

Sustainable Sites (cont.) **Points**

Site Credit 2: **Urban Redevelopment** 1
INTENT:
 Channel development to urban areas with existing infrastructure, protecting greenfields and preserving habitat and natural resources.

REQUIREMENT:
 Increase localized density to conform to existing or desired density goals by utilizing sites that are located within an existing minimum development density of 60,000 square feet per acre (2 story downtown development).

TECHNOLOGIES/STRATEGIES:
 During the site selection process give preference to previously developed sites with urban redevelopment potential.

Site Credit 3: **Brownfield Redevelopment** 1
INTENT:
 Rehabilitate damaged sites where development is complicated by real or perceived environmental contamination, reducing pressure on undeveloped land.

REQUIREMENT:
 Develop on a site classified as a brownfield and provide remediation as required by EPA's Brownfield Redevelopment program requirements.

TECHNOLOGIES/STRATEGIES:
 Participate in EPA's Brownfield Redevelopment program. Utilize EPA OSWER Directive 9610.17 and ASTM Standard Practice E1739 for site remediation where required.

Gain community support by highlighting the social and urban benefits of brownfield redevelopment. Negotiate with local municipalities and landowners for below-market purchase price for brownfield real estate. Obtain tax incentives be meeting geographic requirements for EPA's Brownfield tax credits.

Site Credit 4: **Alternative Transportation** 1-4
INTENT:
 Reduce pollution and land development impacts from automobile use.

REQUIREMENT:
 Locate building within ½ mile of a commuter rail, light rail or subway station or ¼ mile of 2 or more bus lines. (1 point)
 Provide suitable means for securing bicycles, with convenient changing/shower facilities for use by cyclists, for 5% or more of building occupants. (1 point)
 Install alternative-fuel refueling station(s) for 3% of the total vehicle parking capacity of the site. Liquid or gaseous fueling facilities must be separately ventilated or located outdoors. (1 point)
 Size parking capacity not to exceed minimum local zoning requirements AND provide preferred parking for carpools or van pools capable of serving 5% of the building occupants. OR, add no new parking for rehabilitation projects AND provide preferred parking for carpools or van pools capable of serving 5% of the building occupants. (1 point)

TECHNOLOGIES/STRATEGIES:
 Select sites near public transit served by safe, convenient pedestrian pathways.



Sustainable Sites (cont.) **Points**

Site Credit 5:
Reduced Site
Disturbance

INTENT:
Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

1-2

REQUIREMENT:

- On greenfield sites, limit site disturbance including earthwork and clearing of vegetation to 40 feet beyond the building perimeter, 5 feet beyond primary roadway curbs, walkways, and main utility branch trenches, and 25 feet beyond pervious paving areas that require additional staging areas in order to limit compaction in the paved area; OR, on previously developed sites, restore a minimum of 50% of the remaining open area by planting native or adapted vegetation. (1 point)
- Reduce the development footprint (including building, access roads and parking) to exceed the local zoning's open space requirement for the site by 25%. (1 point)

TECHNOLOGIES/STRATEGIES:

Note requirements on plans and in specifications. Establish contractual penalties for destruction of trees and site areas noted for protection. Reduce footprints by tightening program needs and stacking floorplans. Establish clearly marked construction and disturbance boundaries. Delineate laydown, recycling, and disposal areas. Use areas to be paved as staging areas. Work with local horticultural extension services or native plant societies to select indigenous plant species for site restoration and landscaping.

Site Credit 6:
Stormwater Management

INTENT:
Limit disruption of natural water flows by minimizing storm water runoff, increasing on-site infiltration and reducing contaminants.

1-2

REQUIREMENT:

Implement a stormwater management plan that results in:

- No net increase in the rate or quantity of stormwater runoff from existing to developed conditions; OR, if existing imperviousness is greater than 50%, implement a stormwater management plan that results in a 25% decrease in the rate and quantity of stormwater runoff. (1 point)
- Treatment systems designed to remove 80% of the average annual post development total suspended solids (TSS), and 40% of the average annual post development total phosphorous (TP), by implementing Best Management Practices (BMPs) outlined in EPA's Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA 840-B-92-002 1/93). (1 point)

TECHNOLOGIES/STRATEGIES:

Significantly reduce impervious surfaces, maximize on-site stormwater infiltration, and retain pervious and vegetated areas. Capture rainwater from impervious areas of the building for groundwater recharge or reuse within building. Use green/vegetated roofs. Utilize biologically-based and innovative stormwater management features for pollutant load reduction such as constructed wetlands, stormwater filtering systems, bioswales, bio-retention basins, and vegetated filterstrips.



Sustainable Sites (cont.)

Points

Site Credit 7:
Landscape and Exterior
Design to Reduce Heat
Islands

INTENT:
Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.

1-2

REQUIREMENT:

- Provide shade (within 5 years) on at least 30% of non-roof impervious surface on the site, including parking lots, walkways, plazas, etc., OR, use light-colored/high-albedo materials (reflectance of at least 0.3) for 30% of the site's non-roof impervious surfaces, OR place a minimum of 50% of parking space underground OR use open-grid pavement system (net impervious area of LESS than 50%) for a minimum of 50% of the parking lot area. (1 point)
- Use ENERGY STAR Roof compliant, high-reflectance AND low emissivity roofing (initial reflectance of at least .65 and three-year-aged reflectance of at least .5 when tested in accordance with ASTM E408) for a minimum of 75% of the roof surface; OR, install a "green" (vegetated) roof for at least 50% of the roof area. (1 point)

TECHNOLOGIES/STRATEGIES:

Employ design strategies, materials, and landscaping designs that reduce heat absorption of exterior materials. Note albedo/reflectance requirements in the drawings and specifications. Provide shade (calculated on June 21, noon solar time) using native or climate tolerant trees and large shrubs, vegetated trellises, or other exterior structures supporting vegetation. Substitute vegetated surfaces for hard surfaces. Explore elimination of blacktop and the use of new coatings and integral colorants for asphalt to achieve light colored surfaces.

Site Credit 8:
Light Pollution
Reduction

INTENT:
Eliminate light trespass from the building site, improve night sky access, and reduce development impact on nocturnal environments.

1

REQUIREMENT:

- Do not exceed Illuminating Engineering Society of North America (IESNA) footcandle level requirements as stated in the Recommended Practice Manual: Lighting for Exterior Environments, AND design interior and exterior lighting such that zero direct beam illumination leaves the building site.

TECHNOLOGIES/STRATEGIES:

Consult IESNA Recommended Practice Manual: Lighting for Exterior Environments for Commission Internationale de l'Eclairage (CIE) zone and pre and post curfew hour descriptions and associated ambient lighting level requirements. Ambient lighting for pre-curfew hours for CIE zones range between .01 footcandles for areas with dark landscapes such as parks, rural, and residential areas, and 1.5 footcandles for areas with high ambient brightness such as urban areas with high levels of nighttime activity. Design site lighting and select lighting styles and technologies to have a minimal impact off site and minimal contribution to sky glow. Minimize lighting of architectural and landscape features.



