



# 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 Business Certification Inc. (GBCI®).

## Whitney Museum - Gansevoort

**Project ID** 1000016631  
**Rating system & version** LEED-NC v2009  
**Project registration date** 06/22/2011



### Construction Application Decision

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

## LEED FOR NEW CONSTRUCTION & MAJOR RENOVATIONS (V2009)

ATTEMPTED: 64, DENIED: 1, PENDING: 0, AWARDED: 62 OF 110 POINTS

SUSTAINABLE SITES 19 OF 26	
SSp1 Construction Activity Pollution Prevention	Y
SSc1 Site Selection	1 / 1
SSc2 Development Density and Community Connectivity	5 / 5
SSc3 Brownfield Redevelopment	1 / 1
SSc4.1Alternative Transportation-Public Transportation Access	6 / 6
SSc4.2Alternative Transportation-Bicycle Storage and Changing Room	1 / 1
SSc4.3Alternative Transportation-Low-Emitting and Fuel-Efficient V	0 / 3
SSc4.4Alternative Transportation-Parking Capacity	2 / 2
SSc5.1Site Development-Protect or Restore Habitat	0 / 1
SSc5.2Site Development-Maximize Open Space	1 / 1
SSc6.1Stormwater Design-Quantity Control	1 / 1
SSc6.2Stormwater Design-Quality Control	0 / 1
SSc7.1Heat Island Effect-Non-Roof	1 / 1
SSc7.2Heat Island Effect-Roof	0 / 1
SSc8 Light Pollution Reduction	0 / 1

WATER EFFICIENCY 6 OF 10	
WEp1 Water Use Reduction, 20% Reduction	Y
WEc1 Water Efficient Landscaping	4 / 4
WEc2 Innovative Wastewater Technologies	0 / 2
WEc3 Water Use Reduction	2 / 4

ENERGY AND ATMOSPHERE 15 OF 35	
EAp1 Fundamental Commissioning of the Building Energy Systems	Y
EAp2 Minimum Energy Performance	Y
EAp3 Fundamental Refrigerant Mgmt	Y
EAc1 Optimize Energy Performance	6 / 19
EAc2 On-Site Renewable Energy	0 / 7
EAc3 Enhanced Commissioning	2 / 2
EAc4 Enhanced Refrigerant Mgmt	2 / 2
EAc5 Measurement and Verification	3 / 3
EAc6 Green Power	2 / 2

MATERIALS AND RESOURCES 6 OF 14	
MRp1 Storage and Collection of Recyclables	Y
MRC1.1Building Reuse-Maintain Existing Walls, Floors and Roof	0 / 3
MRC1.2Building Reuse, Maintain 50% of Interior	0 / 1
MRC2 Construction Waste Mgmt	2 / 2
MRC3 Materials Reuse	0 / 2
MRC4 Recycled Content	2 / 2

MATERIALS AND RESOURCES CONTINUED	
MRC5 Regional Materials	1 / 2
MRC6 Rapidly Renewable Materials	0 / 1
MRC7 Certified Wood	1 / 1

INDOOR ENVIRONMENTAL QUALITY 9 OF 15	
IEQp1 Minimum IAQ Performance	Y
IEQp2 Environmental Tobacco Smoke (ETS) Control	Y
IEQc1 Outdoor Air Delivery Monitoring	1 / 1
IEQc2 Increased Ventilation	1 / 1
IEQc3.1Construction IAQ Mgmt Plan-During Construction	1 / 1
IEQc3.2Construction IAQ Mgmt Plan-Before Occupancy	1 / 1
IEQc4.1Low-Emitting Materials-Adhesives and Sealants	1 / 1
IEQc4.2Low-Emitting Materials-Paints and Coatings	1 / 1
IEQc4.3Low-Emitting Materials-Flooring Systems	0 / 1
IEQc4.4Low-Emitting Materials-Composite Wood and Agrifiber Products	1 / 1
IEQc5 Indoor Chemical and Pollutant Source Control	0 / 1
IEQc6.1Controllability of Systems-Lighting	0 / 1
IEQc6.2Controllability of Systems-Thermal Comfort	0 / 1
IEQc7.1Thermal Comfort-Design	1 / 1
IEQc7.2Thermal Comfort-Verification	1 / 1
IEQc8.1Daylight and Views-Daylight	0 / 1
IEQc8.2Daylight and Views-Views	0 / 1

INNOVATION IN DESIGN 6 OF 6	
IDc1.1 Innovation in Design	0 / 1
IDc1.1 Innovation in Design- Low Mercury Lighting	1 / 1
IDc1.2 Innovation in Design	0 / 1
IDc1.2 Innovation in Design- Green Education	1 / 1
IDc1.3 Exemplary SSc2	1 / 1
IDc1.3 Innovation in Design	0 / 1
IDc1.4 Exemplary SSc4.1	1 / 1
IDc1.4 Innovation in Design	0 / 1
IDc1.5 Innovation in Design	0 / 1
IDc1.5 Exemplary: SSc7.1	1 / 1
IDc2 LEED® Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS 1 OF 4	
SSc5.1 Site Development-Protect or Restore Habitat	0 / 1
SSc6.1 Stormwater Design-Quantity Control	1 / 1
WEc2 Innovative Wastewater Technologies	0 / 1
EAc1 Optimize Energy Performance	0 / 1
EAc2 On-Site Renewable Energy	0 / 1
MRC1.1Building Reuse-Maintain Existing Walls, Floors and Roof	0 / 1

TOTAL

62 OF 110

# CREDIT DETAILS



## Project Information Forms

### **P1f1: Minimum Program Requirements** **Approved**

**05/12/2014 DESIGN PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted stating that the project complies with all Minimum Program Requirements. 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 New York, New York.

### **P1f2: Project Summary Details** **Approved**

**11/13/2014 DESIGN FINAL REVIEW**

This Form was previously approved and continues to demonstrate compliance.

**05/12/2014 DESIGN PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted including the required project summary details. There is one building in this LEED-NC application with a total of nine stories and 185,000 gross square feet.

### **P1f3: Occupant and Usage Data** **Approved**

**05/12/2014 DESIGN PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted including the required occupant and usage data. The project consists primarily of Public Assembly: Other Assembly spaces. The average users value is 843, the peak users value is 986, and the FTE value is 267.

### **P1f4: Schedule and Overview Documents** **Approved**

**08/11/2016 CONSTRUCTION FINAL REVIEW**

The form has been revised to state that the date of substantial completion is May 1, 2015 and the date of occupancy is May 1, 2015. The documentation continues to demonstrate compliance.

