Site assessment

SSpc45 | Possible 1 point

Intent

To assess site conditions prior to design in order to evaluate sustainable options and inform related decisions about site design.

Pilot Credit Closed

This pilot credit was closed to new pilot credit registrations on 3/1/2015. It is now available in the LEED Innovation Catalog for ongoing use by project teams as an innovation point rather than a pilot credit.

Requirements

Complete and document a site survey/assessment that includes the following information:

- *Topography*: Contour mapping, unique topographic features, slope stability risks;
- *Hydrology*: 100-year floodplain, delineated wetlands, lakes, streams, shorelines, rain/storm water collection/ reuse opportunities, TR-55[1] initial water storage capacity of the site, or local equivalent outside the U.S.;
- *Climate*: Solar exposure, heat island effect potential, and seasonal sun angles, prevailing winds, monthly precipitation and temperature ranges;
- *Vegetation*: Primary vegetation types, greenfield area, significant tree mapping, threatened or endangered species, unique habitat, invasive plants;
- *Soils*: NRCS soils delineation[2], USDA prime farmland[3], healthy soils, previous development disturbed soils;
- *Human Use*: Views, adjacent transportation infrastructure, adjacent properties,existing recycle/reuse of potential construction materials;
- *Human Health Impacts*: proximity of vulnerable populations, adjacent physical activity opportunities, proximity to large sources of air pollution.

The survey/assessment should demonstrate the relationships between the site features/ topics listed above and how these features influenced the project design OR reasons for not addressing topics.

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[1] TR-55 (**Technical Release 55**) is an approach to hydrology that includes many techniques used to model watersheds including procedures to calculate storm runoff volume, peak rate of discharge, hydrographs, and storage volumes (USDA Soil Conservation Service).

[2] A NRCS soils delineation is a soil survey developed by the Natural Resources Conservation Service that shows the boundaries of different soil types and special soil features on the site.

[3] USDA **prime farmland** is defined by the NRCS as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses.

General Pilot Documentation Requirements

REGISTER FOR THE PILOT CREDIT

- Participate in the LEEDuser pilot credit forum
- Complete the feedback survey:

CREDITS 1-14

CREDITS 15-27

CREDITS 28-42

CREDITS 43-56

CREDITS 57-67

CREDITS 68-82

CREDITS 83--96

Credit specific

Submit the completed Site Assessment Worksheet with relevant project information (both narrative descriptions and maps, as applicable). Include additional topics not listed, if any, and provide reasons for not addressing certain topics. The Site Assessment submittals should clearly demonstrate how the site features informed the choice of site as well as the ongoing design and construction of the project. The Site Assessment Worksheet can be found under Resources.

Additional questions

1. To what extent does your firm and/or your project teams already conduct site assessments that include this information?
2. The goal of this credit is to assess site conditions prior to design in order to evaluate sustainable options and inform related decisions about site and building design. Do you believe that these requirements achieve this intent? Why or why not?
3. Did you encounter difficulties in gathering the information for the site assessment? If so, in what ways?

Changes from last version:

- Changes made for 3rd Public Comment (03/01/2012):

  Incorporated global language into the requirements

  Added user-generated pilot credit recommendations, including:

  heat island effect potential

  adjacent properties

  assessment of potential human health impacts

  Updated Site Assessment Worksheet – worksheet for pre-March 2012 projects can be found under resources

- 11/15/2013:

  Updated Site Assessment Worksheet with LEED v4 final worksheet