# **Location and Transportation**

To achieve Sensitive Land Protection, a thorough site evaluation was conducted to identify any sensitive land areas such as wetlands, floodplains, or habitats for endangered species. If sensitive land areas are present on or near the site, plans for mitigation will be issued. The location of the development footprint on land will ensure credit is received. Documents and environmental reviews will be submitted to show compliance with LEED requirements. The Surrounding Density and Diverse Uses credit will be achieved due to the mixed-use development area the project is located and zoned for. These high-density areas promote compact development and contribute to walkability and access to amenities. To earn Access to Quality Transit credit, we will prioritize access to public transportation options for building occupants. The proposed project site is near three bus stops. Combining these three busses, making the bus stops totals the minimum daily transit service per weekday and weekend.

Achieving the Reduced Parking Footprint credit involves minimizing the project's parking footprint and promoting alternative transportation options. Parking will have over a 40% reduction as per the requirements. These calculations include existing and new off-street parking.

Documentation of transit accessibility features and proximity to public transit services will be submitted to demonstrate compliance with LEED requirements for this credit. The Green Vehicles credit emphasizes the use of low-emission and fuel-efficient vehicles. More than 5% of parking spaces will have preferred parking for green vehicles, identified and enforced for sole use by green vehicles. An electric vehicle charging station will be on-site to meet the requirements for this credit. The EVSE will have a level 2 charging capacity and complies.

## **Sustainable Sites**

The Construction Activity Pollution Prevention credit will be implemented through an erosion and sedimentation control plan and sedimentation requirements of the 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP). To receive the Site Assessment credit, a thorough property evaluation will reveal soil conditions, water resources, vegetation, wildlife habitat, and cultural resources. The goal is to minimize environmental impacts and maximize site sustainability. To achieve the Rainwater Management credit, strategies for managing stormwater runoff are necessary to mitigate flooding and protect water quality. The Heat Island Reduction credit will involve high-reflectance roof and roof materials with an SRI greater than 82. Lastly, to earn the Light Pollution Reduction credit, the building luminaires will be monitored and planned to not exceed maximum uplight ratings.



## **Water Efficiency**

There is no irrigation required for the outside landscape due to the limited to none use of plant life, gaining the Outdoor Water Use Reduction Required. All documentation will be submitted. The Indoor Water Use Reduction focuses on minimizing the water consumption. Water-efficient plumbing fixtures and appliances will be incorporated in the design. Several water-efficient strategies will conserve water resources and lower utility costs for building occupants. The building-level water metering involves installing separate water meters to monitor and track water usage at the building level. USGBC will receive resulting whole-project water usage data for a five-year period. The Cooling Tower Water Use credit will incorporate water-efficient colling tower designs. A one-time potable water analysis will be conducted and measured to verify the five control parameters per requirement. The Water Metering credit will be received upon verification of permanent water meters of indoor plumbing fixtures and fittings and reclaimed water.

## **Energy and Atmosphere**

To achieve the Fundamental Commissioning and Verification credit, we will work with a commissioning agent to verify that the building systems installed are performing to the design intent. A current facilities requirements and operations and maintenance planned will be created to ensure building efficiency. The Minimum Energy Performance credit will be awarded after a whole-building energy simulation is conducted. The Building-Level Energy Metering credit will be earned after the installation and verification of building-level energy meters. The meters will be used to identify areas of high energy usage and optimize energy management strategies. The Fundamental Refrigerant Management credit focuses on minimizing emissions of ozone depleting refrigerants. We will install HVAC systems with low-GWP refrigerants and implement leak detection. The Enhanced Commissioning credit will be awarded upon approval of the commissioning authority. Enhanced commissioning will test the optimal performance and energy efficiency of the building. The Optimize Energy Performance credit will be earned after the building undergo a whole-building energy simulation. The major renovation will have a huge percentage increase on the improvement of energy performance. The Advanced Energy Metering credit will be appointed after the installation of metering energy consumption systems. The Demand Response credit will be earned through the existing Demand Response Program Available A comprehensive plan for meeting the contractual commitment will be required along with other requirements. Renewable Energy Production credit will be awarded through renewable energy systems. Renewable energy certificates will be achieved and submitted. Enhanced Refrigerant Management credit is received because of low-impact refrigerants with ozone depletion potential of zero and a global warming potential of less than 50. Green Power and Carbon Offsets credit is received through proper certification.



#### **Materials and Resources**

Storage and Collection of Recyclables credit will be received after design and implementation of a recycling program for the building. Areas will be dedicated for waste haulers and building occupants for the collection and storage processes. A waste stream study will be conducted as well to reduce waste that is generated by building occupants. Construction and Demolition Waste Management Planning credit will be received after the development and implementation of a construction and demolition waste management plan. A final report will be provided detailing all the major waste streams generated. Construction and Demolition Waste Management credit involves implementing strategy to minimize construction waste and maximize recycling and reuse of the material. A waste management plan will be utilized to divert the waste and demonstrate compliance with LEED requirements.

## **Indoor Environmental Quality**

to achieve the Minimum Indoor Air Quality Performance credit, we will ensure that our renovated building meets the minimum requirements for indoor air quality. All ventilation rates and indoor air quality parameters will be in compliance with ASHRAE Standard 62.1. Installation of high-efficiency HVAC filtration systems will be used to maintain indoor air quality and comfort for building occupants. The Environmental Tobacco Smoke Control credit will minimize the exposure to tobacco smoke within the building. There will be no designated smoking areas and signs with smoking bans in indoor and outdoor spaces. Air filtration systems will remove tobacco smoke particles and keep a clean indoor air quality. Enhanced Indoor Air Quality Strategies credit will involve additional indoor quality measures including, operable windows, increase air exchange rates and improve indoor air quality. Indoor plants will be incorporated within the building and green walls to enhance filtration. Low-Emitting Materials credit will be awarded for the use of low emissions of volatile organic compounds. Low-VOC paints, adhesives, sealants, and flooring materials will promote healthy indoor air quality. Construction Indoor Air Quality Management Plan credit will be received after dust controls and temporary air filtration systems. Indoor Air Quality Assessment credit will be received due to the air quality testing conducted by a certified consultant. Thermal Comfort credit will provide comfortable indoor thermal conditions. The HVAC system will be designed and operated to maintain temperature and humidity levels. All systems will be in compliance with the ASHRAE Standard 55-2010. Interior Lighting credit will be received through proper lighting controls in the building. This will promote occupant's productivity, comfort, and wellbeing. Acoustic Performance credit will focus on minimizing noise levels to create a comfortable indoor environment. There will be acoustic insulation materials, sound-absorbing finishes, and noise-reducing building systems installed.



#### **Innovation**

A LEED Accredited Professional will work with the project team to encourage team integration required by the LEED project. The LEED Accredited Professional will streamline the application and certification process. The are to actively participate in the conception to completion of the project and provide expertise and guidance on sustainable design and construction practices.

## **Regional Priority**

Regional Priority: Specific Credit will be awarded upon identification of regional importance for the project's region. The renovation project will align with identified regional priorities and implement sustainable design. Evidence and case studies will be submitted in response to the identified regional priorities of the project address region.

# **Summary and LEED Certification Analysis**

Documentation of LEED credits will be submitted for the USGBC to review and evaluate. The project proposes a total of 50 credits, silver LEED certification.