Water Efficiency	Points
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<p>Water Credit 1: Water Efficient Landscaping</p>	<p>INTENT: Limit or eliminate the use of potable water for landscape irrigation.</p>	<p>1-2</p>
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- REQUIREMENT:**
- Use high efficiency irrigation technology, OR, use captured rain or recycled site water to reduce potable water consumption for irrigation by 50% over conventional means. (1 point)
 - Use only captured rain or recycled site water for an additional 50% reduction (100% total reduction) of potable water for site irrigation needs. OR, do not install permanent landscape irrigation systems. (1 point)

TECHNOLOGIES/STRATEGIES:
Develop a landscaping water use baseline according to the methodology outlined in the LEED Reference Guide. Specify water-efficient, native or adapted, climate tolerant plantings. High efficiency irrigation technologies include micro irrigation, moisture sensors, or weather data based controllers. Feed irrigation systems with captured rainwater, gray water, or on-site treated wastewater.

<p>Water Credit 2: Innovative Wastewater Technologies</p>	<p>INTENT: Reduce generation of wastewater and potable water demand, while increasing local aquifer recharge.</p>	<p>1</p>
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- REQUIREMENT:**
- Reduce the use of municipally provided potable water for building sewage conveyance by a minimum of 50%, OR, treat 100% of wastewater on site to tertiary standards.

TECHNOLOGIES/STRATEGIES:
Develop a wastewater baseline according to the methodology outlined in the LEED Reference Guide. Implement decentralized on-site wastewater treatment and reuse systems. Decrease the use of potable water for sewage conveyance by utilizing gray and/or black water systems. Non-potable reuse opportunities include: toilet flushing, landscape irrigation, etc. Provide advanced wastewater treatment after use by employing innovative, ecological, on-site technologies including constructed wetlands, a mechanical recirculating sand filter, or aerobic treatment systems.



Water Efficiency (cont.)

Points

Water Credit 3:
Water Use Reduction

INTENT:
Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

1-2

REQUIREMENT:

- Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting Energy Policy Act of 1992 fixture performance requirements. (1 point)
- Exceed the potable water use reduction by an additional 10% (30% total efficiency increase). (1 point)

TECHNOLOGIES/STRATEGIES:

Develop a water use baseline including all water consuming fixtures, equipment, and seasonal conditions according to methodology guidance outlined in the LEED Reference Guide. Specify water conserving plumbing fixtures that exceed Energy Policy Act of 1992 fixture requirements in combination with ultra high efficiency or dry fixture and control technologies. Specify high water efficiency equipment (dishwashers, laundry, cooling towers, etc.). Use alternatives to potable water for sewage transport water. Use recycled or storm water for HVAC/process make up water.



Energy and Atmosphere **Points**

Prerequisite 1:
Fundamental Building
Systems Commissioning

INTENT:
Verify and ensure that fundamental building elements and systems are designed, installed and calibrated to operate as intended.

Required

REQUIREMENT:

- Implement all of the following fundamental best practice commissioning procedures.
 - Engage a commissioning authority.
 - Develop design intent and basis of design documentation.
 - Include commissioning requirements in the construction documents.
 - Develop and utilize a commissioning plan.
 - Verify installation, functional performance, training and documentation.
 - Complete a commissioning report.

TECHNOLOGIES/STRATEGIES:

Introduce standards and strategies into the design process early, and then carry through selected measures by clearly stating target requirements in the construction documents. Tie contractor final payments to documented system performance. Refer to the LEED Reference Guide for detailed descriptions of required elements and references to additional commissioning guides.

Prerequisite 2:
Minimum Energy
Performance

INTENT:
Establish the minimum level of energy efficiency for the base building and systems.

Required

REQUIREMENT:

- Design to meet building energy efficiency and performance as required by ASHRAE/IESNA 90.1-1999 or the local energy code, which ever is the more stringent. Analyze expected baseline building performance using the System/Component Method.

TECHNOLOGIES/STRATEGIES:

Use building modeling and analysis techniques to establish and document compliance. ASHRAE/IESNA 90.1-1999 provides guidance for establishing building base case development and analysis. Refer to the LEED Reference Guide for a wide variety of energy efficiency strategy resources.



Energy and Atmosphere (cont.) **Points**

Prerequisite 3:
CFC Reduction in
HVAC&R Equipment

INTENT:
Reduce ozone depletion.

REQUIREMENT:
 Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phaseout conversion.

TECHNOLOGIES/STRATEGIES:
Specify only non-CFC-based refrigerants in all base building HVAC&R systems.

Required

Energy Credit 1:
Optimize Energy
Performance.

INTENT:
Achieve increasing levels of energy performance above the prerequisite standard to reduce environmental impacts associated with excessive energy use.

REQUIREMENT:
Reduce design energy cost compared to the energy cost budget for regulated energy components described in the requirements of ASHRAE/IESNA Standard 90.1-1999, as demonstrated by a whole building simulation using the Energy Cost Budget Method described in Section 11.

2-10

<u>New Bldgs.</u>	<u>Existing Bldgs.</u>	<u>Points.</u>
<input type="checkbox"/> 20%	10%	2
<input type="checkbox"/> 30%	20%	4
<input type="checkbox"/> 40%	30%	6
<input type="checkbox"/> 50%	40%	8
<input type="checkbox"/> 60%	50%	10

Regulated energy components include HVAC systems, building envelope, service hot water systems, lighting and other regulated systems as defined by ASHRAE.

TECHNOLOGIES/STRATEGIES:
Develop and use building modeling and analysis techniques to establish a base case that meets the minimum prerequisite standard. ASHRAE/IESNA 90.1-1999 provides guidance for establishing building base case development and analysis. Perform interactive energy use analysis for selected design elements that affect energy performance and document compliance.

Unit of measure for performance shall be annual energy cost expressed in dollars. Annual energy costs shall be determined using rates for purchased energy, such as electricity, gas, oil, propane, steam, and chilled water and approved by the adopting authority. OR using the default purchased energy costs set forth in the Reference Guide. Refer to the LEED Reference Guide for a wide variety of energy efficiency resources and strategies including conservation measures, electromechanical energy efficiency technologies, passive heating and cooling strategies, and daylighting.



Energy and Atmosphere (cont.) **Points**

Energy Credit 2: Renewable Energy 1-3
INTENT:
 Encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.

REQUIREMENT:
 Supply a net fraction of the building's total energy use (as expressed as a fraction of annual energy cost) through the use of on-site renewable energy systems.

<input type="checkbox"/>	<u>% of Total Energy Cost in Renewables</u>	<u>Pts.</u>
<input type="checkbox"/>	5%	1
<input type="checkbox"/>	10%	2
<input type="checkbox"/>	20%	3

TECHNOLOGIES/STRATEGIES:
 Employ the use of on-site non-polluting-source renewable technologies contributing to the total energy requirements of the project. Consider and use high temperature solar and/or geothermal, wind, biomass (other than unsustainably harvested wood), and bio-gas. Passive solar, solar hot water heating, ground-source heat pumps, and daylighting do not qualify for points under this credit. Credit for these strategies is given in Energy & Atmosphere Credit 1: Optimizing Energy Performance.

Energy Credit 3: Additional Commissioning 1
INTENT:
 Verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended.

