

Amended Coordinated Review Sustainability Checklist

1. INTRODUCTION

1.1. STATEMENT OF PURPOSE

This Amended Coordinated Review Sustainability Checklist (“Sustainability Checklist”) has been prepared by the French-American School of New York (FASNY) in compliance with the State Environmental Quality Review (SEQRA) Statement of Findings adopted by the White Plains Common Council for the proposed FASNY Upper School. The Findings at K-12 requires the preparation of a Sustainability Checklist to enumerate the measures that will be incorporated into FASNY’s Upper School to mitigate, to the maximum extent practicable, the impacts of greenhouse gas emissions generated by the Upper School. The Findings at K-12 require that the Transportation Management Plan, Construction Management Plan, and Solid Waste Management Plan also address greenhouse gas reductions. The Solid Waste Management Plan is incorporated within this Amended Sustainability Checklist.

2. SITE SUSTAINABLE DEVELOPMENT CRITERIA

2.1. FASNY’S DESIGN APPROACH

Throughout the design process, FASNY considered various methods for integrating sustainability and Green Building Measures into the Upper School. FASNY held two day-long workshops with leaders in green design¹ to identify: 1) Green Building Measures that could easily be incorporated into the design, 2) Green Building Measures that could potentially be integrated into the design subject to cost/benefit analysis; 3) Green Building Measures that would be an “added” design measure with potential cost implications; and 4) Green Building Measures that could serve as a teaching tool for students. Various case studies helped illustrate and identify strategies that could be applied to FASNY’s Upper School.

Since FASNY would occupy these buildings over a long-term, FASNY submits that it has every interest in achieving financial benefits of sustainable building practices. In addition, FASNY acknowledges that Green Building Measures help to position the School as a good neighbor, as well as demonstrate a socially and environmentally responsible land use. Finally, Green Building Measures may create a healthy teaching and learning environment that supplements FASNY’s primary educational mission through opportunities for teaching

¹ One workshop was led by Jonathan F.P. Rose and Daniel Hernandez of Jonathan Rose Companies. A second workshop was led by Stantec, the Project Architect, which is one of North America’s leading sustainable design firms.

environmental science and natural systems. FASNY would use these objectives in guiding its decision on what Green Building Measures should be incorporated into the buildings.

The workshop also included a discussion of resiliency and how the Campus could be designed to address the impacts of climate change and energy source reductions. FASNY was particularly concerned about measures that could reduce the duration of any interruption to school operations. As such, FASNY focused on resiliency measures that would address emergency power generation, stormwater management, window protection and security, and flexibility and adaptability of interior spaces and utility systems.

Subsequent to the day-long workshop, the FASNY Facilities Committee met to evaluate the LEED for Schools rating system. In collaboration with Stantec the “LEED 2009 for Schools New Construction and Major Renovations” Project Checklist was completed to identify Green Building Measures that would definitely be integrated into Project design, those that may be integrated into Project design, and those that would not likely be integrated into Project design. The completed LEED Project Checklist (see attached) suggests that FASNY could achieve the equivalency of LEED Gold certification. FASNY is designing its project to meet the minimum equivalency of LEED Silver Certification (the second of four certification levels).

2.2. USGBC LEED CHECKLIST

The LEED for Schools Project Checklist identifies seven (7) categories of potential credits. FASNY believes it can achieve credits within each of the seven (7) categories by integrating the Green Building Measures described below into the Upper School (see Table 1).

**Table 1
Summary of Potential LEED Credits**

Category	Yes	No	Maybe
Sustainable Sites	15	7	2
Water Efficiency	7	0	4
Energy and Atmosphere	14	5	14
Materials and Resources	5	5	3
Indoor Environmental Quality	12	0	7
Innovation and Design Process	6	0	0
Regional Priority Credits	3	0	1
Total	62	17	31
Notes:	Certified: 40 to 49 points; Silver: 50 to 59 points; Gold: 60 to 79 points; Platinum: 80 to 110 points		
Source:	LEED 2009 for Schools New Construction and Major Renovation Project Checklist.		

2.2.1. SUSTAINABLE SITES

FASNY submits that it has made every effort to design the development of the Site in an environmentally sensitive way. The Project Site contains no environmentally sensitive features and no wetlands or associated habitat. In addition, FASNY has proposed an extensive school bus transportation plan to reduce the volume of private cars accessing the Upper School. Parking spaces for

low-emission and no-emission cars and car pool vehicles would be reserved and preferentially located. In addition, bicycle racks would be provided on the site in several locations.