**05/12/2014 DESIGN PRELIMINARY REVIEW**

The LEED Project Information Form has been submitted including the design and construction schedule. The estimated date of substantial completion is noted as June 1, 2015 and the estimated date of occupancy is noted as August 3, 2015. The required documents have been uploaded.



## Sustainable Sites

### **SSp1: Construction Activity Pollution Prevention**

**Awarded**

#### **05/27/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project has implemented an erosion and sedimentation control (ESC) plan that conforms to the 2003 EPA Construction General Permit (CGP).

### **SSc1: Site Selection**

**Awarded: 1**

POSSIBLE POINTS: 1

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

#### **05/12/2014 DESIGN 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**

**Awarded: 5**

POSSIBLE POINTS: 5

ATTEMPTED: 5, DENIED: 0, PENDING: 0, AWARDED: 5

#### **11/13/2014 DESIGN FINAL REVIEW**

This credit was previously approved in the Preliminary Review. The revised documentation demonstrates compliance.

#### **05/12/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the project complies with Option 1 and the average site development density for the project and surrounding areas is 133,741 square feet/acre. A minimum density of at least 60,000 square feet/acre is required. The project site condition is noted as previously developed with existing infrastructure. A scaled area plan has been provided with the development radius and property identifiers. Additionally, the development density table has been completed to include the project site and building areas, along with a listing of site and building areas for all surrounding sites within and/or intersected by the density radius.

However, the following issues exist:

1. Sites within and/or intersected by the exemplary performance density radius have been included in the base credit calculations. The calculations do not demonstrate compliance based on the 547 foot density radius.
2. The density radii used in the supporting documentation are incorrect. A density radius of 547 linear feet and an exemplary performance density radius of 774 linear feet should be indicated, though the documentation indicates radii of 580 and 809 linear feet, respectively.
3. It is unclear if all buildable land adjacent to building 19 has been included in the calculations. As stated in the LEED Reference Guide for Green Building Design and Construction, 2009 Edition, the neighborhood property area (i.e. the denominator of the square foot per acre calculation) must include all properties except for undeveloped public areas such as parks, water bodies, public roads and public right-of-ways. All other buildable land must be included in the calculations.
4. It is unclear if the calculation includes all buildings located within and/or intersected by the density radius as required. It appears that the buildings (as noted on the plan) located between 1 and 10, 10 and 12, 22 and 58, 24 and 47, and adjacent to 25 have not been included.

Despite these issues, it can be confirmed that average property density within the density boundary is at least 60,000 square feet/acre. Credit compliance is not affected.

### **SSc3: Brownfield Redevelopment**

**Awarded: 1**

POSSIBLE POINTS: 1

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

#### **11/13/2014 DESIGN FINAL REVIEW**

The additional documentation demonstrates compliance.

#### **05/12/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the building is located on a contaminated site as defined by an ASTM E1903-97 Phase II Environmental Site Assessment. A narrative describing the site contamination and remediation efforts undertaken at the site has been provided. The executive summaries of the Phase I and Phase II

ESAs documenting the site contamination have been provided.

However, documentation from the environmental consultant or applicable regulatory agency has not been provided to confirm that site remediation is complete or that there is an approved ongoing remediation plan in place.

TECHNICAL ADVICE:

Please provide supporting documentation such as a letter from an environmental consultant or regulatory agency confirming that site remediation is complete or there is an approved ongoing remediation plan in place.

**SSc4.1: Alternative Transportation-Public Transportation Access**      **Awarded: 6**

POSSIBLE POINTS: 6

ATTEMPTED: 6, DENIED: 0, PENDING: 0, AWARDED: 6

**05/13/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the project complies with Option 2 and is served by two bus lines within one-quarter mile walking distance of the project site. A scaled map showing the location of the transit stops and pedestrian route has been provided.

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

**Awarded: 1**

POSSIBLE POINTS: 1

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

**05/13/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form and supplemental calculation methodology have been provided stating that the project includes commercial/institutional spaces and that bicycle storage facilities have been provided to serve at least 5% of the LEED-NC project FTE and transient occupants, measured at peak occupancy, and shower facilities have been provided for at least 0.5% of the LEED-NC project FTE occupants. Plans have been provided showing the location of the bicycle storage and shower facilities.

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

**Not Attempted**

POSSIBLE POINTS: 3

**SSc4.4: Alternative Transportation-Parking Capacity**

**Awarded: 2**

POSSIBLE POINTS: 2

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

**11/13/2014 DESIGN FINAL REVIEW**

The additional documentation demonstrates compliance.

**05/13/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that no new parking has been created within the LEED-NC project scope of work. A project team member has signed the form.

However, Plf2: Project Summary Details indicates that there is one parking space provided for building users. It is unclear if parking has been created within the scope of work of this project.

TECHNICAL ADVICE:

Please provide a narrative and supporting documentation clarifying the scope of work of the project and the impact on the overall parking capacity. If parking capacity is being increased, revise the form to indicate that new parking is provided and pursue compliance via Option 1, 2, or 3. Ensure that the appropriate required documentation is provided to demonstrate compliance with the selected pathway.

**SSc5.1: Site Development-Protect or Restore Habitat**

**Not Attempted**

POSSIBLE POINTS: 1

**SSc5.2: Site Development-Maximize Open Space**      **Awarded: 1**

POSSIBLE POINTS: 1

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

**05/13/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the project site local zoning regulations do not include minimum open space requirements therefore the project complies with Case 3. 14,229 square feet of open space has been provided which is equal to 42.8% of the total site area. Additionally, 26.59% of this dedicated open space is vegetated. A minimum area of open space equal to 20% of the total site area is required and at least 25% of that dedicated open space must be vegetated. The vegetated roof and pedestrian hardscape have been included in the calculations and SSc2: Development Density and Community Connectivity has been earned. The calculations do not include wetlands or naturally designed ponds. A project team member has signed the form. A site plan and a roof plan highlighting the dedicated open space have been provided.

**SSc6.1: Stormwater Design-Quantity Control**

**Awarded: 1**

POSSIBLE POINTS: 1

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

**05/13/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that prior to development of this project, the existing site imperviousness was greater than 50%; therefore, Case 2 applies. A storm water management plan has been implemented such that the post-development site runoff quantity has been reduced by 55.23% for the two-year, 24-hour design storm. A minimum reduction of 25% must be achieved. The pre- and post-development runoff values have been provided within the form.

**SSc6.2: Stormwater Design-Quality Control**

**Not Attempted**

POSSIBLE POINTS: 1

**SSc7.1: Heat Island Effect, Non-Roof**

**Awarded: 1**

POSSIBLE POINTS: 1

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

**05/31/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Option 1 and 100% of nonroof base building hardscape surfaces will be mitigated through the use of materials with an SRI of at least 29.