REQUIREMENT:
 In addition to the Fundamental Building Commissioning prerequisite, implement the following additional commissioning tasks:
 1. Conduct a focused review of the design prior to the construction documents phase.
 2. Conduct a focused review of the construction documents when close to completion.
 3. Conduct a selective review of contractor submittals of commissioned equipment.
 4. Develop a system and energy management manual.
 5. Have a contract in place for a near-warranty end or post occupancy review.
 Items 1, 2, and 3 must be performed by someone other than the designer.

TECHNOLOGIES/STRATEGIES:
 Introduce standards and strategies into the design process early, and then carry through selected measures by clearly stating target requirements in the construction documents. Tie contractor final payments to documented system performance. Refer to the LEED Reference Guide for detailed descriptions of required elements and references to additional guidelines.

Energy Credit 4: Elimination of HCFC's and Halons 1
INTENT:
 Reduce ozone depletion and support early compliance with the Montreal Protocol.

REQUIREMENT:
 Install base building level HVAC and refrigeration equipment and fire suppression systems that do not contain HCFC's or Halon.

TECHNOLOGIES/STRATEGIES:
 Utilize base building HVAC and refrigeration systems that use non ozone damaging liquids for the refrigeration cycle. Refer to the LEED Reference Guide for qualifying alternatives.



Energy and Atmosphere (cont.)

Points

Energy Credit 5:
Measurement and
Verification

INTENT:

Provide for the ongoing accountability and optimization of building energy and water consumption performance over time.

1

REQUIREMENT:

- Comply with the installed equipment requirements for continuous metering as stated in Option B: Methods by Technology of the US DOE's International Performance Measurement and Verification Protocol (IPMVP) for the following:
 - Lighting systems and controls.
 - Constant and variable motor loads.
 - Variable frequency drive (VFD) operation.
 - Chiller efficiency at variable loads (kW/ton).
 - Cooling load.
 - Air and water economizer and heat recovery cycles.
 - Air distribution static pressures and ventilation air volumes.
 - Boiler efficiencies.
 - Building specific process energy efficiency systems and equipment.
 - Indoor water risers and outdoor irrigation systems.

TECHNOLOGIES/STRATEGIES:

Design and specify equipment to be installed in base building systems to allow for comparison, management, and optimization of actual vs. estimated energy and water performance. Employ building automation systems to perform M&V functions where applicable. Tie contractor final payments to documented M&V system performance and include in the commissioning report. Provide for ongoing M&V system maintenance and operating plan in building operations and maintenance manuals. Refer to the LEED Reference Guide for a synopsis of IPMVP options.

Energy Credit 6:
Green Power

INTENT:

Encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.

1

REQUIREMENT:

- Engage in a two year contract to purchase power generated from renewable sources that meet the Center for Resource Solutions (CRS) Green-E requirements.

TECHNOLOGIES/STRATEGIES:

Purchase power from a provider that guarantees a fraction of its delivered electric power is from net nonpolluting renewable technologies. Begin by contacting local utility companies. If the project is in an open market state, investigate Green Power and Power Marketers licensed to provide power in that state. Grid power that qualifies for this credit originates from solar, wind, geothermal, biomass, or low-impact hydro sources. Low-impact hydro shall comply with the Low Impact Hydropower Certification Program.



Materials and Resources

Points

Materials Prerequisite:
Storage & Collection of
Recyclables

INTENT:
Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.

Required

REQUIREMENT:

- Provide an easily accessible area that serves the entire building that is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, glass, plastics, and metals.

TECHNOLOGIES/STRATEGIES:

Reserve space for recycling functions early in the building occupancy programming process and show areas dedicated to collection of recycled materials on space utilization plans. Broader recycling support space considerations should allow for collection and storage of the required elements and newspaper, organic waste (food and soiled paper), and dry waste. When collection bins are used, bin(s) should be able to accommodate a 75% diversion rate and be easily accessible to custodial staff and recycling collection workers. Consider bin designs that allow for easy cleaning to avoid health issues.

Materials Credit 1:
Building Reuse

INTENT:
Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste, and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

1-3

REQUIREMENT:

Reuse large portions of existing structures during renovation or redevelopment projects.

- Maintain at least 75% of existing building structure and shell (exterior skin and framing excluding window assemblies). (1 point)
- Maintain an additional 25% (100% total) of existing building structure and shell (exterior skin and framing excluding window assemblies). (1 point)
- Maintain 100% of existing building structure and shell AND 50% non-shell (walls, floor coverings, and ceiling systems). (1 point)

TECHNOLOGIES/STRATEGIES:

Evaluate retention of existing structure. Consider facade preservation, particularly in urban areas. During programming and space planning, consider adjusting needs and occupant use patterns to fit within existing building structure and interior partition configurations. Identify and effectively address energy, structural, and indoor environmental (lead & asbestos) issues in building reuse planning and deconstruction documents. Percentage of reused non-shell building portions will be calculated as the total area (s.f.) of reused walls, floor covering, and ceiling systems, divided by the existing total area (s.f.) of walls, floor covering, and ceiling systems.



Materials and Resources (cont.)

Points

Materials Credit 2:
Construction Waste
Management

INTENT:
Divert construction, demolition, and land clearing debris from landfill disposal.
Redirect recyclable material back to the manufacturing process.

1-2

REQUIREMENT:

Develop and implement a waste management plan, quantifying material diversion by weight.

- Recycle and/or salvage at least 50% (by weight) of construction, demolition, and land clearing waste. (1 point)
- Recycle and/or salvage an additional 25% (75% total by weight) of the construction, demolition, and land clearing debris. (1 point)

TECHNOLOGIES/STRATEGIES:

Develop and specify a waste management plan that identifies licensed haulers and processors of recyclables; identifies markets for salvaged materials; employs deconstruction, salvage, and recycling strategies and processes, includes waste auditing; and documents the cost for recycling, salvaging, and reusing materials. Source reduction on the job site should be an integral part of the plan.

The plan should address recycling of corrugated cardboard, metals, concrete brick, asphalt, land clearing debris (if applicable), beverage containers, clean dimensional wood, plastic, glass, gypsum board, and carpet, and evaluates the cost-effectiveness of recycling rigid insulation, engineered wood products and other materials. Refer to the LEED Reference Guide for guidelines and references that provide waste management plan development and implementation support including model bid specifications.

Materials Credit 3:
Resource Reuse

INTENT:
Extend the life cycle of targeted building materials, reducing environmental impacts related to materials manufacturing and transport.

1-2

REQUIREMENT:

- Specify salvaged or refurbished materials for 5% of building materials. (1 point)
- Specify salvaged or refurbished materials for 10% of building materials. (1 point)

TECHNOLOGIES/STRATEGIES:

Commonly salvaged building materials include wood flooring/paneling/cabinets, doors and frames, mantels, iron work and decorative lighting fixtures, brick, masonry and heavy timbers. See the LEED Reference Guide for calculation tools and guidelines. Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars* (see exclusions) of the salvaged or refurbished material.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: In total dollar calculations, exclude; labor costs; all mechanical and electrical material and labor costs; and project overhead and fees.

*If the cost of the salvaged or refurbished material is below market value, use replacement cost to estimate the material value, otherwise use actual cost to the project.