A stormwater management system has been designed to control both the quantity and quality of stormwater leaving the site.

2.2.2. WATER EFFICIENCY

Water use reduction would be accomplished through water efficient landscaping. All landscaping will be indigenous to the area to support minimized irrigation. In addition all buildings would use low-flow fixtures, and kitchen equipment designed for low water consumption would be installed.

2.2.3. ENERGY AND ATMOSPHERE

The basic tools of building commissioning and energy modeling would be used to assess the building's energy efficient design, and ensure its proper functioning. The buildings' HVAC systems would optimize energy performance and user comfort based on system design and the use of a Building Information Management system.

Buildings would be equipped with daylighting features and interconnected switches to balance light levels and reduce use of electricity. In addition, all non-emergency light fixtures would be controlled by occupancy sensors.

Buildings would be oriented to utilize passive solar design (to the extent practicable) and will contain a well-designed thermal envelope, reducing energy usage.

FASNY would build a solar-ready roof with the goal of eventually installing an array of solar panels to reduce the School's use of power from the grid. Any solar panels are subject to review and approval by the City.

2.2.4. MATERIALS AND RESOURCES

Construction would include careful management and recycling of construction waste, and materials selection would include those with a high recycled content. In addition, FASNY would select regionally sourced materials and certified wood whenever feasible.

2.2.5. INDOOR ENVIRONMENTAL QUALITY

Enhanced ventilation system capacity and control, and natural ventilation would be provided through operable windows. A carefully defined indoor air quality management plan would be created to ensure protection during construction, including a flush-out period prior to occupancy.

Material selection would be carefully monitored to ensure low levels of volatile organic compounds (VOCs), including sealants, paints, flooring, wood products and furniture.

Lighting and heating systems would be designed to permit maximum individual control and comfort.

2.2.6. INNOVATION AND DESIGN PROCESS

FASNY believes that it can achieve six (6) of the six (6) available credits in this category by exceeding USGBC minimum standards for Materials and Resources credit 2, “Construction Waste Management;” by including a LEED Accredited Professional (LEED AP) as a member of the design team; and by using the School as a Teaching Tool.

2.2.7. REGIONAL PRIORITY CREDITS

FASNY believes that it can achieve three (3) of the four (4) available credits in this category. USGBC has developed Regional Priority credits to encourage the achievement of credits that address geographically specific environmental priorities. They are not new credits, but instead are existing LEED credits that are prioritized in a given area and earn an additional point if the prioritized credit itself is earned. They are only available to projects certifying under LEED 2009 rating systems, the LEED rating systems that has been designated for FASNY’s projects.

3. MUNICIPAL SERVICES

FASNY has prepared detailed estimates of water consumption, sanitary sewage generation, and stormwater generation. Section 3.1 summarizes the calculations of FASNY’s Mechanical Electrical Plumbing (MEP) engineer with respect to water consumption and identifies how FASNY’s system would be connected to the City of White Plains water supply system, including the location of the required water service line back flow preventer. Section 3.2 summarizes the calculations of FASNY’s MEP engineer with respect to generation of sanitary sewage and how FASNY’s system would be connected to the City of White Plains sanitary sewage system. FASNY’s site/civil engineer has prepared a detailed Stormwater Pollution Prevention Plan (SWPPP) (included with the Alternative Site Plan Application materials).

3.1. WATER SUPPLY

Detailed calculations of water supply demand prepared by the Project Mechanical/ Electrical/ Plumbing (MEP) engineer are included as a separate Tab within the Alternative Site Plan Application. Design details for the service connection to the City’s water supply system and back flow preventer are located in the Alternative Site Plans.

3.2. SANITARY SEWAGE

Detailed calculations of sanitary sewage generation prepared by the Project Mechanical/ Electrical/ Plumbing (MEP) engineer are included as a separate Tab within the Alternative Site Plan Application. Design details for the connection to the City’s sanitary sewage system are located in the Alternative Site Plans.

4. STREET RIGHT-OF-WAY DESIGN

Please see the Site Plan drawings for locations and details of the proposed vehicular and pedestrian circulation plan, including those areas of proposed improvements within the City of White Plains right-of-way.

5. STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS

FASNY has designed the Upper School and any improvements within the City of White Plains right-of-way to follow the City of White Plains standard construction details and specifications. All details and specifications are subject to the review and approval of the Commissioner of the Department of Public Works and Commissioner of Buildings.

6. CONSTRUCTION MANAGEMENT PROTOCOL

Pursuant to the SEQRA Findings at N-2, FASNY has prepared a detailed Amended Construction Management Plan (CMP) consistent with the City's Construction Management Protocol. (The Amended CMP is included with the Alternative Site Plan Application.) The greenhouse gas reduction strategies in the Construction Management Plan include use of ultra-low sulfur diesel fuels and modern vehicles with emission controls.

7. ADDITIONAL REQUIRED PLANS

7.1. SOLID WASTE MANAGEMENT PLAN

FASNY proposes to retain a private solid waste hauler to remove all solid waste, including recyclable materials.

The School would generate approximately 2,560¹ pounds per week, inclusive of recycling. This amount equates to between 13 and 26 cubic yards. FASNY proposes to provide two (2) 8-cubic-yard containers for solid waste, one (1) 8-cubic-yard container for commingled recycling (cans and bottles), and one (1) 8-cubic yard container for cardboard and paper. A central collection area has been designed with access off Ridgeway and with sufficient storage capacity to handle the projected volume of waste. Specifically, this area will include three 10' by 14' enclosures. This area would be screened from views from Ridgeway with a combination of fencing and landscaping. (It should be noted that this area is across Ridgeway from a similar waste collection area for the Westchester Hills Golf Club). Attachment B demonstrates that the solid waste containers are accessible to a standard front-end collecting garbage truck and that there is sufficient maneuvering area for the vehicle to enter and exit the site. FASNY anticipates that solid waste would be collected approximately two (2) times per week.

FASNY proposes to compost organic materials to further reduce non-recyclable solid waste generated and also utilize composting as an educational tool in the school's curriculum.

Non-recyclable solid waste generated in Westchester County is incinerated at the Charles Point Resource Recovery Facility where energy is generated as a byproduct of the incineration. This means that little or no methane would be released to the environment as a result of the biodegradation of the solid waste.

7.2. TRANSPORTATION MANAGEMENT PLAN

FASNY has prepared a detailed Amended Transportation Management Plan, which is included in the Alternative Site Plan Application.

¹ Estimated using CEQR Technical Manual rate of 4 lbs per week per student.

7.3. LANDSCAPING PLAN

FASNY has prepared a detailed Landscape Plan for the Alternative Plan that includes the provision of approximately 636 new trees and shrubs to screen parking lots and buildings from views from surrounding residential properties (see Site Plans). This is a similar number of trees as proposed for Parcel A in the Original Plan. The plantings proposed in the Alternative Plan would be in substantially the same location as the Original Plan. FASNY has selected species within the Landscape Plan that are sustainable and appropriate for conditions found on the site. Native species have been specified where possible.

7.4. PARKING AND LOADING MANAGEMENT PLAN

See the description of parking within the Amended Transportation Management Plan, included in the Alternative Site Plan Application.

The service area accessed off Ridgeway would serve as a loading area for products delivered to FASNY. See the Site Plans for details of this area.

7.5. LIGHTING PLAN

See the Site Plans for the proposed site lighting plan for the Upper School.

The lighting plan for the Upper School complies with all applicable standards of the City of White Plains Zoning Ordinance. *

Attachment A
LEED Checklist



LEED 2009 for Schools New Construction and Major Renovations

French American School of New York

Project Checklist

October 2016

15 2 7 Sustainable Sites Possible Points: 24

Y	?	N			
Y			Prereq 1	Construction Activity Pollution Prevention	
Y			Prereq 2	Environmental Site Assessment	
1			Credit 1	Site Selection	1
		4	Credit 2	Development Density and Community Connectivity	4
		1	Credit 3	Brownfield Redevelopment	1
4			Credit 4.1	Alternative Transportation—Public Transportation Access	4
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
2			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	2
		2	Credit 4.4	Alternative Transportation—Parking Capacity	2
1			Credit 5.1	Site Development—Protect or Restore Habitat	1
1			Credit 5.2	Site Development—Maximize Open Space	1
1			Credit 6.1	Stormwater Design—Quantity Control	1
1			Credit 6.2	Stormwater Design—Quality Control	1
	1		Credit 7.1	Heat Island Effect—Non-roof	1
1			Credit 7.2	Heat Island Effect—Roof	1
1			Credit 8	Light Pollution Reduction	1
1			Credit 9	Site Master Plan	1
	1		Credit 10	Joint Use of Facilities	1

