



Curry Toyota & Subaru-Hyundai Dealerships

3026 East Main Street, Cortlandt Manor, New York

Description of Green Initiatives

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1. Project Description & Sustainability Goals

- A. **Brief Description of Project:** Curry Properties, LLC is improving a 5.31 acre site, located at 3026 East Main Street in Cortlandt Manor, NY, to house two automotive dealerships, including a major renovation of the existing Curry Toyota dealership and construction of a new building for Curry Automotive's Subaru & Hyundai franchises. Both buildings will be 2-story masonry and steel frame structures. Consolidated Edison provides the electrical & gas service. Both buildings will operate as auto dealerships; the first floors will include showrooms for each franchise, open offices, private offices, a customer lounge, service space, storage, restrooms, an elevator, and other support spaces. The second floors will include offices, conference/training rooms, a lunch break/café space, men's and women's changing/locker rooms with showers for service technicians, restrooms, storage, and other support spaces. Each second floor will contain a mezzanine space that overlooks the showroom below but is thermally and acoustically isolated from the first floor. The service areas will contain an enclosed service drop-off, service bays, parts storage, and other support spaces. Both buildings share the same parcel of property and parking lot.
- B. **Brief Sustainability and Design Goals:** The project aims to create sustainable, healthy, comfortable, and productive buildings by integrating sustainable design and energy efficiency with comfort, safety, utility, durability, economy, and aesthetics. It is important that the buildings communicate the sustainable strategies and energy efficient measures to the end users. Responding to the local vernacular and surrounding commercial context along East Main St., the massing and exterior materials convey a design of sleek and stylish contemporary architecture. Both buildings minimize their environmental impact on the site by reducing impervious surfaces where possible, increasing on-site infiltration, eliminating stormwater runoff, and planting indigenous, non-invasive, low maintenance, and water efficient landscaping. Light colored roofing materials and site lighting design will further reduce environmental impacts by minimizing both heat island effects and light pollution. Below each exterior skin, lies an efficient thermal building envelope designed to minimize heat gain/loss, thermal bridging, and exfiltration, thereby reducing the demand on the mechanical systems. Within each building envelope, the owner's top priority is to reduce heating/cooling loads through principles, such as daylighting and natural ventilation, efficient equipment, controls (daylight and occupancy sensors) to minimize energy waste, and occupant education. The Toyota dealership and Subaru-Hyundai dealership are registered with GBCI (Green Building Certification Institute) seeking Certification under LEED® NC 2009. Since both projects occupy the same site, the 2010 LEED Application Guide for Multiple Buildings and On-Campus Building Projects shall be utilized. Initially, the owner and design team have targeted a minimum of 7 EA c1 points for each building, a 24% improvement over ASHRAE 90.1. The design team intends to achieve this by minimizing heating/cooling loads through increased envelope thermal efficiency and selection of high performance lighting and equipment. In addition to increasing energy efficiency, the owner expressed an interest in enhancing indoor environmental quality to improve occupant health, comfort, and worker productivity. The third significant priority was the need to reduce municipal water use and wastewater generation using waterless and high-efficiency fixtures. With regard to interior finishes, the project must follow the Subaru & Hyundai design standards. However, the design team intends to maximize occupant health by selecting low-emitting paints, coatings, flooring, adhesives, and sealants.

2. Project Objectives

There are several key objectives that the owner wishes to achieve through this project.

These include:

- A. Provide an accessible, safe, functional, sustainable, healthy, and comfortable environment for the customers, visitors, and employees.
- B. Minimize environmental impacts of the building on the site and surrounding context.
- C. Optimize energy efficiency
- D. Protect and conserve water
- E. Use environmentally preferable products – recycled and locally produced
- F. Enhance indoor environmental quality (EQ)

- G. Provide daylight and views for as many occupants as possible.
- H. Optimize operational and maintenance practices.
- I. Green cleaning practices required

2.1. Project Performance and Sustainability Objectives

The owner wishes to achieve several key performance and sustainability objectives through this project.