Materials and Resources (cont.) **Points**

<p>Materials Credit 4: Recycled Content</p>	<p>INTENT: Increase demand for building products that have incorporated recycled content material, reducing the impacts resulting from extraction of new material</p> <p>REQUIREMENT:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Specify a minimum of 25% of building materials that contain in aggregate a minimum weighted average of 20% post-consumer recycled content material, OR, a minimum weighted average of 40% post-industrial recycled content material. (1 point) <input type="checkbox"/> Specify an additional 25% (50% total) of building materials that contain in aggregate, a minimum weighted average of 20% post consumer recycled content material, OR, a minimum weighted average of 40% post-industrial recycled content material. (1 point) <p>TECHNOLOGIES/STRATEGIES: Specify building materials containing recycled content for a fraction of total building materials. Start with the materials listed in the EPA's Comprehensive Procurement Guidelines (CPG). Common building materials and products with recycled content include; wall, partition, and ceiling materials and systems; insulation; tiles and carpets; cement, concrete, and reinforcing metals; structural and framing steel. See the LEED Reference Guide for a summary of the EPA guidelines and calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps: 1. Calculate total dollars (see exclusions) of the material that contain recycled content. 2. Calculate total dollars (see exclusions) of all building materials. 3. Divide Step 1 by Step 2 to determine the percentage. Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees)</p>	<p>1-2</p>
<p>Materials Credit 5: Local/Regional Materials</p>	<p>INTENT: Increase demand for building products that are manufactured locally, reducing the environmental impacts resulting from transportation, and supporting the local economy.</p> <p>REQUIREMENT:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Specify a minimum of 20% of building materials that are manufactured regionally within a radius of 500 miles. (1 point) <input type="checkbox"/> Of these regionally manufactured materials, specify a minimum of 50% that are extracted, harvested, or recovered within 500 miles. (1 point) <p>TECHNOLOGIES/STRATEGIES: Specify and install regionally extracted, harvested, and manufactured building materials. Contact the state and local waste management boards for information about regional building materials. See the LEED Reference Guide for calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps: 1. Calculate total dollars (see exclusions) of material that is locally or regionally manufactured. 2. Calculate total dollars (see exclusions) of all building materials. 3. Divide Step 1 by Step 2 to determine the percentage. Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees.</p>	<p>1-2</p>



Materials and Resources (cont.)

Points

Material Credit 6:
Rapidly Renewable
Materials

1

INTENT:

Reduce the use and depletion of finite raw and long cycle renewable materials by replacing them with rapidly renewable materials.

REQUIREMENT:

- Specify rapidly renewable building materials for 5% of total building materials.

TECHNOLOGIES/STRATEGIES:

Rapidly renewable resources are those materials that substantially replenish themselves faster than traditional extraction demand (e.g. planted and harvested in less than a 10 year cycle) and do not result in significant biodiversity loss, increase erosion, air quality impacts, and that are sustainably managed. See the LEED Reference Guide for calculation methodology guidelines.

Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars (see exclusions) of materials that are considered to be rapidly renewable.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees.

Material Credit 7:
Certified Wood

1

INTENT:

Encourage environmentally responsible forest management.

REQUIREMENT:

- Use a minimum of 50% of wood-based materials certified in accordance with the Forest Stewardship Council guidelines for wood building components including but not limited to framing, flooring, finishes, furnishings, and non-rented temporary construction applications such as bracing, concrete form work and pedestrian barriers.

TECHNOLOGIES/STRATEGIES:

Refer to the Forest Stewardship Council guidelines for wood building components that qualify for compliance to the requirements and incorporate into material selection for the project.



Indoor Environmental Quality (IEQ)	Points
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IEQ Prerequisite 1:
Minimum IAQ
Performance

Required

INTENT:
Establish minimum IAQ performance to prevent the development of indoor air quality problems in buildings, maintaining the health and well being of the occupants.

REQUIREMENT:
 Meet the minimum requirements of voluntary consensus standard ASHRAE 62-1999, Ventilation for Acceptable Indoor Air Quality and approved Addenda.

TECHNOLOGIES/STRATEGIES:
Include proactive design details that will eliminate some of the common causes of indoor air quality problems in buildings. Introduce standards into the design process early. Incorporate references to targets in plans and specifications. Ensure ventilation system outdoor air capacity can meet standards in all modes of operation. Locate building outdoor air intakes away from loading areas, building exhaust fans, cooling towers, and other sources of contamination. Include operational testing in the building commissioning report. Design cooling coil drain pans to ensure complete draining.

IEQ Prerequisite 2:
Environmental Tobacco
Smoke (ETS) Control

Required

INTENT:
Prevent exposure of building occupants and systems to Environmental Tobacco Smoke (ETS).

REQUIREMENT:
 Zero exposure of nonsmokers to ETS by prohibition of smoking in the building, OR, by providing a designated smoking room designed to effectively contain, capture and remove ETS from the building. At a minimum, the smoking room shall be directly exhausted to the outdoors with no recirculation of ETS-containing air to the non-smoking area of the building, enclosed with impermeable structural deck-to-deck partitions and operated at a negative pressure compared with the surrounding spaces of at least 7 Pa (0.03 inches of water gauge). Performance of smoking rooms shall be verified using tracer gas testing methods as described in ASHRAE Standard 129-1997. Acceptable exposure in non-smoking areas is defined as less than 1% of the tracer gas concentration in the smoking room detectable in the adjoining non-smoking areas. Smoking room testing as described in the ASHRAE Standard 129-1997 is required in the contract documents and critical smoking facility systems testing results must be included in the building commissioning plan and report or as a separate document.

TECHNOLOGIES/STRATEGIES:
Prohibit smoking in the building and/or provide designated smoking areas outside the building in locations where ETS can not reenter the building or ventilation system and away from high building occupant or pedestrian traffic.



Indoor Environmental Quality (cont.)

Points

IEQ Credit 1:
Carbon Dioxide (CO₂)
Monitoring

1

INTENT:

Provide capacity for indoor air quality (IAQ) monitoring to sustain long term occupant health and comfort.

REQUIREMENT:

- Install a permanent carbon dioxide (CO₂) monitoring system that provides feedback on space ventilation performance in a form that affords operational adjustments, AND specify initial operational set point parameters that maintain indoor carbon dioxide levels no higher than outdoor levels by more than 530 parts per million at any time.

TECHNOLOGIES/STRATEGIES:

Install an independent system or make CO₂ monitoring a function of the building automation system. Situate monitoring locations in areas of the building with high occupant densities and at the ends of the longest runs of the distribution ductwork. Specify that system operation manuals require calibration of all of the sensors per manufacturer recommendations but not less than one year. Include sensor and system operational testing and initial set point adjustment in the commissioning plan and report.

IEQ Credit 2:
Increase Ventilation
Effectiveness

1

INTENT:

Provide for the effective delivery and mixing of fresh air to building occupants to support their health, safety, and comfort.

REQUIREMENT:

- For mechanically ventilated buildings, design ventilation systems that result in an air change effectiveness (E) greater than or equal to 0.9 as determined by ASHRAE 129-1997. For naturally ventilated spaces demonstrate a distribution and laminar flow pattern that involves not less than 90% of the room or zone area in the direction of air flow for at least 95% of hours of occupancy.

