

Sustainable Design Guidelines Reference Manual
World Trade Center Redevelopment Projects
LMDC, PANYNJ, and NYSERDA
March 25, 2005

IMPLEMENTATION AND INTENT

The role of the Sustainable Guidelines, the *Reference Manual* and the funding agencies is to **facilitate and assure** the highest sustainable performance within the potentials of each project at the World Trade Center site. For this reason there is not just one submission at the end of the project to determine a 'rating', rather there is a regular sequence of four submissions that occur at the standard milestones of project completion:

1. Schematic Design – Stage One
2. Design Development – Stage Two
3. Construction Documentation – Stage Three
4. Project Completion – Final Submission

This approach provides the PANYNJ and/or LMDC the opportunity to review and confirm sequential progress, as well as to give timely input/support for the design teams' sustainable objectives.

The requirements and deliverables of the Guidelines fall into two distinctive categories:

1. Measurable/Verifiable Criteria: These are the recognizable standards of 'green' design and are predominantly the US Green Building Council's (USGBC) LEED® v 2.1 requirements, which have been incorporated into the Guidelines in order to comply with EO 111 and the related portions of the New York State Green Building Tax Credit.

Note: USGBC's LEED™ is, by its very nature, a universal list of requirements for a given building type that does not address site-specific issues. In addition, it selects only those issues of sustainability that are quantifiable.

2. Plans/Narrative Summaries: These standards, which go beyond the requirements of LEED, address the remaining and essential components of a sustainable project that demonstrate 'whole-system' awareness and planning, as well as future-directed design for growth and change. They confirm plan strategies/attributes of connectivity to adjoining community, green infrastructure, transit systems, etc. These relationships are unique to each project and, unexamined will prevent the achievement of the project's full environmental/sustainable potential. They will be reviewed and assessed on merit by the PANYNJ and/or LMDC.

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Importantly, the entire World Trade Center project will be realized over a long timeframe with many phases, and will require many 'non-building' or 'connective tissue' projects that do not constitute buildings in the traditional sense. Therefore the Guidelines, and the supporting *Reference Manual* are 'scalable' in that the PANYNJ and/or LMDC will assign an appropriate, reduced number of applicable guidelines for these multiple, small and varied projects, including the below grade complex. Similarly, inactive sites will be assigned appropriate 'core' requirements related to storm water, day-lighting, etc.

The fundamental characteristics of the World Trade Center Sustainable Guidelines and the *Reference Manual* is that among the fifty-two (52) credits or chapters, there is a 'core' of LEED or LEED derived verifiable guidelines. The basic version of LEED that is reflected in the Guidelines and the *Reference Manual* is LEED v2.1. For all future projects, the requirement is *that the then-current version of LEED applies*. This is based on the time of project initiation (i.e. award). For instance, the successor version of LEED v2.1, LEED v2.2 is currently in circulation for review as a 'public comment' draft. LEED v2.2 will be balloted by the USGBC Membership in spring 2005, and is planned for release as a full-blown version of LEED in summer 2005. LEED v2.2 and subsequent versions of LEED will automatically become the basis for World Trade Center projects undertaken after their adoption by the USGBC. Importantly, teams will only be required to meet the standards of the LEED version that is current at the time of project initiation and will not be required to meet changing requirements or versions that may be subsequently adopted.

The following chart: '**Basic Composition and Sourcing of the WTC Sustainable Guidelines**' provides a general overview of the five integrated sources constituted in the Guidelines and further elaborated on in the *Reference Manual*.