



LEED Certification Review Report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by the Green Building Certification Institute (GBCI®).

Rochester School New Site Project

Project ID 1000020604
Rating system & version LEED FOR SCHOOLS v2009
Project registration date 12/05/2011



Certified (Gold)

CERTIFIED: 40-49, SILVER: 50-59, GOLD: 60-79, PLATINUM: 80+

LEED FOR SCHOOLS (V2009)

ATTEMPTED: 65, DENIED: 7, PENDING: 0, AWARDED: 64 OF 110 POINTS

SUSTAINABLE SITES 3 OF 24	
SSp1 Construction Activity Pollution Prevention	Y
SSp2 Environmental Site Assessment	1 / 0
SSc1 Site Selection	1 / 1
SSc2 Development Density and Community Connectivity	0 / 4
SSc3 Brownfield Redevelopment	0 / 1
SSc4.1Alternative Transportation-Public Transportation Access	0 / 4
SSc4.2Alternative Transportation-Bicycle Storage and Changing Rooms	0 / 1
SSc4.3Alternative Transportation-Low-Emitting and Fuel-Efficient Vehicles	0 / 2
SSc4.4Alternative Transportation-Parking Capacity	2 / 2
SSc5.1Site Development-Protect or Restore Habitat	0 / 1
SSc5.2Site Development-Maximize Open Space	0 / 1
SSc6.1Stormwater Design-Quantity Control	0 / 1
SSc6.2Stormwater Design-Quality Control	0 / 1
SSc7.1Heat Island Effect, Non-Roof	0 / 1
SSc7.2Heat Island Effect-Roof	0 / 1
SSc8 Light Pollution Reduction	0 / 1
SSc9 Site Master Plan	0 / 1
SSc10 Joint Use of Facilities	0 / 1

WATER EFFICIENCY 10 OF 11	
WEp1 Water Use Reduction-20% Reduction	Y
WEc1 Water Efficient Landscaping	4 / 4
WEc2 Innovative Wastewater Technologies	2 / 2
WEc3 Water Use Reduction	4 / 4
WEc4 Process Water Use Reduction	0 / 1

ENERGY AND ATMOSPHERE 29 OF 33	
EAp1 Fundamental Commissioning of the Building Energy Systems	Y
EAp2 Minimum Energy Performance	1 / 0
EAp3 Fundamental Refrigerant Mgmt	1 / 0
EAc1 Optimize Energy Performance	19 / 19
EAc2 On-Site Renewable Energy	7 / 7
EAc3 Enhanced Commissioning	2 / 2
EAc4 Enhanced Refrigerant Mgmt	1 / 1
EAc5 Measurement and Verification	0 / 2
EAc6 Green Power	0 / 2

MATERIALS AND RESOURCES 5 OF 13	
MRp1 Storage and Collection of Recyclables	Y
MRc1.1Building Reuse-Maintain Existing Walls, Floors and Roof	0 / 2
MRc1.2Building Reuse, Maintain 50% of Interior Non-Structural Elements	0 / 1
MRc2 Construction Waste Mgmt	2 / 2

MATERIALS AND RESOURCES CONTINUED	
MRc3 Materials Reuse	0 / 2
MRc4 Recycled Content	1 / 2
MRc5 Regional Materials	2 / 2
MRc6 Rapidly Renewable Materials	0 / 1
MRc7 Certified Wood	0 / 1

INDOOR ENVIRONMENTAL QUALITY 9 OF 19	
IEQp1 Minimum IAQ Performance	Y
IEQp2 Environmental Tobacco Smoke (ETS) Control	1 / 0
IEQp3 Minimum Acoustical Performance	1 / 0
IEQc1 Outdoor Air Delivery Monitoring	0 / 1
IEQc2 Increased Ventilation	1 / 1
IEQc3.1Construction IAQ Mgmt Plan-During Construction	1 / 1
IEQc3.2Construction IAQ Mgmt Plan-Before Occupancy	1 / 1
IEQc4 Low-Emitting Materials	4 / 4
IEQc5 Indoor Chemical and Pollutant Source Control	0 / 1
IEQc6.1Controllability of Systems-Lighting	1 / 1
IEQc6.2Controllability of Systems-Thermal Comfort	1 / 1
IEQc7.1Thermal Comfort-Design	0 / 1
IEQc7.2Thermal Comfort-Verification	0 / 1
IEQc8.1Daylight and Views-Daylight	0 / 3
IEQc8.2Daylight and Views-Views	0 / 1
IEQc9 Enhanced Acoustical Performance	0 / 1
IEQc10 Mold Prevention	0 / 1

INNOVATION IN DESIGN 4 OF 6	
IDc1.1 Innovation in Design	1 / 1
IDc1.1 Innovation in Design	0 / 1
IDc1.2 Innovation in Design	0 / 1
IDc1.2 Innovation in Design	1 / 1
IDc1.3 Innovation in Design	0 / 1
IDc1.3 Innovation in Design	0 / 1
IDc1.4 Innovation in Design	0 / 1
IDc1.4 Innovation in Design	0 / 1
IDc2 LEED® Accredited Professional	1 / 1
IDc3 The School as a Teaching Tool	1 / 1