TECHNOLOGIES/STRATEGIES:

Employ architectural and HVAC design strategies to increase ventilation effectiveness and prevent short-circuiting of airflow delivery. Techniques available include use of displacement ventilation, low velocity, and laminar flow ventilation (under floor or near floor delivery) and natural ventilation. Operable windows with an architectural strategy for natural ventilation, cross ventilation, or stack effect can be appropriate options with study of inlet areas and locations. See the LEED Reference Guide for compliance methodology guidelines.



Indoor Environmental Quality (cont.)

Points

IEQ Credit 3:
Construction IAQ
Management Plan

1-2

INTENT:

Prevent indoor air quality problems resulting from the construction/renovation process, to sustain long term installer and occupant health and comfort.

REQUIREMENT:

Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows:

- During construction meet or exceed the minimum requirements of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, AND protect stored on-site or installed absorptive materials from moisture damage, AND replace all filtration media immediately prior to occupancy (Filtration media shall have a Minimum Efficiency Reporting Value (MERV) of 13 as determined by ASHRAE 52.2-1999). (1 point)
- Conduct a minimum two week building flushout with new filtration media at 100% outside air after construction ends and prior to occupancy, OR, conduct a baseline indoor air quality testing procedure consistent with current EPA protocol for Environmental Requirements, Baseline IAQ and Materials, for the Research Triangle Park Campus, Section 01445. (1 point)

TECHNOLOGIES/STRATEGIES:

Specify containment control strategies including protecting the HVAC system, controlling pollutant sources, interrupting pathways for contamination, enforcing proper housekeeping and coordinating schedules to minimize disruption. Specify the construction sequencing to install absorptive materials after the prescribed dry or cure time of wet finishes to minimize adverse impacts on indoor air quality. Materials directly exposed to moisture through precipitation, plumbing leaks, or condensation from the HVAC system are susceptible to microbial contamination. Absorptive materials to protect and sequence installation include; insulation, carpeting, ceiling tiles, and gypsum products. Appoint an IEQ Manager with owner's authority to inspect IEQ problems and require mitigation as necessary.



Indoor Environmental Quality (cont.) **Points**

IEQ Credit 4: **Low-Emitting Materials** 1-4
INTENT:
 Reduce the quantity of indoor air contaminants that are odorous or potentially irritating to provide installer and occupant health and comfort.

- REQUIREMENT:**
 Meet or exceed VOC limits for adhesives, sealants, paints, composite wood products, and carpet systems as follows:
- Adhesives must meet or exceed the VOC limits of South Coast Air Quality Management District Rule #1168 by, AND all sealants used as a filler must meet or exceed Bay Area Air Resources Board Reg. 8, Rule 51 (1 point)
 - Paints and coatings must meet or exceed the VOC and chemical component limits of Green Seal requirements. (1 point)
 - Carpet systems must meet or exceed the Carpet and Rug Institute Green Label Indoor Air Quality Test Program. (1 point)
 - Composite wood or agrifiber products must contain no added urea-formaldehyde resins. (1 point)

TECHNOLOGIES/STRATEGIES:
 Evaluate and preferentially specify materials that are low emitting, non-irritating, nontoxic and chemically inert. Request and evaluate emissions test data from manufacturers for comparative products. Ensure that VOC limits are clearly stated in specifications, in General Conditions, or in each section where adhesives, sealants, coatings, carpets, and composite woods are addressed.

IEQ Credit 5: **Indoor Chemical and Pollutant Source Control** 1
INTENT:
 Avoid exposure of building occupants to potentially hazardous chemicals that adversely impact air quality.

- REQUIREMENT:**
 Design to minimize cross-contamination of regularly occupied areas by chemical pollutants:
- Employ permanent entryway systems (grills, grates, etc.) to capture dirt, particulates, etc. from entering the building at all high volume entryways, AND provide areas with structural deck to deck partitions with separate outside exhausting, no air recirculation and negative pressure where chemical use occurs (including housekeeping areas and copying/print rooms), AND provide drains plumbed for appropriate disposal of liquid waste in spaces where water and chemical concentrate mixing occurs.

TECHNOLOGIES/STRATEGIES:
 Design to physically isolate activities associated with chemical contaminants from other locations in the building, providing dedicated systems to contain and remove chemical pollutants from source emitters at source locations.

Applicable measures include eliminating or isolating high hazard areas; designing all housekeeping chemical storage and mixing areas (central storage facilities and janitors closets) to allow for secure product storage; designing copy/fax/printer/printing rooms with structural deck to deck partitions and dedicated exhaust ventilation systems; and including permanent architectural entryway system(s) to catch and hold particles to keep them from entering and contaminating the building interior.



Indoor Environmental Quality (cont.)	Points
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<p>IEQ Credit 6: Controllability of Systems</p>	<p>INTENT: Provide a high level of individual occupant control of thermal, ventilation, and lighting systems to support optimum health, productivity, and comfort conditions.</p> <p>REQUIREMENT:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide a minimum of one operable window and one lighting control zone per 200 s.f. for all occupied areas within 15 feet of the perimeter wall. (1 point) <input type="checkbox"/> Provide controls for each individual for airflow, temperature, and lighting for 50% of the non perimeter, regularly occupied areas. (1 point) <p>TECHNOLOGIES/STRATEGIES: Provide individual or integrated controls systems that control lighting, airflow, and temperature in individual rooms and/or work areas. Consider combinations of ambient and task lighting control and operable windows for perimeter and VAV systems for non perimeter with a 1:1: 2 terminal box to controller to occupant ratio.</p>	<p>1-2</p>
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<p>IEQ Credit 7: Thermal Comfort</p>	<p>INTENT: Provide for a thermally comfortable environment that supports the productive and healthy performance of the building occupants.</p> <p>REQUIREMENT:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Comply with ASHRAE Standard 55-1992, Addenda 1995 for thermal comfort standards including humidity control within established ranges per climate zone. (1 point) <input type="checkbox"/> Install a permanent temperature and humidity monitoring system configured to provide operators control over thermal comfort performance and effectiveness of humidification and/or dehumidification systems in the building. (1 point) <p>TECHNOLOGIES/STRATEGIES: Integrated envelope and HVAC system design strategies that achieve thermal comfort conditions based on mean radiant temperature, local air velocity, relative humidity, and air temperature. Install and maintain a temperature and humidity monitoring system for key areas of the building (i.e., at the perimeter, and spaces provided with humidity control). This function can be satisfied by the building automation system. Specify in system operation manuals that all sensors require quarterly calibration. Include criteria verification and system operation in commissioning plan and report.</p>	<p>1-2</p>
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Indoor Environmental Quality (cont.) **Points**

IEQ Credit 8:
Daylight and Views

INTENT:
Provide a connection between indoor spaces and the outdoor environment through the introduction of sunlight and views into the occupied areas of the building.