These include:

- A. The design will reduce the carbon footprint of the construction and operation activities, and will incorporate energy-efficient lighting, heating, ventilating, and air conditioning systems.
- B. Investigate high-performance envelope, thermal insulation, and ensure no air leakage throughout the life of the building.
- C. Establish BACNET or similar reprogrammable building management system.
- D. Include daylight harvesting design features, such as clerestories and light shelves, to maximize the reach of daylight into deeper areas of the floor plates. Daylight and occupancy sensors, timer switches with manual overrides will be considered and evaluated for payback.
- E. Provide individual control of lighting (task lighting) to reduce energy consumption.
- F. Reduce potable water use through waterless and high efficiency water saving fixtures
- G. Design landscaping to eliminate potable water use for irrigation. Consider indigenous, non-invasive landscaping.
- H. Energy Efficiency:
 - a. The new mechanical systems should provide a comfortable environment for occupants while being energy efficient. Energy modeling should be used as a design tool, in conjunction with life cycle costing.
 - b. The project team should strive for at least a 24% reduction below an ASHRAE 90.1-2007 baseline case. No CFCs or HCFCs should be used.
 - c. Lighting Efficiency: Strive for at least a 30% reduction below ASHRAE 90.1-2007 lighting power density requirements, and if possible, a 40% reduction. The space should be designed to maximize daylighting in spaces and minimize the use of electric lights. Controls, such as daylight sensors and occupancy sensors, should be used to reduce the dependence on electric lighting further. Provide individual control of lighting (task lighting).
- I. Indoor Environmental Quality:
 - a. The spaces should provide a welcoming and soothing environment for visitors. The furniture in the space should be inviting and comfortable.
 - b. Daylight and views should be provided to as many occupants as possible.
 - c. The spaces should allow occupants to control temperature and lighting within the space, per LEED® NC 2009 EQ credit requirements.
 - d. The design team should specify paints, sealants, and other items that have low or no VOC content in accordance with the requirements of LEED® MR c4. Whenever possible, materials with no VOCs should be used. It is essential to provide the occupants with a healthy, toxin-free environment.
 - e. During construction, the contractors should meet all SMACNA IAQ guidelines for occupied buildings under construction. The team should evaluate time and costs for both a space flush-out and indoor air quality testing after construction and prior to occupancy.
 - f. In terms of thermal comfort, the specified equipment should provide an environment within the space that meets the guidelines set in ASHRAE 55 – 2004.
- J. Water Efficiency:
 - a. The project should strive for at least a 40% reduction below EAct 1992 requirements. These reductions will be realized with the installation of high efficiency water closets, waterless urinals, and low flow fixtures.
- K. Materials & Resources:
 - a. The space should strive to incorporate local, recycled or salvaged, low-emitting, and/or renewable materials as much as possible.

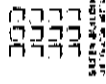
- b. The project should strive for at least overall 10% recycled content (by cost) and 10% manufactured regionally (by cost).
 - c. During construction, the project should strive for at least a minimum 75% reduction in construction waste.
 - d. The project should ensure that a minimum 50% (by cost) of wood-based products (including framing, flooring, doors, etc...) are FSC certified.
- L. Education:
- a. The owner would like the team to consider strategies to promote sustainability education in the space, such as signage, monitors, or a storybook located in the space to educate the occupants and visitors on the building's sustainable components.