REGIONAL PRIORITY CREDITS 4 OF 4	
WEc1 Water Efficient Landscaping	1 / 1
WEc2 Innovative Wastewater Technologies	0 / 1
WEc3 Water Use Reduction	1 / 1
EAc1 Optimize Energy Performance	1 / 1
EAc3 Enhanced Commissioning	1 / 1
EAc5 Measurement and Verification	0 / 1

TOTAL 64 OF 110

CREDIT DETAILS



Project Information Forms

P1f1: Minimum Program Requirements

Approved

07/31/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted stating that the project complies with all Minimum Program Requirements. The project Owner has signed the form as required. The project will comply with MPR 6: Must Commit to Sharing Whole-Building Energy and Water Usage Data, via Option 3. The project is located in Chia, Columbia.

01/14/2014 **DESIGN AND CONSTRUCTION FINAL REVIEW**

P1f2: Project Summary Details

Approved

11/20/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted including the following project summary details. The project spaces occupies 168,820 gross square feet in seven buildings up to four stories This is 100% of the total gross square feet of the buildings. The buildings were originally constructed in 2013 with 168,820 square feet currently undergoing initial fit-out. It uses energy from electricity and on-site renewables and uses water from a municipal potable water system as well as an on-site gray or rainwater system. The sewage is conveyed to a municipal sewer system. The total project budget is \$16,857,756.

01/14/2014 **DESIGN AND CONSTRUCTION FINAL REVIEW**

P1f3: Occupant and Usage Data

Approved

11/20/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted including the following occupant and usage data. The occupant is a profit organization and an occupant type that consists primarily of Core Learning Space: K-12, High School spaces. The average Full-time Equivalence staff value is 186, the peak transient occupancy value is 56, the total peak users value is 242 and the tenant space is occupied 286 days per year. The space is intended to be owner-occupied and owner-managed after project completion.

01/14/2014 **DESIGN AND CONSTRUCTION FINAL REVIEW**

P1f4: Schedule and Overview Documents

Approved

11/20/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted including the design and construction schedule, and the estimated date of occupancy is noted as September 4, 2012. The following required documents have been uploaded: exterior building photos, interior renderings, floor plans, a site plan, mechanical schedules, and mechanical drawings. Additionally the building systems narrative and the project narrative have been provided.

01/14/2014 **DESIGN AND CONSTRUCTION FINAL REVIEW**



Sustainable Sites

SSp1: Construction Activity Pollution Prevention

Awarded

11/20/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project has implemented an erosion and sedimentation control (ESC) plan which conforms to the 2003 EPA Construction General Permit (CGP). The requirements of the CGP are more stringent than local erosion and sedimentation control standards and codes. The ESC plan addresses the necessary requirements to prevent soil loss, sedimentation, and pollution of the air as required. The narrative has been provided to confirm that the ESC plan was implemented appropriately. The narrative describes the actions taken to effectively implement and maintain the ESC plan. The ESC Plan has also been provided.

SSp2: Environmental Site Assessment

Awarded

11/20/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project site was determined to be not contaminated by means of an ASTM Phase I Environmental Site Assessment. The executive summary from the Phase I Environmental Site Assessment has been provided.

SSc1: Site Selection

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

11/20/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project site does not meet any of the prohibited criteria.

SSc2: Development Density and Community Connectivity

Not Attempted

POSSIBLE POINTS: 4

SSc3: Brownfield Redevelopment

Not Attempted

POSSIBLE POINTS: 1

SSc4.1: Alternative Transportation-Public Transportation Access

Denied

POSSIBLE POINTS: 4

ATTEMPTED: 4, DENIED: 4, PENDING: 0, AWARDED: 0

11/21/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project is served by 42 bus lines within one-quarter-mile walking distance of the project site. A scaled drawing showing the location of the transit stops has been provided.

However, there are no dedicated walking or biking lanes that extend from the school building to the edge of the school property in two or more directions.

SSc4.2: Alternative Transportation-Bicycle Storage and Changing Rooms

Denied

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

11/21/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that bicycle storage facilities have been provided to serve 5% of the LEED for Schools project FTE and transient occupants and students above third grade, measured at peak occupancy, and shower facilities for 11% of the LEED for Schools project FTE occupants. Bicycle storage facilities must be provided for at least 5% of project FTE and transient occupants and students above third grade, and shower facilities must be provided for at least 0.5% of FTE project occupants. In addition, the project has [dedicated bicycle lanes / appropriately sized shared use pathways] that extend from the school building to the end of the school property. Plans have been provided showing the location of the bicycle storage and shower facilities and the dedicated bicycle lanes.

