water use reduction has been achieved.

Earned	Denied
15	0
0	0

Energy & Atmosphere	Possible Points 17
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Fundamental Building Systems Commissioning

Prerequisite 1-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the required commissioning activities have been completed or are under contract.

0	0
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Minimum Energy Performance

Prerequisite 2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the project complies with the local energy code, Title 24-2001, which is more stringent than ASHRAE 90.1-1999. A comparison has been provided.

0	0
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CFC Reduction in HVAC&R Equipment

Prerequisite 3-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the project's HVAC&R systems do not contain CFC-based refrigerants.

10 0

Optimize Energy Performance

Credit 1.1-1.10-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template, summary tables, and energy modeling output demonstrate a 65.9% savings between the budget and design cases in comparison with Title 24-2001. Energy efficiency measures include hydronic radiant heating, efficient lighting, displacement ventilation, on-site solar PV system, and variable speed drive fans.

3 0

Renewable Energy

Credit 2.1-2.3-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that 46% of the building's regulated load is provided by on-site renewable energy. A narrative describing the on-site photovoltaic system and calculations demonstrating achievement were also provided.

Additional Commissioning

Credit 3-Version 2.1

1 0

Ozone Depletion

Credit 4-Version 2.1

Design Application

12/13/2007

This credit has been selected for audit.

TECHNICAL ADVICE: Please provide equipment schedules and cut sheets highlighting refrigerant information for all HVAC&R system components.

Construction Application

3/18/2008

The applicant submitted a signed LEED Letter Template, a narrative and HVAC equipment cut-sheets. The narrative states that the project is pursuing credit compliance per the LEED-NC v2.2 requirements. The documentation provided confirms that the amount of refrigerant in the HVAC&R systems has a total refrigerant impact of 94.2, which is below the limit of 100, as required under LEED-NC v2.2.

0 0

Measurement & Verification

Credit 5-Version 2.1

1 0

Green Power

Credit 6-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that at least 50% of the building's regulated load is supplied by renewable power that meets the definition of Green-e. A copy of the two year electricity purchase contract has been provided.

Earned	Denied		
6	0	Materials & Resources Possible Points 13	
0	0	Storage & Collection of Recyclables	Prerequisite 1-Version 2.1
		Design Application	12/13/2007
		The signed LEED Letter Template indicates that appropriate facilities for recycling have been provided. Recycling area calculations and a floor plan locating the recycling area demonstrate achievement.	
<input type="checkbox"/>	<input type="checkbox"/>	Building Reuse	Credit 1.1-1.3-Version 2.1
2	0	Construction Waste Management	Credit 2.1-2.2-Version 2.1
		Design Application	12/13/2007
		A signed LEED Letter Template declares that 95.43% of project construction waste was diverted from the landfill. A list of materials and where they were diverted to has been included.	
<input type="checkbox"/>	<input type="checkbox"/>	Resource Reuse	Credit 3.1-3.2-Version 2.1
2	0	Recycled Content	Credit 4.1-4.2-Version 2.1
		Design Application	12/13/2007
		The signed LEED Letter Template and supporting calculations have been provided declaring that the project has achieved a combined recycled content value of 26.06% of the total materials.	
1	0	Local/Regional Materials	Credit 5.1-5.2-Version 2.1
		Design Application	12/13/2007
		MRC5.1 The signed LEED Letter Template and supporting calculations have been provided declaring that 74.61% of the total project's materials, based on cost, were manufactured within 500 miles of the project site.	
<input type="checkbox"/>	<input type="checkbox"/>	Rapidly Renewable Materials	Credit 6-Version 2.1

1	0
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Certified Wood

Credit 7-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that 50.17% of wood based materials are certified in accordance with FSC Principles and Criteria. Wood products constitute .47% of the total value of all materials for the project.

Earned	Denied
12	1
0	0

Indoor Environmental Quality	Possible Points 15
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Minimum IAQ Performance

Prerequisite 1-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template has been provided stating that the requirements of ASHRAE 62-1999 have been met. Documentation describing the ventilation rate procedure has been provided.

