

LEED Narrative:

Integrative Process

We propose the design team analyze building energy and water systems and design for greater synergy and sustainability. This may include window design choices and low flow plumbing fixtures (1 point).

LT1: Sensitive Land Protection

Development is located on a site meeting criteria listed by LEED. The site does not contain prime farmland, floodplains, endangered or at-risk habitats, water bodies, or wetlands (1 point).

SS1: Construction Activity Pollution Prevention

The contractor will create and implement an erosion and sediment control plan conforming with EPA and local requirements (prereq).

SS2: Site Assessment

The Architect will conduct a site assessment to help inform sustainable design choices relating to topography, climate, human use, and other factors (1 point).

SS4: Open Space

The golf courses will serve as “recreation-oriented paving or turf area with physical site elements that encourage physical activity” to meet this credit. (1 point)

SS6: Heat Island Reduction

Use of a reflective flat roofing membrane, shade structures over playground and site area, use of existing trees to provide shade, installation of tree islands in parking area, and vegetated beds to meet 2 point requirement (2 points).

WE1: Outdoor Water Use Reduction

We will reduce the site water use by at least 30% of calculated baseline through high-efficiency irrigation and plants selection (prereq).

WE2: Indoor Water Use Reduction

We will use low-flow WaterSense labeled fixtures to reduce water use (prereq).

WE3: Building-Level Water Metering

We shall install whole building and site water metering with local utility company, and the Owner shall share the metering information with USGBC for a period of 5 years following LEED certification (prereq).

WE4: Outdoor Water Use Reduction

We will reduce the irrigation water use by at least 50% from baseline using the EPA WaterSense tool (1 point). This will be achieved through plant species selections like sabal palms, Pink Muhly grass and False Agave and through high efficiency irrigation.

WE5: Indoor Water Use Reduction

Utilizing low flow fixtures, the project will save 30% of water from baseline (2 points).

WE7: Water Metering

Contractor shall install or coordinate with local utility to install meters on site irrigation and indoor plumbing fixtures (1 point).

EA1: Fundamental Commissioning and Verification

The owner shall hire a commissioning agent (CxA) to review, test, and verify project systems and design drawings (prereq).

EA2: Minimum Energy Performance

Building performance shall be modeled by design team, and the building shall be at least 5% more efficient than the baseline model (prereq).

EA3: Building-Level Energy Metering

Contractor shall install or coordinate installation of building metering on electrical systems, and owner shall share information with USGBC for period of 5 years (prereq).

EA4: Fundamental Refrigerant Management

HVAC systems shall be designed and installed with refrigerants other than traditional CFCs (prereq).

EA5: Enhanced Commissioning

The owner shall hire a CxA to complete enhanced commissioning and monitoring-based commissioning including seasonal testing and reviewing building operations following substantial completion. The contractor shall install necessary monitoring systems to ensure commissioning (4 points).

EA6: Optimize Energy Performance

The design team shall conduct a project energy simulation, and achieve a benchmark of at least 20% improvement for (8 points). Focus will be on HVAC load reduction to improve the building performance. Strategies like shade systems and high efficiency glazing will be passive measures. High efficiency HVAC systems will be active measures.

EA7: Advanced Energy Metering

Contractor shall install electrical metering systems and other whole building energy systems to analyze draw and demand to better support energy management and reduction (1 point).

EA10: Enhanced Refrigerant Management

Mechanical engineer shall design HVAC system using only low impact refrigerants (1 point).

MR1: Storage and Collection of Recyclables

Recycling collection bins will be installed on site and in building, as well as a separate recycling dumpster for waste hauler use. (prereq).

MR2: Construction and Demolition Waste Management Planning

Contractor shall develop a plan and execute plan to divert construction waste from at least 5 sources and file a report (prereq).

MR4: Building Product Disclosure and Optimization - Environmental Product Declarations

Design team shall design for and contractor shall document and install at least 20 building materials/products with appropriate environmental product declaration (1 point).

MR5: Building Product Disclosure and Optimization - Sourcing of Raw Materials

Design team shall design for and contractor shall document and install at least 20 permanent building materials/products from suppliers with sustainable practices and the appropriate material sourcing information (1point).

MR6: Building Product Disclosure and Optimization - Material Ingredients

Design team shall design for and contractor shall install and document installation of at least 20 products with documented chemical inventory less than 1000 ppm. Documentation could include Health Product Declarations, Cradle to Cradle documents, and others. (1 point)

MR7: Construction and Demolition Waste Management

Contractor shall divert at least 75% of construction waste from at least 4 sources to recycling or salvage (2 points).

EQ1: Minimum Indoor Air Quality Performance

Design and construct building to meet ASHRAE 62.1 (prereq).

EQ2: Environmental Tobacco Smoke Control

Smoking to be prohibited in building and on-site golf course. Signage will be posted by contractor (prereq).

EQ3: Enhanced Indoor Air Quality Strategies

Design team shall design walk off carpet/roll off mats at entry ways, an adequate exhaust system in all kitchen areas, and filtration of outdoor air system that meets or exceeds ASHRAE 52.2 (1 point).

EQ4: Low-Emitting Materials

Design team shall spec low VOC materials in at least five categories, specifically interior paint, interior sealants, flooring, and insulation (2 points).

EQ5: Construction Indoor Air Quality Management Plan

Contractor shall develop and implement indoor air quality plan that meets SMACNA requirements including protecting materials from moisture, protecting mechanical equipment from debris, and prohibiting smoking (1 point).

EQ6: Indoor Air Quality Assessment

CxA shall conduct air testing just prior to occupancy to ensure potential contaminants are within acceptable ranges (2 points).

EQ7: Thermal Comfort

Design team shall design HVAC system and building envelope to meet ASHRAE 55 standards to ensure thermal comfort for end users (1 point).

EQ8: Interior Lighting

Achieve the lighting quality point by using light fixtures with a luminance of less than 2,500 cd/m² in regularly occupied spaces, light sources with a CRI of 80 or higher, materials with appropriate reflectance values, and the other requirements listed by LEED (1 point).

EQ9: Daylight

Install exterior shade devices and manual interior blinds, and demonstrate via computer simulation that at least 55% of occupied floor area achieves the required Spatial Daylight Autonomy (2 points).

EQ10: Quality Views

Use storefront glass to create view of outdoor environments in 75% of occupied spaces (1 point).

IN1: Innovation – Green Building Education

Contractor and Architect shall develop a case study “to inform the design of other buildings based on the successes of this project,” and install signage on-site that educates the users on the benefits of sustainable building features like water saving plant species (1 point).

IN1.1: Innovation – Community Outreach and Involvement

Owner, Architect, and Contractor to engage community by hosting a predesign meeting with adjacent property owners and local citizens, hosting at least one community meeting during the preliminary design phase to take public comment, collecting public comments, and either adjusting the design based on public comments or reporting why changes were not made. A means of communication between community and project team shall be established via website (1 point).

IN2: LEED AP

Contractor and architect shall both have at least 1 LEED AP on project team, specializing in this project type (1 point).