However, there are no bicycle lanes from the school building to the end of the school property in at least two directions as required.

SSc4.3: Alternative Transportation-Low-Emitting and Fuel-Efficient Vehicles

Not Attempted

POSSIBLE POINTS: 2

SSc4.4: Alternative Transportation-Parking Capacity

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

11/21/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the LEED-Schools project is non-residential and applies Case 1 - Option 1. The number of parking spaces provided to the base building does not exceed the minimum number required by local zoning regulations and the project provides 8 preferred parking spaces for car/vanpool vehicles (8% of total parking capacity). Preferred parking for car/vanpools must be provided for at least 5% of the total parking capacity. A site plan highlighting the total parking capacity, the preferred parking spaces, and signage images indicating the reserved status of these spaces have been provided.

SSc5.1: Site Development-Protect or Restore Habitat

Not Attempted

POSSIBLE POINTS: 1

SSc5.2: Site Development-Maximize Open Space

Not Attempted

POSSIBLE POINTS: 1

SSc6.1: Stormwater Design-Quantity Control

Not Attempted

POSSIBLE POINTS: 1

SSc6.2: Stormwater Design-Quality Control

Not Attempted

POSSIBLE POINTS: 1

SSc7.1: Heat Island Effect, Non-Roof

Not Attempted

POSSIBLE POINTS: 1

SSc7.2: Heat Island Effect-Roof

Denied

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

11/26/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that a weighted average 1,491% of the base building roof surface has a Solar Reflectance Index meeting the credit requirements, therefore the project complies with Option 1. A minimum of 75% of the roof area must be SRI-compliant to achieve this credit via Option 1. The roof slope is noted as less than or equal to 2:12. The table listing the compliant SRI roofing materials, a roof plan and manufacturer documentation for the installed roofing materials has been provided.

However, the claimed SRI value of 100 does not appear in the provided product information sheet. Additionally the "Total Roof Area" has been entered as 2,927 (sf) while the "Square Footage" of the qualifying roof area has been entered as 34,052 (sf).

TECHNICAL ADVICE:

Please provide a revised form calculation that includes the actual area of the compliant base building roofing materials, the total roof area and manufacturer documentation containing the SRI of the installed roofing materials.

01/14/2014 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Credit Form has been revised to indicate 45,736 sf of roof area but includes an SRI value of 100, a manufacturer letter has been provided which states that Texasaply FV 3.5 mm product in white has an SRI of 28. The Credit Form indicates that FTP Elastoply Mineral FV 3.5 mm has an SRI of 100. Independent reviewer research of the Texsa website did not result in any additional information in support of a compliant SRI. <http://www.texsa.com.co/dm documents/FTP Elastoply Mineral FV3-5mm.pdf>

The provided documentation and reviewer recalculation using the provided 28 SRI as claimed in the provided letter indicate that the project has a weighted average high-albedo roof area of 22.82% which does not meet credit requirements. The provided documentation does not demonstrate credit compliance.

SSc8: Light Pollution Reduction

Denied

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

11/26/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the base buildings do not have any nonemergency luminaires with a direct line of sight to exterior glazing. Additionally, there are exterior lighting devices within the LEED-NC Project Boundary. The site is classified as LZ3: Medium. The exterior lighting power density tables have been completed. The total actual exterior lighting power is less than or equal to total allowable for tradable surfaces and the actual LPD for nontradable surfaces is less than or equal to the allowable for each nontradable surface. The site lumen calculation table has been completed and the percentage of site fixture lumens above 90 degrees from the nadir is less than or equal to the percentage allowed by the lighting zone.

An exterior site photometric plan has been provided however it is illegible. Additionally this credit requires the submittal of two site photometric plans to evaluate sports lighting. Therefore, compliance with the illuminance requirements for LZ3 cannot be confirmed.

TECHNICAL ADVICE:

Please provide two revised photometric site plans that include the LEED-NC Project Boundary and the light trespass limit line 15 feet beyond the LEED-NC Project Boundary in order to confirm compliance with the illuminance requirements of LZ3. Note that one plan must include all site lighting except sports lighting and the second photometric plan must include only the sports lighting.

01/17/2014 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Credit Form has been revised and significant additional information/light studies have been provided to address the issues outlined in the Preliminary Review comments.

However the provided information is inconclusive and seems to indicate that the project does not comply with the credit requirements. It is not clear in the provided document "GE 0063 13 01 Detailed_ Exterior Lighting" what condition is being measured (sports lighting on or off), why these four areas have been selected for detailed study nor are the property line or the distance from the property line indicated on the drawings. Though the provided photometric data for Boundary 1 might indicate compliance, Boundary 2 indicates levels as high as 1.6 close-in and 0.2 away, Boundary 3 indicates levels as high as 5.9 close-in and 1.0 away, and Boundary 4 indicates 4.6 close-in and 1.6 away.