1-2

REQUIREMENT:

- Achieve a minimum Daylight Factor of 2% (excluding all direct sunlight penetration) in 75% of all space occupied for critical visual tasks, not including copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas. Exceptions include those spaces where tasks would be hindered by the use of daylight or where accomplishing the specific tasks within a space would be enhanced by the direct penetration of sunlight. (1 point)
- Direct line of sight to vision glazing from 90% of all regularly occupied spaces, not including copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas. (1 point)

TECHNOLOGIES/STRATEGIES:

Implement design strategies to provide access to daylight and views to the outdoors in a glare-free way using exterior sun shading, interior light shelves, and /or window treatments. Orient buildings to maximize daylighting options. Consider shallow or narrow building footprints. Employ courtyards, atriums, clerestory windows, skylights, and light shelves to achieve daylight penetration (from other than direct effect or direct rays from the sun) deep into regularly occupied areas of the building.



Innovation Credits and Design/Build Process **Points**

LEED Innovation Credits	<p>INTENT: To provide design teams and projects the opportunity to be awarded points for exceptional performance above requirements set by the LEED Green Buildings System and/or innovative performance in Green Building categories not specifically addressed by the LEED Green Building Rating System.</p> <p>REQUIREMENT: In writing, using the LEED Credit Equivalence process, identify the INTENT of the proposed innovation credit, the proposed REQUIREMENT for compliance, the proposed DOCUMENTATION to demonstrate compliance, and the TECHNOLOGIES/STRATEGIES used to meet the required elements.</p> <p>SUGGESTED USES:</p> <ul style="list-style-type: none"> •Responses to regional sustainability issues. •Unique project types and locations. •Emerging sustainable design topics and innovations. 	1-4
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LEED Accredited Professional	<p>INTENT: To support and encourage the design integration required by a LEED Green Building project and to streamline the application and certification process.</p> <p>REQUIREMENT:</p> <p><input type="checkbox"/> At least one principal participant of the project team that has successfully completed the LEED Accredited Professional exam.</p> <p>STRATEGY: Attend a LEED Accredited Professional training workshop in preparation to take and pass the LEED Accredited Professional exam.</p>	1
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LEED™ Scorecard



Purpose of Form: Use this form to score your project against the LEED™ Green Building Rating System. Fill it out at the time of registration. It will help you, and us, to keep track of the prerequisites and applicable credits on your project. It will also be used to track compliance when that documentation is submitted to the US Green Building Council.

14 Sustainable Sites

- | | |
|---|---|
| <input type="checkbox"/> Prerequisite: Erosion and Sedimentation Control | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 5: Reduced Site Disturbance |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 1: Site Selection | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 6: Stormwater Management |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 2: Urban Redevelopment | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 7: Landscape and Exterior Design to Reduce Heat Islands |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 3: Brownfield Redevelopment | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 8: Light Pollution Reduction |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 4: Alternative Transportation | |

5 Water Efficiency

- Credit 1: Water Efficient Landscaping
- Credit 2: Innovative Wastewater Technologies
- Credit 3: Water Use Reduction

17 Energy and Atmosphere

- | | |
|---|---|
| <input type="checkbox"/> Prerequisite 1: Fundamental Building Systems Commissioning | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 1: Optimize Energy Performance |
| <input type="checkbox"/> Prerequisite 2: Minimum Energy Performance | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 2: Renewable Energy |
| <input type="checkbox"/> Prerequisite 3: CFC Reduction in HVAC&R Equipment | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 3: Additional Commissioning |
| | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 4: Elimination of HCFC's and Halons |
| | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 5: Measurement and Verification |
| | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 6: Green Power |

13 Materials and Resources

- | | |
|--|--|
| <input type="checkbox"/> Prerequisite: Storage & Collection of Recyclables | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 4: Recycled Content |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 1: Building Reuse | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 5: Local/Regional Materials |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 2: Construction Waste Management | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 6: Rapidly Renewable Materials |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 3: Resource Reuse | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 7: Certified Wood |

15 Indoor Environmental Quality

- | | |
|---|---|
| <input type="checkbox"/> Prerequisite 1: Minimum IAQ Performance | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 4: Low-Emitting Materials |
| <input type="checkbox"/> Prerequisite 2: Environmental Tobacco Smoke (ETS) Control | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 5: Indoor Chemical and Pollutant Source Control |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 1: Carbon Dioxide (CO2) Monitoring | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 6: Controllability of Systems |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 2: Increase Ventilation Effectiveness | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 7: Thermal Comfort |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 3: Construction IAQ Management Plan | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Credit 8: Daylight and Views |

64 Total Core LEED Rating System Points

5 Innovation and Design Process Points

- LEED Innovation Credits
- LEED Accredited Professional

Total Points Scored

LEED Green Building Certification Levels

- LEED Certified = 26 - 32 Points
- LEED Certified Silver Level = 33 - 38 Points
- LEED Certified Gold Level = 39 - 51 Points
- LEED Certified Platinum Level = 52+ Points

RESPONSE 15.40

The comment is noted for the record and will be forwarded to the City decision makers for their review and consideration. The information provided in this comment has been addressed in Response to Comment 15.3.

