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Wellesley Square LEED BD+C: Lowrise Draft Narrative

Introduction

Wellesley Square will be designed and built using construction industry best-practices for sustainability described within, and measure by, the LEED BD+C: Multifamily Lowrise rating system.

(<https://www.usgbc.org/resources/leed-v4-homes-and-multifamily-midrise-current-version>)

An Integrated Project Team and process have been established to leverage all professional expertise and seek every opportunity to employ Green Building techniques and practices. The projects' Preliminary Rating shows performance in excess of the target of LEED Silver Certification with several additional credit opportunities in discussion ensuring no ground is lost toward that goal. LEED BD+C: Multifamily Midrise Certification for this project is being discussed and pursuing full certification is viable.

BD+C Multifamily Midrise Checklist Items

IP - Integrative Process

Preliminary Rating

The project team has met to conduct the Preliminary Rating with the Green Rater and Integrative Project Team in attendance. The Preliminary Checklist was completed with the target of LEED Silver level achieved.

Option 1: Integrative Project Team, 1 point

The team includes all of the requisite capabilities, has expertise for low-rise systems and experience modeling REM-Rate energy simulation for LEED BD+C: Multifamily Lowrise.

Option 2: Design Charrette, 1 point

The team plans to meet for a LEED-specific meeting to optimize efficiency and sustainability goals and qualify for the Design Charrette Credit.

Option 1: Trades Training, 1 point

PSA will conduct an on-site, LEED-focused training for the various Trades to enrich their understanding of Green Building principles and LEED, specifically. This meeting will take place in the field, on site, during the earliest stages of construction and as appropriate thereafter.

LT – Location and Transportation

LT Prerequisite Floodplain Avoidance

All LEED criteria are met, project not in a flood hazard area.

LT Credit Site Selection, 8 points

Option 1. Sensitive Land Protection, Previously Developed

The site is 100% previously developed.

Option 2. Infill Development

The site is 100% bordered by previously developed land.

Option 3. Open Space

The project will be built across the street from public parkland that is at least 3/4 acres.

Option 5. Bicycle Network and Storage

The project be near rapid transit, schools, and employment options, and will provide 35 bike storage spaces for the building qualifying for this credit.

LT Credit Compact Development, 3 points

The project will include over 33 units per acre.

LT Credit Community Resources, 3 points

The location is dense with amenities and will receive full credit as well as exemplary performance in this category.

LT Credit Access to Transit, 2 points

Public Transportation is readily available near the site and the project will receive full credit.

SS - Sustainable Sites

SS Prerequisite Construction Activity Pollution Protection

All measures will be met and the project team has created a conforming Erosion and Sedimentation Control Plans.

SS Prerequisite No Invasive Plants

No invasive plant species will be introduced, invasive species are being mitigated, as well.

SS Credit Heat Island Reduction, 2 points

Option 2. Nonabsorptive materials

ENERGY STAR Qualified roofing materials will be used.

SS Credit Nontoxic Pest Control, 2 points

Several pest control strategies will be employed including: non-cellulosic material for structural elements, building gaps will be sealed with insect resistant screens, and a robust Integrated Pest Management Policy will be developed

WE - Water Efficiency

WE Prerequisite Water Metering

A Whole-Building water meter will be installed.

WE Credit Indoor Water Use, 5 points

All water fixtures (showers, lavatory faucets, and toilets) will be WaterSense certified, and high-limit thresholds will be met. Clothes Washers will be ENERGY STAR labeled.

EA - Energy and Atmosphere

EA Prerequisite Minimum Energy Performance

ENERGY STAR Thermal Bypass Inspection Checklist will be followed to ensure insulation and air-barrier integrity of the buildings during the construction process. ENERGY STAR v3 checklists will be followed, qualified appliances will be installed, and duct runs will be fully ducted.

EA Prerequisite Energy Metering

Electric sub-meters will be included for each unit.

EA Prerequisite Education of Tenant and Building Manager

Ownership will provide an Operations & Maintenance Binder (or electronic version) to each occupant and Building Management and a one-hour educational walk-through will be provided to building occupants.

EA Credit Annual Energy Use, 13.5 points

The project is projected to achieve an 45%, or greater, energy savings against the IECC 2015 MA baseline.

EA Credit Efficient Hot Water Distribution System, 2 points

Option 3. Pipe Insulation

MR - Material and Resources

MR Prerequisite Certified Tropical Woods

Suppliers will be notified of preference for FSC products and a request for the country of manufacture for each wood product. Any tropical woods used will be FSC Certified.

MR Prerequisite Durability Management

Each measure of the ENERGY STAR Water Management Builder Checklist will be installed by the Builder.

MR Credit Durability Management Verification, 1 point

Each Builder Durability measure will be verified on-site by PSA.

MR Credit Environmentally Preferable Products (EPP)

Option 1. Local Production, 1 point

Due to re-use of several Building components, the project will receive credit for 'recycled' materials.

Option 2. EPP, 1.5 points

Building materials and finishes will be selected to comply with the recycled and local source criteria.

MR Credit Construction Waste management, 1.5 points

The project team will target 30% reduction of total construction waste.

EQ - Indoor Environmental Quality

EQ Prerequisite Ventilation

- Unit mechanical ventilation systems will meet the provisions of ASHRAE 62.2-2010, sections 5 and 7,
- Bath exhaust systems exhaust directly to outdoors and be ENERGY STAR labeled

EQ Prerequisite Combustion Venting

No unvented combustion appliances are installed and CO monitors are installed per LEED and MA code.

EQ Prerequisite Garage Pollutant Protection

Doors to living spaces will be gasketed, CO detectors will be installed, all penetrations from garage will be sealed.

EQ Prerequisite Air Filtering

MERV 8 filters will be used for space conditioning equipment, MERV 6 for outdoor supply air on ventilation systems.

EQ Prerequisite Environmental Tobacco Smoke

This will be a non-smoking building, signage is included.

EQ Prerequisite Compartmentalization

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Careful air-sealing measures will be implemented and units tested to comply with low LEED infiltration standards.

EQ Credit Enhanced Ventilation, 3 points

Balanced whole-house ventilation will be installed which will comply with ASHRAE 62.2 (no more than 10% over)

EQ Credit Low-Emitting Products, 1 point

The project team will select finishes with 90% of components which will meet the CA Section 01350 criteria for low emissions.

Mark Price, LEED Green Rater

Principal Consultant

Price Sustainability Associates