7 4 Water Efficiency Possible Points: 11

Y	?	N			
Y			Prereq 1	Water Use Reduction—20% Reduction	
4			Credit 1	Water Efficient Landscaping	2 to 4
	2		Credit 2	Innovative Wastewater Technologies	2
2	2		Credit 3	Water Use Reduction	2 to 4
1			Credit 3	Process Water Use Reduction	1

14 14 5 Energy and Atmosphere Possible Points: 33

Y	?	N			
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
11	6	2	Credit 1	Optimize Energy Performance	1 to 19
	4	3	Credit 2	On-Site Renewable Energy	1 to 7
	2		Credit 3	Enhanced Commissioning	2
1			Credit 4	Enhanced Refrigerant Management	1
2			Credit 5	Measurement and Verification	2
	2		Credit 6	Green Power	2

5 3 5 Materials and Resources Possible Points: 13

Y	?	N			
Y			Prereq 1	Storage and Collection of Recyclables	
		2	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 2
		1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2

Materials and Resources, Continued

Y	?	N			
		2	Credit 3	Materials Reuse	1 to 2
1	1		Credit 4	Recycled Content	1 to 2
1	1		Credit 5	Regional Materials	1 to 2
	1		Credit 6	Rapidly Renewable Materials	1
1			Credit 7	Certified Wood	1

12 7 Indoor Environmental Quality Possible Points: 19

Y	?	N			
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
Y			Prereq 3	Minimum Acoustical Performance	
1			Credit 1	Outdoor Air Delivery Monitoring	1
		1	Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
4			Credit 4	Low-Emitting Materials	1 to 4
1			Credit 5	Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			Credit 7.1	Thermal Comfort—Design	1
1			Credit 7.2	Thermal Comfort—Verification	1
	3		Credit 8.1	Daylight and Views—Daylight	1 to 3
	1		Credit 8.2	Daylight and Views—Views	1
	1		Credit 9	Enhanced Acoustical Performance	1
	1		Credit 10	Mold Prevention	1

6 Innovation and Design Process Possible Points: 6

Y	?	N			
1			Credit 1.1	Innovation in Design: Green Housekeeping	1
1			Credit 1.2	Innovation in Design: Exemplar Credit	1
1			Credit 1.3	Innovation in Design: Mercury lighting	1
1			Credit 1.4	Innovation in Design: Recycled Paper	1
1			Credit 2	LEED Accredited Professional	1
1			Credit 3	The School as a Teaching Tool	1