The provided "Exterior Lighting Measures_Rochester School" is a field study of some of the boundary conditions (the Southern boundary noticeably missing) and states that Rochester School is surrounded by an approximately 3m high vegetated boundary. While the provided photographs are illustrative of some of the boundary conditions they cannot demonstrate credit compliance unto themselves. Additionally the provided lighting study is not comprehensive nor does it indicate compliance for the East Boundary with levels as high as 0.15 away (point 9) and 0.14 close-in (point 24).

The provided documentation indicates that credit requirements have not been met.

SSc9: Site Master Plan
POSSIBLE POINTS: 1

Not Attempted

SSc10: Joint Use of Facilities
POSSIBLE POINTS: 1

Not Attempted



Water Efficiency

WEp1: Water Use Reduction-20%Reduction

Awarded

11/27/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form and water use calculations have been provided stating that the potable water usage in the project has been reduced by 30.05% from a calculated baseline design. A minimum reduction of 20% is required.

However, a plumbing fixture schedule has not been provided as required. Documentation is needed to verify the fixture manufacturer, model, and flush or flow rate claimed.

Additionally the lavatory has been indicated as belonging to the Private Lavatory Faucet fixture family, yet it does not appear that the private lavatory classification is appropriate for this project type. Note that private or private use applies to: plumbing fixtures in residences, apartments, and dormitories; to private (non-public) bathrooms in transient lodging facilities (hotels and motels); and to private bathrooms within hospitals and nursing facilities. All other facilities are considered to be public or public use.

When dual-flush water closets are utilized, weighted calculations must be performed to determine the average flow rate.

TECHNICAL ADVICE:

Please provide a plumbing fixture schedule or manufacturer documentation which includes all applicable fixtures/fittings and their flush/flow rates within the LEED-NC project.

Revise the form to ensure that the lavatories are classified as public using the appropriate baseline for the public lavatory fixtures.

Update the form if necessary to ensure that any autocontrol/metered lavatory faucets are converted from GPM to GPC and listed in the form as Metering in Table WEp1-4 Flow Fixture Data. Ensure that the design case calculations use the default 12-second duration when converting to GPC. Note that the duration column is not applicable in this case and therefore should not be modified.

Revise the form so that the weighted calculations for the dual-flush water closets are properly averaged.

Refer to the LEED Reference Guide for Green Building Design and Construction, 2009 Edition, and the Water Use Reduction Additional Guidance found on the USGBC website for additional information regarding how to document this prerequisite.

01/14/2014 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Prerequisite Form and supporting documentation have been revised to address the issues outlined in the Preliminary Review comments and state that 71% design water savings have been achieved.

However WEp1 must not include savings from the use of onsite treated water. Reduction of potable water use through the use of onsite treated water must only be accounted for through the use of an Alternative Compliance Path in WEc3 Water Use Reduction. WEp1 is earned only through the use of water-efficient fixtures.

Additionally fixture names within the Credit Form do not always match the provided product information sheets. A single Fixture Group should not be used when there are distinct populations with either different frequency of use patterns or who use distinctly different fixtures (e.g. potentially watchmen, cooks, drivers, and infants using a low-flow water closet as compared to others who utilize a dual-flush water closet).

Reviewer calculations indicate design water savings of approximately 26% which meets the prerequisite requirements of a minimum of 20% design water savings.

For future submittals please be certain to complete the Credit Form completely, work to utilize default daily uses when appropriate and provide product information for all installed fixtures. The provided information is sufficient to demonstrate prerequisite compliance.

WEc1: Water Efficient Landscaping

Awarded: 4

POSSIBLE POINTS: 4

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 4

11/26/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the landscaping does not utilize permanent irrigation systems and that all temporary irrigation systems used for plant establishment will be removed within one year of installation. The site plan and the narrative describing how the landscape has been designed for no irrigation have been provided.

WEc2: Innovative Wastewater Technologies

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

11/26/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project has treats 208% of the water used for sewage conveyance via Option 2. A minimum treatment of 50% is required. The wastewater treated to tertiary standards and is either infiltrated or used on-site. Documentation has been provided to confirm the on-site water treatment capabilities.

However, WEp1: Water Use Reduction has been denied pending clarifications.

TECHNICAL ADVICE:

Please see the comments within WEp1 and resubmit this credit.

The LEED Credit Form indicates that the project is pursuing the Exemplary Performance option for this credit and that the project reserves one point within the Innovation in Design category for this strategy.

01/14/2014 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and states that only onsite treated water is utilized for sewage conveyance. For future submittals please be certain to provide calculations demonstrating the output of the onsite water treatment system. The provided documentation demonstrates credit achievement.

WEc3: Water Use Reduction

Awarded: 4

POSSIBLE POINTS: 4

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 4

11/26/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form and water use calculations have been provided stating that the potable water usage in the project has been reduced by 30% from the calculated baseline design fixture performance. A minimum reduction of 30% is required.

However, WEp1: Water Use Reduction has been denied pending clarifications.

