# Green Infrastructure & Stormwater Management CASE STUDY

## **SE Division Green Street**

Location: Portland, OR

**Client:** City of Portland Bureau of Transportation

**Design Firm(s):** Nevue Ngan Associates; KPFF Engineering **Landscape architect/Project contact:** Kevin Robert Perry, ASLA

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**ASLA Chapter:** Oregon



Image: Kevin Robert Perry, ASLA

# **Project Specifications**

**Project Description**: The SE Division Reconstruction Project is a green street retrofit that stretches over 30-city blocks along a vital arterial in SE Portland. SE Division Street is vital link from Portland's downtown to east side neighborhoods and has a very active community network. The plan includes an extensive public involvement process with the surrounding neighborhood and business community. Because the SE Division Street corridor runs through both residential and commercial/retail land uses, the project has multiple goals including: increasing pedestrian safety, creating a sustainable main street and community place, balancing the multi-nodal transportation demands, and integrating hundreds of green street stormwater facilities. Many of the stormwater design elements along SE Division Street are new and innovative and have yet

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to be tried in any other Portland green street application. The project is currently in the construction document phase and is slated for construction in 2012.

#### **Project Type:**

Transportation corridor/streetscape
A retrofit of an existing property

**Design features**: Stormwater curb extensions and street planters.

This project was designed to meet the following specific requirements or mandates: State statute, local ordinance, developer/client preference

Impervious area managed: Greater than 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: Less than 5,000 sq/ft

The regulatory environment and regulator was supportive of the project.

## **Cost & Jobs Analysis**

**Estimated Cost of Stormwater Project:** \$1,000,000-\$5,000,000 (Public funding: Federal, state, local)

Was a green vs. grey cost analysis performed? Yes. The green solution was found to be more cost effective than pipe upsizing.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Slightly reduced costs (1-9% savings).

Number of jobs created: Not available

Job hours devoted to project: Not available

Planning and Design: Not available

Construction: Not available

Annual Maintenance: Not available

#### **Performance Measures**

Stormwater reduction performance analysis:

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Performance will vary from block to block. Some areas will be able to manage the 25-year storm event while others will only be able to capture the 1-year storm event.

**Community & economic benefits that have resulted from the project:** This project is expected to provide a safer transporation route for pedestrians and provide a unique streetscape to the neighboring residences, especially in the commercial zones of the street.

#### **Additional Information**

**Links to images:** Drawings can be made available by contacting Kevin Robert Perry at 503-239-0600 or email at <a href="mailto:kevin@nevuengan.com">kevin@nevuengan.com</a>