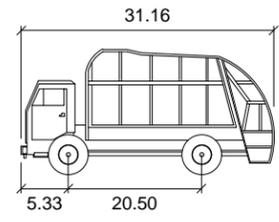
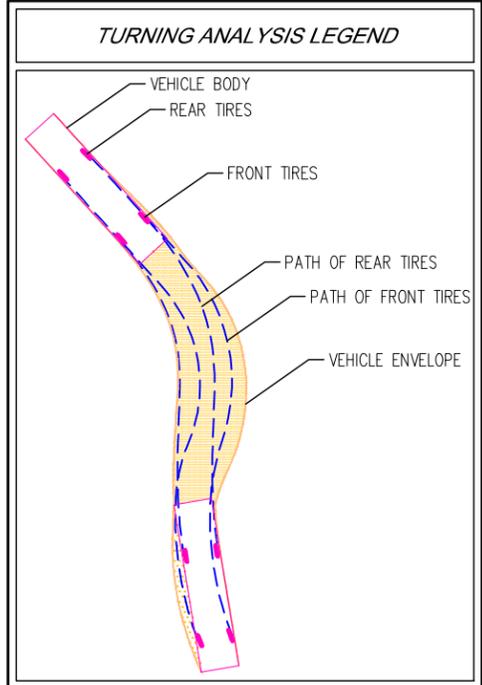
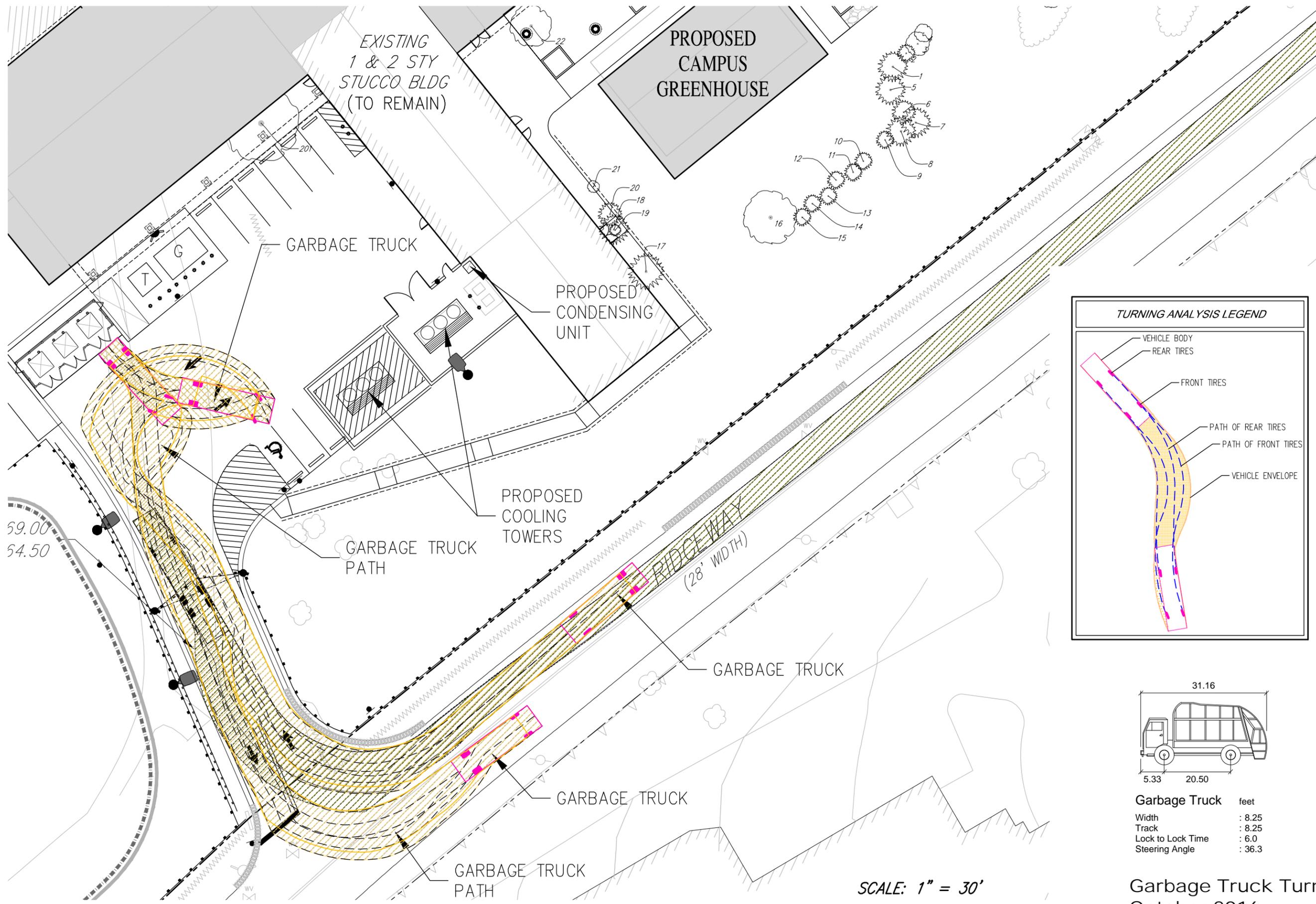
3 1 Regional Priority Credits Possible Points: 4

Y	?	N			
1			Credit 1.1	Regional Priority: Habitat	1
1			Credit 1.2	Regional Priority: Storm Water	1
1			Credit 1.3	Regional Priority: Alternative Transportation	1
	1		Credit 1.4	Regional Priority: Grey water toilets / renewable energy / 13 Energy	1

62 31 17 Total Possible Points: 110

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

Attachment B
Garbage Truck Turning Template



Garbage Truck	feet
Width	: 8.25
Track	: 8.25
Lock to Lock Time	: 6.0
Steering Angle	: 36.3

SCALE: 1" = 30'