*** general notes

COMMENT 1541

PROJECT	Site Address	Project Status	Owner/Developer	Owner Name	Parcel Address 1	City	Zip Code	F1/GAT	F1 Conversion Date	F2 Conversion Date	F4 Conversion Date	Fused Date	Family	Senior	Disabled	Total Units	Date of Construction	1 Year of Amortization	Condition	Pinpoint Status	Construction Type
Pico Union Manor/Pu Terrace	504 Full Address	Non-Prof	Pico Union Manor/Pu Terrace		1545-42 11th Place	Los Angeles	90002	236(J)	01/11/1994				FAMILY			11	02/22/1991	20	GOOD		Rehab
Professional Hsg & Dev	1800 Magnolia Ave		65 Professional Housing		1005 Rambler Bldg	Merced	95340	236(J)	10/25/1994				FAMILY			11	02/22/1991	20	GOOD		Rehab
Midtown Apartments	1440 W 12th St		1755 E. Main Luther King Blvd		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	01/11/1994				FAMILY			18	01/29/1994	20	GOOD		
Professional Hsg & Dev	1400 S. Kenmore Ave		64 Professional Housing		1005 Rambler Bldg	Merced	95340	236(J)	10/25/1994				FAMILY			18	01/29/1994	20	GOOD		
Process Apts	4335 Woodlawn Ave		American Development Corp		1005 Rambler Bldg	Merced	95340	236(J)	10/25/1994				FAMILY			10	06/04/1978	20	GOOD		
Revels LaBou	3927 76 1/2 S. Flower Drive	Homeownership	Revels LaBou					CRB	10/04/1995				FAMILY			4	10/04/1995	20	GOOD		
Midtown Apartments	1548 W 13th St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	01/11/1994				FAMILY			16	05/10/1971	20	GOOD		Rehab
Midtown Apartments	3811 Denner Ave		57 Midtown Apartments		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	01/11/1994				FAMILY			16	01/21/1970	20	GOOD		
Midtown Apartments	2716 S. Normandie		57 Midtown Apartments		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	05/11/1994				FAMILY			14	06/17/1969	20	GOOD		
Midtown Apartments	1225 W 7th St		57 Midtown Apartments		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	05/11/1994				FAMILY			20	04/11/1971	20	GOOD		
Midtown Apartments	221 W 13th St		ROBERT HADICAK		639 S. Beason St. Suite 332	San Pedro	90731	236(J)	05/11/1994				FAMILY			2	05/05/1979	20	GOOD		
Midtown Apartments	3030 San Marino St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	01/11/1994				FAMILY			2	05/05/1979	20	GOOD		
Level Tenants	2950 Van Burn Pl		American Develop Corp		1005N Rambler Bldg	Hollywood	90028	236(N)	03/28/1994				FAMILY			12	12/08/1991	20	GOOD		
Flares, Abbot & Romana G	1409 S. Covland Ave	Homeownership	Flares, Abbot & Romana G					CRB	01/03/2006				FAMILY			25	10/07/1972	20	GOOD		
Jewel Tenants	4118-1462 W 27th St		American Develop Corp		1800 N. Highland Ave. #318	Hollywood	90028	236(J)	03/28/1994				FAMILY			12	10/22/1970	20	GOOD		Rehab
Michael & Maria Sandoz	2500 Hobart Blvd	For Profit	Michael & Maria Sandoz		2500 Hobart Blvd	Los Angeles	90018	CRB	01/01/2006				FAMILY			20	07/20/1970	20	MODERATE		Rehab
Midtown Apartments	1350-56 Bonnie Brise Street	For Profit	Midtown Apartments Ltd		1350-56 Bonnie Brise Street	Los Angeles	90018	CRB	11/13/1994				FAMILY			52	08/12/1972	20	GOOD		
Professional Hsg & Dev	1745 W 20th St		65 Professional Housing		1005 Rambler Bldg	Merced	95340	236(J)	10/25/1994				FAMILY			21	05/07/1969	20	GOOD		Rehab
Royal Arts Phase 1	1337 S. Catalina St		65 Professional Housing		1005 Rambler Bldg	Merced	95340	236(J)	10/25/1994				FAMILY			16	01/28/1972	20	GOOD		Rehab
Residence Service Foundation	2628-38 S. Brighton Ave	Non-Prof	Residence Service Foundation		3250 Vincent Blvd	Los Angeles	90010	236(J)	04/10/2006				DISABLED			13	03/05/1969	20	GOOD		Rehab
Revel Investors V.A.	3800-71 S. Hayward Blvd		Revel Investor 5		6330 San Vicente Blvd. Ste. 270	Los Angeles	90048	HUD HSG	12/31/1998	11/02/1996			FAMILY			66	03/12/1971	20	GOOD		Rehab
Los Angeles Gardens	1123-45 W 30th St		31 Los Angeles Gardens		1006 Rambler Bldg	Merced	95340	236(J)	11/16/1994				FAMILY			5	04/30/1970	20	GOOD		
Yamato, Lloyd T	1545-59 W 12th Street	For Profit	Yamato, Lloyd T		1545-59 W 12th Street	Merced	95340	236(J)	10/23/2007				FAMILY			8	04/30/1970	20	GOOD		
Los Angeles Gardens	2225 W 18th St		31 Los Angeles Gardens		1006 Rambler Bldg	Los Angeles	90018	236(J)	11/16/1994				FAMILY			20	03/15/1975	20	GOOD		
L.A. PRO II APARTMENTS	3990 Denner Ave		44 LA Pro 2 Apts A LD		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1993				FAMILY			20	06/13/1975	20	GOOD		
L.A. PRO II APARTMENTS	1100 S. Berendo		44 LA Pro 2 Apts A LD		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1993				FAMILY			20	01/04/1975	20	GOOD		
L.A. PRO II APARTMENTS	3977 S. Berendo Ave		44 LA Pro 2 Apts A LD		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1993				FAMILY			24	05/18/1974	20	MODERATE		
L.A. PRO I Apts	822 S. Lake Ave		44 LA Pro 1 Apts A LD		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1993				FAMILY			24	05/18/1974	20	MODERATE		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	2026 La Salle Ave		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	236(J)	07/31/1994				FAMILY			24	10/04/1972	20	GOOD		
Midtown Apartments	1366 S. Bonnie Brise St		Alpha Prop Mgmt		1755 E. Main Luther King Blvd	Los Angeles	90008	23													