**SSc7.2: Heat Island Effect-Roof**

**Not Attempted**

POSSIBLE POINTS: 1

**SSc8: Light Pollution Reduction**

**Not Attempted**

POSSIBLE POINTS: 1



## Water Efficiency

### **WEp1: Water Use Reduction-20% Reduction**

**Awarded**

#### **11/13/2014 DESIGN FINAL REVIEW**

The revised documentation states that potable water has been reduced by 31.32%, which demonstrates compliance.

#### **05/13/2014 DESIGN 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 35.64% from a calculated baseline design. A minimum reduction of 20% is required. A plumbing fixture schedule has been provided.

However, the following issues are pending:

1. The fixture usage groups have been based on occupant type, whereas fixture groups are meant to define occupant groups (i.e. office, warehouse, retail, etc.). The LEED Reference Guide for Green Building Design and Construction, 2009 Edition, states that user groups must reflect populations within the building that use a specific subset of flow and flush fixtures. If the project occupants have similar usage patterns or use similar fixtures, one fixture usage group may be used to represent the entire tenant occupancy. Note that the form will automatically calculate the daily usage rates for each fixture based on the percent male/female as entered in the Fixture Group when the group is assigned to each fixture.
2. It appears that a peak value for transient occupants has been used in the calculations. The calculations must be based on the daily average occupancy.
3. The documentation in Plf4: Schedule and Overview Documents indicates that the project includes multiple unisex and male restrooms that do not contain urinals. The calculations in the form automatically assume that 100% of male occupants will use restrooms that contain urinals. If a percentage of male occupants will not have access to or will not be expected to use restrooms with urinals, the default Total Daily Uses for water closets and urinals will need to be adjusted in the form accordingly.
4. The Performers lavatory has been indicated as belonging to the Private Lavatory Faucet fixture family, yet the private lavatory classification is not appropriate. Private or private use applies to plumbing fixtures in residences, apartments, and dormitories; private (non-public) bathrooms in transient lodging facilities (hotels and motels); and private bathrooms within hospitals and nursing facilities. All other facilities are considered to be public or public use.

#### TECHNICAL ADVICE:

1. Please revise the form to ensure that fixture groups have been defined to reflect the various occupant groups within the LEED-NC project that use a specific set of flow and flush fixtures. One fixture group may be used to represent the entire tenant occupancy if the project occupants have similar usage patterns or use similar fixtures.
2. Revise the calculations to use the daily average occupancy and not the peak occupancy.
3. Provide a narrative and/or supporting daily use calculations to explain the anticipated urinal usage. Revise the form to ensure that the Total Daily Uses column for the water closets and urinals have been modified appropriately.
4. If the Performers fixture group will be used in the calculations, revise the form so the lavatories are classified as public. Ensure the appropriate baseline for the public lavatory fixtures is used.

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.

### **WEc1: Water Efficient Landscaping**

**Awarded: 4**

POSSIBLE POINTS: 4

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

#### **05/13/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the landscaping and irrigation systems have been designed to reduce potable water consumption for irrigation by 100% and has reduced the total water used for irrigation by 67.81% from a calculated baseline case. A minimum reduction of 50% in potable water use is required. The form indicates that the installed irrigation systems use captured rainwater. Specific information regarding the available quantity of rainfall volume has been provided. A narrative describing the landscape and irrigation design strategies employed by the project has also been provided.

### **WEc2: Innovative Wastewater Technologies**

POSSIBLE POINTS: 2

**Not Attempted**

**WEc3: Water Use Reduction****Awarded: 2**

POSSIBLE POINTS: 4

ATTEMPTED: 3, DENIED: 0, PENDING: 0, AWARDED: 2

**11/13/2014 DESIGN FINAL REVIEW**

WEp1 has been achieved and states that potable water has been reduced by 31.32%, which demonstrates compliance.

**05/13/2014 DESIGN 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 36% from the calculated baseline design fixture performance. A minimum reduction of 30% is required.

However, WEp1: Water Use Reduction is pending clarifications.

TECHNICAL ADVICE:

Please see the comments within WEp1 and resubmit this credit.



## Energy and Atmosphere

### EAp1: Fundamental Commissioning of the Building Energy Systems

**Awarded**

#### 08/16/2016 CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

#### 06/06/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that fundamental commissioning is complete. However, to demonstrate compliance, the following must be addressed.

##### TECHNICAL ADVICE

1. The prerequisite form provides the required commissioning authority experience of Wallace F Workmaster. However, enhanced commission credit form is signed by Nicholas Sweeney. It is unclear who the leading commissioning agent is for this project. Per Who can be the CxA guideline, the same commissioning agent overseeing the enhanced Cx tasks must also oversee the Fundamental Commissioning tasks.

Please provide further documentation verifying who the Commissioning Agent is for this project and confirming that the Commissioning Agent has the required experience.

### EAp2: Minimum Energy Performance

**Awarded**

#### 11/10/2014 DESIGN FINAL REVIEW

The LEED Form has been revised to address the issues outlined in the Preliminary Review and states that the project has achieved an energy cost savings of 22.2%. The total predicted annual energy consumption for the project is 2,073,118 kWh/year of electricity, 57,031 therms/year of natural gas, and 71,229 therms/year of cogeneration gas.

#### 05/19/2014 DESIGN 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 22.2% using the ASHRAE 90.1-2007 Appendix G methodology. A minimum energy cost savings of 10% is required for all new construction projects. Energy efficiency measures incorporated into the building design include an improved thermal envelope, high efficiency glazing, reduced interior and exterior lighting power density, occupancy sensors, CHP plant, high efficiency boiler, and high efficiency chiller.

However, the following two review comments requiring a project response (marked as Mandatory) must be addressed for the Final Review.

##### TECHNICAL ADVICE:

##### REVIEW COMMENTS REQUIRING A PROJECT RESPONSE (Mandatory):

1. Please provide a narrative response to each Preliminary Review comment below and a narrative describing any additional changes made to the energy models between the Preliminary and Final Review phases not addressed by the responses to the review comments. Note that the mandatory comments are perceived to reduce the projected savings for the Proposed design. If the projected savings increase substantially in the Final submission, without implementing any optional comments that may improve performance, a narrative explanation for these results must be provided.

2. The quantity and type of chillers modeled in the Baseline case does not appear to comply with Section G3.1.3.7 per the cooling capacity (system 7 only) reported by Supplemental Table 1.4 Air-side HVAC details Tab. Revise the type and quantity of chillers to meet Appendix G modeling protocol per Section G3.1.3.7 and G3.1.3.2.