TECHNICAL ADVICE:

Please see the comments within WEp1 and resubmit this credit.

01/14/2014 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and states that 71% design water savings have been achieved.

Please note for future submittals that calculations must be provided demonstrating the amount of water that will be treated onsite, additionally onsite treated water use must be calculated utilizing this Credit Form's alternative compliance path approach.

The project has exceeded the exemplary performance threshold (45%) for this credit, but that has not been attempted in the Innovation in Design section.

WEc4: Process Water Use Reduction

Not Attempted

POSSIBLE POINTS: 1



Energy and Atmosphere

EAp1: Fundamental Commissioning of the Building Energy Systems

Awarded

12/02/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the fundamental commissioning report for the project energy-related systems has been completed. The required commissioning authority experience of the project team Commissioning Agent has been provided, and the documentation confirms that the Owner Project requirements (OPR) and Basis of Design (BOD) are consistent with the final construction documentation and completed project. The project Owner and project team Commissioning Agent have signed the form. The executive summary of the commissioning report which includes a list of the systems commissioned and a sample checklists for at least two of the commissioned systems have been provided.

EAp2: Minimum Energy Performance

Awarded

12/02/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form and supporting documentation have been provided stating that the project is new construction and therefore complies with Option 1. The project has achieved an energy cost savings of 56.28% using the ASHRAE 90.1-2007 Appendix G methodology. A minimum energy cost savings of 10% is required for all new construction. Energy efficiency measures incorporated into the building design include an improved thermal envelope, high efficiency glazing, reduced interior lighting power density, solar thermal water heating, a heat pump pool water heating system, natural ventilation, and an on-site solar photovoltaic system. The total predicted annual energy consumption for the project is 830,191 kWh/year of electricity and 114,740 kWh/year of natural gas.

EAp3: Fundamental Refrigerant Management

Awarded

12/02/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that there are no CFC-based refrigerants in the HVAC systems which serve the LEED-Schools project.

EAc1: Optimize Energy Performance

Awarded: 19

POSSIBLE POINTS: 19

ATTEMPTED: 19, DENIED: 0, PENDING: 0, AWARDED: 19

12/02/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form and supporting documentation have been provided stating that the project is new construction and has achieved an energy cost savings of 56.28% using the ASHRAE 90.1-2007 Appendix G methodology. A minimum energy cost savings of 12% is required for all new construction projects.

EAc2: On-Site Renewable Energy

Awarded: 7

POSSIBLE POINTS: 7

ATTEMPTED: 7, DENIED: 0, PENDING: 0, AWARDED: 7

12/02/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form and supporting documentation have been provided stating that the project complies with Option 1. The project has offset 13.25% of the total energy costs through renewable energy generated on-site using the ASHRAE 90.1-2007 Appendix G methodology. A minimum of 1% of the total energy costs offset via on-site generated renewable energy is required. A narrative describing the on-site renewable energy production system has been provided.

EAc3: Enhanced Commissioning

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

12/02/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that enhanced commissioning has been implemented. The project team Commissioning Agent has signed the form as required. The form includes the completion dates for the comprehensive commissioning review tasks. The systems manual covering the commissioned systems and future operating information and the contract between the Owner and the Commissioning Agent ensuring post-construction commissioning activities have been provided.

EAc4: Enhanced Refrigerant Management

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

12/02/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project selected refrigerants and HVACR systems that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Additionally, all fire suppression systems in the LEED-Schools project do not use ozone-depleting substances including CFCs, HCFCs, or halons. The refrigerant impact calculation indicates that the total refrigerant impact of the LEED-Schools project is 13 per ton, which is less than the maximum allowable value of 100.

EAc5: Measurement and Verification

POSSIBLE POINTS: 2

Not Attempted

EAc6: Green Power

POSSIBLE POINTS: 2

Not Attempted



Materials and Resources

MRp1: Storage and Collection of Recyclables

Awarded

11/26/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Prerequisite Form has been provided stating that the project has provided appropriately sized dedicated areas for the collection and storage of materials for recycling, including cardboard, paper, plastic, glass, and metals. The narrative has been provided describing the size, accessibility, and dedication of recycling storage areas in the project building, as well as the expected volume and pick-up frequencies. The area is adequately sized and located. Representative floor plans and site plans have been provided highlighting recycling collection and storage areas.

MRc1.1: Building Reuse-Maintain Existing Walls, Floors and Roof

Not Attempted

POSSIBLE POINTS: 2

MRc1.2: Building Reuse, Maintain 50% of Interior Non-Structural Elements

Not Attempted

POSSIBLE POINTS: 1

MRc2: Construction Waste Management

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 2

11/26/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the project has diverted 94% of the on-site generated construction waste from landfill. A minimum of 50% diverted is required. Calculations and a Construction Waste Management Plan have been provided to document the waste types and receiving agencies for the diverted materials.

