

Urban Oasis

233 B Street Townhome Project, Davis, California

On July 23, 2008 the ‘Urban Oasis’ project was denied by the City of Davis Planning Commission 5-2 because it “is inconsistent with adopted design guidelines”. Specifically, major issues were lack of traditional sloping roofs with eaves and lack of “bungalow feel”.

Currently, historic preservation is interpreted as the most important value – full compliance with Design Guidelines is the only way to gain approval for a project, and trumps all. Other factors in this project such as (i) an innovative, green building method that spectacularly outperforms currently used traditional building methods in terms of energy efficiency and sustainability, (ii) living roofs with multiple benefits for urban ecology, and (iii) roof decks that enhance quality of life, are not rewarded at all. Based on the staff report, the majority of the Planning Commissioners felt they had no option but to deny the project. Furthermore, several of the commissioners realized that with the current system it was not possible to reward factors other than compliance with Design Guidelines.

On November 5, 2008 the appeal of the Planning Commission denial was denied by the Davis City Council by a 2-2-1 vote.

We tried to make the case that full compliance with the Design Guidelines should be one of many factors and not the one trumping all others. LEED and Green Point Rating have gone to point systems. They take an overall view. There is no trump card such as requiring that all projects must include solar panels. This point system approach encourages innovation.

Quantitation of Greenness

Green Points. One of the units in the project was Green Point Rated by Green Built, a Sacramento company specializing in green construction and certified to be a Green Point Rater. The rating is a draft, because an official certified Green Point Rating requires verification of every rated aspect of the project before and during construction. Based on the elements included in the current design, the project would have 321 points out of a possible total of 376. Potentially, it is the highest Green Point Rating of any residential project to be green point rated. Green Point Rating has been adopted by the City of Davis to rate projects.

Title 24. Rescom Energy Engineering did Title 24 calculations for the same unit. The calculations currently do not provide for a way to include green roofs in the evaluation, nor the proposed radiant cooling. Even so, the Title 24 calculations are 64% over that required for compliance. This means that the project will consume 64% less energy than a comparable 'standard' project. Such a high figure over compliance is rare.

Greenhouse Gas Emissions. The following comments are from a letter by Deb Niemeier, Professor of Civil Engineering at UC Davis and consultant to the City of Davis Natural Resources Commission on carbon targets.

Potentially, this project could produce as much as a 70% reduction in household generated greenhouse gas emissions over a comparable small footprint house meeting current energy efficient standards.

There are many innovative and new design elements being proposed: green roofs, new fabrication techniques, and new materials – all of which can significantly reduce energy consumption levels, which in turn reduce greenhouse gas emissions.

This project is far-reaching, and as a living laboratory, could provide much needed data for future retrofit projects. And reductions in retrofits and existing residential housing are critical if the City wishes to achieve its priorities and mitigate its impact on global warming.