### EAp3: Fundamental Refrigerant Management

**Awarded**

#### 05/12/2014 DESIGN 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-NC project.

### EAc1: Optimize Energy Performance

**Awarded: 6**

POSSIBLE POINTS: 19

ATTEMPTED: 5, DENIED: 0, PENDING: 0, AWARDED: 6



### 11/10/2014 DESIGN FINAL REVIEW

Additional documentation has been provided for EAp2: Minimum Energy Performance claiming an energy cost savings of 22.2%.

### 05/19/2014 DESIGN 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 22.2% using the ASHRAE 90.1-2007 Appendix G methodology. A minimum energy cost savings of 12% is required for all new construction projects.

However, EAp2: Minimum Energy Performance is denied pending clarifications.

TECHNICAL ADVICE:

Please see the comments within EAp2 and resubmit this credit.

**EAc2: On-Site Renewable Energy**  
POSSIBLE POINTS: 7

**Not Attempted**

**EAc3: Enhanced Commissioning**

POSSIBLE POINTS: 2

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

**Awarded: 2**

### 08/16/2016 CONSTRUCTION FINAL REVIEW

The additional documentation submitted within EAp1: Fundamental Commissioning of Building Energy Systems demonstrates compliance.

### 05/22/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that enhanced commissioning has been implemented. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Refer to the comments within EAp1: Fundamental Commissioning of Building Energy Systems and resubmit this credit

**EAc4: Enhanced Refrigerant Management** **Awarded: 2**

POSSIBLE POINTS: 2

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

### 05/12/2014 DESIGN 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-NC 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-NC project is 83 per ton, which is less than the maximum allowable value of 100.

**EAc5: Measurement and Verification**

POSSIBLE POINTS: 3

ATTEMPTED: 3, DENIED: 0, PENDING: 0, AWARDED: 3

**Awarded: 3**

### 05/22/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 1 and has developed and implemented a Measurement and Verification (M&V) plan consistent with Option D: Calibrated Simulation (Savings Estimation Method) in the IPMVP Volume III: Concepts and Options for Determining Energy Savings in New Construction, April 2003.

**EAc6: Green Power**

POSSIBLE POINTS: 2

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

**Awarded: 2**

### 05/21/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has a two-year purchase agreement to procure 70% of electricity for this LEED project that meets the Green-e definition for renewable power using Option 1: Whole Building Energy Simulation.





## Materials and Resources

### MRp1: Storage and Collection of Recyclables

**Awarded**

#### 05/13/2014 DESIGN 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 pick-up frequencies. Representative floor plans and site plans have been provided highlighting recycling collection and storage areas.

It is noted that the narrative does not describe the expected volume of recycled materials as required. However, it is apparent the area is adequately sized and located. In this case, prerequisite compliance is not affected. For future projects, provide a narrative describing the expected volume of recycled materials.

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

POSSIBLE POINTS: 3

**Not Attempted**

### MRc1.2: Building Reuse, Maintain 50% of Interior

POSSIBLE POINTS: 1

**Not Attempted**

### MRc2: Construction Waste Management

POSSIBLE POINTS: 2

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

**Awarded: 2**

#### 08/11/2016 CONSTRUCTION FINAL REVIEW

The revised documentation confirms that all construction waste has been accounted for and states that the project has diverted 85.69% of the on-site generated construction waste from landfill. The documentation demonstrates compliance.

#### 05/31/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has diverted 88.13% of the on-site generated construction waste from landfill. However, to demonstrate compliance, the following must be addressed.

#### TECHNICAL ADVICE

1. There are materials in the calculation indicated as comingled waste ("Other"). Materials must be listed separately, by type, or project specific diversion rates of comingled debris must be provided. Provide a narrative and documentation to confirm the breakdown of recycled materials or a project specific diversion rate. If the materials were weighed off-site, include the weigh tickets or a narrative from the hauler or recycler. If the value of waste was calculated using the average annual recycling rate for a specific sorting facility, it is acceptable as long as the method of recording and calculating the recycling rate for the facility is regulated by a local or state government authority, per LEED Interpretation 3000. Refer to the entire LEED Interpretation for details. In this case, provide either documentation from the sorting facility with the project specific diversion rates or a letter from the recycling facility that confirms the name of the state or local authority, the average recycling rate that has been determined, and that the sorting facility is state regulated. Ensure that the documentation confirms that the sorting facility is state regulated.

2. It is unclear if all construction waste has been accounted for in the calculations. The Construction Waste Management Plan includes information from 2011 and 2012; however, the dates of construction for this project as listed in Plf4: Schedule and Overview Documents are from 1/7/13 to 6/1/15. Provide a narrative and revised documentation indicating that all the construction waste for this particular project has been included in the calculations.

### MRc3: Materials Reuse

POSSIBLE POINTS: 2

**Not Attempted**

### MRc4: Recycled Content

POSSIBLE POINTS: 2

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

**Awarded: 2**

#### 08/11/2016 CONSTRUCTION FINAL REVIEW

The revised documentation demonstrates compliance and states that 26.26% of the total building materials content, by value, has been manufactured using recycled materials.

### 05/31/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that 39.84% of the total building materials content, by value, has been manufactured using recycled materials. However, to demonstrate compliance, the following must be addressed.

#### TECHNICAL ADVICE

1. The Total Materials Cost used in the calculations (\$40,000,000) appears to be an estimated value, rather than the true actual materials cost for the project. Provide a narrative confirming both the actual materials cost and the total construction cost (currently listed as \$150,000,000) for the project. Revise the calculator as necessary.
2. It appears that many of the values in the calculator have been rounded to the nearest thousand dollars and it is therefore unclear if they represent the actual costs of the materials listed. Revise the calculator using the actual, exact costs of the materials listed.
3. The provided manufacturers' documentation indicates that the recycled content values reported for the Nucor Yamamoto steel, Canam steel, and Gerdau Rebar are based on company averages, whereas the calculations for this credit require actual, product-specific recycled content values. Provide additional manufacturer's documentation for these products that clearly specify the product-specific recycled content. Alternatively, for steel products only, if the recycled content is unknown, then the LEED default recycled content value (25% post-consumer) must be used. Provide revised calculations that correctly account the recycled content values of all products listed in the calculator.

### MRC5: Regional Materials

**Awarded: 1**

POSSIBLE POINTS: 2

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

### 08/11/2016 CONSTRUCTION FINAL REVIEW

The revised documentation demonstrates compliance and states that 14.75% of the total building materials value includes materials and products that have been manufactured and extracted within 500 miles of the project site.