MRc3: Materials Reuse

Not Attempted

POSSIBLE POINTS: 2

MRc4: Recycled Content

Awarded: 1

POSSIBLE POINTS: 2

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

11/26/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form and the LEED Materials and Resource Calculator have been provided stating that 15% of the total building materials content, by value, has been manufactured using recycled materials. A minimum of 10% is required. The recycled material meets the ISO 14021 definitions of post- and pre-consumer material. Manufacturer's documentation has been provided for at least 20% of the compliant materials as required.

MRc5: Regional Materials

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

11/26/2013 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form and the LEED Materials and Resource Calculator have been provided stating that 35% of the total building materials value includes building materials and products that have been manufactured and extracted within 500 miles of the project site. A minimum of 10% must be extracted and manufactured within 500 miles of the project site. Manufacturer documentation has been provided for at least 20% of the compliant materials as required.

The LEED Credit Form indicates that the project is pursuing the Exemplary Performance option for this credit and that the project reserves one point within the Innovation in Design category for this strategy.

MRc6: Rapidly Renewable Materials

Not Attempted

POSSIBLE POINTS: 1

MRc7: Certified Wood

Not Attempted

POSSIBLE POINTS: 1



Indoor Environmental Quality

IEQp1: Minimum Indoor Air Quality Performance

Awarded

07/31/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project is mechanically ventilated and mechanically conditioned, therefore the project applies Case 1. The project has utilized the Ventilation Rate Procedure (VRP) Compliance Calculator and the form states that the mechanical ventilation system is comprised of 100% outside air. The project team Ventilation Systems Designer has signed the form as required. The VRP calculations and designed outdoor air intake rates confirm that the system level outdoor air intake ventilation rates for all ventilation systems meet the minimum established in ASHRAE 62.1-2007.

IEQp2: Environmental Tobacco Smoke (ETS) Control

Awarded

11/26/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project minimizes exposure to ETS-containing air by prohibiting smoking on-site. Additionally, smoking is prohibited within the building. The project Owner has signed the form.

IEQp3: Minimum Acoustical Performance

Awarded

11/27/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project's acoustical performance has been designed in accordance with the requirements of this prerequisite.

Background HVAC Noise Level: The form indicates that in all classrooms and core learning spaces on the project, a maximum background HVAC noise level of no more than 45 dBA has been achieved using the design strategies recommended in ANSI Standard S12.60-2002 Annex B. A narrative has also been provided describing how compliance has been achieved, which project spaces have been analyzed, and the design measures implemented to control background HVAC noise levels.

Reverberation time (RT) for spaces less than 20,000 cubic feet: The form indicates that for each classroom and core learning space on the project which is less than 20,000 cubic feet, the sum of all surfaces on the ceilings and walls which have a Noise Reduction Coefficient (NRC) of at least 0.70 is greater than or equal to the ceiling area (excluding the area of ceiling lights, diffusers or grilles) in that space. The calculation table has been completed, and manufacturer documentation for NRC values has also been provided.

IEQc1: Outdoor Air Delivery Monitoring

Not Attempted

POSSIBLE POINTS: 1

IEQc2: Increased Ventilation

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/31/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project AHUs are able to meet the ASHRAE 62.1-2007 outdoor air requirement and therefore applies Case 1. The project has increased breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates.

IEQc3.1: Construction IAQ Management Plan- During Construction

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

11/27/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project developed and implemented a Construction IAQ Management Plan that followed the referenced SMACNA Guidelines. The form narrative describes how absorptive materials were protected from moisture damage during the construction and preoccupancy phases. Photographs from at least two different time periods have been provided highlighting the implemented IAQ measures. Permanently installed air handling units were not operated during construction. A copy of the Construction IAQ Management Plan has been provided. Additionally, the documentation confirms that no smoking was allowed in the building or within 25 feet of the building entrances once the building was enclosed.

IEQc3.2: Construction IAQ Management Plan-

Awarded: 1

Before Occupancy

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/31/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that an IAQ Management Plan was implemented for this project which includes post-construction measures and therefore the project applies Option 1 - Path 2. Prior to initial occupancy, the space was flushed out with a minimum of 3,500 cubic feet of outdoor air per square foot of floor area. Once occupied, the space was ventilated at a minimum rate of 0.30 cfm/square foot of outside air or the design minimum outside air rate determined in IEQp1 Minimum Indoor Air Quality Performance, whichever is greater, until a total of 14,000 cubic feet per square foot of outside air was delivered to the space. A copy of the IAQ Management Plan and a narrative describing the flush-out procedure, including flush-out dates, date of occupancy consistent with Pf4 Schedule and Overview Documents, outdoor delivery rates, internal temperature, and relative humidity, have been provided.

IEQc4: Low-Emitting Materials

Awarded: 4

POSSIBLE POINTS: 4

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 4

11/27/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that all indoor adhesive and sealant products comply with CA Section 01350 Testing and Product Requirements.

The LEED Credit Form has been provided stating that all flooring products comply with CA Section 01350 Testing and Product Requirements.