0	0
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Environmental Tobacco Smoke (ETS) Control

Prerequisite 2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template has been provided stating that no smoking is allowed in the building and outdoor smoking areas are located away from operable windows and entryways.

1	0
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Carbon Dioxide (CO2) Monitoring

Credit 1-Version 2.1

Design Application

12/13/2007

The applicant submitted a signed LEED Letter Template and a narrative. The narrative states that the DDC connected CO2 sensors are located in the return air duct and that the monitors have a setpoint of 800ppm. The applicant did not however provide additional documentation identifying the location of the sensors, and validating that the setpoint satisfies the spaces served.

TECHNICAL ADVICE: Please provide additional documentation highlighting the location of the CO2 sensors. Confirm that the return air would not become diluted such that there would be an inadequate sampling the CO2 concentration of the spaces. Please include additional information supporting how the set-point of 800ppm was established and that this conforms to ASHRAE 62-2001, Appendix C.

Construction Application

3/18/2008

The applicant submitted a narrative and drawings highlighting the locations of the CO2 sensors. The narrative outlines the methods employed to determine the CO2 sensor setpoint at 800 ppm. The information provided in the narrative confirms adherence to ASHRAE 62-2001, Appendix C methodologies and therefore the credit is awarded.

0

1

Increase Ventilation Effectiveness

Credit 2-Version 2.1

Design Application

12/13/2007

This credit has been selected for audit.

TECHNICAL ADVICE: Please provide section and plan drawings of each major mechanically ventilated room type. Drawings should clearly indicate all inlets, outlets, furniture, and occupants specific to the following system types: 1. Mixing Systems - the outlet types, the characteristic room lengths, the return/exhaust openings, all air velocities, and the predicted Air Diffusion Performance Index (ADPI) 2. Displacement/Unidirectional Systems - the outlet types, the return and exhaust openings, all air velocities, and the predicted distribution of the upper and lower stratification zones. Airflow patterns must be graphically illustrated to scale. Cut sheets and specification tablets for all terminal vents, grills, and registers must be provided and cross referenced to the drawings.

Construction Application

3/18/2008

The applicant provided a narrative, air changes per hour calculations, an air-diffuser ADPI summary and drawings. The documentation provided does not conform to the credit requirements. The applicant did not provide documentation as requested in the preliminary review and as stated on page 257 of the LEED-NC v2.1 Reference Guide. Since the necessary documentation was not provided, credit compliance cannot be determined and therefore this credit is not awarded.

1

0

Construction IAQ Management Plan, During Construction

Credit 3.1-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template has been provided stating that a construction IAQ plan was followed and implemented. Filters with a MERV 13 rating were installed during and after construction. Photographs and a description of the SMACNA approaches followed were included.

1

0

Construction IAQ Management Plan, Before Occupancy

Credit 3.2-Version 2.1

Design Application

12/13/2007

A signed LEED Letter Template declares that a two week building flush out was conducted with 100% outside air from 10/2/2006 - 10/16/2006. A flush out plan is provided describing the use of MERV 13 filters, adjustments to the HVAC equipment to maintain maximum airflow through the building during flush out, and installation of new MERV 13 filters following flush out.

3 0

Low-Emitting Materials

Credit 4.1-4.4-Version 2.1

Design Application

12/13/2007

EQc4.1

A signed LEED Letter Template declares the use of compliant adhesives and sealants. A list with associated VOC levels has been provided.

EQc4.2

A signed LEED Letter Template declares that all paints, including topcoats and primers, meet the VOC requirements of Green Seal. A list, with VOC content indicated, has been provided.

EQc4.3

A signed LEED Letter Template has been provided declaring that the project uses carpeting that complies with the CRI Green Label Program.

1 0

Indoor Chemical & Pollutant Source Control

Credit 5-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template declares that the requirements of the credit have been met. A footgrill key plan drawings has been provided to help support credit compliance. However, it appears permanent entryway systems have not been employed at all exterior entrances, including Lobby 115, Lobby 219 and at each meeting room, potentially only accessible via a single door entry when the larger meeting space is sub-divided by a folding partition.

Per CIR ruling dated 12/21/04, "Any door that is intended to be used regularly and frequently by building occupants should be considered high volume for the purposes of this credit. . . If the door is egress-only or is used infrequently, it may be excluded."

