

Green Building and Site/Community Impacts

Green building principles include the site, community, and global issues identified below.

- [Sustainable consumption and production](#) - working towards achieving more with less.
- [Natural resource protection and environmental enhancement](#) - protecting the natural resources on which we depend.
- [From local to global: building sustainable communities](#) creating places where people want to live and work, now and in the future.
- [Climate change and energy](#) - confronting the greatest threat.

When a new, green home is constructed, the following typical factors should be carefully considered.

Additional Internet Resources

[Smart Communities Network](#)
[Creating Energy Smart Communities](#)

[Architecture 2030](#)

[Sustainable Development](#)

Site Factors

Efficient site design and development practices help reduce environmental impacts. Typical site factors that support green building principles include:

- Walking the building site and **flagging which trees are to be saved**, and defining the **limits of clearing and grading** on the site plan. The objective is to preserve the assets of the building site.
- Identifying **locations for on-site storage of construction materials** and suitable pathways for heavy equipment used in construction. The objective is to avoid compacting soils or destroying vegetation un-necessarily.
- Constructing **onsite storm water retention/infiltration** features. The object is to limit the [negative effects of stormwater runoff](#).
- Reducing hard, impermeable surfaces for driveways and patios, and use gravel, permeable block pavers, grids, or other permeable systems instead to allow storm water to infiltrate rather than run off.
- Orienting the home for maximum [passive solar heating and cooling](#) (also an Energy Efficiency factor)
- Selecting native [vegetation species for landscaping](#) to limit water demands (also a Water Efficiency factor)
- Grouping landscape plants with similar water needs to facilitate efficient irrigation
- Establish a construction site recycling plan for cardboard, plastics and metals

Community/Global Impacts

- When selecting a building site, consider the impacts of urban sprawl and the associated demands on constructing extensions to municipal infrastructure for water, power, and sewer.
- When selecting a building site, consider the proximity to work locations and community services for shopping, entertainment, etc. to limit transportation energy use
- Consider locally derived building materials rather than materials which have long delivery distances and therefore use more energy in transportation
- Consider the [embodied energy](#) required to manufacture or produce construction materials