However, based on the scope of work, it is unclear whether all flooring systems and adhesives and sealants used on the inside of the weatherproofing system and applied on-site have been included in the tables as stated. Multiple flooring systems and the following are common products included in this credit: flooring adhesives, subfloor adhesives, drywall and panel adhesives, wall-base adhesives, multipurpose construction adhesives, structural glazing and wood adhesives, substrate adhesives, adhesive and sealant primers, welding adhesives, contact adhesives, architectural sealants, and aerosol adhesives.

TECHNICAL ADVICE:

Please provide a comprehensive list of adhesives and sealants and/or a narrative confirming that these items were not used.

Revise the form to confirm that all interior flooring materials and finishes used on the project meet or exceed the applicable criteria.

Provide additional manufacturer documentation as necessary.

01/14/2014 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments. A declaration by Mr. Juan Pablo Aljure Leon states that one adhesive/sealant (Armstrong S-780 Linoleum Adhesive), three paints, one linoleum, and one ceiling panel product comprise all of the adhesives/sealants, paints, floor coverings, and ceiling systems contained within the entire project. The provided documentation indicates credit achievement. For future submittals please be certain to include absolutely every product used within this credit category.

IEQc5: Indoor Chemical and Pollutant Source Control

Not Attempted

POSSIBLE POINTS: 1

IEQc6.1: Controllability of Systems-Lighting

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/31/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that lighting controls are provided to enable 100% of occupants to make adjustments to suit individual task needs and preferences. A minimum of 90% of individual workstations must have individual lighting controls. The project includes shared multi-occupant spaces and lighting controls have been provided for 100% of the shared multi-occupant spaces. A minimum of 100% of shared multi-occupant spaces must have lighting controls. Drawings confirming the location of the individual controls and the location of shared multi-occupant spaces, including activities and types of lighting controls have been provided.

IEQc6.2: Controllability of Systems-Thermal Comfort

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/31/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the required ventilation and temperature controls are provided to enable 100% of

the occupants with the ability to make adjustments to suit individual needs and preferences. A minimum of 50% of individual workstations must have individual thermal controls. The project includes shared multi-occupant spaces and thermal controls have been provided for 100% of the shared multi-occupant spaces. A minimum of 100% of shared multi-occupant spaces must have thermal controls. The project is mechanically ventilated. The project team Mechanical Designer has signed the form as required. Drawings confirming the location of the individual thermal controls and the location of shared multi-occupant spaces thermal controls have been provided.

IEQc7.1: Thermal Comfort-Design **Not Attempted**
POSSIBLE POINTS: 1

IEQc7.2: Thermal Comfort-Verification **Not Attempted**
POSSIBLE POINTS: 1

IEQc8.1: Daylight and Views-Daylight **Not Attempted**
POSSIBLE POINTS: 3

IEQc8.2: Daylight and Views-Views **Not Attempted**
POSSIBLE POINTS: 1

IEQc9: Enhanced Acoustical Performance **Not Attempted**
POSSIBLE POINTS: 1

IEQc10: Mold Prevention **Not Attempted**
POSSIBLE POINTS: 1



Innovation in Design

IDc1.1: Innovation in Design

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

11/26/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been submitted stating that the project achieves exemplary performance for WEc2 Innovative Wastewater Technologies as specified in the LEED Reference Guide for Green Building Design and Construction, 2009 Edition.

However, the base credit is pending clarifications.

TECHNICAL ADVICE:

Please see the comments within WEc2. Ensure that any issues noted there are addressed within the exemplary performance documentation when resubmitting this credit.

01/14/2014 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Credit Form for WEc2 has been revised to address the issues outlined in the Preliminary Review comments and demonstrates that the water used for sewage conveyance has been reduced by 100%. The provided documentation demonstrates that exemplary performance has been achieved.

IDc1.1: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.2: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.2: Innovation in Design

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

11/27/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been submitted stating that the project achieves exemplary performance for MRc5 Regional Materials as specified in the LEED Reference Guide for Green Building Design and Construction, 2009 Edition. The requirement for exemplary performance in MRc5 is 30% Regional Materials. The project team has provided documentation demonstrating 35% regional materials which exceeds the exemplary performance requirement.

IDc1.3: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.3: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.4: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.4: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc2: LEED® Accredited Professional

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

11/27/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been submitted stating that a LEED AP has been a participant on the project development team. A copy of the LEED AP award certification for Liliana Medina has been included as required.

IDc3: The School as a Teaching Tool

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

11/27/2013 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been submitted stating that the project has designed a curriculum based on the high-performance features of the building and committed to implementing the curriculum within ten months of LEED certification. Additionally, the curriculum meets local or state curriculum standards and provides ten or more hours of classroom instruction per year per full-time student. The narrative describing the process by which the project team has developed a curriculum based on the high-performance features of the building including details on how the curriculum explores the relationship between human ecology, natural ecology and the project building has been provided.



