It seemed like a simple, straightforward residential project until I walked beneath some 150 year old trees and saw a wall built a century ago of hand-cleared fieldstone. “This is the only spot for our house,” my client explained, “and we need room to play volleyball.”

Yes, we considered slashing through for a building site. After terms of slope, size, vehicular access or proportions. A closer look reveals a unique character and a diversity of challenges on any site. The process of site planning allows us to understand the site in detail. The process begins by gathering facts of property lines and angles, topography, zoning requirements (setbacks, height, lot coverage, parking, ease-sites in terms of climatic concerns particular to the house’s region. Within Minnesota the temperature, winds, snow, rain and humidity vary considerably. Each site has its own microclimate of conditions. On a site outside of Stillwater, we were faced with a long drive to the building site. We installed a temporary drive in the fall and reviewed the snow drift patterns during the winter. The result was a slightly shifted drive, a change in two turns and reduced snow plowing for the life of the house. Studying the sun’s seasonal variation in altitude, azimuth and the average hours of daily sun allows us to evaluate in-

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Site challenges on this Lake Vermilion site included rock outcropping, significant slope, heavy tree cover and wind from across the lake.

all, Minnesota has plenty of old trees and stone walls. But we didn’t. The house was built where sun washes the rooms, where the views are spectacular and with yard space for everyone. Best of all, behind the house we can still walk under the canopy of trees and lean on that stone wall.

Houses that we design evolve from their sites. The shape of the house, how the house is placed on the site and the transition between interior and exterior spaces are unique to each project. Frequently, sites are called “challenging” in ments, etc.), drainage, utilities and soil conditions. These parameters form the basis for site planning. The client’s program of needs is analyzed and evaluated with the site, in order to determine their compatibility. A client approached us to evaluate some wooded sites which had enough slope for a walk-out lower level. In more discussion, the client decided that they did not want a finished lower level. For the same price, two flat lots were purchased allowing a buffer of exterior space around the house. Site planning includes evaluating
terior and exterior spaces, amount of
openness within the house, heat gain
and loss, and placement of activities
relative to sunrise and sunset in sum-
mer and winter months. The large
overhangs of Prairie-style houses
evolved to respond to the Midwestern
climate by shading the direct summer
sun while allowing the lower winter
sun to pass below the overhang.
Porches facing southwest were de-
veloped in early settler housing to shade
the house from hot afternoon sun.
A house needs to respond to the
shape of the site, both proportions
and slope. We have designed houses
to fit sites ranging from 45 degree
slopes to sites so flat that drainage
seemed impossible. Manipulating the
site to a predetermined house plan is
not an acceptable form of site plan-
ing. A recent client described their
narrow city lot, paused and said they
want to explore a New Orleans shot-
gun-style house as a balance to their
site. People are becoming more
aware of a gentle, natural fit between
house and site.

The geology of a site forms the
design. The soils type, elevation of
the water table, depth to foundation
bearing capacity, erosion potential
and drainage all affect the design
and economics of a project. On
Lake Vermilion we are designing a
house around the native rock out-
cropping. We integrated one area
of rocks as a center focal point in a
courtyard between the house and
garage. A part of architecture is
preserving the old things in our
world as well as building new.

Building a house on a treeless lot is
an opportunity to plant windbreaks,
woodlands and native plants in an
effort to restore a bit of nature. This
takes time, generations to grow
some magnificent trees. Given this
time frame, clearing land of plants
and trees for thoughtless housing
tracts is offensive. If we are pre-
sented with a wooded site it is im-
portant to respect and preserve the
vegetation whenever possible.
Trees offer protection from the
wind, help to isolate noise, provide
privacy, shade and cool our houses,
reduce runoff by absorbing rainfall,
provide cover for wildlife, and the
list goes on.

Researching historical, cultural
and community factors helps to
place the site in its context. A site
may have archaeological value, an
old foundation may be preserved
for site character or an earlier land-
fill may clue us to additional site
work. The compatibility of the
project is analyzed with the sur-
rounding area and land use.

The client, architect, landscape
architect and builder are involved
in the site planning process. To-
gether we can produce architecture
that respects the spirit of the land
and preserves those old stone walls
and trees.

Rosemary McMonigal is princi-
pal of McMonigal Architects, a
ten-year-old firm specializing in
residential architecture, (331-
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