### 05/31/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that 15.53% of the total building materials value includes materials and products that have been manufactured and extracted within 500 miles of the project site. However, to demonstrate compliance, the following must be addressed.

#### TECHNICAL ADVICE

1. Refer to the comments within MRC4: Recycled Content and address the issues noted there.
2. The documentation indicates several products have the same manufacture and harvest distance. It is not clear that the materials/products would be manufactured and extracted from the same location. Salvaged materials may contribute toward the requirements of this credit. Projects should use the location of salvage as the point of extraction and the location of the salvaged goods vendor/restoration location as the point of manufacturer (where applicable). The point of extraction for a recycled item could include a recycling facility, scrap yard, depository, stockpile, or any other location where the material was collected and packaged for market purchase before manufacturing. Therefore, the extraction location for a recycled material may or may not be the same as the manufacturing location. In most cases the extraction location for a recycled material will be a recycling facility or scrap yard. Provide documentation, such as manufacturer's letters or cut sheets, specifying that the materials listed with the same distances were manufactured and extracted within a 500 mile radius of the project. Ensure that the extraction location for the recycled content and the raw material content has been accounted for. Ensure that only the portion of the material where the extraction location is known is used toward compliance. Revise the form and LEED Materials and Resource Calculator if necessary.
3. The manufacturer documentation for the Gerdau rebar does not indicate the extraction or manufacturing distances for the product listed in the calculations. Provide additional documentation to confirm how the extraction and manufacture distances for this product were determined.

### MRC6: Rapidly Renewable Materials

POSSIBLE POINTS: 1

**Not Attempted**

### MRC7: Certified Wood

POSSIBLE POINTS: 1

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

**Awarded: 1**

### 05/31/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that 76.36% of the total wood-based building materials are certified in accordance with the principles and criteria of the Forest Stewardship Council (FSC).





## Indoor Environmental Quality

### IEQp1: Minimum Indoor Air Quality Performance

**Awarded**

#### 04/24/2015 DESIGN APPEAL REVIEW

The revised ventilation rate procedure calculations, a narrative, and the mechanical schedules have been provided demonstrating compliance.

#### 11/24/2014 DESIGN FINAL REVIEW

A response narrative has been provided to justify the square footage difference between this credit and P1f2. Revised Ventilation Procedure Calculations have also been provided with updated Ez value. However, it appears that for the VAV systems, the calculations were still not performed at the minimum flow ( ds values are 100% both at the zone level and system level) and no justification has been provided for the parameters utilized.

The documentation does not demonstrate compliance.

All prerequisites must be earned prior to achieving LEED certification. Because this prerequisite has been denied after receiving two full rounds of review, an appeal will be necessary. When preparing documentation for an appeal, ensure that the clarification documentation including the VAV systems were calculated at the minimum flow rate, or provide a narrative justifying the parameters selected.

#### 05/19/2014 DESIGN 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. 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.

However, two issues are pending:

1. It appears that the calculations may not have been performed for the worst-case conditions. Generally, worst-case conditions are during heating mode (zone air distribution effectiveness, Ez, of 0.8 for an overhead distribution system in heating mode.) and when the VAV system is at minimum flow.

2. The total area of 123,405 square feet documented for this prerequisite varies substantially from the total gross area of 185,000 square feet reported in P1f2: Project Summary Details. It is unclear whether all occupiable space (as defined by ASHRAE 62.1-2007) has been accounted for within the ventilation rate procedure calculations. Note that all occupiable spaces (which can include regularly occupied, non-regularly occupied, and unconditioned areas) must be provided with ventilation which meets the minimum requirements in accordance with ASHRAE 62.1-2007.

TECHNICAL ADVICE:

1. Please provide revised Ventilation Rate Procedure calculations with an Ez of 0.8 and with the VAV system analyzed at minimum flow, or provide additional information to justify the parameters utilized.

2. Update the Ventilation Rate Procedure calculations to include all occupiable space and ensure that the area is reported consistently across all credits, or provide a detailed narrative describing the difference in area.

It is noted that the VRP calculations for ACS-C1-7 and ACS-9-2 were performed using the 62MZCalc spreadsheet following ASHRAE 62.1-2004 Section 6.2.5, which is appropriate for multiple zone recirculating systems. However, these systems serve a single ventilation zone, therefore, the multiple-zone recirculating calculation methodology is inappropriate. Section 6.2.3 should be followed when calculating the minimum outside air rate for single zone systems. Taking this into account, independent calculations were performed which result in a minimum required outside air rate lower than the scheduled ventilation rate, even with a revised Ez value. The compliance of this prerequisite of those two units are not affected unless the square footage of those two systems served need to be updated per review comment no. 2.

### IEQp2: Environmental Tobacco Smoke (ETS) Control

**Awarded**

#### 12/12/2014 REVISED REVIEW COMMENT

The revised documentation demonstrates compliance.

#### 05/13/2014 DESIGN PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project minimizes exposure to ETS-containing air by prohibiting smoking within 25 feet of all entries, outdoor air intakes, and operable windows. Additionally, smoking is

prohibited within the building. A project team member has signed the form. Drawings and plans confirming the signage system communicating the exterior smoking policy have been provided.

However, the documentation indicates that the exterior smoking policy may not be posted in sufficient locations to account for other building entrances, such as those at the loading dock area and staff entrance. Note that page 418 of the LEED Reference Guide for Green Building Design and Construction, 2009 Edition, states that the exterior non-smoking policy must be posted for all occupants to read.

TECHNICAL ADVICE:

Please provide a response narrative and other revised documentation to confirm how the signage is posted in enough locations to communicate the exterior non-smoking policy reasonably to all occupants.

### **IEQc1: Outdoor Air Delivery Monitoring**      **Awarded: 1**

POSSIBLE POINTS: 1

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

#### **11/10/2014 DESIGN FINAL REVIEW**

The additional documentation demonstrates credit compliance.

#### **05/19/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the project meets the credit criteria for a mechanically ventilated space. A CO2 sensor has been installed within each densely occupied space and an outdoor airflow measurement device has been installed for all systems where 20% or more of the design supply airflow services non-densely occupied spaces. These devices are programmed to generate an alarm when the conditions vary by 10% or more from the design value. Drawings confirming the location of the CO2 sensors and outdoor airflow measurement devices have been provided.

However, the provided plans indicate that CO2 sensors might not have been installed within each densely occupied space as required. The VRP calculations submitted within IEQp1 indicates that the project includes more rooms having a design occupant density greater than or equal to 25 people per 1000 square feet.

TECHNICAL ADVICE:

Please provide documentation confirming that all spaces with a design occupant density greater than or equal to 25 people per 1000 square feet are monitored by CO2 sensors.