Regional priority

WEc1: Water Efficient Landscaping

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

WEc3: Water Use Reduction

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

EAc1: Optimize Energy Performance

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

EAc3: Enhanced Commissioning

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

TOTAL

110

65

7

0

64

REVIEW SUMMARY

Review	POINTS:					
	SUBMITTED	RETURNED	SUBMITTED	DENIED	PENDING	AWARDED

Design and Construction Preliminary	07/12/2013	12/02/2013	65	5	11	52
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Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
Plf1: Minimum Program Requirements	Approved		0	0	0	0
Plf2: Project Summary Details	Approved		0	0	0	0
Plf3: Occupant and Usage Data	Approved		0	0	0	0
Plf4: Schedule and Overview Documents	Approved		0	0	0	0
SSp1: Construction Activity Pollution Prevention	Awarded	Construction	0	0	0	0
SSp2: Environmental Site Assessment	Awarded	Design	0	0	0	0
SSc1: Site Selection	Awarded	Design	1	0	0	1
SSc4.1: Alternative Transportation-Public Transportation Access	Denied	Design	4	4	0	0
SSc4.2: Alternative Transportation-Bicycle Storage and Changing Rooms	Denied	Design	1	1	0	0
SSc4.4: Alternative Transportation-Parking Capacity	Awarded	Design	2	0	0	2
SSc7.2: Heat Island Effect-Roof	Pending	Design	1	0	1	0
SSc8: Light Pollution Reduction	Pending	Design	1	0	1	0
WEp1: Water Use Reduction-20% Reduction	Pending	Design	0	0	0	0
WEc1: Water Efficient Landscaping	Awarded	Design	3	0	0	5
WEc2: Innovative Wastewater Technologies	Pending	Design	3	0	3	0
WEc3: Water Use Reduction	Pending	Design	3	0	3	0
EAp1: Fundamental Commissioning of the Building Energy Systems	Awarded	Construction	0	0	0	0
EAp2: Minimum Energy Performance	Awarded	Design	0	0	0	0
EAp3: Fundamental Refrigerant Management	Awarded	Design	0	0	0	0
EAc1: Optimize Energy Performance	Awarded	Design	20	0	0	20
EAc2: On-Site Renewable Energy	Awarded	Design	7	0	0	7
EAc3: Enhanced Commissioning	Awarded	Construction	3	0	0	3
EAc4: Enhanced Refrigerant Management	Awarded	Design	1	0	0	1
MRp1: Storage and Collection of Recyclables	Awarded	Design	0	0	0	0
MRc2: Construction Waste Management	Awarded	Construction	1	0	0	2
MRc4: Recycled Content	Awarded	Construction	1	0	0	1
MRc5: Regional Materials	Awarded	Construction	2	0	0	2
IEQp1: Minimum Indoor Air Quality Performance	Awarded	Design	0	0	0	0
IEQp2: Environmental Tobacco Smoke (ETS) Control	Awarded	Design	0	0	0	0
IEQp3: Minimum Acoustical Performance	Awarded	Design	0	0	0	0
IEQc2: Increased Ventilation	Awarded	Design	1	0	0	1

IEQc3.1: Construction IAQ Management Plan-During Construction	Awarded	Construction	1	0	0	1
IEQc3.2: Construction IAQ Management Plan-Before Occupancy	Awarded	Construction	1	0	0	1
IEQc4: Low -Emitting Materials	Pending	Construction	2	0	2	0
IEQc6.1: Controllability of Systems-Lighting	Awarded	Design	1	0	0	1
IEQc6.2: Controllability of Systems-Thermal Comfort	Awarded	Design	1	0	0	1
IDc1.1: Innovation in Design	Pending	Design	1	0	1	0
IDc1.2: Innovation in Design	Awarded	Construction	1	0	0	1
IDc2: LEED® Accredited Professional	Awarded	Construction	1	0	0	1
IDc3: The School as a Teaching Tool	Awarded	Design	1	0	0	1

Design and Construction Final**12/18/2013****01/17/2014****11****2****0****12****Credit**

	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
Pf1: Minimum Program Requirements	Approved		0	0	0	0
Pf2: Project Summary Details	Approved		0	0	0	0
Pf3: Occupant and Usage Data	Approved		0	0	0	0
Pf4: Schedule and Overview Documents	Approved		0	0	0	0
SSc7.2: Heat Island Effect-Roof	Denied	Design	1	1	0	0
SSc8: Light Pollution Reduction	Denied	Design	1	1	0	0
WEp1: Water Use Reduction-20% Reduction	Awarded	Design	0	0	0	0
WEc2: Innovative Wastewater Technologies	Awarded	Design	3	0	0	2
WEc3: Water Use Reduction	Awarded	Design	3	0	0	5
IEQc4: Low -Emitting Materials	Awarded	Construction	2	0	0	4
IDc1.1: Innovation in Design	Awarded	Design	1	0	0	1