7. Performance Criteria

The success of the project will be determined according to the following measureable performance criteria:

7.1 General Requirements

1. Professional and industry standards: All work meets or exceeds ASHRAE standards specified by the LEED® NC 2009 rating system, NFPA, and all local and state codes.
2. Commissioning process: The owner, architect, engineer, contractors, and subcontractors shall follow the direction of the Commissioning Agent in the commissioning process.
3. LEED® Checklists: As a reference, the LEED® checklists for both buildings have been attached to this document. Each checklist is broken up into 8 categories. Each category contains a list of the available credits and the possible points for those credits. There are three columns along the left-hand side of each credit. The leftmost column indicates the number of points pursued for that credit. The middle column indicates the number of points foregone, i.e. If the design team cannot achieve that credit, and the rightmost column indicates the number of points available for credits that the design team is still undecided about pursuing. At the bottom right-hand corner of each sheet is a total of all points pursued, foregone, and undecided. Just below that are the thresholds required to meet the various levels of LEED® Certification. At this point, the design team intends to achieve a minimum level of LEED® Certified for each building.



LEED for New Construction v2009

Registered Project Checklist

Curry Toyota

1	4	12		
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Y	N	7		
Y				
5			Construction Activity Pollution Prevention	
5			Site Selection	1
5			Development Density and Community Connectivity	5
1			Brownfield Redevelopment	1
6			Alternative Transportation—Public Transportation Access	6
1			Alternative Transportation—Bicycle Storage and Changing Rooms	1
3			Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
2			Alternative Transportation—Parking Capacity	2
1			Alternative Transportation—Protect or Restore Habitat	1
1			Site Development—Maximize Open Space	1
1			Stormwater Design—Quantity Control	1
1			Stormwater Design—Quality Control	1
1			Heat Island Effect—Non-roof	1
1			Heat Island Effect—Roof	1
1			Light Pollution Reduction	1

8	2	
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Y	N	7		
Y				
4			Water Use Reduction—20% Reduction	2 to 4
2			Water Efficient Landscaping	2
4			Innovative Wastewater Technologies	2 to 4
			Water Use Reduction	2 to 4

11	3	3
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Y	N	7		
Y				
Y			Fundamental Commissioning of Building Energy Systems	
Y			Minimum Energy Performance	
Y			Fundamental Refrigerant Management	
7			Optimize Energy Performance	1 to 19
1			On-Site Renewable Energy	1 to 7
2			Enhanced Commissioning	2
2			Enhanced Refrigerant Management	2
3			Measurement and Verification	3
2			Green Power	2

6	3	1
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Y	N	7		
Y				
Y			Storage and Collection of Recyclables	
1			Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
1			Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Construction Waste Management	1 to 2
1			Materials Reuse	1 to 2

Y	N	7
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Y	N	7		
2			Credit 4	Recycled Content
1			Credit 5	Regional Materials
1			Credit 6	Rapidly Renewable Materials
1			Credit 7	Certified Wood

7	3	5
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Y	N	7		
Y			Prereq 1	Minimum Indoor Air Quality Performance
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control
1			Credit 1	Outdoor Air Delivery Monitoring
1			Credit 2	Increased Ventilation
1			Credit 3.1	Construction IAQ Management Plan—During Construction
1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings
1			Credit 4.3	Low-Emitting Materials—Flooring Systems
3			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products
1			Credit 5	Indoor Chemical and Pollutant Source Control
1			Credit 6.1	Controllability of Systems—Lighting
1			Credit 6.2	Controllability of Systems—Thermal Comfort
1			Credit 7.1	Thermal Comfort—Design
1			Credit 7.2	Thermal Comfort—Verification
1			Credit 8.1	Daylight and Views—Daylight
1			Credit 8.2	Daylight and Views—Views

1	5
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Y	N	7		
1			Credit 1.1	Innovation in Design: Specific Title
1			Credit 1.2	Innovation in Design: Specific Title
1			Credit 1.3	Innovation in Design: Specific Title
1			Credit 1.4	Innovation in Design: Specific Title
1			Credit 1.5	Innovation in Design: Specific Title
1			Credit 2	LEED Accredited Professional

47	23	14
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Y	N	7		
1			Credit 1.1	Regional Priority: Specific Credit
1			Credit 1.2	Regional Priority: Specific Credit
1			Credit 1.3	Regional Priority: Specific Credit
1			Credit 1.4	Regional Priority: Specific Credit

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