TECHNICAL ADVICE: Please provide a narrative identifying all exterior doors within the LEED project boundary. Include an explanation addressing why, based upon usage, each door has or has not been provided with permanent entryway systems.

Construction Application

3/18/2008

The applicant provided a drawing and a narrative addressing usage patterns for all exterior doors within the LEED project boundary, demonstrating compliance with the credit requirements.

1 0

Controllability of Systems

Credit 6.1-6.2-Version 2.1

Design Application

12/13/2007

EQc6.2

The signed LEED Letter Template and calculations have been provided declaring that all regularly occupied non-perimeter spaces have been provided with airflow, temperature, and lighting controls as required by this credit.

1	0	Thermal Comfort, Comply with ASHRAE 55-1992	Credit 7.1-Version 2.1
		Design Application	12/13/2007
<p>The signed LEED Letter Template declares that the project has been designed to maintain indoor comfort within the ranges established by ASHRAE 55-1992, Addenda 1995. Information on temperature and humidity control ranges has been provided.</p>			

1	0	Thermal Comfort, Permanent Monitoring System	Credit 7.2-Version 2.1
		Design Application	12/13/2007
<p>The signed LEED Letter Template has been provided declaring that a permanent temperature and humidity monitoring system that operates during all seasons has been installed. The system is to permit control of individual building zones to maintain thermal comfort within the ranges defined in ASHRAE 55-1992, Addenda 1995. The Letter Template further declares that these systems were commissioned as part of the scope for EAp1, Fundamental Building Systems Commissioning.</p>			

1	0	Daylight & Views, Daylight 75% of Spaces	Credit 8.1-Version 2.1
		Design Application	12/13/2007
<p>The signed LEED Letter Template, drawings, and calculations demonstrate that 87% of critical visual task areas have a daylight factor of at least 2%.</p>			

1	0	Daylight & Views, Views for 90% of Spaces	Credit 8.2-Version 2.1
		Design Application	12/13/2007
<p>The signed LEED Letter Template, drawings, and calculations demonstrate that 98% of critical visual task areas have direct access to views of the outdoors.</p>			

Earned	Denied		
5	0	Innovation & Design Process	Possible Points 5

1

0

Innovation in Design 1.1

Credit 1-Version 2.1

Design Application

12/13/2007

Exemplary Performance of MRc2

The applicant submitted an innovation credit for exemplary performance of MRc2. A signed LEED Letter Template declares that 95.43% of project construction waste was diverted from the landfill. A list of materials and where they were diverted to has been included. As this exceeds the incremental threshold for an innovation point, the credit is earned.

1

0

Innovation in Design 1.2

Credit 1-Version 2.1

Design Application

12/13/2007

Exemplary Performance of EAc1

The applicant has submitted an innovation credit for exemplary performance of EAc1. The documentation provided demonstrates an energy cost savings of 65.9% in comparison to Title 24-2001 and therefore warrants award of an innovation point.

1

0

Innovation in Design 1.3

Credit 1-Version 2.1

Design Application

12/13/2007

Exemplary Performance of EAc2

The applicant has submitted an innovation credit for exemplary performance of EAc2. The applicant provided a narrative and calculations demonstrating that the on-site photovoltaic system offsets 46% of the project's regulated energy use. This offset amount exceeds the required 40% threshold and therefore warrants award of an innovation point.

1

0

Innovation in Design 1.4

Credit 1-Version 2.1

Design Application

12/13/2007

Sustainable Campus Education

The applicant has submitted an innovation credit based on the merits of having a green educational outreach program in place for the project. This innovation credit is based on established CIRs. The project has instituted a comprehensive program that educates building occupants as well as visitors, using a comprehensive signage program and guided tours. These collective measures demonstrate compliance to the established criteria for an innovation credit based on a green educational outreach program.

4/15/2008

Construction Application Review

1

0

LEED Accredited Professional

Credit 2-Version 2.1

Design Application

12/13/2007

The signed LEED Letter Template and the LEED Accredited Professional Certificate have been provided for Jovan Gayton.