IV. Comments and Responses to the Draft EIR

Project Name	Address	Project Type	City	Project ID	Project Status	Project Date	Project Value	Project Type	Project Status	Project Date	Project Value
Hope Manor	1332 S. Hope Street	Non-Profit	Los Angeles	91316	CR	01/20/2017	107,2017			12/12/1990	31,000
Hummel David & Hemingway David	1909 W. Adams	For Profit	Los Angeles		CR	04/21/1986	72				5,000
Ins Apartments	1220 S. Olive St.	For Profit	Los Angeles		CR	01/01/2020	FAMILY	25		11/06/1989	35,000
Ins. Herbert	1608 W. 11th Street	CR	Los Angeles		CR	01/20/2015	FAMILY	43		11/11/1987	33,000
Jacobs & Nemaz	1318 21 S. St. Andrews Place	Private	Los Angeles		CR	02/01/1992		14		09/27/1988	5,000
Jacobs, Lawrence & Frayne	1346-48 S. Gramercy Place	For Profit	Los Angeles		CR	02/09/1992		14		09/27/1988	5,000
Jefferson Townhomes	1600 1414 W. Jefferson	For Profit	Los Angeles		CR	01/01/2015		30		06/11/1998	40,000
Jewel Manor	2601 S. Orchard Ave.	For Profit	Los Angeles		CR	06/01/2031		21		09/27/1988	31,000
Johnson Apt. Building	3811 Normandie Place	For Profit	Los Angeles		CR	01/01/2005	FAMILY	9		06/27/1992	20,000
Johnson, Lynn & Henry	2841 La Salle	For Profit	Los Angeles		CR	01/01/2010		8		10/06/1998	30,000
Kenneth & Josephine Hogue	1415 Alvarado Terrace	For Profit	Los Angeles		CR	01/01/2017		48		03/30/1989	29,000
Ridge Minor Apartments	2413 South Center	Non-Profit	Los Angeles		CR	01/01/2019	SENIOR	21		07/12/1991	31,000
Kim Chul	1050 S. Park View	For Profit	Los Angeles		CR	01/01/1988		18		07/15/1990	7,000
Kim, David	1033 S. Armore	Private	Los Angeles		CR	01/01/1993		10		03/30/1990	28,000
Kristenson, Donald	2332 S. Portland Street	For Profit	Los Angeles		CR	01/01/1985		15		06/11/1985	30,000
La Salle #2	1933 La Salle Avenue	For Profit	Los Angeles		CR	01/01/2015		8		07/22/1992	10,000
La Villa Hermosa	1830 1628 W. Jefferson Blvd	Private	Los Angeles		CR	01/01/1991	FAMILY	80		07/22/1992	10,000
Larson Apts	1237 S. Alvarado	Private	Los Angeles		CR	01/01/1990		43		03/30/1992	30,000
Lawrence Jacobs	1532 S. Wilton Place	For Profit	Los Angeles		CR	01/01/2017		14		01/26/1990	30,000
Leon Walker	1029 W. 39th Street	For Profit	Los Angeles		CR	01/01/1993		6		10/28/1998	5,000
Louise Brown	236749 Portland Street	For Profit	Los Angeles		CR	01/01/1991		14		02/10/1989	5,000
Manring, Socorro M	1477 1491 E. 25th St.	For Profit	Los Angeles		CR	01/01/1991		10		01/01/1991	5,000
McHugh Frank (McHugh Apartment)	3732 Van Dyke	For Profit	Los Angeles		CR	01/01/2001		18		11/08/1998	14,000
Michael P. Zum	2903 W. 11th Street	For Profit	Los Angeles		CR	11/01/1994		20		07/08/1991	5,000
Merr, Mitchell & Nagan	1475 W. Adams Blvd	For Profit	Los Angeles		CR	01/01/1991		24		07/07/1989	5,000
Mr. Jacobs, Mr. Nemaz	1741 W. Westminster Ave	For Profit	Los Angeles		CR	01/01/2017	FAMILY	22		09/30/1992	30,000
Newman, William J. & Kathleen	1216 S. Bonnie Bree Street	For Profit	Los Angeles		CR	06/22/2011		12		03/30/1992	30,000
O'Donovan, Christine	1651 S. Burbank Avenue	For Profit	Los Angeles		CR	06/01/1990		8		06/27/1988	5,000
O'Donovan, Christine	1711 S. Burlington	Private	Los Angeles		CR	01/01/1993		10		01/17/1990	5,000
Odette, David And Edith	2626 Seaverd Street	For Profit	Los Angeles		CR	04/01/2000		16		06/11/1985	18,000
Pop, Louis & Suzanne Sides	634 S. Spring Street, Bldg 300	For Profit	Los Angeles		CR	01/01/2019	FAMILY	48		09/21/1988	5,000
Portsmouth Hotel	1308 S. Hill Street	For Profit	Los Angeles		CR	10/24/1994		53		03/21/1986	31,000
Prudential Hotel	1012 E. 7th St.	Non-Profit	Los Angeles		CR	01/01/2020		30		02/21/1986	5,000
Rimba, Ruth A	1446 W. 24th Street	For Profit	Los Angeles		CR	01/01/1984		46		03/21/1986	5,000
Robert, Daniel	7895 Trilby Way	For Profit	Los Angeles		CR	10/02/1993		26		02/01/1983	5,000
Sabah, Hesham And Mahjoub	1440 S. Burlington	CR	Los Angeles		CR	07/06/2008		8		01/06/1993	39,000
Schuman, Mark B	1501 W. Adams Blvd	For Profit	Los Angeles		CR	01/01/1991	FAMILY	24		09/30/1989	5,000
Sheidan East Villa	2210 S. La Salle Ave	For Profit	Los Angeles		CR	01/01/1991		27		09/30/1989	5,000
Sheidan South Villa	231 S. James Street	For Profit	Los Angeles		CR	01/01/1991		11		11/13/1991	4,000
Sheidan West Villa	1531 W. Adams Boulevard	Private	Los Angeles		CR	01/01/2000		10		07/20/1997	5,000
Sheidan West Villa	231 S. Hoover Street	For Profit	Los Angeles		CR	01/01/1991		20		05/17/1997	15,000
Troy Apartments	3023 Royal Street	Non-Profit	Los Angeles		CR	01/01/2002		151		06/18/1997	24,000
Tsu, Richard & Donna	1944 S. Bonaventure	For Profit	Los Angeles		CR	01/01/2005		5		01/01/1987	10,000
Vila Nueva	1722 Toberman	For Profit	Los Angeles		CR	01/01/1990		30		07/13/1998	5,000
Wagon, Reed & Sherry	1345 S. Abbot	For Profit	Los Angeles		CR	01/01/2018	FAMILY	10		09/16/1990	20,000
W American Const. Corp S Park	1341 W. 37th Place	For Profit	Los Angeles		CR	01/01/2019		13		04/02/1989	30,000
Wild Ame Ebdy	1177 W. Adams Blvd	Non-Profit	Los Angeles		CR	01/01/2019		120		09/04/1984	5,000
Wardrop, John & David	1626-30 W. 12th Street	For Profit	Los Angeles		CR	01/01/2015	FAMILY	6		12/07/1978	5,000
Whitaker, George And Carol	2824-28 S. Hobart Blvd	For Profit	Los Angeles		CR	01/01/2008		9		12/34/1984	30,000
Winston Normandie Apartments	2804 S. Danton Avenue	For Profit	Los Angeles		CR	01/01/2011 8/22/2014	FAMILY	5		01/01/1984	27,000
1045 S. Armore Ave		Private	Los Angeles		CR	04/24/1988		5			5,000
1045 S. Armore Ave		Private	Los Angeles		CR	04/24/1988		15		02/21/1990	969,000
1131 S. Egan Ave		Private	Los Angeles		CR	04/24/1988		4		05/27/1984	5,000
1429 W. 27th St.		Private	Los Angeles		CR	04/24/1988		4			5,000
1532 S. Andrews Pl.		Private	Los Angeles		CR	04/24/1988		2			5,000
1664 W. 36th St.		Private	Los Angeles		CR	04/24/1988		4			5,000
1672 W. 36th St.		Private	Los Angeles		CR	04/24/1988		2			5,000
61 W. 12th St. (San Pedro)		Private	Los Angeles		CR	04/24/1988		2			5,000
Casa Esperanza	206 E. 23rd Street	Non-Profit	Los Angeles		CR	06/30/2021 5/14/2024	FAMILY	10			999,000
Pool Living Villa	1208 22nd St. Under Ave	Private	Los Angeles		CR	11/11/1999	SENIOR, DISABLED	115			20,000
Running Apartments	1104 Browning Blvd	Non-Profit	Los Angeles		CR	01/01/2000		4		01/01/1993	20,000
Adams George's Apts	1735 1807 West Adams	Private	Los Angeles		CR	03/26/2006		5		10/01/1996	40, EXCELLENT
San Marino Court	2140 San Marino St	Private	Los Angeles		CR	06/05/1997	BOND-FINANCED	34			10,000
1144 S. Egan Ave		Private	Los Angeles		CR	06/05/1997		12			25,000
1242 E. 11th St		Private	Los Angeles		CR	06/05/1997		4			15,000
2816 San Marino St		Private	Los Angeles		CR	06/05/1997		1			999,000
1052 S. Mariposa Ave		Private	Los Angeles		CR	06/05/1997		11			599,000
461 S. Arapahoe St		Private	Los Angeles		CR	06/05/1997		4			10,000
541-647 E. 27th St.		Non-Profit	Los Angeles		CR	06/05/1997		11			10,000
Academy Apts No. 1	2628 Brighton Ave	Non-Profit	Los Angeles		CR	03/11/2004		12			30,000
Academy Apts No. 2	1207 S. Vermont Ave	Non-Profit	Los Angeles		CR	06/23/1998		9			5,000
Payton Tower	1035 W. 39th St	Non-Profit	Los Angeles		CR	12/28/2012		12			30,000
0 310 South Mariposa LLC	Brook Bonard	Yorba, CA	91356	BOND-FINANCED	12/01/2020			26			Rehab