### **IEQc2: Increased Ventilation**

**Awarded: 1**

POSSIBLE POINTS: 1

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

#### **04/24/2015 DESIGN APPEAL REVIEW**

The revised documentation provided in IEQp1 demonstrates that the breathing zone outdoor air ventilation rates to all occupied spaces have been increased by at least 30% above the minimum rates required by ASHRAE 62.1-2007.

#### **11/24/2014 DESIGN FINAL REVIEW**

The additional documentation submitted within IEQp1 does not demonstrate compliance.

Because this credit is denied solely due to issues with IEQp1, it does not need to be appealed should the project wish to appeal IEQp1. The status of this credit will be updated based on the results of the appeal of the prerequisite.

#### **05/19/2014 DESIGN 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 credit form states that the project has increased breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates.

However, IEQp1: Minimum Indoor Air Quality Performance has been denied pending clarifications.

TECHNICAL ADVICE:

Please see the comments within IEQp1 and resubmit this credit.

### **IEQc3.1: Construction IAQ Management**      **Awarded: 1** **Plan-During Construction**

POSSIBLE POINTS: 1

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

#### **08/11/2016 CONSTRUCTION FINAL REVIEW**

The revised documentation demonstrates compliance.

#### **05/31/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project reduces air quality problems resulting from construction to promote the comfort and well-being of construction workers and building occupants. However, to demonstrate compliance, the following must be addressed.

##### TECHNICAL ADVICE

1. The form indicates the filters were replaced 2/2/15, which is prior to the date of substantial completion of construction listed in Plf4 (6/1/15). The filters must be replaced after construction has been completed.
2. The filters were not replaced immediately prior to the building occupancy date of 5/3/15.

Provide a narrative clarifying the dates of construction completion, filter replacement, and building occupancy. Revise this form and the Plf4 form if necessary.

#### **IEQc3.2: Construction IAQ Management Plan-Before Occupancy**      **Awarded: 1**

POSSIBLE POINTS: 1

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

#### **08/16/2016 CONSTRUCTION FINAL REVIEW**

The additional documentation demonstrates compliance.

#### **05/25/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that an Indoor Air Quality (IAQ) Management Plan was developed and implemented and that the project complies with Option 2: IAQ Testing. However, to demonstrate compliance, the following must be addressed.

##### TECHNICAL ADVICE

1. The test report does not indicate that tests were conducted for all of the required contaminants. It appears that 4-Phenylcyclohexene (4-PCH) has not been tested. Provide a narrative and summary test results to confirm that all required contaminant has been tested. The narrative must include test results to confirm that the measured concentrations did not exceed the maximum concentration limits indicated in the credit language, or confirming that no carpets and fabrics with styrene butadiene rubber latex backing are installed as part of the base building systems.

#### **IEQc4.1: Low-Emitting Materials-Adhesives and Sealants**      **Awarded: 1**

POSSIBLE POINTS: 1

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

#### **08/11/2016 CONSTRUCTION FINAL REVIEW**

The revised documentation demonstrates compliance.

#### **05/31/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that all adhesive and sealant products used on the inside of the weatherproofing system and applied on-site have been included in the tables and the overall VOC Budget is equal to or below the required standard. However, to demonstrate compliance, the following must be addressed.

##### TECHNICAL ADVICE

1. It is unclear whether all adhesives and sealants used on the inside of the weatherproofing system and applied on-site have been included in the table. Refer to the referenced standards of this credit and confirm whether the comprehensive list of adhesives and sealants, as defined by the referenced standards, used on the inside of the weatherproofing system and applied on-site have been included in the table. 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, tile adhesives, contact adhesives, architectural sealants (including grouts, and polyurethane or plastic foams), duct sealants, plumbing adhesives and sealants, wall-covering adhesives, fiberglass panel adhesives, welding adhesives, and aerosol adhesives. Refer to the South Coast Air Quality Management District (SCAQMD) South Coast Rule 1168 (effective date of July 1, 2005 and rule amendment date of January 7, 2005) for the complete list and definitions. Consult AQMD and product manufacturers for assistance in properly classifying products. Revise the form, provide additional manufacturer documentation, and include a narrative to explain any special circumstances, if necessary. Ensure that all applicable products have been included in the documentation.



**IEQc4.2: Low-Emitting Materials-Paints and Coatings**

POSSIBLE POINTS: 1

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

**Awarded: 1****05/31/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that all paint and coating products used on the inside of the weatherproofing system and applied on-site have been included in the tables and comply with the VOC limits of the referenced standards for this credit.

**IEQc4.3: Low-Emitting Materials-Flooring Systems**

POSSIBLE POINTS: 1

**Not Attempted****IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products**

POSSIBLE POINTS: 1

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

**Awarded: 1****08/11/2016 CONSTRUCTION FINAL REVIEW**

The revised documentation demonstrates compliance.

**05/31/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that all composite wood and agrifiber products used on the interior of the building and all laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies contain no added urea-formaldehyde resins. However, to demonstrate compliance, the following must be addressed.

**TECHNICAL ADVICE**

1. The documentation within the MR credits indicates that plywood from multiple companies was used in the project but has not been included in the list for this credit (Pacific Wood Laminates, Feldman Lumber, Roy O Martin, and Wildwoman). It is unclear if these products are covered under the Medex Sierra Pine and Flakeboard Company Vesta MDF listed in the form. Provide a narrative and revise the form as necessary to ensure that all composite wood, agrifiber, and laminating adhesives used on the project have been accounted for and contain no added urea-formaldehyde. Provide additional manufacturer documentation if necessary.

**IEQc5: Indoor Chemical and Pollutant Source Control**

POSSIBLE POINTS: 1

**Not Attempted****IEQc6.1: Controllability of Systems-Lighting**

POSSIBLE POINTS: 1

**Not Attempted****IEQc6.2: Controllability of Systems-Thermal Comfort**

POSSIBLE POINTS: 1

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

POSSIBLE POINTS: 1

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

**Awarded: 1****05/12/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the mechanically ventilated and mechanically conditioned project space is in compliance with ASHRAE 55-2004. The project has utilized Load Calculation software to determine credit compliance. The metabolic rate and clothing insulation, weather design conditions, and operating conditions have been provided for both the cooling and heating mode. Local discomfort effects have been considered and are considered unlikely. Supporting documentation to confirm that all design conditions fall within the ASHRAE 55-2004 acceptable ranges has been provided.

**IEQc7.2: Thermal Comfort-Verification**

POSSIBLE POINTS: 1

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

**Awarded: 1**

**05/25/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that a permanent monitoring system will be installed and a thermal comfort survey of building occupants will be conducted between six and 18 months after occupancy.

