Green street and parking lot demonstration projects can be selected and designed using one or a combination of three approaches. Depending on the approach taken, demonstration projects can range from small to large, retrofit to new construction, and simple to complex.

Strategic Approach

This approach locates stormwater facilities intermittently, but strategically, to provide the most efficient level of stormwater management. Because this approach uses smaller facilities, it tends to be the least expensive to construct and maintain. This approach is widely used for retrofitting existing streets. An example project using this approach is the SW 12th Avenue Green Street in Portland, Oregon (Figure 6-17).

Opportunity Approach

This approach locates stormwater facilities in areas where there are very few constraints and that offer high demonstration value. By using this approach, under-utilized landscape or impervious areas are converted into stormwater facilities of any size. An example of this approach are the five rain gardens located along NE Sandy Boulevard in Portland, Oregon (Figure 6-18).

Full-Integration Approach

This green street approach integrates the entire street frontage for stormwater management. A full-integration approach offers the most stormwater management benefits, but it is usually the most expensive to build and maintain. This approach is most compatible with new construction projects or if a street is planned to be completely rebuilt. An example of this approach is the Street Edge Alternatives in Seattle, Washington (Figure 6-19).

SOURCE: KEVIN ROBERT PERRY - CITY OF PORTLAND

Figure 6-17: *Portland's SW 12th Avenue Green Street project utilizes a strategic approach in placing smaller stormwater facilities intermittently along the streetscape.*

SOURCE: NEVUE NGAN ASSOCIATES

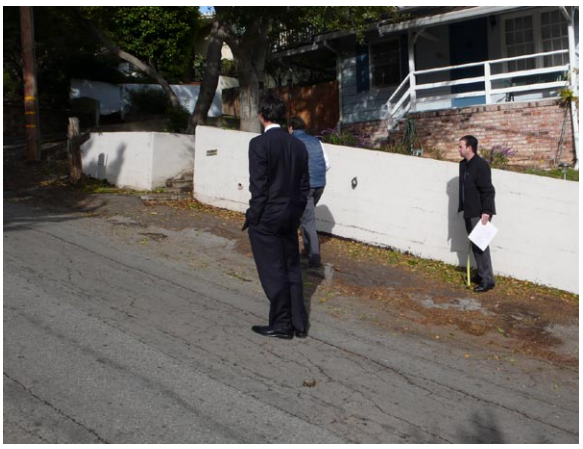
Figure 6-18: *The five rain garden projects located along NE Sandy Boulevard in Portland are located where the site constraints were minimal.*

SOURCE: NEVUE NGAN ASSOCIATES

Figure 6-19: *When a street is completely reconstructed, such as the Street Edge Alternatives (SEA) Streets in Seattle, Washington, the project uses a full-integration approach.*

SOURCE: NEVUE NGAN ASSOCIATES

Figure 6-20: *The Fitzgerald Marine Reserve Parking Lot project looks at redesigning an entire site to better manage stormwater runoff.*



SOURCE: NEVUE NGAN ASSOCIATES

Figure 6-21: *The Holly Road Green Street project is an example of how to retrofit an existing narrow and extremely steep residential street with a variety of design options.*

SOURCE: NEVUE NGAN ASSOCIATES

Figure 6-22: *The Belle Air/Third Avenue Green Street is a simple stormwater curb extension project located near an elementary school.*

The City/County Association of Government's approach to gaining support for sustainable green streets and parking lots started "small," with a few demonstration projects that showcase the different design strategies described in this guidebook. Developing a green street and parking lot program that serves the 21 different municipalities in San Mateo County may seem daunting. It is easier to reach general consensus among varying agencies and municipality departments by testing new and innovative strategies within multiple demonstration projects.

Demonstration projects not only provide a good opportunity for public outreach, but also allow municipalities to gauge what resources are needed to move towards more ambitious green street and parking lot projects. Some of the best demonstration projects are retrofits that can creatively demonstrate how, through good design, gray space can be converted into green space for stormwater management.

The following pages illustrate the conceptual design of three demonstration projects that have been awarded grant funding from the SMCWPPP's Sustainable Green Streets and Parking Lot Program. Each of these projects vary in complexity, scale, and types of stormwater strategies used. Furthermore, there are differing implementation schedules for each project. However, all three grant projects will be completed by 2010.

An additional conceptual design example describes an innovative, large-scale commercial parking lot retrofit,. This example is not an actual demonstration project and is included in this guidebook for illustration purposes only.

The conceptual drawings and information in the following pages provide only a snapshot of each project's design development at the time of this guidebook's completion. Depending on each project's complexity and/or schedule, the overall design described in this guidebook may differ from what is actually constructed.