**IEQc8.1: Daylight and Views-Daylight**  
POSSIBLE POINTS: 1

**Not  
Attempted**

**IEQc8.2: Daylight and Views-Views**  
POSSIBLE POINTS: 1

**Not  
Attempted**



## Innovation in Design

**IDc1.1: Innovation in Design**  
POSSIBLE POINTS: 1

**Not  
Attempted**

**IDc1.1: Innovation in Design- Low  
Mercury Lighting**

POSSIBLE POINTS: 1

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

**Awarded: 1**

### 05/31/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project team has developed and implemented an ID credit proposal for installing low mercury lamps. Note that this approach must be documented in accordance with LEED Interpretation 5500. The project has an average mercury content in picograms per lumen hour of ten for lamps, which is less than 80 as required. The calculation and cut sheets documenting the mercury content in all installed lamps have been provided.

**IDc1.2: Innovation in Design**  
POSSIBLE POINTS: 1

**Not  
Attempted**

**IDc1.2: Innovation in Design- Green  
Education**

POSSIBLE POINTS: 1

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

**Awarded: 1**

### 08/11/2016 CONSTRUCTION FINAL REVIEW

The revised documentation demonstrates compliance.

### 05/31/2016 CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that all composite wood and agrifiber products used on the interior of the building and all laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies contain no added urea-formaldehyde resins. However, to demonstrate compliance, the following must be addressed.

#### TECHNICAL ADVICE

1. The documentation within the MR credits indicates that plywood from multiple companies was used in the project but has not been included in the list for this credit (Pacific Wood Laminates, Feldman Lumber, Roy O Martin, and Wildwoman). It is unclear if these products are covered under the Medex Sierra Pine and Flakeboard Company Vesta MDF listed in the form. Provide a narrative and revise the form as necessary to ensure that all composite wood, agrifiber, and laminating adhesives used on the project have been accounted for and contain no added urea-formaldehyde. Provide additional manufacturer documentation if necessary.

**IDc1.3: Exemplary SSc2**

POSSIBLE POINTS: 1

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

**Awarded: 1**

### 11/13/2014 DESIGN FINAL REVIEW

The revised documentation demonstrates compliance.

### 05/12/2014 DESIGN PRELIMINARY REVIEW

The LEED Credit Form has been submitted stating that the project achieves exemplary performance for SSc2: Development Density as specified in the LEED Reference Guide for Green Building Design and Construction, 2009 Edition. To achieve an ID point, the project itself must either have a density of at least double that of the average density within the calculated area, or the average density within an area twice the area used for SSc2 must be at least 120,000 square feet per acre. The documentation provided demonstrates that the average density for twice the area is 133,741 square feet per acre.

However, the following issues are pending:

1. The density radii used in the supporting documentation are incorrect. A density radius of 547 linear feet and an exemplary performance density radius of 774 linear feet should be indicated, though the documentation indicates radii of 580 and 809 linear feet, respectively.

2. It is unclear if all buildable land adjacent to building 19 and all buildable land on Pier 51 has been included in the calculations. As stated in the LEED Reference Guide for Green Building Design and Construction, 2009 Edition, the neighborhood property area (i.e. the denominator of the square foot per acre calculation) must include all properties

except for undeveloped public areas such as parks, water bodies, public roads and public right-of-ways. All other buildable land must be included in the calculations.

3. It is unclear if the calculation includes all buildings located within and/or intersected by the density radius as required. It appears that the buildings (as noted on the plan) located between 1 and 10, 10 and 12, 22 and 58, 24 and 47, 25 and 43, 33 and 87, and 79 and 94 have not been included.

TECHNICAL ADVICE:

1. Please provide revised documentation using the correct density radii.
2. Revise the development density table to include all buildings located within and/or intersected by the density radius as required.
3. Provide a revised scaled plan and development density table that includes all buildable land within and/or intersected by the density radius.

Alternatively, the project may list only enough buildings to satisfy credit compliance provided that the total acreage within and/or intersected by the density radius is used as the denominator for all calculations. A narrative and any applicable supporting documentation must be provided in this case to confirm that the project meets credit requirements.

**IDc1.3: Innovation in Design**  
POSSIBLE POINTS: 1

**Not  
Attempted**

**IDc1.4: Exemplary SSc4.1**

**Awarded: 1**

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

**05/13/2014 DESIGN PRELIMINARY REVIEW**

The LEED Credit Form has been submitted stating that the project achieves exemplary performance for SSc4.1: Alternative Transportation - Public Transportation Access as specified in the LEED Reference Guide for Green Building Design and Construction, 2009 Edition. The documentation provided within SSc4.1 demonstrates that the project is within one half mile of at least two existing commuter rail, light rail, or subway lines and within one quarter mile of at least two stops for two public bus lines. The total frequency of the rail and bus lines is 1,347 rides per day. A minimum of 200 transit rides per day is required for Exemplary Performance. Transit schedules have been provided as required.

**IDc1.4: Innovation in Design**  
POSSIBLE POINTS: 1

**Not  
Attempted**

**IDc1.5: Innovation in Design**  
POSSIBLE POINTS: 1

**Not  
Attempted**

**IDc1.5: Exemplary**

**Awarded: 1**

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

**05/31/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project achieves exemplary performance for SSc7.1: Heat Island Effect - Nonroof. The requirement for exemplary performance is 100% and the project has documented 100%.

**IDc2: LEED® Accredited Professional**

**Awarded: 1**

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

**05/31/2016 CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that a LEED AP has been a participant on the project development team.



## Regional priority

### SSc6.1: Stormwater Design-Quantity Control

POSSIBLE POINTS: 1

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

**TOTAL**

**110**

**64**

**1**

**0**

**62**

# REVIEW SUMMARY

Review			POINTS:			
	SUBMITTED	RETURNED	SUBMITTED	DENIED	PENDING	AWARDED
<b>Design Preliminary</b>	<b>02/17/2014</b>	<b>05/20/2014</b>	<b>36</b>	<b>0</b>	<b>16</b>	<b>24</b>

Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
PIf1: Minimum Program Requirements	Approved		0	0	0	0
PIf2: Project Summary Details	Approved		0	0	0	0
PIf3: Occupant and Usage Data	Approved		0	0	0	0
PIf4: Schedule and Overview Documents	Approved		0	0	0	0
SSc1: Site Selection	Anticipated	Design	1	0	0	1
SSc2: Development Density and Community Connectivity	Anticipated	Design	5	0	0	5
SSc3: Brownfield Redevelopment	Pending	Design	1	0	1	0
SSc4.1: Alternative Transportation-Public Transportation Access	Anticipated	Design	6	0	0	6
SSc4.2: Alternative Transportation-Bicycle Storage and Changing Rooms	Anticipated	Design	1	0	0	1
SSc4.4: Alternative Transportation-Parking Capacity	Pending	Design	2	0	2	0
SSc5.2: Site Development-Maximize Open Space	Anticipated	Design	1	0	0	1
SSc6.1: Stormwater Design-Quantity Control	Anticipated	Design	2	0	0	2
WEp1: Water Use Reduction, 20% Reduction	Pending	Design	0	0	0	0
WEc1: Water Efficient Landscaping	Anticipated	Design	4	0	0	4
WEc3: Water Use Reduction	Pending	Design	3	0	3	0
EAp2: Minimum Energy Performance	Pending	Design	0	0	0	0
EAp3: Fundamental Refrigerant Management	Anticipated	Design	0	0	0	0
EAc1: Optimize Energy Performance	Pending	Design	2	0	6	0
EAc4: Enhanced Refrigerant Management	Anticipated	Design	2	0	0	2
MRp1: Storage and Collection of Recyclables	Anticipated	Design	0	0	0	0
IEQp1: Minimum Indoor Air Quality Performance	Pending	Design	0	0	0	0
IEQp2: Environmental Tobacco Smoke (ETS) Control	Pending	Design	0	0	0	0
IEQc1: Outdoor Air Delivery Monitoring	Pending	Design	1	0	1	0
IEQc2: Increased Ventilation	Pending	Design	1	0	1	0
IEQc7.1: Thermal Comfort-Design	Anticipated	Design	1	0	0	1
IDc1.3: Exemplary SSc2	Pending	Design	1	0	1	0
IDc1.4: Exemplary SSc4.1	Anticipated	Design	1	0	0	1

**Design Final****10/27/201412/04/2014****21****2****0****18**

<b>Credit</b>	<b>STATUS</b>	<b>TYPE</b>	<b>POINTS: ATTEMPTED</b>	<b>DENIED</b>	<b>PENDING</b>	<b>AWARDED</b>
PIf1: Minimum Program Requirements	<b>Approved</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PIf2: Project Summary Details	<b>Approved</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PIf3: Occupant and Usage Data	<b>Approved</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PIf4: Schedule and Overview Documents	<b>Approved</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
SSc2: Development Density and Community Connectivity	<b>Anticipated</b>	Design	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>
SSc3: Brownfield Redevelopment	<b>Anticipated</b>	Design	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
SSc4.4: Alternative Transportation-Parking Capacity	<b>Anticipated</b>	Design	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
WEp1: Water Use Reduction, 20% Reduction	<b>Anticipated</b>	Design	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WEc3: Water Use Reduction	<b>Anticipated</b>	Design	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>
EAp2: Minimum Energy Performance	<b>Anticipated</b>	Design	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
EAc1: Optimize Energy Performance	<b>Anticipated</b>	Design	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
IEQp1: Minimum Indoor Air Quality Performance	<b>Denied</b>	Design	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
IEQp2: Environmental Tobacco Smoke (ETS) Control	<b>Denied</b>	Design	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
IEQc1: Outdoor Air Delivery Monitoring	<b>Anticipated</b>	Design	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IEQc2: Increased Ventilation	<b>Denied</b>	Design	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
IDc1.3: Exemplary SSc2	<b>Anticipated</b>	Design	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>



**Design Appeal**

04/06/201504/27/2015

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1

**Credit**

	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
IEQp1: Minimum Indoor Air Quality Performance	Anticipated	Design	0	0	0	0
IEQc2: Increased Ventilation	Anticipated	Design	1	0	0	1

**Construction Preliminary****03/11/201606/08/2016****28****0****16****12**

<b>Credit</b>	<b>STATUS</b>	<b>TYPE</b>	<b>POINTS: ATTEMPTED</b>	<b>DENIED</b>	<b>PENDING</b>	<b>AWARDED</b>
SSp1: Construction Activity Pollution Prevention	<b>Awarded</b>	Construction	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
SSc7.1: Heat Island Effect-Non-Roof	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
EAp1: Fundamental Commissioning of the Building Energy Systems	<b>Pending</b>	Construction	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
EAc3: Enhanced Commissioning	<b>Pending</b>	Construction	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>
EAc5: Measurement and Verification	<b>Awarded</b>	Construction	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
EAc6: Green Power	<b>Awarded</b>	Construction	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
MRc2: Construction Waste Management	<b>Pending</b>	Construction	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>
MRc4: Recycled Content	<b>Pending</b>	Construction	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>
MRc5: Regional Materials	<b>Pending</b>	Construction	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>
MRc7: Certified Wood	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IEQc3.1: Construction IAQ Management Plan-During Construction	<b>Pending</b>	Construction	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
IEQc3.2: Construction IAQ Management Plan-Before Occupancy	<b>Pending</b>	Construction	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
IEQc4.1: Low-Emitting Materials-Adhesives and Sealants	<b>Pending</b>	Construction	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
IEQc4.2: Low-Emitting Materials-Paints and Coatings	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products	<b>Pending</b>	Construction	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
IEQc7.2: Thermal Comfort-Verification	<b>Awarded</b>	Design	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IDc1.1: Innovation in Design- Low Mercury Lighting	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IDc1.2: Innovation in Design- Green Education	<b>Pending</b>	Construction	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
IDc1.5: Exemplary: SSc7.1	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IDc2: LEED® Accredited Professional	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

**Construction Final****07/28/201608/23/2016****13****1****0****12**

<b>Credit</b>	<b>STATUS</b>	<b>TYPE</b>	<b>POINTS: ATTEMPTED</b>	<b>DENIED</b>	<b>PENDING</b>	<b>AWARDED</b>
PIf4: Schedule and Overview Documents	<b>Approved</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
EAp1: Fundamental Commissioning of the Building Energy Systems	<b>Awarded</b>	Construction	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
EAc3: Enhanced Commissioning	<b>Awarded</b>	Construction	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
MRC2: Construction Waste Management	<b>Awarded</b>	Construction	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
MRC4: Recycled Content	<b>Awarded</b>	Construction	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
MRC5: Regional Materials	<b>Awarded</b>	Construction	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>
IEQc3.1: Construction IAQ Management Plan-During Construction	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IEQc3.2: Construction IAQ Management Plan-Before Occupancy	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IEQc4.1: Low-Emitting Materials-Adhesives and Sealants	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
IDc1.2: Innovation in Design- Green Education	<b>Awarded</b>	Construction	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>